DEPARTMENT OF HEALTH & HUMAN SERVICES
Centers for Medicare & Medicaid Services
7500 Security Boulevard, Mail Stop S2-25-26
Baltimore, Maryland 21244-1850

State Demonstrations Group

March 15, 2023

Ms. Jacey Cooper
State Medicaid Director
Chief Deputy Director, Health Care Programs
California Department of Health Care Services
1501 Capitol Avenue, 6th Floor, MS 0000
Sacramento, CA 95814

Dear Ms. Cooper:

The Centers for Medicare & Medicaid Services (CMS) completed its review of the Public Hospital Redesign and Incentives in Medi-Cal (PRIME) Summative Evaluation Report, which is required by the Special Terms and Conditions (STCs), specifically STC #90 ("Summative Evaluation Report"), of California's section 1115 demonstration, "California Medi-Cal 2020 Demonstration" (Project No: 11-W-00193/9). The PRIME demonstration component was effective through June 30, 2020 during the state's Medi-Cal 2020 approval period that ended on December 31, 2021. This report covers the PRIME implementation period from January 2016 through June 2020. CMS determined that the Summative Evaluation Report, submitted on June 10, 2022, is in alignment with the approved Evaluation Design and the requirements set forth in the STCs and therefore approves it.

In accordance with STC #92 "Public Access," the approved PRIME Summative Evaluation Report may now be posted to the state's Medicaid website. CMS will also post the report on Medicaid.gov.

The PRIME Summative Evaluation Report presents a comprehensive analysis of the demonstration's effectiveness using a robust set of hypotheses, evaluation questions, and outcome measures that are closely aligned with the program goals. The report utilizes a rigorous mixed methods evaluation design, including a comparison strategy using matched beneficiaries. The evaluation uses primary data from key stakeholder interviews and beneficiary and provider surveys, as well as administrative, claims, encounter, and applicable financial data. Fifty hospitals participated in the PRIME initiative and they implemented a total of 18 projects. The report found that the hospitals under the PRIME initiative made notable progress in achieving the goals of increasing provision of patient-centered, data-driven, team-based care; improving

provision of point of care services, complex care management, population health management, and culturally competent care; improving population health and patient experience in Medi-Cal; integrating physical and behavioral health and coordinating care for vulnerable populations; and transitioning public hospitals to value-based care.

We look forward to our continued partnership on California's section 1115 demonstration. For any questions on the approval of the report or the demonstration, please contact your CMS demonstration team.

Sincerely,

Danielle Daly -S

Digitally signed by Danielle Daly -S
Date: 2023.03.15 15:53:52 -04'00'

Danielle Daly
Director
Division of Demonstration Monitoring and Evaluation

cc: Cheryl Young, State Monitoring Lead, CMS Medicaid and CHIP Operations Group

UCLA CENTER FOR HEALTH POLICY RESEARCH

HEALTH ECONOMICS AND EVALUATION RESEARCH

Final Summative Evaluation of California's Public Hospital Redesign and Incentives in Medi-Cal (PRIME) Program

Prepared for: California Department of Health Care Services
Prepared: June 2021
Approved: March 2023

UCLA CENTER FOR HEALTH POLICY RESEARCH

Final Summative Evaluation of California's Public Hospital Redesign and Incentives in Medi-Cal (PRIME) Program

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This evaluation was supported by funds received from the California Department of Health Care Services (DHCS, contract number 16-93440). The analyses, interpretations, and conclusions contained within this evaluation are the sole responsibility of the authors. This report contains analysis of data available up to the end of Demonstration Year 15 (June 2020).

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Executive Summary

PRIME Overview

Public Hospital Redesign and Incentives in Medi-Cal (PRIME) is a part of California's Section 1115 Medicaid Waiver called "Medi-Cal 2020." PRIME was designed to accelerate efforts by participating public hospitals to strengthen the ability of participating public hospitals to successfully perform under risk-based alternative payment models (APMs), consistent with Centers for Medicare and Medicaid Services (CMS) and Medi-Cal 2020 goals. PRIME included 18 projects organized under 3 domains (Appendix G Exhibit 287). Domain 1 projects were focused on outpatient delivery system transformation and preventive services, Domain 2 projects were focused on high-risk or high-cost populations, and Domain 3 projects were focused on resource utilization efficiency. Collectively these projects were intended to achieve five overarching goals: (1) increase provision of patient-centered, data-driven, team-based care; (2) improve provision of point of care services, complex care management, population health management, and culturally competent care; (3) improve population health and patient experience in Medi-Cal; (4) integrate physical and behavioral health and coordinate care for vulnerable populations; and (5) transition public hospitals to value-based care (Exhibit 1 of the PRIME Evaluation Design).

A total of 17 designated public hospitals (DPHs) and 37 district and municipal public hospitals (DMPHs) elected to participate in PRIME, though 3 DMPHs discontinued their participation during PRIME for various reasons. In collaboration with stakeholders, the California Department of Health Care Services (DHCS) outlined the core components for the implementation of the PRIME projects (Attachment Q). DHCS also approved metric specifications, standardized reporting instructions, and defined reimbursement methodologies for hospitals' achievements on metric performance. The PRIME implementation plan was approved by the CMS, which included a design for the comprehensive and rigorous evaluation of PRIME in the interim and at the end of the program.

Evaluation Overview

The UCLA Center for Health Policy Research (UCLA) was selected to evaluate the goals of PRIME using a conceptual framework adapted from the Triple Aim: enhanced infrastructure, better care, better health, and lower costs (Exhibit 2 of the PRIME Evaluation Design). The evaluation questions were closely aligned with project objectives defined in Attachment Q. The evaluation findings are presented in 3

complementary reports: the Interim Evaluation Report was prepared in August 2019 and approved by CMS for release in February 2020; the Preliminary Summative Evaluation Report was prepared in August 2020 and approved by CMS for release in March 2020; and this Final Summative Evaluation Report.

PRIME Implementation Findings

An intensive assessment of PRIME hospitals' efforts in developing the infrastructure and care processes, as well as system-wide and project specific implementation of PRIME was conducted and described in the Interim Evaluation Report released in August 2019. A summary of the system-wide findings are provided in PRIME Implementation Findings and a summary of project specific metric findings are provided in Goal 3 Findings of this report. Collectively, the findings indicate substantial improvements in the fundamental infrastructure needed to implement PRIME projects both system-wide and for specific projects with advances in administrative capacity and increased Electronic Health Record (EHR) functionality. Hospitals reported that they utilized significant effort to implement the recommended core components (outlined in STC Attachment Q) and a systematic approach to project implementation to achieve the desired outcomes. Hospitals frequently overcame challenges in collecting standardized data by implementing innovative solutions and workarounds.

An additional assessment of progress in PRIME project activities by the end of the program was described in detail in the Preliminary Summative Evaluation Report completed in August 2020. Hospitals were surveyed by UCLA and they rated the extent to which they achieved the goals of PRIME projects in which they participated (from 1- Did not achieve any goals to 10- Achieved all goals). The findings indicated an overall high rate of completing project activities for DPHs (7.7 and higher out of 10), DMPH non-CAHs (6.9 and higher), and DMPH CAHs (6.0 and higher). When asked to report up to 5 specific PRIME unfinished activities, 36 hospitals reported 104 such activities. Among responding hospitals, most unfinished activities were reported for complex projects such as Projects 1.1 Behavioral Health Integration (15 unfinished activities), 1.2 Primary Care Redesign (31), 1.3 Specialty Care Redesign (17), and 2.2 Care Transitions (13). Also, 6 hospitals noted 11 overarching unfinished activities, such as further improvements in data infrastructure and increasing their quality improvement workforce. Hospitals reported a high level of effort for all projects, but DMPH CAHs most frequently reported a high level of difficulty across most projects. Hospitals perceived that the highest impact of PRIME was on the quality of care followed by patient health outcomes and cost containment.

The Impact of COVID-19 Pandemic on PRIME

The first reports of COVID-19 in the United States occurred in January 2020, during the last 6 months of PRIME. By the end of PRIME in June 2020, over 236,000 cases and over 5,000 hospitalizations were reported in California with Los Angeles County reporting the highest average daily rates. Based on the limited amount of testing data available in Medi-Cal data from March 2020 through June 2020, approximately 1% of PRIME patients had a documented COVID-19 diagnosis.

Hospitals rated the impact of the COVID-19 pandemic on their ability to implement PRIME activities on a scale from 0 (not at all impacted) to 10 (extremely impacted). Hospitals reported that the pandemic had the highest impact on care processes such as providing cancer screening and follow up, providing specialty care visits, and meeting outcome-related PRIME metrics, all with a score of 7 or higher. Shelter-in-place orders and the need for use of alternative modalities to replace in-person visits were frequently reported reasons for the underlying impacts. Hospitals also reported innovations and adaptations in response to the pandemic including use of electronic platforms and modifications to care protocols. Hospitals also varied in reported impact on sustainability of PRIME activities, with DPH County hospitals reporting the largest negative impact. At the same time, hospitals reported that implementing several PRIME projects improved their ability to respond to the pandemic. Hospitals assessed the extent of the contribution of each PRIME project by rating whether they promoted or improved their response to COVID-19 from 0 (no improvement) to 10 (very great improvement). Among all PRIME hospitals, the projects rated as driving the most improvement in the response to COVID-19 were Projects 1.1 Behavioral Health Integration, 1.3 Specialty Care Redesign, and 2.3 Complex Care Management (CCM) for High-Risk Populations with an average score of 5 or more out 10. Additionally, hospitals rated the overall contribution of infrastructure and care processes established under PRIME in their COVID-19 response, with the highest impact attributed to implementing systems for provider-patient communication for their high-risk populations' care management processes.

Achievement of Overarching PRIME Goals

The overall evaluation of PRIME indicated success in achieving all five of PRIME's overarching goals.

Findings for Goal 1: Increase Provision of Patient-Centered, Data-driven, Team-based Care

Six PRIME projects were specifically designed to increase the capabilities to provide patient-centered, data-driven, team-based care, especially for high utilizer beneficiaries. Of these, 3 projects focused on outpatient care delivery transformation that led to developing the infrastructure and care processes to provide patient-centered, data-driven, and team-based care. Another 3 focused on populations at risk of or already using a high volume of services, with two of these implemented by the majority of PRIME hospitals. All 6 of these projects were required for DPHs. Data showed increased capabilities for data-driven care, including improving EHR content and functionality and expanding use of tools such as registries and telehealth to manage patients and increase access. Patient-centered, data-driven, and team-based care was also supported by adoption of evidence-based models, development of decision-support tools and referral protocols, increasing staffing capacity, IT solutions, development of comprehensive multi-disciplinary teams, and development of population management tools. Hospitals restructured administrative teams and developed partnerships with external providers. PRIME was also an impetus for promoting enterprise-wide EHRs.

Project 1.2 Ambulatory Care Redesign, implemented by all DPHs and 5 DMPHs, specifically aligned with Goal 1 and led to efforts by 17 hospitals to receive patient-centered medical home (PCMH) recognition or certification. Of the hospitals participating in Project 1.2 (22 responded to the survey in 2018), 7 DPHs and 2 DMPHs reported having PCMH recognition/certification as part of the Interim Evaluation. Hospitals most commonly pursued PCMH accreditation by the National Committee for Quality Assurance (NCQA; 9 hospitals).

Several projects including Project 1.2 Primary Care Redesign and Project 1.3 Specialty Care Redesign focused on promoting team-based care by improving workflows, training, and scheduling time for regular meetings and daily huddles. Developing patient registries and obtaining PCMH certification were reported by a few hospitals as unfinished activities by the end of PRIME.

Findings for Goal 2: Improve Provision of Point Of Care Services, Complex Care Management, Population Health Management, and Culturally Competent Care

Improving capacity of hospitals to better manage patients through provider point of care services, complex care management, and population health management hinged on strengthening their data analytic capacity and required highly functional EHRs and information sharing with other organizations. Findings indicated that hospitals worked towards a consolidated EHR. The great majority of hospitals had existing EHRs that supported point of care delivery (47) and patient engagement (45), and fewer said their EHR supported care coordination (35) and population health management (28). All hospitals used up to 16 condition-specific registries and 27 hospitals participated in Health Information Exchanges to facilitate data sharing despite challenges in system interoperability. Many hospitals (19) chose projects that had establishing data analytic systems based on EHRs and registries as a core component.

Findings also indicated that many hospitals (20) improved patient management by developing, improving, and incorporating into workflows interventions targeting patients by risk level, most frequently for diabetes and behavioral health conditions. A few hospitals reported development of EHR capabilities for data analytics to support population health management as unfinished activities at the end of PRIME.

Findings for Goal 3: Improve Population Health and Patient Experience in Medi-Cal

The evidence from hospital-reported data and an independent evaluation of Medi-Cal data indicates that participating hospitals succeeded in improving population health and health outcomes of Medi-Cal beneficiaries. The evidence from the analysis of achievement rates indicated that PRIME hospitals mostly succeeded in improving health of all patients including Medi-Cal beneficiaries by attaining performance targets related to clinical improvements, preventive interventions, and patient experiences. The independent evaluation of these metrics, including a difference-in-difference analysis among Medi-Cal beneficiaries attributed to PRIME hospitals and comparison patients, was challenging due to lack of adequate data to fully replicate PRIME specifications.

Nevertheless, these analyses provided supportive evidence of success for some performance metrics indicating better performance among PRIME hospitals. Exhibit 1 shows the difference-in-difference (DD) values for metrics and measures that had statistically greater movement in the intended direction for PRIME patients than for comparison patients.

Exhibit 1: PRIME metrics and other evaluation measures that showed greater movement in the intended direction for PRIME Patients than for Comparison Patients

PRIME Metrics	Magnitude of Difference between PRIME and Comparison Patients from before to during PRIME (DD)
DPH	
1.6.2. Breast Cancer Screening	3.28%
DMPH	
1.2.8. AHRQ PQI #90	-0.22%
1.3.2 and 2.2.1 Plan All-Cause Readmissions	-2.37%
1.6.3. Cervical Cancer Screening	2.00%
Additional Measures	
DPH	
1.1. Average Number of Mental Health Visits Per Beneficiary, Per Year	0.06
2.2 Outpatient Follow-Up Visit Rates within 30 Days of Hospitalizations	1.76%
Utilization Measures	
DPH	
Percentage of Enrollees with Any ED Visits	-1.40%
ED Visits per 1,000 Beneficiaries per Year	-6.32
Percentage of Enrollees with Any Hospitalizations	-0.97%
Hospitalizations per 1,000 Beneficiaries per Year	-2.33
DMPH	
Percentage of Enrollees with Any ED Visits	-3.42%
ED Visits per 1,000 Beneficiaries per Year	-15.36
Percentage of Enrollees with Any Hospitalizations	-1.07%
Payment Measures	
DPH	
Total Payments	-$865
Payments for Hospitalizations	-$487
Payments for Outpatient Pharmacy	-$94
DMPH	
Total Payments	-$836
Payments for Emergency Department Visits	-$66
Payments for Hospitalizations	-$260

Source: UCLA analysis of Medi-Cal data, July 2014 to June 2020.
Notes: Measures presented have a statistically significant DD, p≤0.05.

For DPHs, 7 other measures changed in the intended direction during PRIME for PRIME patients but this change was similar to change for the comparison patients. These included 1.2.3.c. NQF 0034: Colorectal Cancer Screening, 1.2.8. AHRQ PQI

#90, 1.6.3. Cervical Cancer Screening, 2.1.5 Cesarean Birth, 3.1.1 Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis, Payments for Emergency Department Visits, Payments for Outpatient Services. For DMPHs 4 other measures changed in the intended direction during PRIME for PRIME patients but this change was similar to change for the comparison patients. These included 1.2.3.c. NQF 0034: Colorectal Cancer Screening, 1.6.2. Breast Cancer Screening, 2.1.5 Cesarean Birth, Payments for Outpatient Services.

The metrics with greater improvements corresponded to outcomes of systematic redesign of primary care, improved delivery of preventive care, and care of high-risk high-cost populations. Additional assessment of qualitative data indicated that the improvements in metrics were likely explained by hospitals ability to achieve goals, lower levels of difficulty, higher integration in routine of care, and higher rates of sustainability of activities. Conversely, lack of improvements was frequently explained by more unfinished activities and higher level of effort in addition to lower ratings of achievement of goals and integration into routine care.

Assessment of overarching utilization and payment data provided definitive evidence of reduced use of hospitalizations and ED visits as well as their associated payments. An additional analysis of change in number of ED visits and hospitalizations by race/ethnicity for DPHs indicated that Latinx patients may have experienced a greater reduction than other groups under PRIME, indicating the possibility that PRIME may have improved equity in these outcomes. Together, these findings suggest PRIME helped achieve goals consistent with the Triple Aim components of better health and lower costs.

Findings for Goal 4: Integrate Physical and Behavioral Health and Coordinate Care for Vulnerable Populations

With a few exceptions, PRIME projects were inherently dependent on care coordination and care integration for success in providing integrated high-quality care in the most appropriate settings. Findings indicated that care coordination was a core component of multiple PRIME projects and selected by 17 hospitals. Most information on care coordination approaches was provided in Project 1.2 Ambulatory Care Redesign and indicated use of care coordinators (18) and case managers (13) in many primary care sites, regularly training and monitoring them.

Behavioral and physical health integration was an explicit goal of Project 1.1 Behavioral Health Integration in which 22 participating PRIME hospitals identified behavioral health needs and referred patients to behavioral health care providers. These activities were

supported by integration of behavioral health data in EHRs, availability of clear referral protocols and training providers and staff on how to use them, behavioral health specific registries and staff that monitor and manage the care of patients with these conditions, co-location of behavioral health and primary care providers in the same settings, constructing multidisciplinary teams that meet regularly and jointly develop individualized treatment plans, frequent quality improvement activities to promote integration, and prioritizing behavioral health as an institutional goal with support and buy-in for behavioral health integration by leadership and staff.

Findings for Goal 5: Transition Public Hospitals to Value-Based Care

PRIME moved participating hospitals towards value-based care using two strategies. The first was to reimburse hospitals for participating in PRIME projects based on attaining metric performance targets.

Hospitals reported on their progress in mid-year and year end reports, which included a self-reported rate for metrics (achievement rates). DHCS assigned an achievement value (AV) as an indication of the progress toward the target (see Interim Report PRIME Funding and Payment Methodology for more information) and issued payments to hospitals. AVs indicated the degree to which the hospital made progress toward meeting pre-determined targets (range 0-1). The average AVs for P4R metrics throughout PRIME for DPHs were 0.94-1.00 and for DMPHs were 0.81-1.00 (from the Preliminary Summative Report). Average AVs were lower for P4P metrics for both DPHs (0.76-0.92) and DMPHs (0.60-0.77). The average AVs for pay for performance (P4P) metrics were lower in later years of PRIME in part due to the increasingly higher performance rate targets in each consecutive demonstration year. In DY 13 and later, some metrics transitioned from P4R to P4P, and achievement values decreased for these metrics. Greater success of DPHs AV attainment may have been due to participation in previous quality improvement programs; more staffing resources and expertise, data reporting capabilities, and EHR capabilities.

The second strategy used in PRIME to move hospitals were managed care contracts with APMs. All 17 DPHs reported at least one type of STC approved capitation contract or other APMs in 2020. DPHs reported 1 contract with upside gainsharing, 1 with upside gainsharing and downside risk and 8 contracts with condition-specific population-based payments. The percentage of unique lives under APM arrangements increased by 8% from 2018 to 2020 and by 13% from 2019 to 2020.

Conclusions and Policy Implications

This Final Summative Evaluation Report incorporates the findings of two previous reports. The previous evaluation reports provided evidence that hospitals developed and enhanced needed infrastructure and instigated changes in care delivery processes and showed success in achievement of metrics. In this report, ample evidence indicated achievement of the overarching goals of PRIME, particularly success in reducing hospitalizations and emergency department visits that were likely unnecessary, and an overall reduction in Medi-Cal payments attributable to the program. The Final Summative Evaluation Report provided evidence that the COVID-19 pandemic disrupted implementation of PRIME projects but hospitals used innovation and modifications to mitigate this disruption. The progress of PRIME has been integrated in managed care value-based payments to public hospitals. The findings of this evaluation highlight the importance of federal funding for initiating and promoting progress in quality improvement projects and can be used to inform federal and state Medicaid policies to promote better care, better health, and lower costs.

Introduction

On December 30th, 2015 California received approval for an §1115 Medicaid "Medi-Cal 2020" Waiver. The waiver allowed DHCS to make specific changes to the State's Medicaid plan as approved by CMS. Medi-Cal 2020 included PRIME program. PRIME hospitals expected to improve patient outcomes and be ready to successfully function under risk-based APMs in the long term. PRIME requires hospitals to establish performance baselines, achieve established targets for improvement, and evaluate the success of quality improvement interventions on an ongoing basis. The guiding principles and specific rules of the PRIME program are specified in the Special Terms and Conditions (STCs).

PRIME Hospitals

Participating PRIME hospitals included Designated Public Hospital (DPH) systems and the District/Municipal Public Hospitals (DMPH). DPHs include 12 county-owned and operated hospital systems (DPH-county) and 5 University of California hospital systems (DPH-UC). DMPHs consist of 17 rural institutions designated as critical access hospitals (DMPH CAH) and 20 other DMPHs (non-CAH). Of these, 3 DMPHs discontinued PRIME participation by the end of the 5 year demonstration period. Additional information is available in Appendix B. Project Selection and PRIME Hospital Abbreviations.

Funding and Payment Methodology

Up to nearly $7.5 billion in total funding was available, with $3.7 billion available from the federal government and the remaining from a combination of state contribution in the form of administrative oversight and local funds provided by PRIME hospitals. PRIME hospitals were required to report standardized performance metrics, the majority of which were endorsed and specified by national organizations. PRIME also provided the opportunity to develop innovative metrics when standard measures did not exist or adequately assess a clinical condition in a project (Attachment Q). Metric payment started with pay-for-reporting (P4R) and transitioned to P4P for nearly all metrics. Hospitals submitted their PRIME program data biannually in reports to DHCS. DHCS applied calculations specified in Attachment II to assign an Achievement Value (AV), which determined the level of payment.

PRIME had additional opportunities for entities to reclaim unclaimed funds. The Unearned Funds Pool provided a second opportunity to earn up to 90% of unearned

funds by over-performing on other P4P metrics (demonstrated by exceeding an unearned funds metric demonstration year target by 50% or greater). High Performance Pools (distinct for DPMH and DPH) were available for hospitals that achieved ≥90th percentile benchmark performance or 20% gap closure in the eligible metrics.

PRIME Evaluation

The UCLA Center for Health Policy Research (UCLA) was selected to evaluate PRIME. UCLA developed the evaluation design and evaluation questions that were closely aligned with project objectives defined in PRIME STC Attachment Q. The overall mixed methods evaluation included analyses of quantitative and qualitative data for a comprehensive assessment of program implementation and outcomes (PRIME Evaluation Design).

PRIME Evaluation Conceptual Framework

The evaluation of PRIME was designed to assess the goals of PRIME using a conceptual framework adapted from the Triple Aim: enhanced infrastructure, better care, better health, and lower costs (Exhibit 2 of the PRIME Evaluation Design). The evaluation conceptual framework highlighted how PRIME projects were expected to develop or enhance the infrastructure needed to achieve PRIME goals, deliver better care by improving the process of care delivery overall, achieve better outcomes for patients, and promote efficiencies and reduce costs. PRIME Projects included objectives that can be defined as process and outcome indicators. Process objectives indicate achievement of changes in processes demonstrating successful implementation of Project activities. Outcome objectives demonstrate (1) improvements in patient health that have implications for efficiency and cost reduction and (2) improvements in efficiencies and cost reduction directly. For example, Project 1.1 in Domain 1 was designed to increase use of behavioral health screening tools (better care). Early identification and intervention of behavioral health problems was expected to reduce emergency department (ED) visits (better health, lower cost). These improvements were ultimately expected to lead to PRIME hospitals that are efficient safety net providers that could operate under alternative payment methods such as those employed by Medi-Cal managed care plans (MCPs).

UCLA initially provided research questions and hypotheses for each PRIME project in the PRIME Evaluation Design. These evaluation questions were closely aligned with project objectives defined in PRIME STC Attachment Q. Specific questions were developed using available data for a comprehensive assessment of the impact of each

project. For the final evaluation, UCLA additionally developed 5 research questions that corresponded to the 5 overarching PRIME goals.

Surveys, key informant interviews, and hospital reported data were used to assess the process of implementation of each project at participating DPHs and DMPHs. Hospital-reported metric rates, metric achievement values, and UCLA analyses of metrics using a quasi-experimental methodology were used to assess the success of PRIME in answering overall PRIME goals and project specific objectives.

Evaluation Reports

The evaluation findings are presented in 3 complementary reports including an Interim Evaluation Report prepared in August 2019, the Preliminary Summative report prepared in August 2020 and approved for release February 2021, and this final report. The Interim Evaluation included extensive data on PRIME implementation. The Preliminary Summative report findings included extensive data on hospital reported metric achievement rates. Findings from both reports are briefly summarized in this Final Evaluation report for a comprehensive overview of the PRIME implementation and outcomes.

Evaluation Data Sources and Analysis Methods

The evaluation of PRIME was completed using qualitative and quantitative data and UCLA used different methods for analyzing each data source.

Qualitative Data Analysis Methods

UCLA conducted three surveys and one round of key informant interviews with participating hospitals. UCLA also used the PRIME 5-year plans and biannual self-reported narrative reports submitted to DHCS. These data were used in reporting on infrastructure and processes of PRIME implementation.

Surveys

From April to May 2018, 52 hospitals completed an Interim Survey (17 DPHs, 19 DMPH non-CAHs, 16 DMPH CAHs) for the Interim Evaluation report. The questionnaire included questions about health system capacity and overarching domains of PRIME implementation that were answered by all hospitals, as well as project-specific implementation questions were only answered by hospitals participating in the specific PRIME projects. From January to May 2019, a follow-up questionnaire was administered to stakeholders (n=48 responded). Hospitals were asked to respond with regards to the timeframe during which they completed the interim survey (April to May

2018). Follow-up questions focused on (1) primary and specialty care capacity and (2) components of behavioral health integration. Core components were recommended by DHCS as activities that hospitals could undertake to develop and implement the project. “The core components promote standardization across the program, while allowing participating PRIME entities to tailor program activities to meet local needs.” (Attachment Q) The core components ranged from a single activity to a complex combination of activities. Interim survey questions were designed to examine the implementation of each project as defined in the core components. The survey allowed hospitals to self-identify whether they were completing each component. Hospitals that selected a core component may have implemented specific aspects rather than all potential activities of a core component. Since the interim survey, hospitals may have implemented or dropped activities under a core component.

A second comprehensive survey by UCLA (called "final survey" in the Preliminary Summative Report) of participating PRIME hospitals was completed by April 2020. This survey reflected active projects in DY 15 and examined synergies between PRIME goals and hospitals’ mission and other ongoing initiatives, a self-assessment of achievement of PRIME goals and scope of unfinished activities, sustainability of PRIME following the end of the program, and hospitals’ perceptions of the impact of PRIME on the Triple Aim.

For the Final Summative Evaluation, UCLA conducted a survey of PRIME hospitals to assess the impact of COVID-19 pandemic on the last 6 months of PRIME. UCLA surveyed hospitals on (1) the impact of the COVID-19 pandemic on PRIME implementation and its sustainability and (2) whether the infrastructure and care processes established under PRIME projects contributed to hospitals ability to respond to the COVID-19 pandemic. Key informants from 50 participating PRIME hospitals (17 DPHs, 17 DMPH non-CAHs, 16 DMPH CAHs) responded to the survey in October and November 2020, excluding 1 DMPH non-CAH and 3 DMPH that were no longer participating in the program as of DY15. All survey data were analyzed descriptively and reported overall and by DPH and DMPH as needed.

Key Informant Interviews

To gain in-depth perspectives of PRIME implementation in the Interim Evaluation, interviews were conducted with PRIME stakeholders and leadership with a purposive sample of participating hospitals (n=23). From June to August 2018, interviews were conducted with key informants from 17 DPHs, 5 DMPH non-CAHs (Antelope Valley, Kaweah Delta, Palomar, Salinas Valley, Tri-City), and 1 DMPH CAH (Mammoth). Interviews focused on the general impact of PRIME, the synergy of the selected projects with existing projects and each other, leadership and staff buy-in,

recommendations for ongoing implementation of the program, and clarification or expansion upon topics noted in the survey. UCLA developed hospital-specific interview questions based on the approved 5- year plans and survey responses. Additionally, selected questions were asked in all the interviews. The content of interviews were analyzed and used to contextualize the survey findings.

Self-Reported Data

UCLA also used the PRIME 5-year plans and self-reported year-end narrative reports submitted to DHCS. The former described selection of PRIME projects and how hospitals planned to implement them. The latter data included a brief summary of how the data was collected, project metric achievement rates, as well as challenges and successes in achievement of project metrics.

Metric specifications were largely from nationally recognized measures with modifications to accommodate provider-level reporting, developed by DHCS, the National Committee for Quality Assurance (NCQA), California Association of Public Hospitals Safety Net Institute (SNI) and District Hospital Leadership Forum (DHLF), and re-evaluated annually. DHCS issued trend-break notices when the metric changed enough that it could not be compared to the prior rates. These data were reviewed by DHCS for completeness and were used to determine payment based on assessment of achievement values.

UCLA aggregated and analyzed the year-end reports for each demonstration year (DY, Appendix G Exhibit 289). Data included the rate, as well as the numerator and denominator used to calculate that rate for each metric. Unless otherwise noted, UCLA calculated the weighted average for each metric by summing the numerators and the denominators for all hospitals that reported data, and then divided the overall numerator by the overall denominator. This process was repeated for each metric. Metrics were designated as P4R or P4P in a given year, and this varied for DPHs and DMPHs. Hospitals may not have reported data if they were working on Infrastructure Building Milestones or had other constraints on data availability. In general, DMPHs did not report data in DY 11. A detailed description of the methodology for the qualitative analysis can be referenced in the Interim Evaluation Report (see Appendix C. Detailed Survey and Interview Methodology).

Limitations

The qualitative data were subject to limitations associated with self-reported data, such as potential biases in survey responses, changes in implementation over time that were not captured or reflected in available data, or unknown or underlying variations in metric calculation by hospitals. A more detailed discussion of the limitations of the qualitative

analysis can be referenced in the Interim Evaluation Report (see Appendix C. Detailed Survey and Interview Methodology).

Quantitative Analysis

The quantitative data utilized in this report included Medi-Cal enrollment and fee-for-service and managed care claims and encounters from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) data warehouse. The data included a minimum of two years of data during PRIME and patients were selected for inclusion following the PRIME criteria for attribution of patients to DPHs and DMPHs. Medi-Cal data included both fee-for-service and managed care encounter data. Dates of service included in the claims ranged from July 2013-June 2020 (DY 9-DY 15), with variation by cohort.

Data also included the California Department of Health Care Access and Information (HCAI), formerly the Office of Statewide Health Planning and Development (OSHPD). Patient discharge data included January 2014 to December 2019. HCAI data is reported by calendar year, so the latter half of DY 15 was not available for this analysis.

UCLA analyzed Medi-Cal and HCAI data to construct PRIME metrics when feasible. UCLA used the DY 15 Year End PRIME Reporting Manual for the Summative evaluation, unless otherwise noted. This strategy excludes variations in metric values due to changes in metric specifications over time and allowed for a systematic and standardized assessment of PRIME outcomes. Subsequently, these metrics may not fully align with the hospital self-reported metrics. In addition to PRIME metrics, UCLA created additional measures to assess overall or project specific outcomes.

UCLA used descriptive and a quasi-experimental pre-post, intervention-comparison group analytic design and DD methodology for analyses of Medi-Cal and HCAI data. For analyses of the HCAI data, UCLA identified California hospitals with most similar characteristics using HCAI financial and patient discharge data. For the analyses of Medi-Cal data, UCLA constructed a comparison group using PRIME criteria (such as 2 or more visits) for attribution of patients to DPHs and DMPHs and propensity score modeling. For the DD analyses, UCLA used doubly robust models using propensity scores. See Appendix C. Difference-in-Difference (DD) Data and Methodology for further detail on these data and methods.

Limitations

The quantitative findings in this report were subject to data and methodology limitations described in detail in Appendix C. Difference-in-Difference (DD) Data and Methodology. Examples of data limitations included likely delays in submission Medi-Cal claims due to

the COVID-19 pandemic, lack of comprehensive behavioral health claims, and lack of complete baseline utilization data. Examples of methodology limitations included significant differences in between PRIME specified metrics created by UCLA and those reported by hospitals and challenges in identification of the comparison patients.

Characteristics of PRIME Hospitals

An assessment of variations in characteristics of PRIME hospitals was presented in the Interim Evaluation Report released in August 2020. Data showed that DPHs were generally large, tertiary or quaternary care institutions often located in highly populated urban areas. DPHs included county-owned and operated hospitals and University of California (UC) hospitals. The 12 county-owned and operated hospitals and had a payer mix that was dominated by Medi-Cal and uninsured patients. In contrast, the 5 UC hospitals had a payer mix dominated by insured patients and a more complex case mix than the former group. DPHs also had capacity for delivery of outpatient primary and specialty care services. All DPHs had also participated in a prior California Section 1115 Waiver program, Delivery System Reform Incentive Payment (DSRIP), which was closely aligned with several PRIME projects. Under DSRIP, DPHs made strides in improved infrastructure and care processes in various areas, in addition to gaining valuable expertise in reporting metrics and accountability for performance improvement. PRIME required the participation of DPHs in six mandatory projects in Domains 1 and 2 but DMPHs did not have this mandatory project requirement. This facilitated the implementation of synergistic projects on system transformation and care of complex patients by DPHs.

In contrast, DMPHs consisted of smaller hospitals owned and operated by districts and municipalities, most often in less densely populated or rural areas. In the final survey, 6 DMPHS reported having no primary care clinics and 12 had no specialty clinics (of the 33 DMPHs that completed the survey). Among all the DMPH hospitals, 17 were Critical Access Hospitals (CAHs), defined by having fewer general-acute care beds and located in rural areas. Thus, the CAHs were smaller hospitals with more limited internal capacity and lower case mix than the other DMPHs. DMPHs had not participated in other prior Waiver programs and did not have the same experience as DPHs in performance accountability. The level of prior experience was particularly important for the ability of the hospitals to gather data and report on performance metrics. Three DMPHs discontinued PRIME participation. Two of these discontinued DMPHs either closed or suspended operations during PRIME, and the third DMPH became privately owned during PRIME.

PRIME Implementation Findings

An extensive assessment of each PRIME project and overall activities was conducted and presented in the Interim Evaluation Report released in August 2020. This report included a description of PRIME hospitals and the projects they selected under the program, the infrastructure they developed to implement the planned activities, and the processes they followed subsequently as of May 2019. The Interim Evaluation Report indicated progress in infrastructure and care processes.

System-Wide Infrastructure Development

The data showed that PRIME hospitals developed or enhanced their infrastructure system-wide and for specific projects during PRIME, building on their past progress in various areas. Available data indicated system-wide advances in developing administrative capacity and personnel; improving EHR content and functioning; expanding use of tools such as registries and telehealth to manage patients and increase access; increasing capacity through formalized working relationships with external providers; and building on synergies with other initiatives and programs that were concurrently implemented (e.g. Whole Person Care).

System-wide efforts in PRIME implementation included promoting change in organizational culture and function by training and organizing providers in teams and expanding capacity to deliver collaborative team-based care. Assessment of these processes indicated accelerated efforts in training and organizing providers in teams and engaging all stakeholders including providers, clinical and administrative staff, and senior leadership in the process. The majority of hospitals also engaged in multiple quality improvement collaboratives and used rapid cycle improvement exercises to implement various projects. In addition, about a third of hospitals developed new capacity to address racial/ethnic, language, sexual orientation, and gender identity disparities and promoted systematic physical and behavioral health screening during PRIME.

System-Wide Implementation Processes

PRIME implementation was guided by a series of core components per project that proposed the development of infrastructure and activities to be undertaken to implement projects. The analyses of data showed that hospitals nearly always followed these core components and that many hospitals had begun work on these components prior to PRIME. The actual activities hospitals engaged in depended on whether they had begun working on a given project prior to PRIME and the progress they had made when PRIME started.

The assessment of data and metric challenges and the solutions devised to address them consistently showed the same themes across all projects. Hospitals consistently reported a lack of adequate IT infrastructure, variations in documentation by providers and staff in different departments, variations in care processes within departments, and departmental silos that prevented collaboration as a barrier to success. But they also reported addressing these challenges by developing IT and workarounds; standardizing data collection tools and training providers; and promoting provider engagement and cross-departmental collaboration. Hospitals also reported the volume of metrics, simultaneous implementation of projects, and concerns over whether metrics adequately reflected hospital efforts as other general barriers.

Progress in Project Activities by the End of PRIME

An assessment of the progress of hospitals by the end of PRIME was presented in the Preliminary Summative Evaluation Report completed in August 2020. This progress was measured by assessing completion of planned activities and description of unachieved activities in a survey implemented from February to April 2020.

Hospitals rated the extent to which they achieved the goals and activities of PRIME projects in which they participated on a scale that ranged from 1 (achievement of no goals) to 10 (achievement of all goals). DPH scores ranged from a low of 7.0 for Project 1.7 Obesity Prevention and Healthier Foods Initiative (Healthier Foods) to a high of 9.4 for Project 3.2 Resource Stewardship: High-Cost Imaging (High-Cost Imaging). Among the projects that were required for DPHs (Project 1.1-1.3 and 2.1-2.3), the lowest achievement score was 7.7 for Project 1.3 Ambulatory Care Redesign: Specialty Care (Specialty Care Redesign) to 8.3 for Project 2.3 CCM for High-Risk Populations. DMPH non-CAHs ratings of achievement of their selected projects ranged from a low of 6.9 for 2.2 Care Transitions to a high of 9.5 for Project 3.3 Resource Stewardship: Therapies Involving High Cost Pharmaceuticals (High-Cost Pharmaceuticals). The DMPH CAHs achievement rates for selected projects ranged from a low of 6.0 for Project 1.5 Million Hearts to a high of 10.0 for Project 1.7 Healthier Foods.

Hospitals were asked to report, through open-ended response, up to 5 specific PRIME unfinished activities that they intended to implement during PRIME, but had not fully implemented. Data showed variations by hospital type. Approximately 70% of the hospitals (36 of the 51 surveyed) reported any unfinished activities, for a total 104. Most activities related to Projects 1.1 Behavioral Health Integration (15), 1.2 Primary Care Redesign (31), 1.3 Specialty Care Redesign (17), and 2.2 Care Transitions (13). Also, 6 hospitals noted 11 overarching unfinished activities, such as further improvements in data infrastructure and increasing their quality improvement workforce. Unfinished

activities were grouped into infrastructure and process, and data showed variations by hospital type. The majority of unfinished activities related to Project 1.1 were reported by DPHs (13), which included a mix of infrastructure (6) and process-related (7) activities. Illustrative examples of unfinished infrastructure activities included developing registries and partnerships. Examples of unfinished process activities included increasing SBIRT and cancer screening (i.e. colonoscopy), collecting REAL/SOGI data, and expanding the use of specialty telehealth visits.

Level of Effort and Difficulty of PRIME Implementation

An indicator of project implementation was the level of effort, financial investment, and difficulty. In the Interim Evaluation Report, hospitals reported they spent more effort engaging stakeholders, identifying resources, and training staff and comparatively less effort towards personnel reorganization and modifications to projects and metrics. The overall level of effort was similarly high for all projects, but the overall level of difficulty was more frequently high for DMPHs, particularly DMPH CAHs, across most projects.

In the Preliminary Summative Evaluation Report, hospitals rated the levels of staff effort, financial investment, and difficulty of PRIME Projects (from low of 1 to high of 5). Ratings of staff effort ranged from a low of 3.5 for Project 2.5 Transition to Integrated Care: Post Incarceration (Post Incarceration) and as high as 4.8 for Project 2.4 Integrated Health Home for Foster Children (Foster Children Health Homes), with multiple projects with high scores of 4.5 such as Project 1.1 Behavioral Health Integration, Project 1.6 Cancer Screening and Follow-up, and Project 2.7 Advance Care Planning.

The examination of ratings of financial investment was somewhat lower, ranging from a low of 2.9 for Projects 2.6 Pain Management and Project 3.3 High-Cost Pharmaceuticals to a high of 4.0 for Project 1.1 Behavioral Health Integration and Project 2.5 Post Incarceration. The ratings of level of difficulty ranged from a low of 3.4 for Project 3.2 High-Cost Imaging and a high of 4.5 for both Project 2.4 Foster Children Health Homes and Project 2.5 Post-Incarceration Care. Hospitals noted that the most important factors to their success in implementing PRIME projects were the high prioritization of PRIME by senior leadership and the integration of PRIME into their organization's strategic mission.

Hospital Perceptions of Overall Impact of PRIME

In the Preliminary Summative Evaluation Report, hospitals' perceptions of the overall impact of PRIME was assessed by examining the impact on organizational capacity, managed care contracts, Triple Aim: enhanced infrastructure; better care; better health; and lower costs, promoting collaborations, and unexpected consequences. Ratings were reported on a scale of 1 (very low) to 5 (very high).

Hospitals reported the highest impact of PRIME to be on their data collection (4.1), analytics (4.0), and reporting capacity (4.0). The lowest impact was their ability to participate in risk-based contracts (2.5). To prepare hospitals to participate in value-based payment (VBP) models, DPHs were required to have assigned enrollees under one or more contracts with Medi-Cal MCP. All DPHs and the great majority of DMPHs reported having at least 1 contract with a Medi-Cal MCP during PRIME with assigned enrollees. The average number of contracts was highest for DMPH non-CAHs (2.5) and lowest for DPH County hospitals (1.6) and DMPH CAHs (1.6). This variation was likely influenced by the number of MCPs operating in each county. The average number of Medi-Cal MCP enrollees was highest within DPH County hospitals, totaling to over 631,000 enrollees. As a whole, DPH and DMPH hospitals reported a total of over 788,000 Medi-Cal MCP enrollees within their PRIME-eligible population (DPH: 671,000; DMPH: 127,000 (reported in the survey).

The perceived impact of PRIME on the Triple Aim was examined for each domain. Hospitals perceived that the highest impact of PRIME was on the quality of care in all 3 domains (4.3), followed by patient health outcomes (4.1 for Domains 1 and 2, and 3.8 for Domain 3), and cost containment (3.2 for Domain 1, 3.3 for Domain 2, and 3.5 for Domain 3). Methods for assessing PRIME's impact varied. Direct measurement of metrics was the most common method for assessing the quality of care (82%) and patient health outcomes (80%). But, anecdotal and other observations were most common for cost-containment and efficiency (47%).

Hospitals rated the highest impact of PRIME as 4.0 for improving internal collaboration between clinical staff and data analytics staff and 3.3 and 3.2 for improving external collaborations, such as the California Department of Health Care Services, California Association of Public Hospitals, and Safety Net Institute.

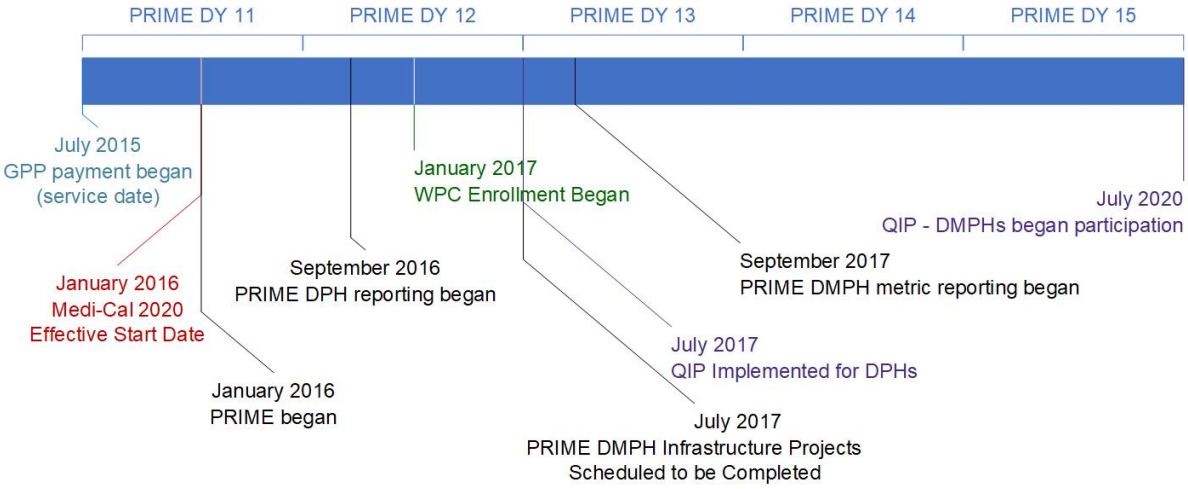
Hospitals were asked to report if there were unexpected consequences implementing PRIME. Some (20) hospitals reported unexpected adverse consequences, with the most common (10) being provider and staff resistance, burden, or burnout. In contrast, 38 hospitals reported multiple unexpected values of implementing PRIME, with the most common being driving the engagement of providers and staff in opportunities for training

and leadership in quality improvement (12), and promoting data-driven quality improvement within the organization (9).

PRIME Synergies with Other Programs

PRIME was one of several Medi-Cal 2020 Waiver demonstrations. The PRIME Interim Report discusses hospital perspectives of potential synergies between PRIME and two other demonstration programs, the Global Payment Program (GPP) and the Whole Person Care (WPC) demonstration. Additionally, the interim report discusses DPHs' perspectives of synergies between PRIME and the Quality Incentive Pool (QIP) Program, a managed care Directed Payment Program implemented by DHCS that involves payment redesign. The implementation timeline for these programs is highlighted in Exhibit 2.

Exhibit 2: Timeline for PRIME, GPP, QIP, and WPC



Notes: *Global Payment Program (GPP), Whole Person Care (WPC), and Quality Incentive Program (QIP)*

This chapter briefly describes each program, structural synergies between programs, and a summary of synergies described by hospitals in evaluation reports. Data used for this assessment included Medi-Cal 2020 STCs, GPP Final Evaluation, and WPC Interim Report.

Quality Incentive Pool (QIP) Program

In 2017, California created the QIP Program for the 17 DPHs, a managed care directed payment program allowable under 42 Code of Federal Regulations 438.6(c). The State directs Medi-Cal MCPs to make QIP payments to QIP Entities. In the first three years of QIP, only DPHs participated in QIP. The DMPHs did not participate in QIP until after PRIME ended in July 2020.

Similar to PRIME, QIP tied incentive payments to performance on clinical quality measures. In the first three years of QIP, DPHs' designated performance measures were organized into four strategic categories: primary care, specialty care, inpatient care, and resource utilization. The QIP measures did not directly overlap with any of the quality measures used in PRIME, to avoid duplication of payment for the same measure and to provide broad coverage of clinical areas. Like PRIME, QIP aimed to promote access to care, value-based payments, and tie funding to quality outcomes.

Although there were many similar aims between PRIME and QIP that enabled synergies, QIP built on the progress made under PRIME and advanced the alignment of State, MCP, and hospital system goals. QIP increasingly aligned program measures with those under which the managed care plans are held accountable. In PRIME, a robust number of managed care assigned lives was not essential to demonstrate metric performance and earn performance payments, whereas in QIP the majority of measures exclusively used managed care assigned lives for the measure target population. Additionally, PRIME measures had a generous pay-for-reporting allowance that progressed to pay-for-performance over the five years as data infrastructure became more sophisticated. QIP measures were exclusively pay-for-performance starting in the second program year.

QIP is in the fifth program year and the DMPHs who participated in PRIME are included in the QIP program. Without their participation in PRIME and the infrastructure-building period PRIME allowed, many of them would not be prepared to participate in data-driven quality incentive programs like QIP. QIP continues to build on the data and quality infrastructure established under PRIME and goes beyond PRIME by further aligning State, MCP, and hospital system goals.

Whole Person Care

WPC was designed to coordinate the medical, behavioral, and social service needs of Medi-Cal enrollees who are high utilizers of services, improve their health, and reduce costs. High utilizers were defined as those who were high utilizers of avoidable emergency department, hospitals, or nursing facilities; had two or more chronic physical conditions; had severe mental illness and/or substance use disorders; were experiencing homelessness or were at-risk-of-homelessness; and were recently released from institutions, including jail or prison. WPC was led by county entities, which were primarily departments of health care services or public health in 27 California counties. Of these, 12 were counties with DPHs and 15 other counties without a DPH. All County DPHs participated in WPC, with three DPHs (Kern Medical Center, Arrowhead Regional Medical Center, and Santa Clara Valley Health and Hospital System) acting as the lead entity implementing the WPC pilot in those counties and approximately 10 other hospitals, including 2 DPH UCs, and 8 DMPHs that were contracted partners and provided WPC services. Each WPC pilot defined eligible beneficiaries, conducted outreach, and enrolled them in WPC. Teams organized by pilots coordinated care for all enrollees and provided housing support services when needed. Some pilots also provided additional services such as respite or sobering center stays as well as linkages to social service providers to obtain other benefits or jobs. Pilots were reimbursed for WPC services and had the option of selecting pay-for-outcome incentives for a small number of metrics.

The above summary of the WPC program highlights differences with PRIME design and implementation process. WPC was narrowly focused on a subgroup of Medi-Cal managed care patients while PRIME population was inclusive of patients touched by participating hospitals, including those who were without insurance or had other forms of insurance. WPC focused on delivery of a narrow range of services that were not part of Medi-Cal benefits and PRIME focused on improving the quality of and delivery of a broad range of services that were Medi-Cal benefits. WPC pilots were primarily reimbursed for provision of WPC services with a limited emphasis on accountability for outcomes. PRIME hospitals received payments for progress toward metric targets.

Despite these differences, there were synergies in implementation of the two programs. In the Interim WPC report, 11 pilots reported synergies between WPC and PRIME included working with high-need Medi-Cal beneficiaries, collection of advanced data, integration of electronics systems, and a number of similar metrics, provision of case management services. WPC pilots in Contra Costa and Santa Clara coordinated their activities across these waiver programs by establishing leadership teams to strategize and leverage resources. Some other DPHs reported that the high level of effort in

development and operations of these projects simultaneously led to challenges in collaboration. In the PRIME interim report, hospitals described synergies to include a focus on high utilizer populations (such as Domain 2, Targeted High Risk or High Cost Populations), meetings and other collaborations between various waiver program teams to share best practices and reduce silos, and promoting similar workflow and metric standardizations across programs.

The Global Payment Program (GPP)

GPP was designed to combine uncompensated care funding streams (Disproportionate Share Hospital and Safety Net Care Pool) into a single payment program for County DPHs' delivery of uncompensated services. GPP increased the flexibility of federal funding to shift DPHs away from emergency and acute services towards preventive and primary care services, including non-traditional services, such as phone visits, group visits, telemedicine, and other electronic consultations.

DPHs earned points by providing specific types of services, and points counted toward a target threshold. Hospitals were paid based on the number of accrued points relative to the threshold. The payment amount was based on an annual "global budget" that a hospital could earn. Services were categorized into a tier and group and assigned point values. Service groups included traditional provider-based, face-to-face outpatient encounters; other non-traditional provider, groups, prevention/wellness, face-to-face; technology-based outpatient; and inpatient. Relative values shifted during the program toward primary and preventive services.

The above summary of GPP highlights differences with PRIME. GPP focused on uninsured patients who received care at DPHs, while the PRIME population was inclusive of all DPH patients with 2 or more primary care visits in a given year, in addition to managed care assigned lives. Furthermore, DMPH and DPH UC hospitals could participate in PRIME. Both GPP and PRIME intended to reduce costs, but GPP specifically sought to change the distribution of care away from acute care and towards lower-cost outpatient services. GPP used a global budget to control costs, while PRIME used pay-for-reporting and pay-for-performance to promote performance metrics in projects that targeted specific areas of care.

The GPP evaluation report indicated that the program led to an increase in the number of uninsured served and incentivized outpatient care, which may have increased the number of PRIME patients with 2 or more primary care visits. Hospitals reported that the greater predictability of the global budgets supported investments in primary care

delivery reform, which may have supported PRIME infrastructure and implementation, such as improving capacity for care coordination and telehealth.

Other Medi-Cal 2020 Waiver Programs

In addition to the programs above, the Waiver programs or efforts included Access Assessment, Drug Medi-Cal Organized Delivery System (DMC-ODS), Dental Transformation Initiative (DTI), California Children's Services Demonstration Project (CCS), and Coordinated Care Initiative (CCI). Among these, DMC-ODS and DTI were largest. DMC-ODS was intended to organize SUD care for patients with SUD and improve quality, access, and care coordination and integration. The program was implemented by 37 counties in California, many of which were home to participating PRIME hospitals. DMC-ODS was likely to have synergies with PRIME Project 1.1 to the degree that PRIME hospitals provided SUD care to the subset of patients with SUD and because the goal of both interventions were to promote care integration. However, the scope of this synergy is not known.

DTI was focused on increased delivery of use of preventive dental services to children to prevent and treat early childhood caries and increase continuity of care. DTI had four domains implemented in multiple counties, but the program interventions had limited synergies with PRIME projects. Other Waiver efforts such as CCI and CCS were also focused on integrating specific populations such as dually eligible and children with special health care needs in managed care and had synergies with PRIME Projects Project 2.4 in relation to CCS and 2.7 in relation to CCI in increasing Medi-Cal APM participation.

Quality Improvement Activities

PRIME included a learning collaborative component (PRIMEd) to promote peer-to-peer learning and system transformation. DHCS contracted with Aurrera Health Group (formerly Harbage Consulting) to host learning collaboratives to support participating hospitals as they implemented PRIME projects. Five annual PRIMEd conferences, occasional regional meetings and semiannual meetings, and periodic webinars were held on overarching PRIME implementation issues, principles of quality improvement, and timely topics such as telehealth during the COVID-19 pandemic.

Topic-specific Learning Collaboratives (TLCs) were also convened starting in DY13 to focus on the implementation of specific PRIME projects. Six TLCs continued into DY 15, including Behavioral Health, Health Disparities, Maternal and Infant Health, Health Homes for Foster Children, Care Transitions, and Tobacco Cessation.

PRIME hospitals received further technical assistance from other entities and learning collaboratives such as the Safety Net Institute (SNI), the California Association of Public Hospitals (CAPH), District Hospital Leadership Forum (DHLF), and the California Maternal Quality Care Collaborative (CMQCC). Support included webinars, presentations in the annual conferences, and metric-related support. Further detail on quality improvement activities under PRIME can be found in Appendix E: Quality Improvement Activities and PRIME Topic-Specific Learning Collaboratives in DY14-DY 15.

PRIME and COVID-19

The first reports of COVID-19 in the United States occurred in January 2020, during the last 6 months of PRIME. In this chapter, UCLA examines the impact of the pandemic on the last year of PRIME implementation. The progress of the pandemic in California was examined using data on COVID-19 cases from the LA Times and hospitalizations from the California Department of Public Health from April 2020, when such data was first available, through June 2020, the last month of PRIME. Data reported by individual counties were added together to get total cases and hospitalizations for California.

UCLA also surveyed hospitals on (1) the impact of the COVID-19 pandemic on PRIME implementation and its sustainability and (2) whether the infrastructure and care processes established under PRIME projects contributed to hospitals ability to respond to the COVID-19 pandemic. Key informants from 50 participating PRIME hospitals (17 DPHs, 17 DMPH non-CAHs, 16 DMPH CAHs) responded to the survey in October and November 2020, excluding 1 DMPH non-CAH and 3 others that were no longer participating in the program as of DY15 (Appendix Exhibit 95). Hospitals were asked to rate their perceived impacts on a scale of 0-10 and the results were reported across all participating hospitals and by hospital type as appropriate. Responses to open-ended questions were analyzed qualitatively in order to identify emerging themes.

Early Progression of COVID-19 Pandemic in California

The number of COVID-19 cases steadily increased from April to June 2020, with 236,139 COVID-19 cases reported in California by the end of June. The number of new daily cases was under 3,000 a day through April and May, and by late June, there were multiple days with nearly 8,000 cases (data not shown; cumulative cases shown in Exhibit 3). During this time, COVID-19 hospitalizations were nearly 3,500 in late April but reached over 5,000 by end of June (Exhibit 4), indicating an increasing burden of disease and declining hospital capacity. COVID-19 related deaths illustrate disease severity and demand on hospital resources.

Exhibit 3: Cumulative COVID-19 Cases, April 2020 through June 2020, California

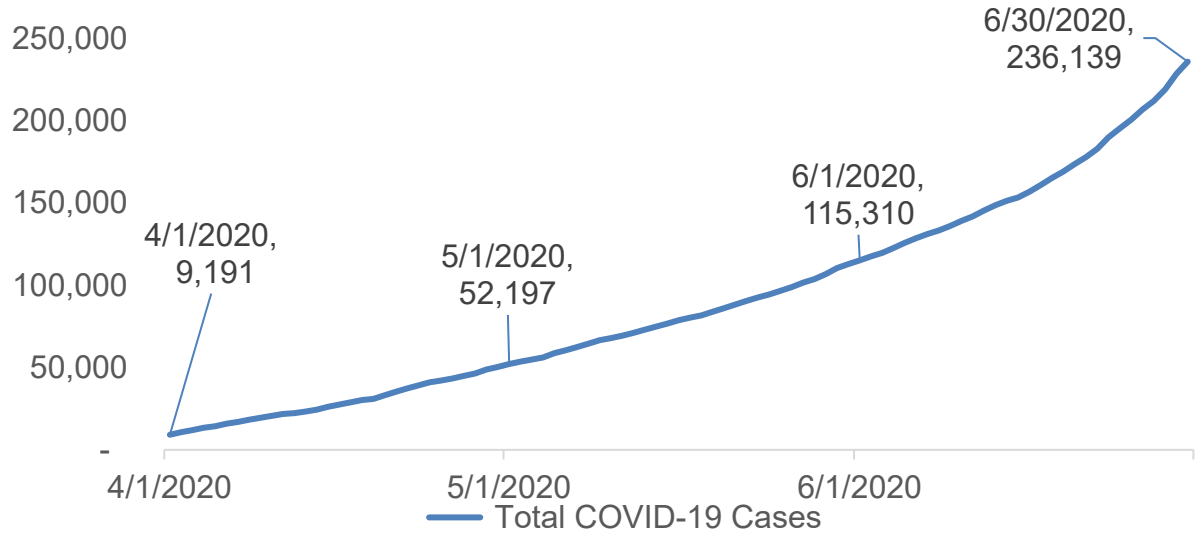
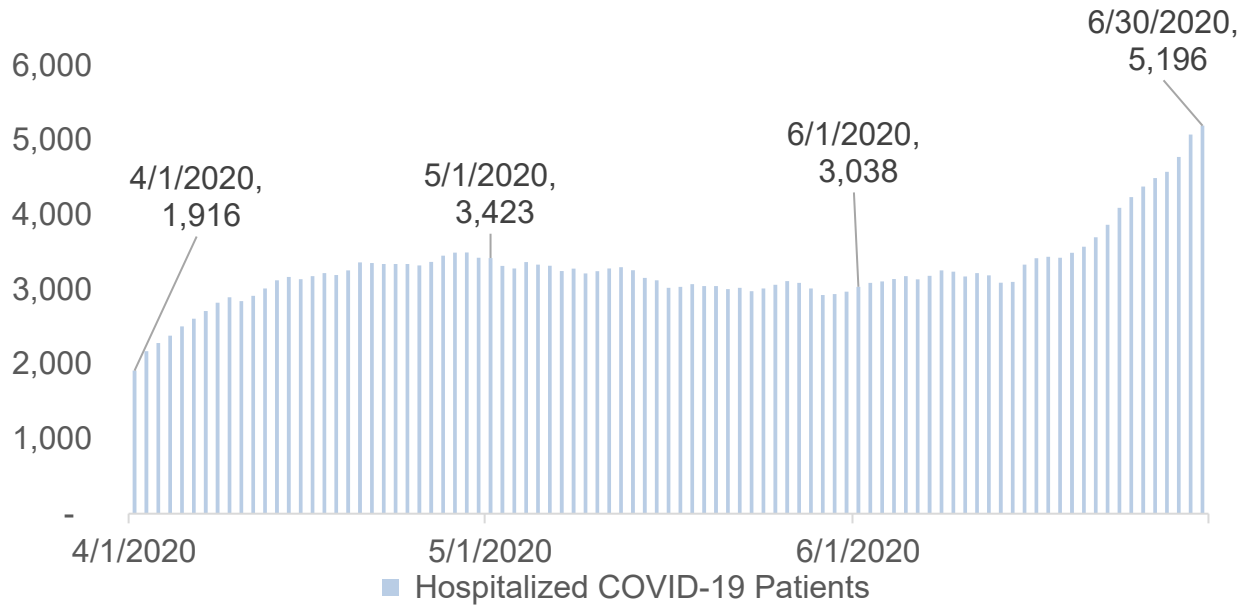


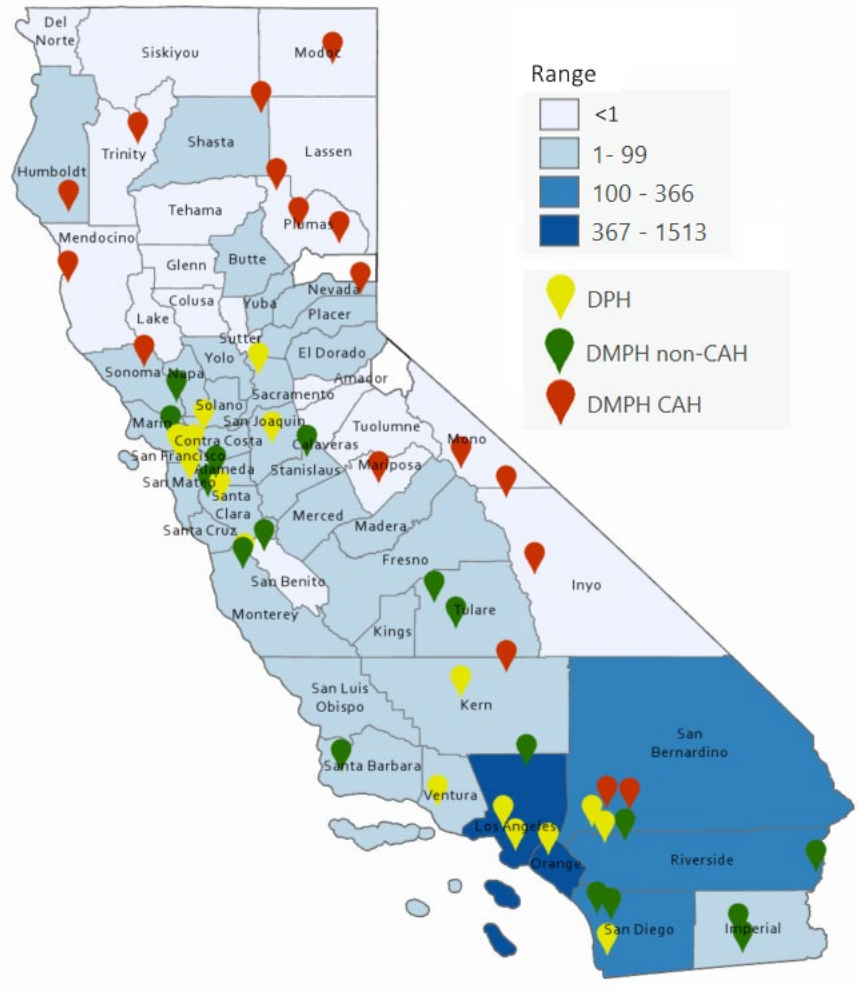
Exhibit 4: Daily COVID-19 Hospitalizations, April 2020 through June 2020, California



Source: Daily COVID-19 cases reported from April 1, 2020 to June 30, 2020 through the LA Times. Daily COVID-19 hospitalizations reported from April 1, 2020 to June 30, 2020 to the California Department of Public Health. Data reported by individual counties were added together to get total cases and hospitalizations for California.

Exhibit 5 displays the average number of daily COVID-19 hospitalizations in June 2020 in counties where PRIME hospitals were located. The highest tier of daily hospitalizations (367 to 1,513) was in Orange and Los Angeles counties where 4 PRIME hospitals (3 DPH and 1 DMPH non-CAH) were located. The second highest tier of hospitalizations (100 to 366) were in San Bernardino, Riverside, and San Diego counties with 9 PRIME hospitals (3 DPH, 4 DMPH non-CAH, 2 DMPH CAH). There was less than 1 average daily COVID-19 hospitalization reported in 19 counties where 11 PRIME hospitals (1 DMPH non-CAH and 10 DMPH CAH) were located.

Exhibit 5: Average Number of Daily COVID-19 Hospitalizations in June 2020, by County



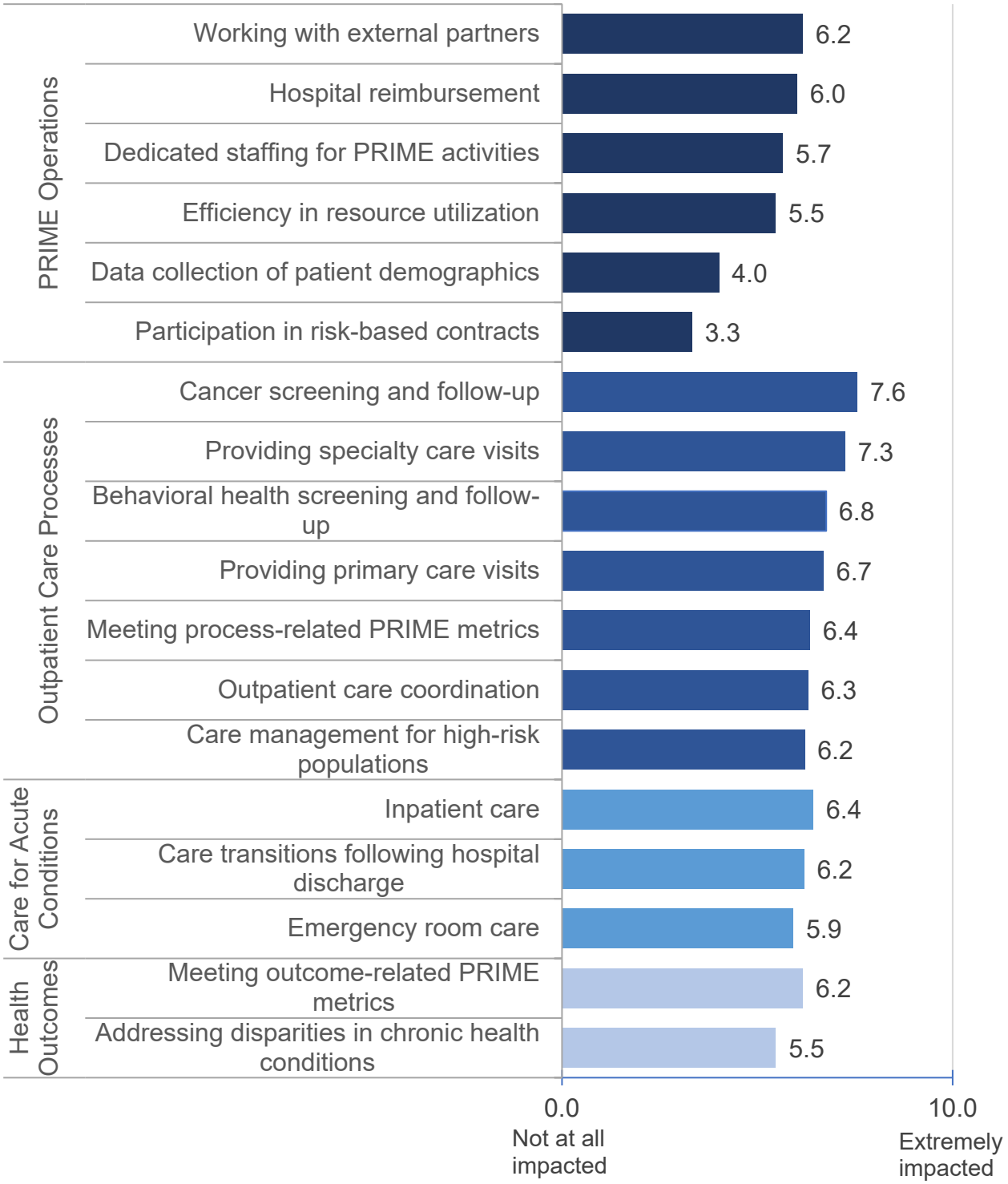
Source: Daily COVID-19 hospitalizations reported from June 1, 2020 to June 30, 2020 from the California Department of Public Health. Data was not available for Alpine and Sierra counties.

Overall Impact of COVID-19 Pandemic on PRIME Implementation

UCLA examined via survey responses the impact of the COVID-19 pandemic on the implementation of PRIME activities in four main categories: (1) PRIME operations, (2) outpatient care processes, (3) care for acute conditions, and (4) improving health outcomes. Hospitals rated the impact of the COVID-19 pandemic on their ability to implement PRIME activities on a scale from 0 (not at all impacted) to 10 (extremely impacted).

Among PRIME operations, hospitals rated the highest impact of COVID-19 to be on ability to work with external partners (Exhibit 6, average rating 6.2), followed by hospital reimbursement (6.0). Among outpatient care processes, hospitals reported the highest impact on their ability to conduct cancer screening and follow-up (7.6) and provide specialty care visits (7.3). Under care for acute conditions, the highest rating was for inpatient care (6.4) and under improving health outcomes, the highest rating was for meet outcome-related PRIME metrics (7.0). Overall, the greatest impacts were reported for outpatient and acute service delivery and their subsequent impact on reporting and improving outcomes.

Exhibit 6: Hospital Ratings of Impact of COVID-19 on PRIME Implementation



Source: UCLA analysis of the COVID-19 Survey, October to November 2020.

Note: Sample included 50 participating PRIME hospitals. One participating DMPH non-CAH hospital did not respond to the survey.

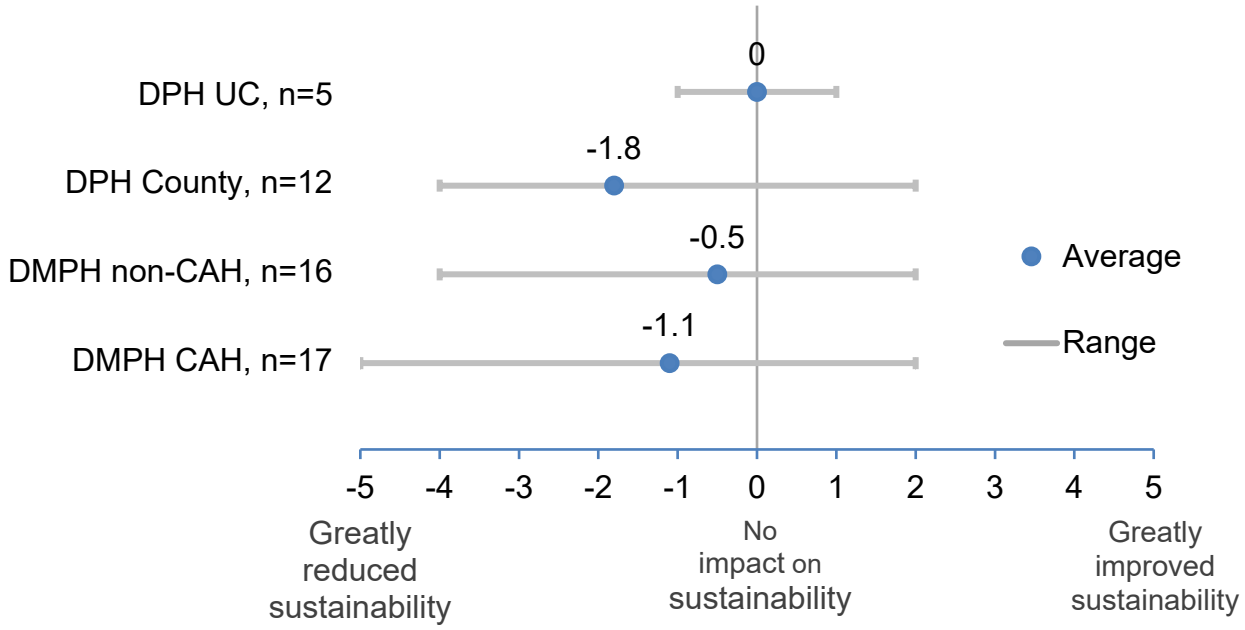
Further examination of these ratings by hospital type indicated some underlying differences (Appendix A: Selected PRIME Evaluation COVID-19 Survey Results). For example, for PRIME operations, DPHs reported the highest impact was on hospital reimbursement (6.8), and both DMPH groups reported the highest impact was on working with external partners (7.0 for DMPH non-CAHs and 6.0 for DMPH CAHs). For outpatient care processes, DPHs reported the highest impact was on providing cancer screening and follow-up (8.1), while DMPH non-CAHs identified behavioral health screening and follow-up (7.6) and DMPH CAHs identified providing specialty care visits (7.3) as being the most impacted.

Hospitals elaborated on how COVID-19 negatively impacted PRIME implementation (Appendix A Exhibit 96). Multiple responses highlighted a general reduction in health care utilization resulting from shelter-in-place orders and cancellation of elective or preventive services, although some noted an increase in demand for behavioral health services or other services to meet health needs resulting from delayed or foregone care. Another category of negative impacts stemmed from the responses reflecting the need to reassign staff and shift care priorities due to the pandemic, which undermined the capacity to implement PRIME activities. A third category of responses highlighted the negative impact the pandemic had on hospital financing and quality of care.

Despite the negative impacts of the pandemic on PRIME implementation, hospitals described ways in which they innovated and adapted to these challenges (Appendix A Exhibit 97). These included efforts to provide health care through electronic platforms, increased use of data infrastructure and communication tools, and modifications to care protocols and quality maintenance.

Hospitals also rated the impact of COVID-19 on sustainability of PRIME activities after the end of the program on a scale from -5 (greatly reduced) to 0 (no impact) to 5 (greatly improved; Exhibit 7). Responses varied by all hospital types. However, DPH UC hospitals reported no impact of the pandemic on the sustainability of PRIME activities on average. But DPH County hospitals (-1.8), DMPH non-CAHs (-0.05), and DMPH CAHs (-1.1) reported varying ratings of reductions in sustainability on average.

Exhibit 7: Hospital Ratings of Impact of COVID-19 on Sustainability of PRIME, by Hospital Type



Source: UCLA analysis of the COVID-19 Survey, October to November 2020.
Notes: Sample included 50 participating PRIME hospitals. One participating DMPH non-CAH hospital did not respond to the survey.

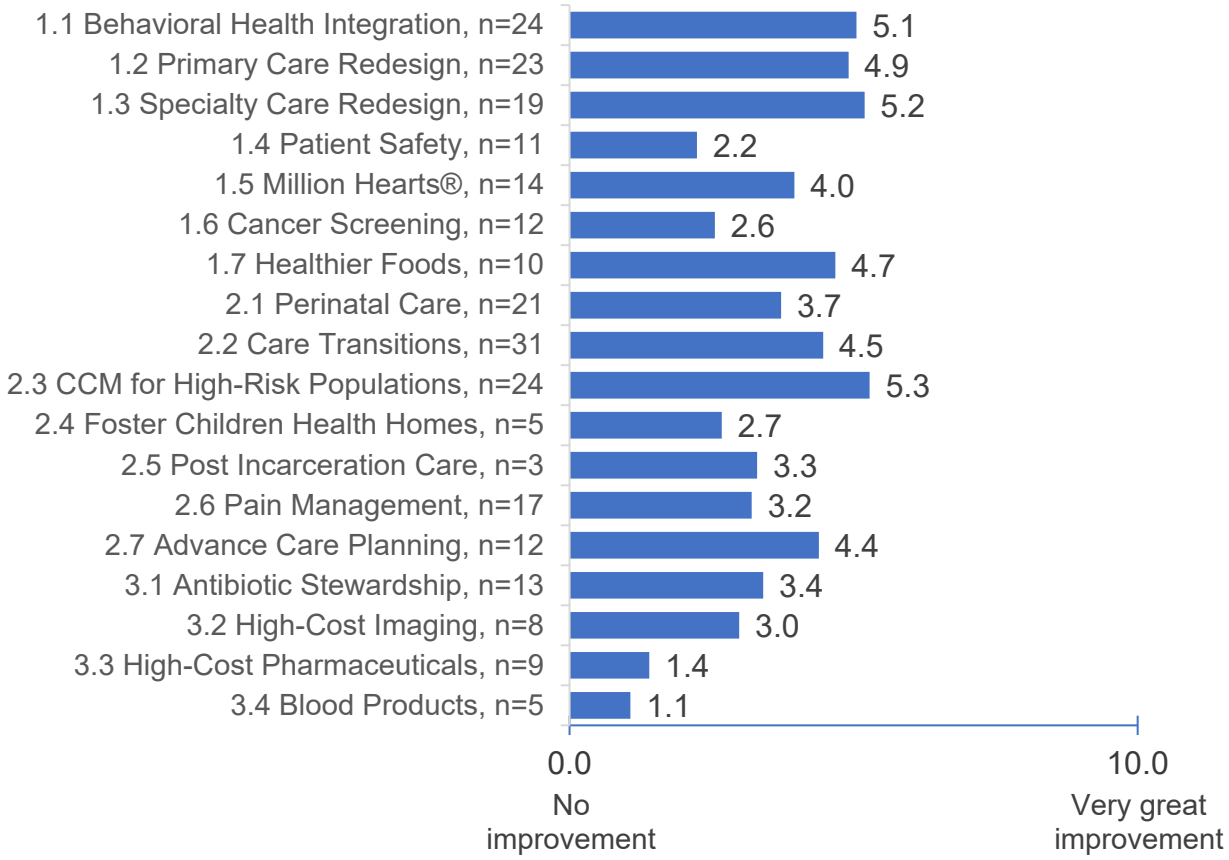
Hospitals were asked to elaborate on how COVID-19 had affected the sustainability of PRIME activities (Appendix A Exhibit 98). Overall, 29 hospitals reported that COVID-19 had reduced the sustainability of PRIME. Among those hospitals, reduced staffing resources and a more limited ability to deliver needed services during the pandemic led to a reassessment of how best to approach care delivery for metrics in another ongoing pay-for-performance program, QIP. Among 13 hospitals that reported no impact, some noted that PRIME processes were already embedded in standard workflows and thus more resistant to the impact of COVID-19. Of the 8 hospitals reporting that COVID-19 improved the sustainability of PRIME activities, hospitals discussed how the development of data infrastructure, collaborative care approaches, and the ability to provide care

virtually as a result of COVID-19 had created lasting improvements in their ability to provide care going forward.

Contributions of PRIME to COVID-19 Response

Hospitals were asked to reflect on whether and how implementing PRIME contributed to their ability to respond to COVID-19. Hospitals assessed the extent of the contribution of each PRIME project by rating whether they promoted or improved their response to COVID-19 from 0 (no improvement) to 10 (very great improvement). Among all PRIME hospitals, the projects rated as driving the most improvement in the response to COVID-19 were Projects 1.1 Behavioral Health Integration (5.1), 1.2 Primary Care Redesign (4.9), 1.3 Specialty Care Redesign (5.2), and 2.3 Complex Case Management for High-Risk Populations (5.3, Exhibit 8). Hospitals reported the lowest improvement of their COVID-19 response as a result of Projects 3.3 High-Cost Pharmaceuticals (1.4) and 3.4 Blood Products (1.1).

Exhibit 8: Hospital Ratings of Impact of PRIME Projects on COVID-19 Response



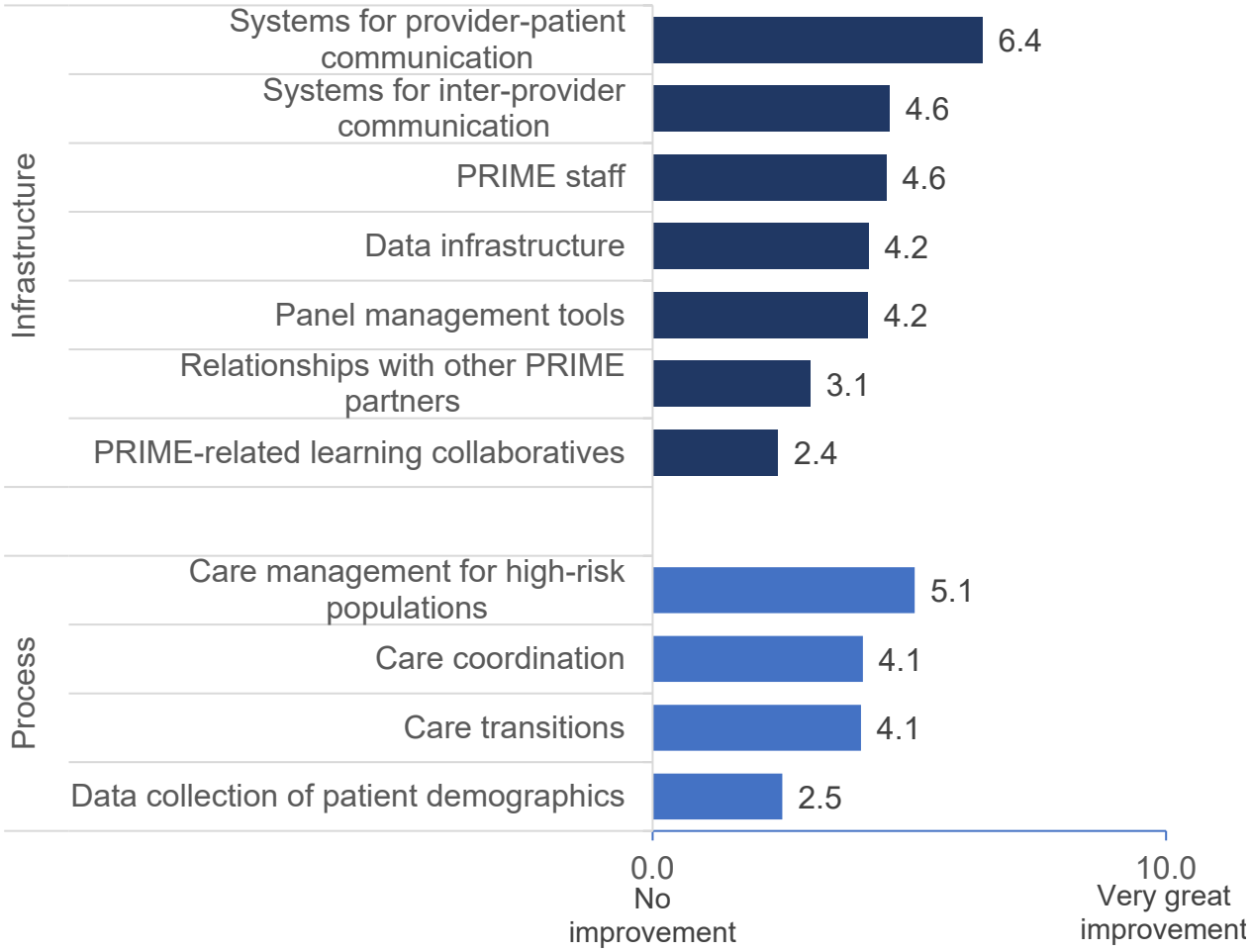
Source: UCLA analysis of the COVID-19 Survey, October to November 2020.
Note: Sample included 49 participating PRIME hospitals in July 2020. One participating DMPH non-CAH hospital did not respond to the survey. Responses from 1 hospital were excluded due inconsistency in responses. CCM: complex case management. N's represent the number of hospitals participating in projects at the time of data collection.

Further examination of these ratings by hospital type revealed numerous differences (Appendix A: Selected PRIME Evaluation COVID-19 Survey Results). For example, ratings of the most improvements by DPHs were for Projects 1.7 Healthier Foods (5.7) and 2.5 Post-Incarceration Care (5.5). Among DMPH CAHs, Projects 1.1 Behavioral Health Integration (7.0), 2.3 Complex Case Management for High-Risk Populations (7.0), and 3.3 High-Cost Pharmaceuticals (8.0) had the had the most improvements. DMPH CAHs also reported high impact of Project 1.1 Behavioral Health Integration (7.4) on their ability to respond to COVID-19.

Hospitals provided examples of ways in which implementing specific PRIME projects aided their COVID-19 response (Appendix A Exhibit 99). The responses indicated that developing specific infrastructure and care process under different projects provided the ability to address patient conditions that may have exacerbated COVID-19 or its consequences. For example, establishing team-based care as part of Projects 1.1 and 1.2 contributed to ability to adapt to virtual care delivery. In addition, increased capacity for data reporting and tracking population health metrics in projects 1.3 and 2.1 promoted coordinating care for COVID-19 patients.

Hospitals also rated the overall contribution of infrastructure and care processes established under PRIME in their COVID-19 response, with the highest impact attributed to implementing systems for provider-patient communication (6.4) and processes for facilitating care management for high-risk populations (5.1; Exhibit 9). Hospitals reported lower impact for patient demographics (2.5) and PRIME-related learning collaboratives (2.4), in which participation was disrupted during the pandemic.

Exhibit 9: Hospital Ratings of Impact of PRIME Infrastructure and Processes on COVID-19 Response



Source: UCLA analysis of the COVID-19 Survey, October to November 2020.
Note: Sample included 50 participating PRIME hospitals. One participating DMPH non-CAH hospital did not respond to the survey.

Further examination of the impact of PRIME infrastructure on COVID-19 response showed variation by hospital type (Appendix A Exhibit 106 to Exhibit 108). For example, DPHs gave the highest rating to data infrastructure and the lowest rating to PRIME-

related learning collaboratives. In contrast, DMPH non-CAH and CAHs gave the highest ratings to systems for inter-provider and provider-patient communication.

Selected illustrative quotes for each aspect of PRIME infrastructure are provided in Appendix A Exhibit 100. For example, hospitals discussed their ability to leverage interoperability of electronic health record and other capabilities developed or expanded under PRIME to share data and track infections by REAL/SOGI and other patient characteristics. In addition, hospitals reported that they leveraged PRIME staff and health information technology implemented during PRIME (e.g., communication systems, registries) in promoting continuity of care and outreach during the pandemic.

Assessing the impact of developing PRIME processes on the response to COVID-19 by hospital type revealed numerous similarities. Processes for facilitating care management for high-risk populations were rated as having among the highest impact on improving the response to COVID-19 across hospital types. Among DMPH non-CAHs, processes for coordinating care transitions were also rated as providing the highest impact on improving the response to COVID-19. DMPH non-CAHs and DMPH CAHs reported low impact of collecting data on patient demographics on their COVID-19 response.

Prominent examples and exemplary quotes illustrating the impact of implementing PRIME processes on improving the response to COVID-19 are presented in Appendix A Exhibit 101. For example, hospitals described workflows developed during PRIME that allowed for ongoing care management for high-risk populations during the pandemic, coordinate ongoing care for other health conditions, and coordinate care transitions. In addition, some hospitals noted that systematic collection of patient demographics spurred by PRIME allowed for the identification of disparities related to COVID-19 by specific patient characteristics (e.g., race/ethnicity, age, gender).

Impact of COVID-19 Pandemic on PRIME Patients

UCLA assessed the potential impact of the COVID-19 pandemic using Medi-Cal claims data for PRIME patients. The proportion of PRIME patients that had a documented COVID-19 diagnosis was 0.9% (data not shown), although early in the pandemic testing was limited, and codes for positive tests were not available until March 2020. These patients had higher utilization of services before the COVID-19 pandemic than the PRIME patients without the diagnosis.

Project Specific Findings

This chapter presents the evidence on how participating PRIME hospitals implemented each project, their self-reported data on metric achievement rates and corresponding achievement values, and an independent assessment of performance metrics when feasible. This analysis was achieved by using Medi-Cal enrollment and claims data and a quasi-experimental design and DD methodology. A detailed explanation of the cohort construction and DD methodology is provided in Appendix C. Difference-in-Difference (DD) Data and Methodology.

Domain 1: Outpatient Delivery System Transformation and Prevention

Project 1.1 Integration of Physical and Behavioral Health

Objectives

Project 1.1 was designed to promote behavioral health and primary care integration to improve outcomes of care for patients with behavioral health conditions. Main goals of the project included: 1) early identification of behavioral health conditions; 2) comprehensive and appropriate treatment of behavioral health conditions; and 3) improvement of outcomes for patients with chronic medical and behavioral health conditions. Specific objectives and core components can be found in Attachment Q.

Hypotheses

Integration of behavioral and primary health care improved use of behavioral health services, reduced use of acute care services, and reduced overall expenditures. These changes were accomplished by improvements in BH screening, timely and accessible treatment, better primary care and BH provider communication to manage and coordinate patient care, and better patient engagement and activation.

Research Questions

1. What efforts did participating hospitals undertake to integrate primary and behavioral health care?
2. Did participating hospitals report improved performance in Project 1.1 metrics during PRIME, consistent with project objectives?
3. Did project implementation lead to changes in metric performance for PRIME patients before and during PRIME and in comparison to the comparison patients?

Limitations

No PRIME specified metrics could be constructed from Medi-Cal data by UCLA. See PRIME Metric Feasibility Analysis for a detailed explanation.

Project Selection

A total of 25 hospitals (17 DPHs and 8 DMPHs) participated and reported metric performance data for this required project. Two DMPHs dropped out of participation in DY 12 and another DMPH joined in DY 15. Detailed information on hospital participation during PRIME can be found in Appendix B. Project Selection.

Findings for Project 1.1

Research Question 1: Summary of Project Implementation

Overall, hospitals made progress in implementing Project 1.1 by establishing data infrastructure and protocols for behavioral integration, garnering support and using evidence-based models for integration, co-locating behavioral health and primary care providers, and delivering integrated care.

Multiple hospitals indicated implementing some aspects of this project prior to PRIME, but the majority had newly selected or implemented the core components identified in Attachment Q (22 hospitals completed the survey). For example, when asked to report on specific infrastructure established for implementing this project, hospitals reported a single EHR for primary care and behavioral health providers (20); behavioral health patient registries (13) that were most commonly managed by licensed clinical social workers (11); and newly developed explicit protocols for referral of patients to behavioral health providers (10).

More specifically, when reporting on how this project was implemented, hospitals indicated an increase in leadership support and resources for: involving primary care and behavioral health providers in planning (21); screening for depression (18); and colocation of behavioral health providers (11). Hospitals faced challenges in garnering provider support due to competing priorities and concerns for capacity to address behavioral health needs. Hospitals mostly (14) used the Collaborative Care Model and increasingly co-located behavioral health providers in at least some primary care clinics (13). Behavioral health staffing was frequently limited and mostly included clinical social workers and marriage and family therapists and, less frequently, psychiatrists. Providers used monthly joint QI meetings (11), daily pre-visit planning and huddles (9), weekly case

conferences (9), and monthly informal or formal meetings (8) to communicate, but this depended on the level of behavioral health staffing. Delivery of behavioral health care included systematic screening for depression (16), tobacco (14), and alcohol abuse (12); warm handoffs to (20) and directly facilitating appointments with behavioral health providers (15), although these processes were still being refined; providing medication-assisted treatment or MAT for patients with substance abuse disorders (9) and regularly providing jointly-developed individual treatment plans (7).

Data and metric-related challenges to implementation included lack of health information technology or EHR functionality (12), variations in documentation by providers and staff (8), lack of system-wide established processes (10), and inadequate follow-up in documenting patient outcomes (7). These challenges were addressed by standardizing processes in tracking/documentation (8), standardizing processes across systems (8), adoption of an enterprise-wide EHR (7), and establishing meetings across teams (6). A detailed description of Project 1.1 implementation is available in the PRIME Interim Report.

In the Preliminary Summative Evaluation Report , hospitals rated (from 1=very low to 5=very high) staff effort (4.5), financial investment (4.0), and level of difficulty (4.2) of Project 1.1 to be high.

Research Question 2: Summary of Changes in Hospital-Reported Metric Achievement Rates

Performance of the hospitals in Project 1.1 was measured by 7 metrics, two of which had sub-rates. All assessed metrics changed in the intended direction with the exception of one metric for DMPHs (Exhibit 10). Detailed results are available in Appendix G. Project-Specific Trends in Metric Performance Project 1.1 – Integration of Behavioral Health & Primary Care.

Exhibit 10: Project 1.1 Hospital Reported Metric Rates and Changes Before DY 15

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care	Changed in the Intended Direction DPH	Changed in the Intended Direction DMPH
Alcohol and Drug Misuse Sub-rate #1: Brief Annual Screen (began in DY 14)	1.1.1.a@	Increase	Process	N/A	N/A
Alcohol and Drug Misuse Sub-rate #2: Full Screen, Brief Intervention, and Referral to Treatment (SBIRT)	1.1.1.a@	Increase	Process	Y	Y
Care Coordinator Assignment (retired DY 12)	1.1.2*	Increase	Process	Y	N/A
Comprehensive Diabetes Care: HbA1c Poor Control (>9.0%)	1.1.3.d	Decrease	Outcome	Y	N
Depression Remission at 12 Months (retired DY 12)	1.1.4	Increase	Outcome	Y	N/A
Screening for Clinical Depression and Follow-Up	1.1.5.f	Increase	Process	Y	Y

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care	Changed in the Intended Direction DPH	Changed in the Intended Direction DMPH
Preventative Care and Screening: Tobacco Use – Screening and Cessation Intervention	1.1.6.t	Increase	Process	Y	Y
Depression Remission or Response for Adolescents and Adults (DRR): Follow-Up (began in DY 13)	1.1.7^	Increase	Process	Y	Y
DRR: Depression Response (began in DY 13)	1.1.7^	Increase	Outcome	Y	Y
DRR: Depression Remission (began in DY 13)	1.1.7^	Increase	Outcome	Y	Y

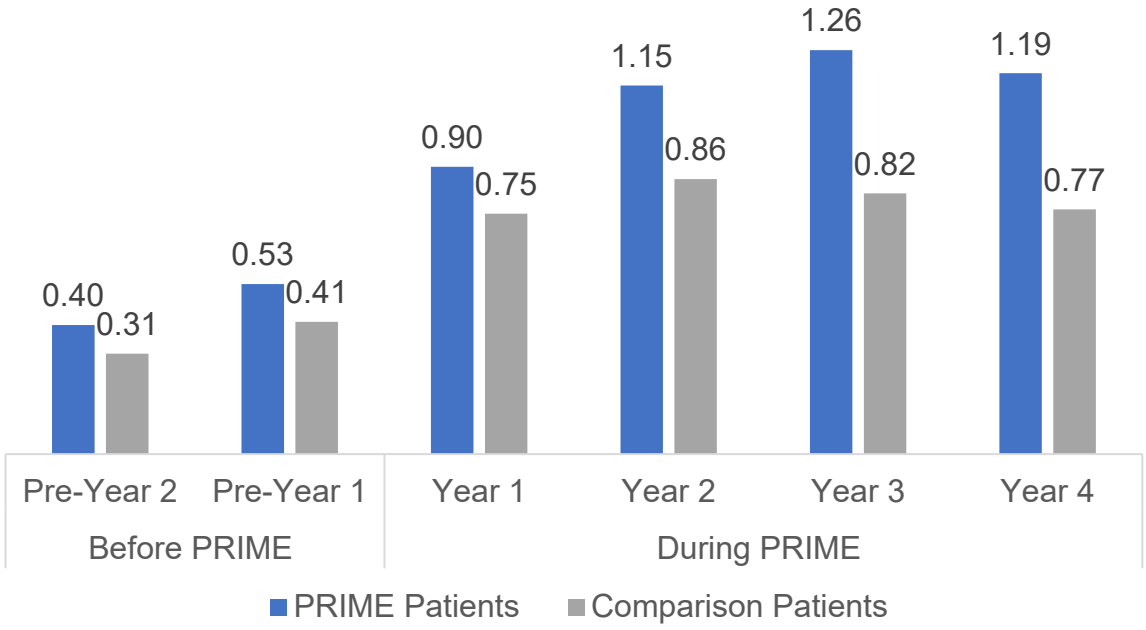
Source: PRIME Metrics Specs, DY15YE. UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital.
** Denotes innovative metric.*
Y: metric increased or decreased in the intended direction, N: metric did not increase or decrease in the intended direction, N/A: trend was not measured (for Sub-rate #1: Brief Annual Screen and Metrics, and DMPHs for 1.1.2 and 1.1.4 that were discontinued).
@ A sub-rate was added to Metric 1.1.1.a in DY 14. Metric 1.1.7 was added in DY 13, replacing Metric 1.1.4;
Assessment of changes in metric values excluded DY 15 due to disruptions in care delivery and utilization caused by the COVID-19 pandemic.

Research Question 3: Changes in Metrics between PRIME and Comparison Patients

UCLA created two additional measures (average number of mental health visits and substance use disorder treatment visits per beneficiary per year; more detail is available in Exhibit 124) related to Project 1.1 which were not specified by PRIME, but measured trends in behavioral service utilization. These measures were calculated for all PRIME patients attributed to hospitals implementing Project 1.1.

Analyses of DPHs showed statistically significant increases in the average number of mental health visits per beneficiary per year for PRIME patients before (0.13) and during PRIME (0.10, Exhibit 11). This trend did not change from before to during PRIME for PRIME patients but the trend decreased for comparison patients. As a result, PRIME patients had a statistically significant greater increase in mental health visits than comparison patients (DD) by 0.06 visits per beneficiary per year.

Exhibit 11: DPH Trends in Average Number of Mental Health Visits per Beneficiary per Year Before and During PRIME for PRIME and Comparison Patients (Goal: Increase)

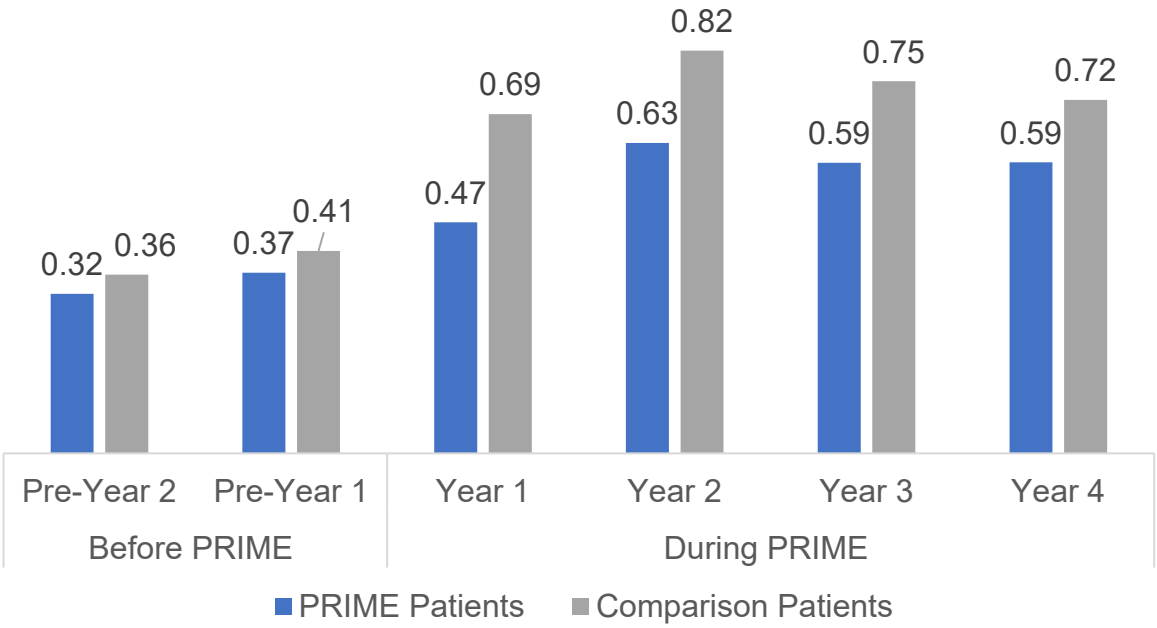


Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	0.13*	0.10*	-0.03	0.06*
Comparison Patients	0.10*	0.01	-0.09*	

Source: UCLA analysis of Medi-Cal data, July 2014 to June 2020.
*Notes: * Denotes p≤0.05, a statistically significant difference. Average Annual Change Before PRIME is calculated as: (Pre-Year 1 – Pre-Year 2). Average Annual Change During PRIME is calculated as: (Year 4 – Year 1) /3. Difference between changes is calculated as: (Average Annual Change During PRIME – Average Annual Change Before PRIME). Difference-in-difference is calculated as: (Difference between changes for PRIME patients – Difference between changes for comparison patients). The analyses exclude patients with a COVID-19 diagnosis.*

Analyses of DMPHs did not show a significant increase in this measure during PRIME or a difference in trends (DD) between PRIME and comparison patients (Exhibit 12).

Exhibit 12: DMPH Trends in Average Number of Mental Health Visits per Beneficiary per Year Before and During PRIME for PRIME and Comparison Patients (Goal: Increase)

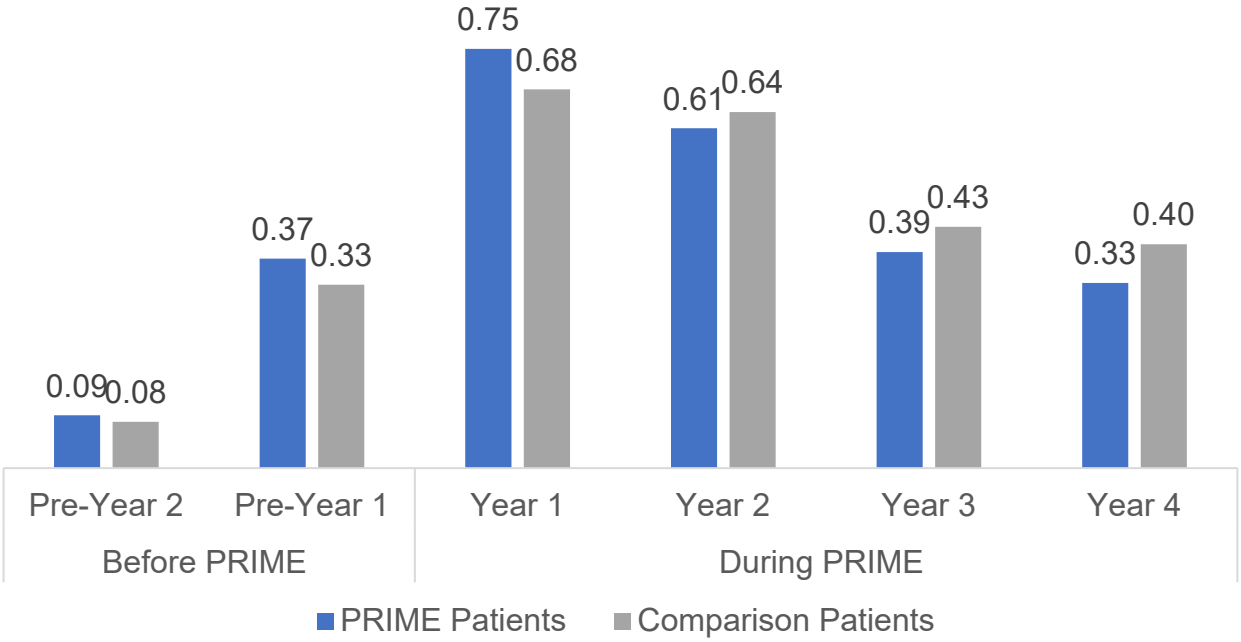


Patients				
PRIME Patients	0.05*	0.04	-0.01	0.03
Comparison Patients	0.05*	0.01	-0.04*	

Source and notes above.

Analyses of DPHs showed a statistically significant decrease both during PRIME (0.14) in the average number of substance use disorder treatment visits per beneficiary per year from before to during PRIME (0.42) for PRIME patients (Exhibit 13). The rates decreased statistically significantly more for PRIME patients than comparison patients (DD) by 0.08 visits per beneficiary per year.

Exhibit 13: DPH Trends in Average Number of Substance Use Disorder Treatment Visits per Beneficiary per Year Before and During PRIME for PRIME and Comparison Patients (Goal: Increase)

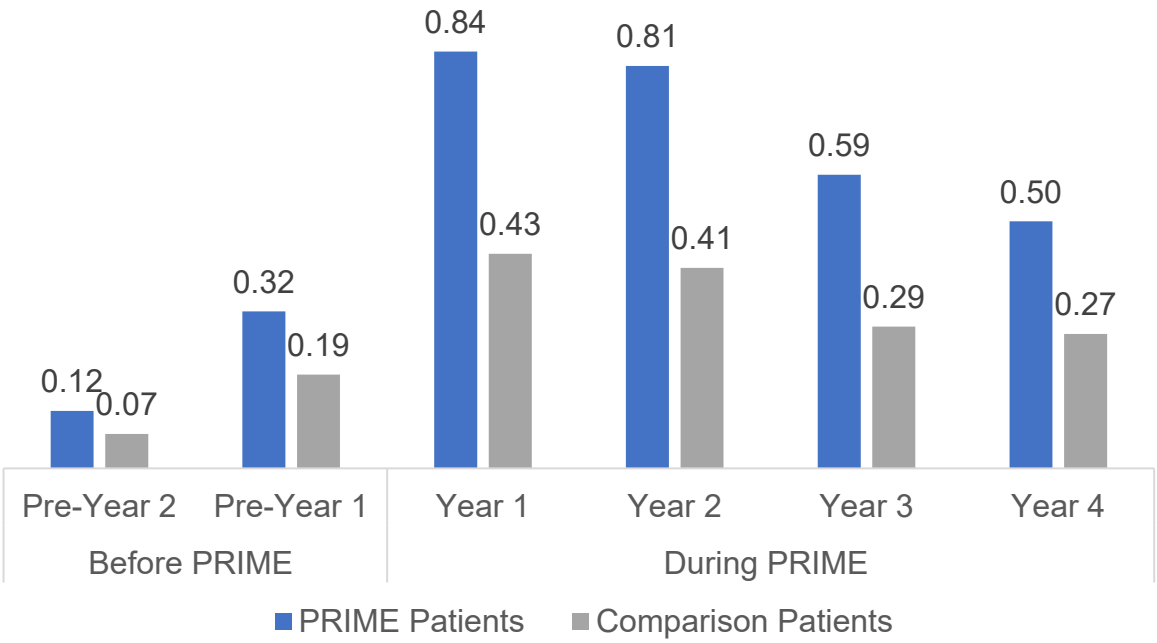


Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	0.28*	-0.14*	-0.42*	-0.08*
Comparison Patients	0.25*	-0.09*	-0.34*	

Source and notes above.

Analyses of DMPHs showed similar patterns to DPHs, with a statistically significant greater decrease (DD) of 0.14 visits per beneficiary per year for PRIME vs. comparison patients (Exhibit 14).

Exhibit 14: DMPH Trends in Average Number of Substance Use Disorder Visits per Beneficiary per Year Before and During PRIME for PRIME and Comparison Patients



Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	0.20*	-0.11*	-0.31*	-0.14*
Comparison Patients	0.12*	-0.05*	-0.17*	

Source and notes above.

Project 1.2 Ambulatory Care Redesign: Primary Care (includes reduction in disparities in health and health outcomes)

Objectives

Project 1.2 focused on promoting system integration and improving efficiency in primary care delivery to ultimately improve access to care. These goals were to be achieved by transforming primary care practice into the PCMH care delivery model. Hospitals were encouraged to implement the PCMH principles including team-based care, care coordination across settings, population health management using EHR technologies and other approaches, promoting evidence-based care delivery including monitoring of provider performance, and promoting access through open-access scheduling. Specific objectives can be found in Attachment Q.

Hypotheses

Participating hospitals redesigned primary care and thus improved patient outcomes. This was accomplished by obtaining PCMH status or delivering care according to PCMH principals, including providing team-based care, coordinating care, enhanced access to care, care management, and patient activation and engagement.

Research Questions

1. What efforts did participating hospitals undertake to obtain PCMH status and redesign primary care delivery, including establishment of primary care teams, assignment of patients to medical homes, care coordination, enhanced access to care, care management, and patient activation and engagement?
2. Did participating hospitals report improved performance in Project 1.2 metrics during PRIME, consistent with project objectives?
3. Did project implementation lead to changes in metric performance for PRIME patients before and during PRIME and in comparison to the comparison patients?

Limitations

Several metrics could not be constructed from Medi-Cal data by UCLA. See PRIME Metric Feasibility Analysis for a detailed explanation.

Project Selection

A total of 24 hospitals (17 DPHs and 7 DMPHs) participated and reported metric performance data for this required project. One DMPH dropped out of participation in DY 12. Detailed information on hospital participation during PRIME can be found in Appendix B. Project Selection.

Findings for Project 1.2

Research Question 1: Summary of Project Implementation

Overall, hospitals made progress in implementing Project 1.2 by establishing data infrastructure and protocols to implement the PCMH model of care, including delivering team-based care, disease management, care coordination, population health management, and addressing health disparities. Hospitals reported improvements in the majority of metrics. However, they varied in their progress in project implementation and metrics progress.

Multiple hospitals implemented aspects of this project before PRIME, but the majority newly selected or implemented the core components (22 hospitals participating in Project 1.2 completed the survey). Specific infrastructure established for this project included developing EHR capacity to track test results and document demographic data. Hospitals also trained and supported primary care providers, activities that were synergistic with Project 1.3.

When reporting on how this project was implemented, 9 hospitals obtained PCMH recognition/certification. All hospitals planned or conducted a gap analysis to assess primary care practices and 8 DPHs conducted a system-wide analysis. Twelve hospitals followed a specific model for delivering team-based care. The majority of DPHs and DMPHs reported that care models utilized within the hospitals met essential components of team-based care, particularly communication and interaction (18) and QI support for improving workflows (18), and scheduled time for regular team meetings (18).

Hospitals frequently engaged care coordinators to coordinate health care (20) and most were always located in primary care clinics (16). Seventeen hospitals used case managers to coordinate social services, and most hospitals always had these staff in the primary care clinic (11). Furthermore, 17 hospitals hired or trained front line staff to coordinate non-clinical services, such as obtaining health insurance coverage, coordinating transportation, and providing patient education.

Population health management requires a risk assessment to identify the level of care needed per patient, teach patients self-management skills, and provide them with an individualized treatment plan (ITP) to guide both self-management and professional care delivery. Hospitals most often conducted risk-stratification of patients based on a diagnosis of diabetes (19), depression (16), and congestive heart failure (13). Disease management was incorporated into the activities of the medical team by all but 1 hospital. Disease management services were delivered via multiple methods: 20 hospitals used

telephone calls for this purpose, 15 held group visits, and 14 mailed informational materials.

In the Preliminary Summative Evaluation Report , hospitals rated (from 1=very low to 5=very high) staff effort (4.4), financial investment (3.7), and level of difficulty (4.1) of Project 1.2 to be moderately high.

Research Question 2: Summary of Changes in Hospital-Reported Metric Achievement Rates

Performance of hospitals in Project 1.2 was measured by 14 metrics, one of which had a sub-rate (Exhibit 15). All assessed metrics changed in the intended direction with the exception of one metric for DMPHs (Metric 1.2.7.i). Detailed results are available in Appendix G. Project-Specific Trends in Metric Performance Project 1.2 – Ambulatory Care Redesign: Primary Care.

Exhibit 15: Project 1.2 Hospital Reported Metric Overview and Rate Changes Before DY 15

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care	Changed in the Intended Direction DPH	Changed in the Intended Direction DMPH
Alcohol and Drug Misuse Sub-rate #1: Brief Annual Screen	1.2.1.a@	Increase	Process	N/A	N/A
Alcohol and Drug Misuse Sub-rate #2: Full Screen, Brief Intervention, and Referral to Treatment (SBIRT)	1.2.1.a@	Increase	Process	Y	Y
CG-CAHPS: Provider Rating	1.2.2	Increase	Outcome	Y	Y
Colorectal Cancer Screening	1.2.3.c	Increase	Process	Y	Y
Comprehensive Diabetes Care: HbA1c Poor Control (>9.0%)	1.2.4.d	Decrease	Outcome	Y	Y
Controlling Blood Pressure	1.2.5.b@	Increase	Outcome	Y	Y
Ischemic Vascular Disease (IVD):	1.2.7.i@^	Increase	Process	Y/Y	Y/N

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care	Changed in the Intended Direction DPH	Changed in the Intended Direction DMPH
Use of Aspirin or Another Antithrombotic					
Prevention Quality Overall Composite (PQI) #90	1.2.8	Decrease	Outcome	Y	Y
Screening for Clinical Depression and Follow-Up	1.2.12.f	Increase	Process	Y	Y
Tobacco Use – Screening and Cessation Intervention	1.2.14.t	Increase	Process	Y	Y
Documented REAL and/or SOGI Disparity Reduction Plan (DY 12 only)	1.2.6*	Increase	Process	N/A	N/A
Primary Care Redesign Metrics Stratified by REAL Categories and SOGI (DY 12 only)	1.2.9*	Increase	Process	N/A	N/A
REAL and/or SO/GI Disparity Reduction (begins in DY 13)	1.2.10*^	Depended on selection	Outcome	Y	Y
REAL Data Completeness	1.2.11	Increase	Process	Y	Y

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care	Changed in the Intended Direction DPH	Changed in the Intended Direction DMPH
SO/GI Data Completeness (begins in DY 12)	1.2.13^	Increase	Process	Y	Y

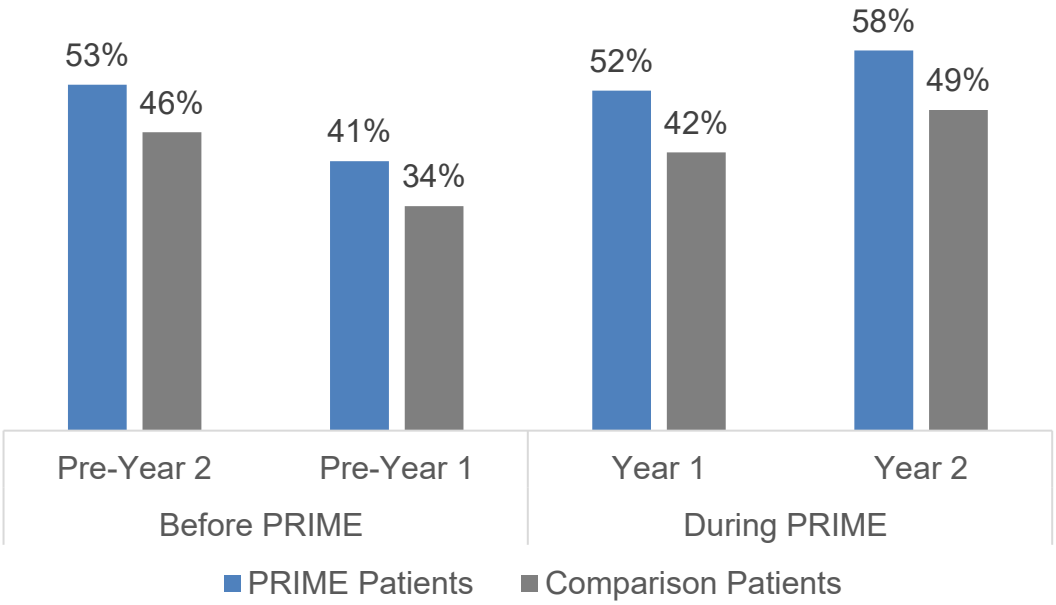
Source: PRIME Metrics Specs, DY15YE. UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital. REAL: Race, Ethnicity, and Language, SO/GI: Sexual Orientation/ Gender Identity.
** Innovative metric.*
N/A: Metrics 1.2.6 and 1.2.9 did not have a trend, as they were only in effect in DY 12 as an attestation report.
@ A sub-rate was added to Metric 1.2.1 in DY 14, so no trend was reported for Sub-rate #1: Brief Annual Screen. Metric 1.2.5.b had a trending break in DY14 (19—002); thus, the trend was based on the original definition. Metric 1.2.7 had a trending-break in DY 12 (17-007) so the change is measured from DY 11 to DY 12 and DY 12 to DY 14 for both DPH and DMPHs.
^Metric 1.2.10 began in DY 13, so change is measured from DY 13 to DY 14. Metric 1.2.13 began in DY 12, so the change is measured from DY 12 to DY 14 for both DPH and DMPHs. Of note, many of these metrics were stratified by demographics, and hospitals selected specific populations for disparities reductions.
Y: metric increased or decreased in the intended direction, N: metric did not increase or decrease in the intended direction, N/A: trend was not measured through DY 14. Assessment of changes in metric values excluded DY 15 due to disruptions in care delivery and utilization caused by the COVID-19 pandemic.

Research Question 3: Changes in Metrics between PRIME and Comparison Patients

UCLA analyzed changes in two PRIME specified metrics, 1.2.3.c and 1.2.8; other metrics were not feasible (PRIME Metric Feasibility Analysis). Metric 1.2.3.c - NQF 0034: Colorectal Cancer Screening. PRIME specifications required up to 9 years of look-back period and UCLA applied up to 6 years of available data. However, trends for this rate were measured for two years during PRIME reflecting the most frequent modes of screening.

Analyses of DPHs showed that colorectal cancer screening rates in this metric increased statistically significantly in the desired direction during (6.12%) and from before to during PRIME for PRIME patients (17.80%, Exhibit 16). However, the trend in this rate was statistically similar for PRIME patients and comparison patients (DD).

Exhibit 16: DPH Trends in Metric 1.2.3c: Colorectal Cancer Screening Before and During PRIME for PRIME and Comparison Patients (Goal: Increase)



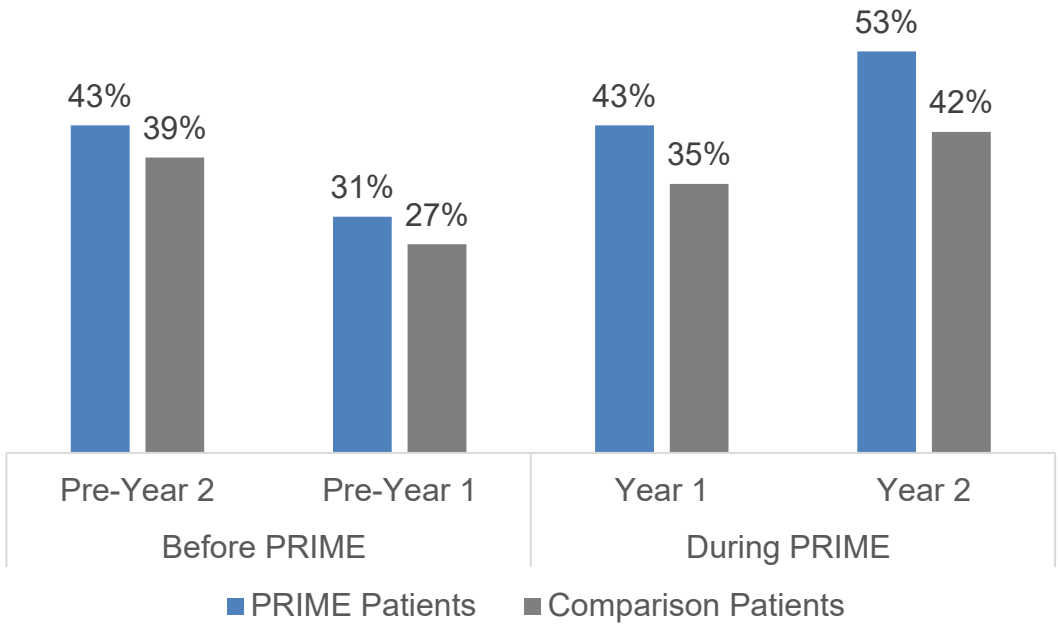
Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	-11.68%*	6.12%*	17.80%*	0.06%
Comparison Patients	-11.28%*	6.46%*	17.74%*	

Source: UCLA analysis of Medi-Cal data, July 2014 to June 2020.
*Notes: * Denotes p≤0.05, a statistically significant difference. Average Annual Change Before PRIME is calculated as: (Pre-Year 1 – Pre-Year 2). Average Annual Change During PRIME is calculated as: (Year 2 – Year 1). Difference between changes is calculated as: (Average Annual Change During PRIME – Average Annual Change Before PRIME). Difference-in-difference is calculated as: (Difference between changes for PRIME patients – Difference between changes for comparison patients). Values in the*

graph are rounded for ease of presentation and may differ from exact values in the table. The analyses exclude patients with a COVID-19 diagnosis.

The analyses of this metric for DMPHs showed a similar increase in trend for this metric from before to during PRIME for PRIME patients (21.60%) and no difference in trends between PRIME and comparison patients (Exhibit 17).

Exhibit 17: DMPH Trends in Metric 1.2.3c: Colorectal Cancer Screening Before and During PRIME for PRIME and Comparison Patients (Goal: Increase)



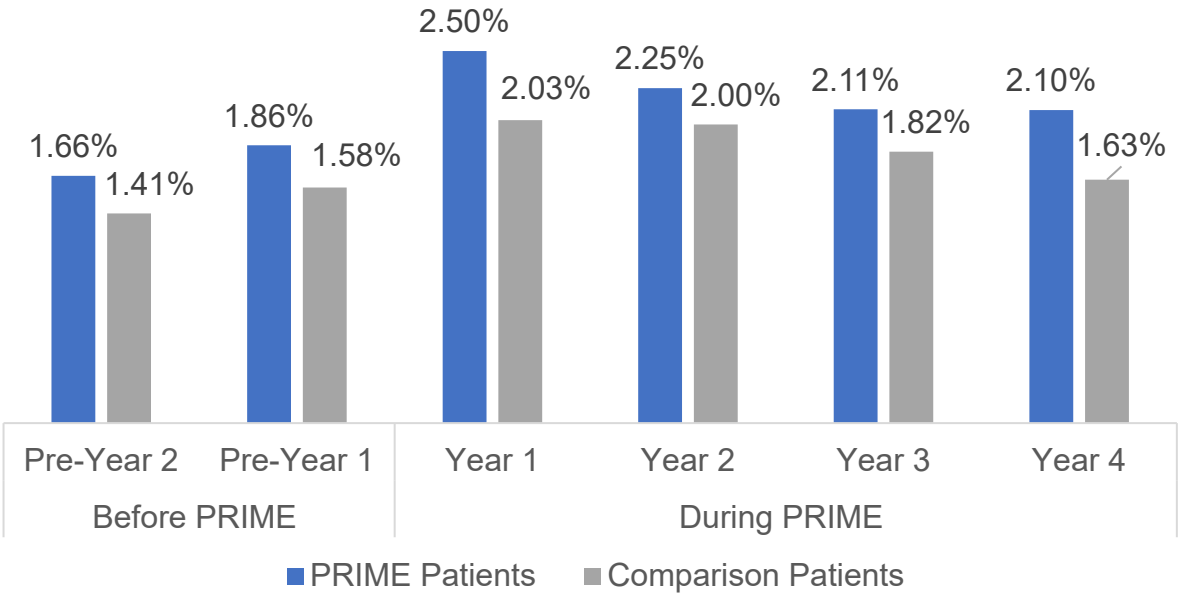
Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	-11.94%*	9.66%*	21.60%*	3.45%
Comparison Patients	-11.34%*	6.81%*	18.15%*	

Source and notes above.

UCLA analyzed changes in the PRIME specified metric 1.2.8 - Prevention Quality Overall Composite PQI #90 (for more information about PQI see Metric 1.2.8 – AHRQ Prevention Quality Indicators (PQI #90)). PQI is an overall composite score in which a lower rate indicates better performance. Analyses of DPHs showed a statistically significant decrease in this metric in the desired direction for both PRIME (0.33%) and comparison

(0.30%) patients from before to during PRIME (Exhibit 18). But the rate of decrease (DD) for the two groups was statistically similar.

Exhibit 18: DPH Trends in Metric 1.2.8: Prevention Quality Overall Composite (PQI) #90 Before and During PRIME for PRIME and Comparison Patients (Goal: Decrease)

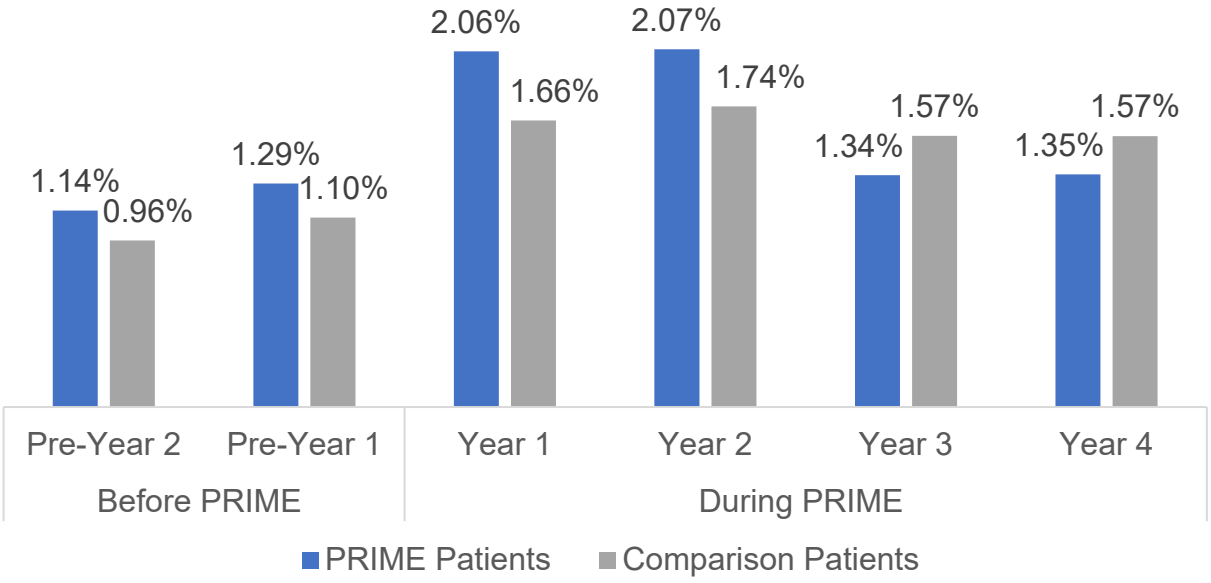


Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	0.20%*	-0.13%*	-0.33%*	-0.03%
Comparison Patients	0.17%*	-0.13%*	-0.30%*	

Source: UCLA analysis of Medi-Cal data, July 2014 to June 2020.
*Notes: * Denotes p≤0.05, a statistically significant difference. Average Annual Change Before PRIME is calculated as: (Pre-Year 1 – Pre-Year 2). Average Annual Change During PRIME is calculated as: (Year 4 – Year 1) /3. Difference between changes is calculated as: (Average Annual Change During PRIME – Average Annual Change Before PRIME). Difference-in-difference is calculated as: (Difference between changes for PRIME patients – Difference between changes for comparison patients). The analyses exclude patients with a COVID-19 diagnosis.*

The analyses of this metric for DMPHs (Exhibit 19) showed a statistically significant greater decrease in the desired direction and more decrease (DD) in the PQI rate for PRIME patients than the comparison patients by 0.22%.

Exhibit 19: DMPH Trends in Metric 1.2.8: Prevention Quality Overall Composite (PQI) #90 Before and During PRIME for PRIME and Comparison Patients (Goal: Decrease)

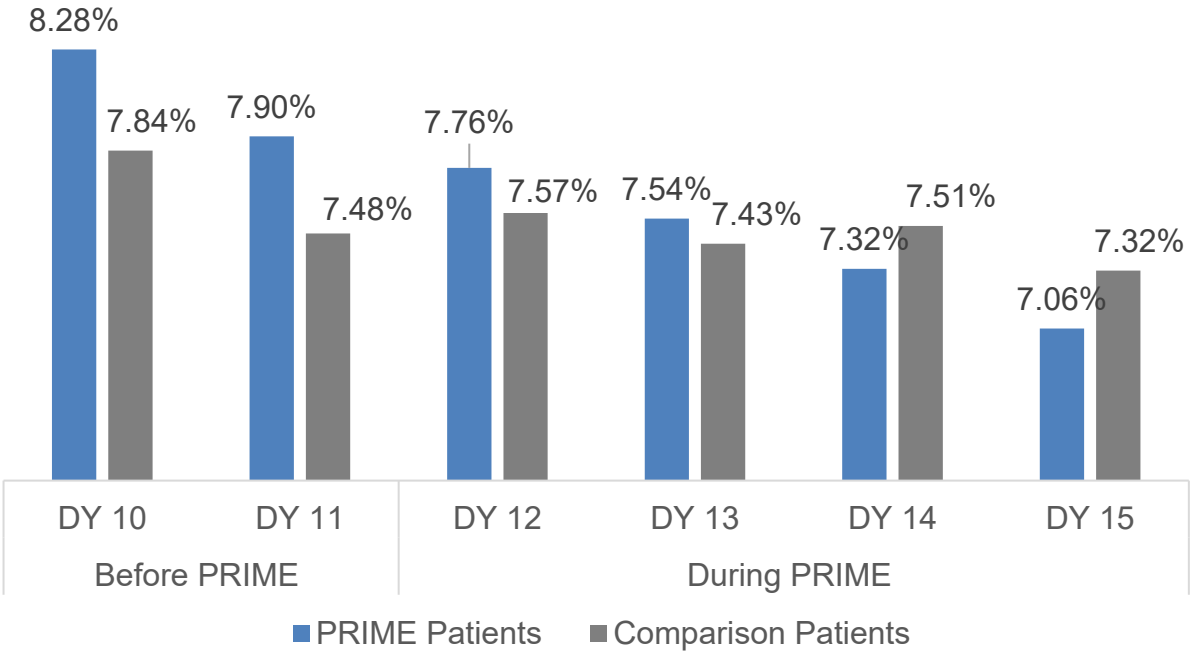


Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	0.15%*	-0.24%*	-0.39%*	-0.22%*
Comparison Patients	0.14%*	-0.03%	-0.17%*	

Source and notes above.

UCLA also analyzed metric 1.2.8 - Prevention Quality Overall Composite PQI #90 using discharge data from California Department of Health Care Access and Information (HCAI), formerly the California Hospital Discharge (OSHPD), in order to assess changes in discharges with all types of insurance. This metric was created without PQI 10: Dehydration Admission Rate due to unavailability of data. Analyses of DPHs for all insurance types did not show a significant difference in trends for PRIME hospitals or between PRIME and comparison hospitals (Exhibit 20). Since HCAI is limited to hospitalizations, data is not available to restrict this to the PRIME eligible population, this analysis is cross-sectional, and the dates align with PRIME DYs.

Exhibit 20: DPH Trends in Metric 1.2.8: Prevention Quality Overall Composite (PQI) #90 Before and During PRIME for PRIME and Comparison Hospitals Using All Discharges in California Hospital Discharge (HCAI) Data (Goal: Decrease)



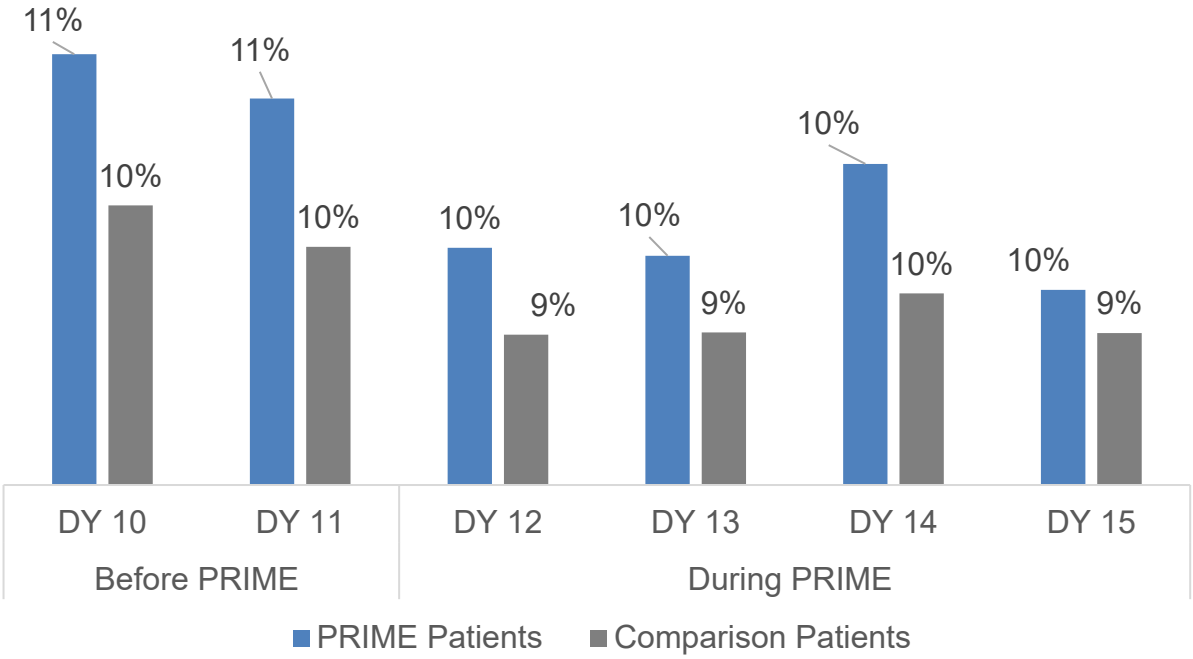
Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	-0.38%*	-0.23%	0.15%	
Comparison Patients	-0.36%*	-0.08%	0.28%*	-0.13%

Source: UCLA analysis of HCAI data, July 2014 to December 2019.
*Notes: * Denotes p≤0.05, a statistically significant difference. Average Annual Change Before PRIME is calculated as: (Pre-Year 1 – Pre-Year 2). Average Annual Change During PRIME is calculated as: (Year 4 – Year 1) /3. Difference between changes is*

calculated as: (Average Annual Change During PRIME – Average Annual Change Before PRIME). Difference-in-difference is calculated as: (Difference between changes for PRIME patients – Difference between changes for comparison patients). Values in the graph are rounded for ease of presentation and may differ from exact values in the table.

Analyses of DMPHs for all insurance types for this metric showed no significant change in trends (DD) between PRIME and comparison hospitals (Exhibit 21).

Exhibit 21: DMPH Trends in Metric 1.2.8: Prevention Quality Overall Composite (PQI) #90 Before and During PRIME for PRIME and Comparison Hospitals Using All Discharges in California Hospital Discharge (HCAI) Data (Goal: Decrease)



Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	-0.24%	-0.08%	0.17%	
Comparison Patients	-0.23%	0.00%	0.23%	-0.06%

Source and notes above.

Project 1.3 Ambulatory Care Redesign: Specialty Care

Objectives

Project 1.3 was designed to integrate specialty and primary care and thus improve timely access to high quality and effective specialty care by transformation of specialty care practice, including mental health and substance abuse treatment. This goal was to be achieved by establishing needed infrastructure such as specialty care support tools for primary care providers (PCPs) and implementing processes that promote delivery of integrated care including team-based care, technology-assisted expanded access to specialty care, and improved management of patients. Specific objectives can be found in Attachment Q.

Hypotheses

Redesigned specialty care delivery may improve patient outcomes. This was accomplished by strategies such as increased primary care capacity to manage higher acuity conditions, timely and appropriate referrals to specialty care, and use of telehealth among others.

Research Questions

1. What efforts did participating hospitals undertake to redesign specialty care, including enhancing the capacity of primary care providers to manage high acuity patients, enhancing protocols for specialty referrals and consultations, and improving referral timeliness and receiving feedback from specialists?
2. Did participating hospitals report improved performance in Project 1.3 metrics during PRIME, consistent with project objectives?
3. Did project implementation lead to changes in metric performance for PRIME patients before and during PRIME and in comparison to the comparison patients?

Limitations

Several metrics could not be constructed from Medi-Cal data by UCLA. See PRIME Metric Feasibility Analysis for a detailed explanation.

Project Selection

A total of 19 hospitals participated and reported metric performance data, including all 17 DPHs as required, and 2 DMPHs. Detailed information on hospital participation during PRIME can be found in Appendix B. Project Selection.

Findings for Project 1.3

Research Question 1: Summary of Project Implementation

Overall, hospitals made significant progress in implementing Project 1.3 by integrating specialists with primary care teams and promoting the capacity of primary care providers to manage patients with higher severity. Some hospitals took a more methodical approach to redesign by conducting gap analyses and using evidence-based practices but most hospitals had made some progress before PRIME and focused on other activities. Despite past efforts, hospitals found this project to be resource-intensive and challenging, particularly due to unanticipated changes in metrics.

Multiple hospitals indicated implementing some aspects of this project before PRIME but the majority had newly selected or implemented the core components (19 hospitals participating in Project 1.3 completed the survey). Before PRIME, many hospitals had developed a specialty care program that their population could access (11), had clinical teams engaged in evidence-based care (12), and engaged in QI activities such as performance feedback and rapid cycle improvement (11). The most common activity newly selected or continued during PRIME was developing and implementing standardized workflows for diversified care delivery strategies to expand access and improve cost efficiency (15).

When asked to report on specific infrastructure established for implementing this project, 17 hospitals reported that they provided tools and services to primary care providers to support them in the treatment and management of patients with high acuity and reduce the need for specialty referrals. The most common types were decision support tools (12), real-time specialist consultations (8), and the provision of extra clinical support and establishing care teams with multiple specialties (8). Eleven hospitals (11 DPHs) reported training PCPs to expand their specialty roles, most commonly for endocrinology or substance use (6).

Fourteen hospitals reported developing or adopting at least 1 specialty treatment protocol. The most common treatment protocols were for cardiology (7), gastroenterology (7), endocrinology (6), substance abuse (5), mental health (4), and pain management (4). Examples of specialty treatment protocols were for a brief treatment of mental health conditions by primary care teams and influenza vaccination within specialty care settings. Six hospitals reported conducting a gap analysis to assess the need for medical specialty care.

Several hospitals used a specific team-based model (8) and the majority facilitated communication and interaction within the team (14), scheduled daily huddles (13), and

regular team meetings (13). Hospitals reported participation of medical (8), mental health (7) and substance use specialists (3) in primary care teams. All participating hospitals reported that primary care providers always (6) or usually (13) received outcomes of the visit from specialists most often through the electronic medical record (17). Hospitals used population management (13), telephone visits (7), and e-consults (6) to expand access.

All participating hospitals reported the use of individual treatment plans (ITPs) by specialists, including regular use of ITPs by medical (12) and mental health or substance use specialists (13). Hospitals improved medication adherence by calls to offer reminders or refreshers on medication instructions (12) and providing schedules or pillboxes (11). In interviews, hospitals reported other strategies such as patient portal tools, embedding pharmacists in primary care settings, and engaging care management staff in medication counseling.

The top challenges cited by the majority of hospitals were IT infrastructure lacking data query ability, tracking, or reporting functions (10), and processes not being established system-wide (8). Hospitals addressed these most commonly by standardization across systems, both with their EHR/IT (9) and processes (7). A detailed description of Project 1.3 implementation is available in the PRIME Interim Report

In the Preliminary Summative Evaluation Report , hospitals rated (from 1=very low to 5=very high) staff effort (4.0), financial investment (3.5), and level of difficulty (4.2) of Project 1.3 to be moderately high.

Research Question 2: Summary of Changes in Hospital-Reported Metric Achievement Rates

Performance in Project 1.3 was measured by 7 metrics. All assessed metrics changed in the intended direction with the exception of Metric 1.3.2 for DMPHs (Exhibit 22). Detailed results are available in Appendix G. Project-Specific Trends in Metric Performance Project 1.3 – Ambulatory Care Redesign: Specialty Care.

Exhibit 22: Project 1.3 Hospital Reported Metric Overview and Rate Changes Before DY 15

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care	Changed in the Intended Direction DPH	Changed in the Intended Direction DMPH
Closing the Referral Loop: Receipt of Specialist Report	1.3.1	Increase	Process	Y	Y
DHCS All-Cause Readmissions; Plan All-Cause Readmissions	1.3.2@	Decrease	Outcome	Y	N
Influenza Immunization	1.3.3	Increase	Process	Y	Y
Post Procedure ED Visits (retired DY 13)	1.3.4*	Decrease	Outcome	Y	Y
Request for Specialty Care Expertise Turnaround Time	1.3.5*	Increase	Process	Y	Y
Specialty Care Touches: Specialty Expertise Requests Managed Solely via Non-in-Person Specialty Encounters	1.3.6*	Increase	Process	Y	Y
Preventative Care and Screening: Tobacco Use – Screening and	1.3.7	Increase	Process	Y	Y

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care	Changed in the Intended Direction DPH	Changed in the Intended Direction DMPH
Cessation Intervention					

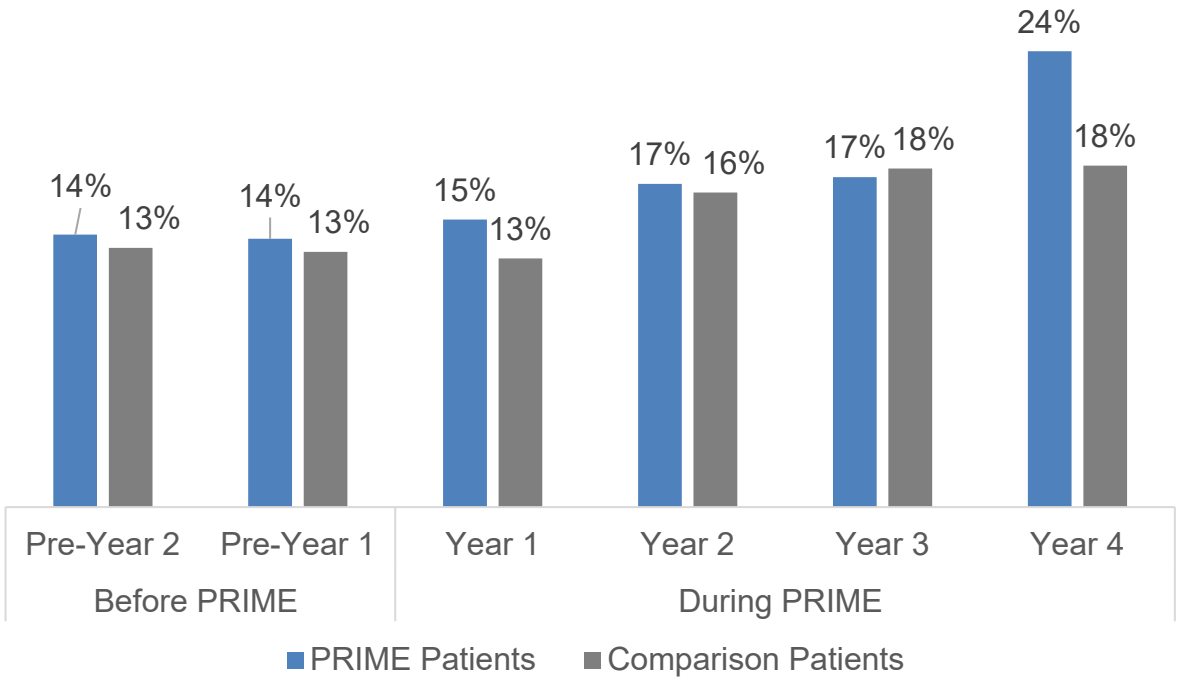
Source: PRIME Metrics Specs, DY15YE. UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital.
@ Metric 1.3.2 CMS Plan All Cause Readmission had a "reverse" trending break in DY 14 (PPL 19-004).
Y: metric increased or decreased in the intended direction, N: metric did not increase or decrease in the intended direction, N/A: trend was not measured through DY 14.
Assessment of changes in metric values excluded DY 15 due to disruptions in care delivery and utilization caused by the COVID-19 pandemic.

Research Question 3: Changes in Metrics between PRIME and Comparison Patients

UCLA analyzed trends in the PRIME specified metric 1.3.2: Plan All-Cause Readmissions in Medi-Cal and HCAI data. The availability of adequate information to construct these metrics using Medi-Cal data is described in Appendix G. Project-Specific Trends in Metric Performance: PRIME Metric Feasibility Analysis.

UCLA analyzed changes in the PRIME specified metric 1.3.2: Plan All-Cause Readmissions before and during PRIME for PRIME and comparison patients and separately for DPHs and DMPHs. A lower rate indicates better performance. Analyses of DPHs showed a statistically significant increase in this metric during PRIME (2.91%) but no change in the trend from before to during PRIME (Exhibit 23). The trend between PRIME and comparison patients (DD) was also statistically similar.

Exhibit 23: DPH Trends in Metric 1.3.2: Plan All-Cause Readmissions Before and During PRIME for PRIME and Comparison Patients (Goal: Decrease)



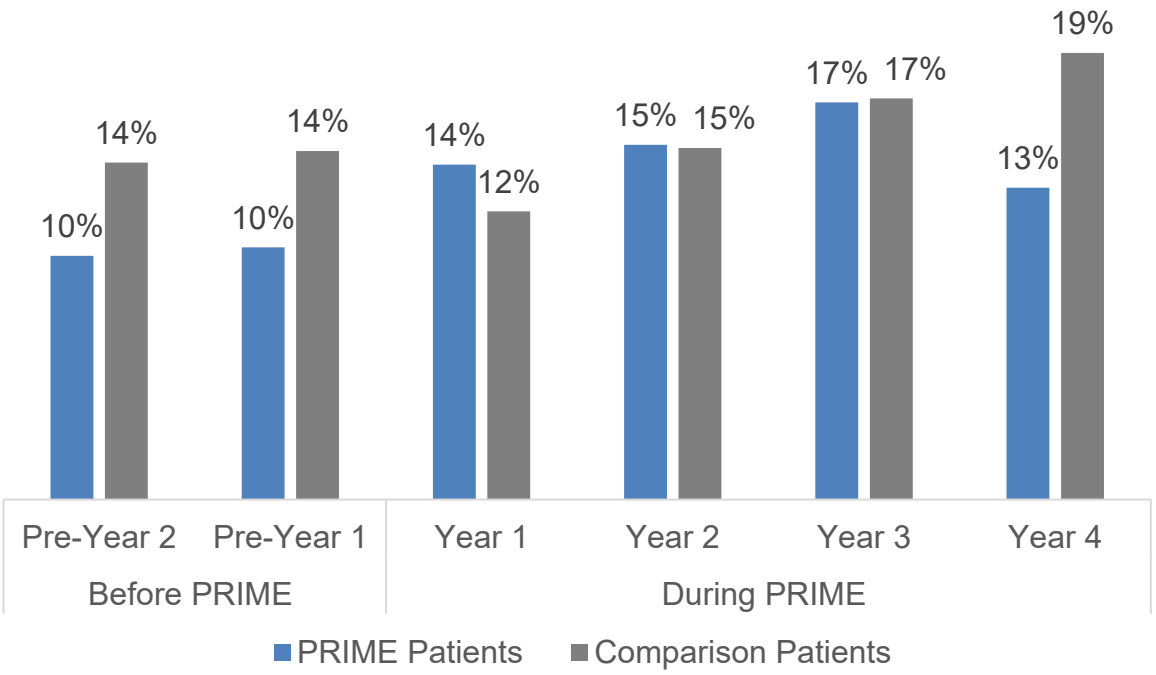
Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	-0.21%	2.91%*	3.12%	1.31%

Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
Comparison Patients	-0.21%	1.60%*	1.81%*	

Source: UCLA analysis of Medi-Cal data, July 2014 to June 2020.
*Notes: * Denotes p≤0.05, a statistically significant difference. Average Annual Change Before PRIME is calculated as: (Pre-Year 1 – Pre-Year 2). Average Annual Change During PRIME is calculated as: (Year 4 – Year 1) /3. Difference between changes is calculated as: (Average Annual Change During PRIME – Average Annual Change Before PRIME). Difference-in-difference is calculated as: (Difference between changes for PRIME patients – Difference between changes for comparison patients). Values in the graph are rounded for ease of presentation and may differ from exact values in the table. The analyses exclude patients with a COVID-19 diagnosis.*

Analyses of DMPHs showed no significant changes for PRIME patients from before to during PRIME. However, the trend between PRIME and comparison patients (DD) decreased significantly for PRIME patients relative to comparison patients, by 2.37% (Exhibit 24).

Exhibit 24: DMPH Trends in Metric 1.3.2: Plan All-Cause Readmissions Before and During PRIME for PRIME and Comparison Patients (Goal: Decrease)

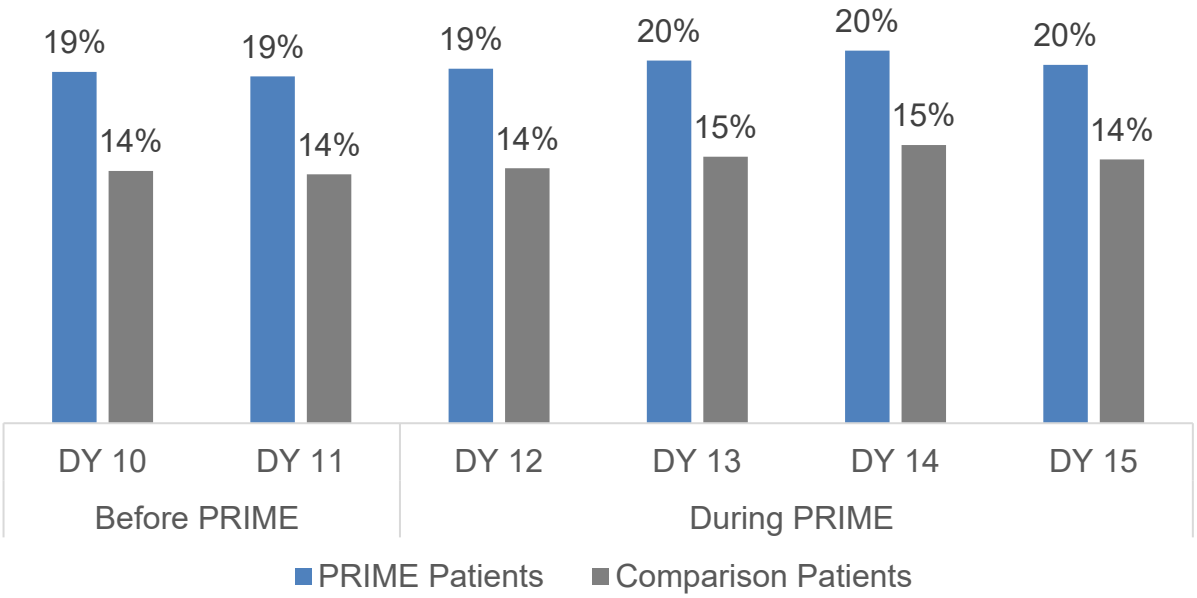


Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	0.35%	-0.32%	-0.67%	-2.37%*
Comparison Patients	0.49%	2.19%*	1.70%	

Source and notes above.

UCLA also analyzed changes in metric 1.3.2: Plan All-Cause Readmissions using California hospital discharges from HCAI data for all insurance types. Analyses for DPHs showed no significant changes in trends for PRIME patients and between PRIME and comparison patients (Exhibit 25). Since HCAI is limited to hospitalizations, data is not available to restrict this to the PRIME eligible population, this analysis is cross-sectional, and the dates align with PRIME DYs.

Exhibit 25: DPH Trends in Metric 1.3.2: Plan All-Cause Readmissions Before and During PRIME for PRIME and Comparison Patients Using All Discharges in California Hospital Discharge (HCAI) Data (Goal: Decrease)



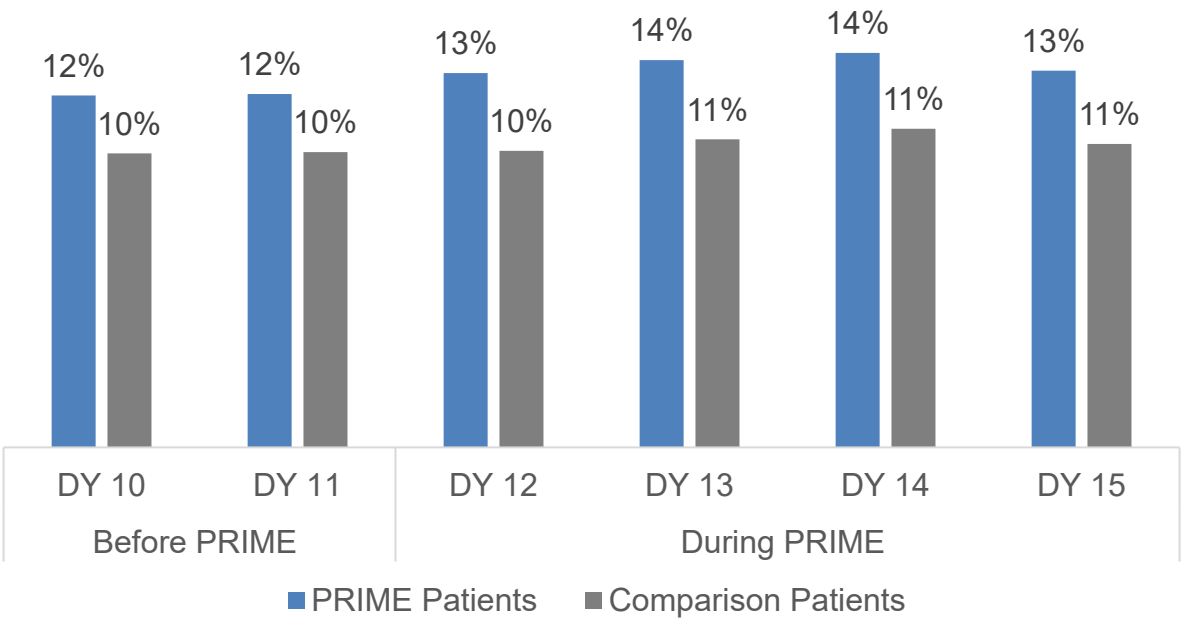
Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	-0.24%	0.07%	0.31%	
Comparison Patients	-0.19%	0.16%	0.35%*	-0.03%

Source: UCLA analysis of HCAI data, July 2014 to December 2019.
*Notes: * Denotes p≤0.05, a statistically significant difference. Average Annual Change Before PRIME is calculated as: (Pre-Year 1 – Pre-Year 2). Average Annual Change During PRIME is calculated as: (Year 4 – Year 1) /3. Difference between changes is calculated as: (Average Annual Change During PRIME – Average Annual Change Before PRIME). Difference-in-difference is calculated as: (Difference between changes for*

PRIME patients – Difference between changes for comparison patients). Values in the graph are rounded for ease of presentation and may differ from exact values in the table.

Analyses for DMPHs showed no significant change in trends between PRIME and comparison patients (Exhibit 26).

Exhibit 26: DMPH Trends in Metric 1.3.2: Plan All-Cause Readmissions Before and During PRIME for PRIME and Comparison Patients Using All Discharges in California Hospital Discharge (HCAI) Data (Goal: Decrease)



Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	0.05%	0.03%	-0.02%	
Comparison Patients	0.04%	0.08%	0.04%	-0.06%

Source and notes above.

Project 1.4 Patient Safety in the Ambulatory Setting

Objectives

Project 1.4 was designed to improve quality of care in the outpatient setting by reducing medication errors and delays in delivery of preventive services, particularly for patients with chronic conditions who may be at risk for adverse events from missed diagnoses, medication side-effects, or other potential problems related to chronic disease management. These goals were to be achieved by examining the existing infrastructure and care delivery processes such as gap analyses, establishing needed infrastructure such as data systems, and improving processes such as ensuring follow-up for abnormal results of common laboratory tests and for monitoring patients on persistent medications (Attachment Q).

Hypotheses

Participating hospitals improved patient safety by improving follow-up after abnormal test results and annual monitoring of patients on persistent medications.

Research Questions

1. What efforts did participating hospitals undertake to increase follow up for patients with abnormal laboratory results and improve monitoring for those on persistent medications?
2. Did participating hospitals report improved performance in Project 1.4 metrics during PRIME, consistent with project objectives?
3. Did project implementation lead to change in metric performance for PRIME patients before and during PRIME and in comparison to the comparison patients?

Limitations

Several metrics could not be constructed from Medi-Cal data by UCLA. See PRIME Metric Feasibility Analysis for a detailed explanation.

Project Selection

A total of 15 hospitals (6 DPHs and 9 DMPHs) participated and reported metric performance data for this optional project. One DPH and two DMPHs dropped out of participation in DY 12. Two DMPHs dropped in DY 13. Detailed information on hospital participation during PRIME can be found in Appendix B. Project Selection.

Findings for Project 1.4

Research Question 1: Summary of Project Implementation

Overall, hospitals made significant progress in Project 1.4 by establishing a baseline assessment of workflows, conducting gap analyses, establishing protocols for follow up regarding abnormal test results and monitoring patients on specific medications, and implementing systems for capturing and monitoring data.

Eleven hospitals implementing Project 1.4 completed the implementation survey and those results are presented in this analysis. To implement this project, hospitals collected baseline studies to assess workflows for patients on persistent medications (7), particularly for abnormal results follow-up. Hospitals examined gaps in following up abnormal test results within target populations (6) or disease conditions (4), as well as gaps in the management of persistent medications within target populations (5) and disease conditions (4). Baseline studies included studying patient compliance on completing laboratory tests, identifying existing workflows for patients on persistent medications, and gathering qualitative data from clinics to guide potential policy and process changes. Hospitals defined timeliness criteria for addressing abnormal test results (8), notifying patients (8), following-up on medication adverse events (3) and scheduling follow-up visits from immediately to 1 business day. When reporting on how this project was implemented, all or almost all hospitals reported that they documented services following abnormal results (11), reviewed the medical record for abnormal results (10), and informed patients of abnormal results promptly (10). Nine hospitals reviewed medical records for adverse outcomes among patients on persistent medications. Seven hospitals reported that they regularly provided feedback to providers regarding documentation, monitoring, and conducted follow-up related to abnormal test results and management of persistent medications.

Before PRIME the majority of hospitals had developed guidelines for addressing critically abnormal test results (8), protocols for provider notification (8), and protocols for patient notification for follow-up (7). During PRIME this expanded, so that all but 1 hospital, had implemented or were planning to implement such protocols. Regarding follow-up for difficult-to-reach patients, 4 hospitals had implemented specific protocols for this population before PRIME while 6 had implemented or were planning to implement such protocols during PRIME.

The most common metric and data-related challenges were that IT infrastructure lacked data query ability, tracking, or reporting functions (8), followed by variation in documentation within the system by providers and staff (5). The solutions identified by

hospitals were EHR/IT standardization or expansion across the system (4), standardized tools and screening (4), and standardizing processes across systems (5). A detailed description of Project 1.4 implementation is available in the PRIME Interim Report.

In the Preliminary Summative Evaluation Report , hospitals rated (from 1=very low to 5=very high) staff effort (3.9), financial investment (3.6), and level of difficulty (3.6) of Project 1.4 to be moderate.

Research Question 2: Summary of Changes in Hospital-Reported Metric Achievement Rates

Performance of hospitals in Project 1.4 was measured by 3 metrics, one of which included 3 sub-rates (Exhibit 27). All metrics changed in the intended direction with the exception of one metric for DMPHs. Detailed results are available in Appendix G. Project-Specific Trends in Metric Performance Project 1.4 – Patient Safety in the Ambulatory Setting.

Exhibit 27: Project 1.4 Hospital Reported Metric Overview and Rate Changes Before DY 15

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care	Changed in the Intended Direction DPH	Changed in the Intended Direction DMPH
Abnormal Results Follow-Up: Abnormal Potassium Follow-up	1.4.1*	Increase	Process	Y	Y
Abnormal Results Follow-Up: Abnormal INR Follow-Up	1.4.1*	Increase	Process	Y	Y
Abnormal Results Follow-Up: Abnormal BIRADS Follow-Up	1.4.1*	Increase	Process	Y	N
Annual Monitoring for Patients on Persistent Medications	1.4.2	Increase	Process	Y	Y
INR Monitoring for Individuals on Warfarin	1.4.3	Increase	Process	Y	Y

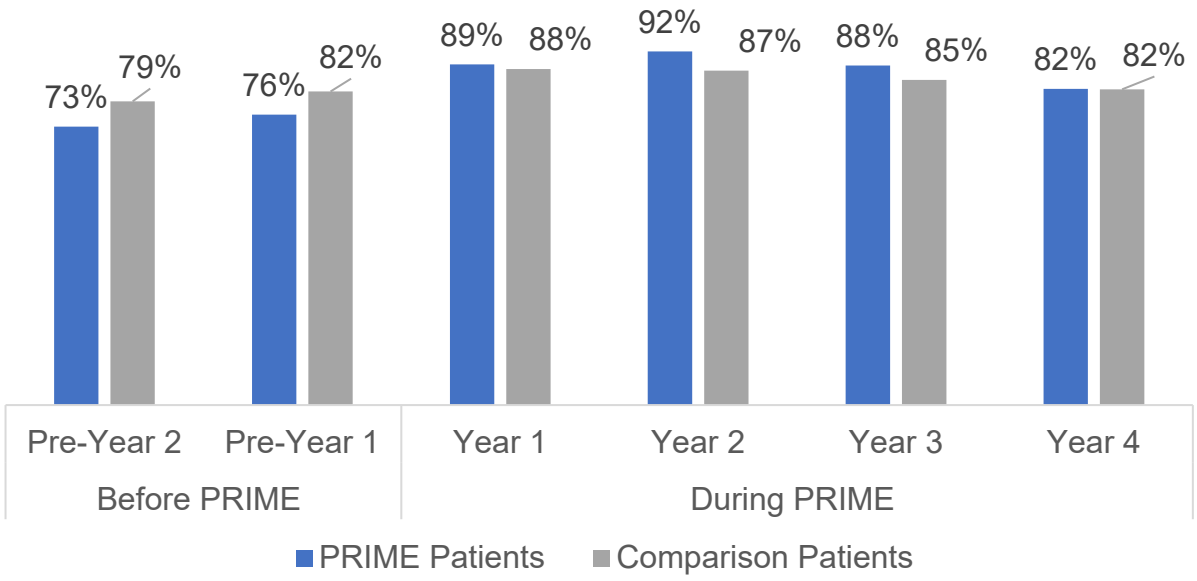
Source: PRIME Metrics Specs, DY15YE. UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital.
** Denotes innovative metric.*
Y: metric increased or decreased in the intended direction, N: metric did not increase or decrease in the intended direction, N/A: trend was not measured through DY 14. Assessment of changes in metric values excluded DY 15 due to disruptions in care delivery and utilization caused by the COVID-19 pandemic.

Research Question 3: Changes in Metrics between PRIME and Comparison Patients

UCLA analyzed trends in Metric 1.4.2 Annual Monitoring for Patients on Persistent Medications and Metric 1.4.3 International Normalized Ratio (INR) Monitoring for Individuals on Warfarin. The availability of adequate information to construct these metrics using Medi-Cal data is described in Appendix G. Project-Specific Trends in Metric Performance: PRIME Metric Feasibility Analysis.

UCLA analyzed changes in the PRIME specified Metric 1.4.2 Annual Monitoring for Patients on Persistent Medications. Hospitals were intended to increase the rates of annual monitoring tests for patients on persistent medications (ACE inhibitors/ARBs or diuretics). Analysis of DPHs showed a statistically significant decrease in trend for this metric from before to during PRIME for PRIME patients (5.25%), but the rate of decrease (DD) was similar between PRIME and comparison patients (Exhibit 28).

Exhibit 28: DPH Trends in Metric 1.4.2: Annual Monitoring for Patients on Persistent Medications Before and During PRIME for PRIME and Comparison Patients (Goal: Increase)



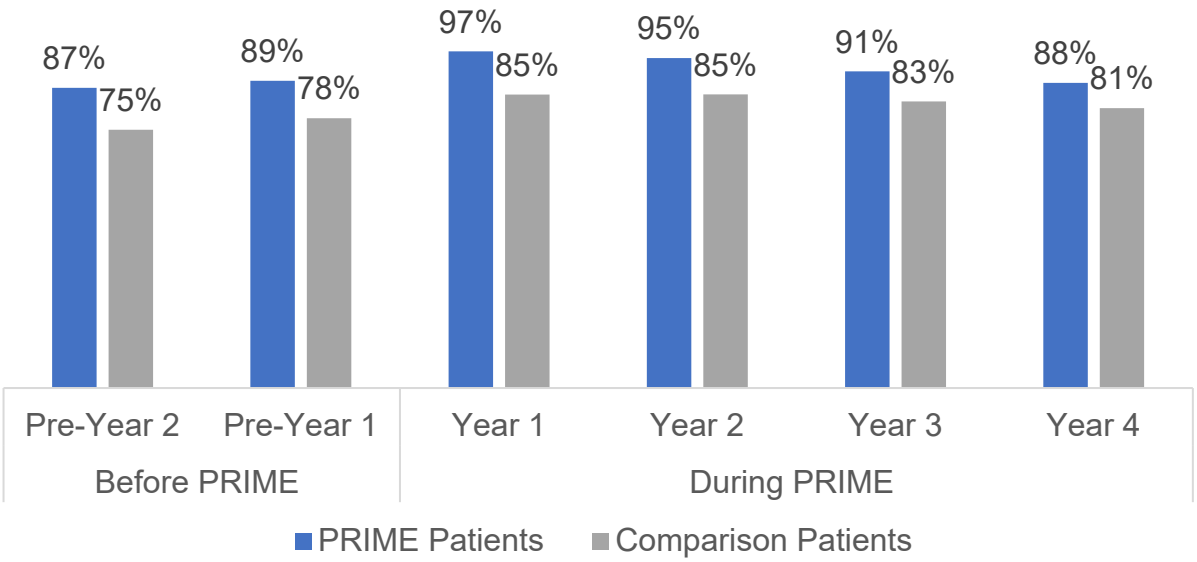
Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	3.12%	-2.13%*	-5.25%*	-0.92%

Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
Comparison Patients	2.57%	-1.76%*	-4.33%*	

Source: UCLA analysis of Medi-Cal data, July 2014 to June 2020.
*Notes: * Denotes p≤0.05, a statistically significant difference. Average Annual Change Before PRIME is calculated as: (Pre-Year 1 – Pre-Year 2). Average Annual Change During PRIME is calculated as: (Year 4 – Year 1) /3. Difference between changes is calculated as: (Average Annual Change During PRIME – Average Annual Change Before PRIME). Difference-in-difference is calculated as: (Difference between changes for PRIME patients – Difference between changes for comparison patients). Values in the graph are rounded for ease of presentation and may differ from exact values in the table. The analyses exclude patients with a COVID-19 diagnosis.*

Analyses of DMPHs also showed a statistically significant decrease in this trend from before to during PRIME for PRIME patients (5.04%) and a similar rate of decrease (DD) for both PRIME and comparison patients (Exhibit 29).

Exhibit 29: DMPH Trends in Metric 1.4.2: Annual Monitoring for Patients on Persistent Medications Before and During PRIME for PRIME and Comparison Patients (Goal: Increase)



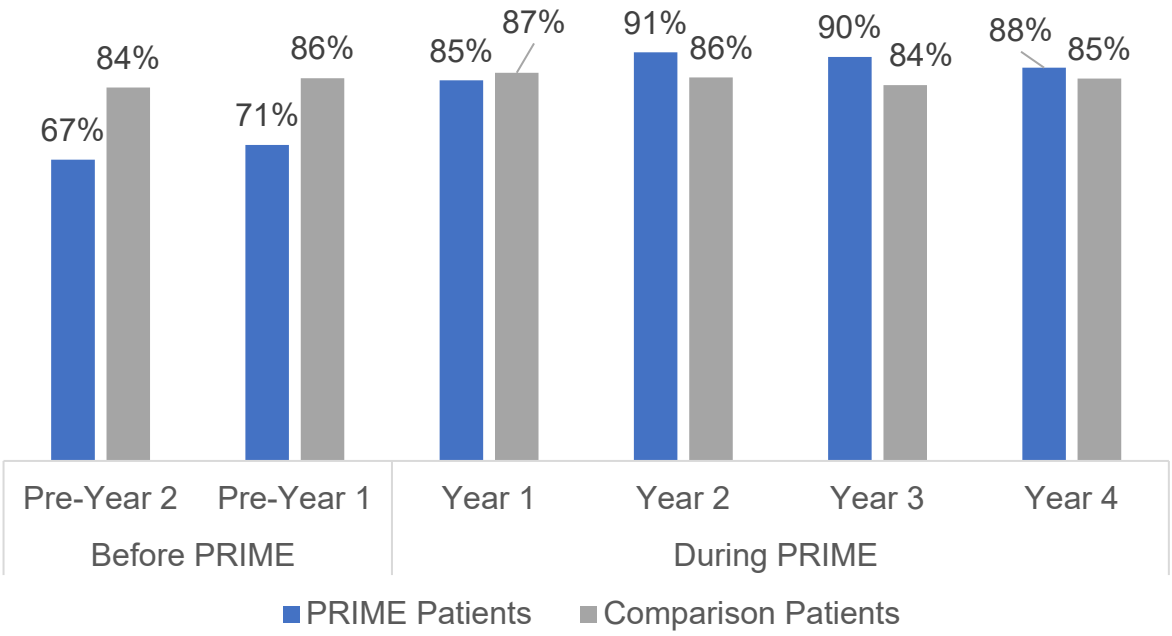
Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	2.02%*	-3.02%*	-5.04%*	
Comparison Patients	3.35%*	-1.31%*	-4.66%*	-0.38%

Source: UCLA analysis of Medi-Cal data, July 2014 to June 2020.
*Notes: * Denotes p≤0.05, a statistically significant difference. Average Annual Change Before PRIME is calculated as: (Pre-Year 1 – Pre-Year 2). Average Annual Change During PRIME is calculated as: (Year 4 – Year 1) /3. Difference between changes is calculated as: (Average Annual Change During PRIME – Average Annual Change Before PRIME). Difference-in-difference is calculated as: (Difference between changes for PRIME patients – Difference between changes for comparison patients). Values in the graph are rounded for ease of presentation and may differ from exact values in the table. The analyses exclude patients with a COVID-19 diagnosis.*

UCLA analyzed changes in the PRIME specified Metric 1.4.3 International Normalized Ratio (INR) Monitoring for Individuals on Warfarin. Hospitals were intended to increase the rates of monitoring tests, with at least one test per 56-day interval with Warfarin.

Analyses of DPHs did not show a significant change in trends for this metric for PRIME patients from before to during PRIME and no differences in trends (DD) between PRIME and comparison patients (Exhibit 30). Analysis for DMPHs was not feasible due to small sample sizes.

Exhibit 30: DPH Trends in Metric 1.4.3: International Normalized Ratio (INR) Monitoring for Individuals on Warfarin Before and During PRIME for PRIME and Comparison Patients (Goal: Increase)



Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	3.29%*	0.94%	-2.35%	
Comparison Patients	2.08%*	-0.43%	-2.51%*	0.16%

Source and notes above.

Project 1.5 Million Hearts Initiative

Objectives

Project 1.5 was designed to support participation in the Million Hearts® initiative, a national initiative aimed at promoting evidence-based practices for the prevention and treatment of cardiovascular disease and empowering patients to make healthy choices. These activities were expected to reduce disparities in receipt of preventive services and reduce variations in performance across DPHs and DMPHs. These goals were to be achieved by developing needed infrastructure such as registries and protocols for delivery of guideline-concordant care, as well as implementing changes in care delivery processes such as assessment of existing disparities and clinical management of patients. Specific objectives can be found in Attachment Q.

Hypotheses

Participating hospitals supported the Million Hearts initiative clinical targets, including tobacco cessation, hypertension control, and aspirin use.

Research Questions

1. What efforts did participating hospitals undertake to provide recommended clinical preventive services aligned with the Million Hearts Initiative?
2. Did participating hospitals report improved performance in Project 1.5 metrics during PRIME, consistent with project objectives?
3. Did project implementation lead to change in metric performance for PRIME patients before and during PRIME and in comparison to the comparison patients?

Limitations

Project 1.5 metrics could not be constructed from Medi-Cal data by UCLA. See PRIME Metric Feasibility Analysis for a detailed explanation.

Project Selection

A total of 19 hospitals (7 DPHs and 12 DMPHs) participated and reported metric performance data for this optional project. One DPH and DMPH joined in DY 12, two DMPHs dropped out of participation in DY 12, two DMPHs dropped in DY 13, and one DMPH joined in DY 15. Detailed information on hospital participation during PRIME can be found in Appendix B. Project Selection.

Findings for Project 1.5

Research Question 1: Summary of Project Implementation

Overall, hospitals made significant progress in implementing project 1.5 by establishing data infrastructure and registries for identifying and tracking patients at higher risk for heart disease due to hypertension and tobacco use, utilizing telehealth for chronic disease management, routinely tracking blood pressure, and referring patients to community-based resources.

Fifteen hospitals participating in Project 1.5 completed the survey and those results are presented in this analysis. Of the 8 core components identified in Attachment Q for this project, fewer than half of the hospitals (from 3 hospitals for the least common component to 8 for the most common component) had been implemented prior to PRIME.

When asked to report on specific infrastructure established for implementing this project, most hospitals reported utilizing registries for patients with hypertension (10) or tobacco use (9). About half of hospitals utilized telehealth for chronic disease management (2 before PRIME, 6 planned or implemented during PRIME); fewer hospitals utilized it for cardiology (2 before PRIME; 2 implemented during PRIME). To improve receipt of preventative services, the majority of hospitals reported referencing outside resources, most commonly USPSTF recommendations (12), American Heart Association resources (11), and the Centers for Disease Control and Prevention's tobacco cessation resources (10). When reporting on how this project was implemented, most hospitals prepared for the project by assessing baseline data on the receipt and use of targeted preventative services related to the Million Hearts Initiative (11). Fewer hospitals identified disparities in care delivery for patients with heart disease or stroke risk under PRIME (types of disparities included 8 categories, of which the maximum was 4 hospitals for severity of condition by race/ethnicity and 3 hospitals for outpatient visits by language); one hospital reported identifying disparities related to outpatient visits for heart disease by SO/GI.

Hospitals performed the processes of care delivery consistently; the majority of hospitals reported that they measure blood pressure at each medical visit (14) and 10 reported that patients measure their blood pressure at home and report it to their provider. To manage low dose aspirin therapy under PRIME, the majority of hospitals reported assessing the risk of coronary events (12), assessing bleeding risk (12), and monitoring adherence to aspirin therapy (9). Thirteen hospitals reported linking patients to community-based resources. The most common types of referrals were educational or self-management classes, followed by exercise classes or activities. Few hospitals reported linking patients

to informal support groups or cooking classes (the number of hospitals varied by category, the most common were 4 hospitals that linked patients with stroke support groups and 4 for tobacco support groups).

The top data-related challenge cited by the majority of hospitals was that IT infrastructure lacked data query ability, tracking, or reporting functions (10); followed by variation in documentation within the system by providers and staff (8). The top solutions to data-related challenges identified by the majority of hospitals were EHR/IT standardization or expansion across the system (8), followed by provider and staff training and increased capacity (3). The top metric-related challenges were that processes were not established system-wide (5), followed by siloed departments and difficulty collaborating (4) as well as inadequate availability of services (4). The top solution to metric-related challenges identified by the hospitals was implementing provider and staff training and increased capacity (5), followed by standardizing processes across systems (5). A detailed description of Project 1.5 implementation is available in the PRIME Interim Report.

In the Preliminary Summative Evaluation Report , hospitals rated (from 1=very low to 5=very high) staff effort (3.9), financial investment (3.0), and level of difficulty (3.8) of Project 1.5 to be moderate.

Research Question 2: Summary of Changes in Hospital-Reported Metric Achievement Rates

Performance in Project 1.5 was measured by 4 metrics (Exhibit 31). All metrics changed in the intended direction. Detailed results are available in Appendix G. Project-Specific Trends in Metric Performance Project 1.5 – Million Hearts Initiative.

Exhibit 31: Project 1.5 Hospital Reported Metric Overview and Rate Changes Before DY 15

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care	Changed in the Intended Direction DPH	Changed in the Intended Direction DMPH
Controlling Blood Pressure	1.5.1.b@	Increase	Outcome	Y	Y
Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antithrombotic	1.5.2.i @	Increase	Process	Y	Y
PQRS # 317 Preventative Care and Screening: Screening for High Blood Pressure and Follow-Up Documented	1.5.3	Increase	Process	Y	Y
Tobacco Use – Screening and Cessation Intervention	1.5.4.t	Increase	Process	Y	Y

Source: PRIME Metrics Specs, DY15YE. UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital. PQRS: Physician Quality Reporting System.

@Metric 1.5.1.b had a trend break in DY14 (19—002); thus, the trend was based on the original definition. A trend- break was issued for Metric 1.5.2.i in DY 12 (17-007), so the change is measured from DY 12 to DY 14 for both DPH and DMPHs.
Y: metric increased or decreased in the intended direction, N: metric did not increase or decrease in the intended direction, N/A: trend was not measured through DY 14. Assessment of changes in metric values excluded DY 15 due to disruptions in care delivery and utilization caused by the COVID-19 pandemic.

Project 1.6 Cancer Screening and Follow-up

Objectives

Project 1.6 was designed to improve early diagnosis and timely treatment of cancer by promoting evidence-based and coordinated processes for prevention, screening, and follow-up. These goals were to be achieved by developing needed infrastructure, such as adopting health information technology to collect data about receipt of preventive services and to implement decision support and registry functions, a multidisciplinary taskforce, and protocols for guideline-concordant care delivery; as well as following processes such as addressing disparities and linking patients to community-based services (Attachment Q).

Hypotheses

Participating hospitals increased the rates of preventive cancer screening and reduced variations in rates. These were accomplished by developing and implementing standards for screening and follow-up.

Research Questions

1. What efforts did participating hospitals undertake to improve and standardize delivery of preventive cancer screening?
2. Did participating hospitals report improved performance in Project 1.6 metrics during PRIME, consistent with project objectives?
3. Did project implementation lead to changes in metric performance for PRIME patients before and during PRIME and in comparison to the comparison patients?

Limitations

Several metrics could not be constructed from Medi-Cal data by UCLA. See PRIME Metric Feasibility Analysis for a detailed explanation.

Project Selection

A total of 15 hospitals (6 DPHs and 9 DMPHs) participated and reported metric performance data for this optional project. One DPH and three DMPHs dropped out of participation in DY 12. Detailed information on hospital participation during PRIME can be found in Appendix B. Project Selection.

Findings for Project 1.6

Research Question 1: Summary of Project Implementation

Overall, hospitals made significant progress in establishing data infrastructure and protocols, including leveraging the U.S. Preventive Services Task Force recommendations and establishing guidelines to improve cancer screening, follow-up, and tracking patients at risk for cancer. Hospitals reported improvements in the majority of metrics. However, they varied in their progress in project implementation, particularly in using demographic data to assess disparities.

Ten hospitals implementing Project 1.6 completed the survey about whether and when they implemented the suggested core components of this project as an indication of their approach to improve cancer screening and follow-up. For example, most core components were not implemented before PRIME; during PRIME most of the hospitals implemented the majority of the components. Before PRIME the majority of hospitals were using their EHR systems for clinical decision support, registries, and panel/population management approaches (6). About half of the hospitals had access to data to assess patients at risk for breast, cervical, and colorectal cancer before PRIME, and this expanded to all but one hospital during PRIME.

All hospitals reported that they had established a task force to identify principle-based expected practices for cancer screening and follow-up. All or nearly all hospitals included primary care providers (10) and medical support staff (8). Hospitals developed standardized screening and follow-up processes for breast, cervical, and colorectal cancer. To improve receipt of preventative services, the majority referenced USPSTF recommendations (7); 4 other references were used less frequently. Hospitals determined system-wide approaches to cancer screening using guidelines based on age, frequency of screening, and diagnostic tools to. For example, age-based guidelines were incorporated into standards for screening for breast cancer (9) and cervical and colorectal cancer screening (8); frequency of screening and diagnostic tools were used by 8 hospitals for all 3 screening tests.

Hospitals inconsistently collected and used demographic data to identify disparities in care delivery among populations at higher risk for cancer. Several (4) hospitals examine disparities in outpatient visits based on race/ethnicity and language and disparities in severity or complexity of conditions based on race/ethnicity. Eight hospitals linked patients with cancer to community-based resources, most commonly to informal support groups and educational classes.

The top metric and data-related challenges were inadequate IT infrastructure (4), requiring manual tracking or chart review (4). The top solutions identified by the hospitals were enhancing outreach and capacity to follow up with patients (6) and standardizing processes for documentation (4). A detailed description of Project 1.6 implementation is available in the PRIME Interim Report.

In the Preliminary Summative Evaluation Report , hospitals rated (from 1=very low to 5=very high) staff effort (4.5), financial investment (3.5), and level of difficulty (3.7) of Project 1.6 to be moderately high.

Research Question 2: Summary of Changes in Hospital-Reported Metric Achievement Rates

Performance of hospitals in Project 1.6 was measured by 5 metrics (Exhibit 32). All metrics changed in the intended direction. Detailed results are available in Appendix G. Project-Specific Trends in Metric Performance Project 1.6 – Cancer Screening and Follow-Up.

Exhibit 32: Hospital Reported Metric Overview and Rate Changes Before DY 15

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care	Changed in the Intended Direction DPH	Changed in the Intended Direction DMPH
BIRADS to Biopsy	1.6.1*	Increase	Process	Y	Y
Breast Cancer Screening	1.6.2@	Increase	Process	Y	Y
Cervical Cancer Screening	1.6.3	Increase	Process	Y	Y
Colorectal Cancer Screening	1.6.4.c	Increase	Process	Y	Y
Receipt of Appropriate Follow-Up for Abnormal CRC Screening	1.6.5*	Increase	Process	Y	Y

Source: PRIME Metrics Specs, DY15YE. UCLA analysis of the hospital-reported data, February to June 2021.
*Notes: DPH: designated public hospital, DMPH: district and municipal public hospital. * Denotes innovative metric.*
@ Trending break was issued for Metric 1.6.2 in DY 14 (19—002); thus, the trend was based on the original definition.
Y: metric increased or decreased in the intended direction, N: metric did not increase or decrease in the intended direction.
Assessment of changes in metric values excluded DY 15 due to disruptions in care delivery and utilization caused by the COVID-19 pandemic.

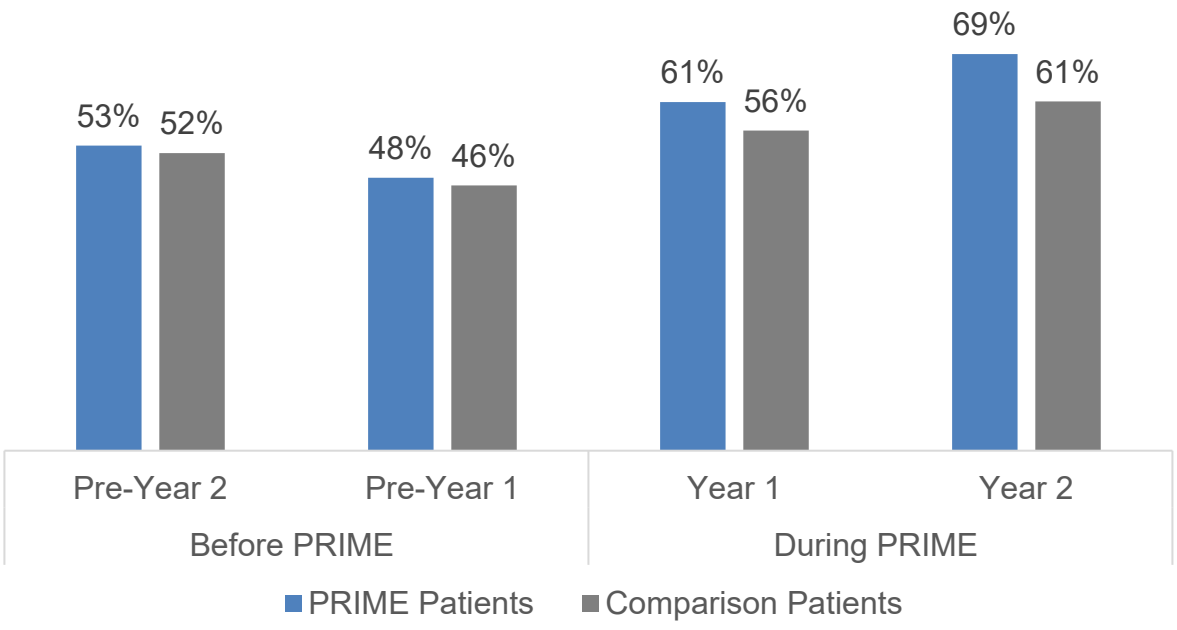
Research Question 3: Changes in Metrics between PRIME and Comparison Patients

UCLA analyzed trends in Metric 1.6.2: Breast Cancer Screening and Metric 1.6.3 Cervical Cancer Screening, given the availability of adequate information to construct these metrics using Medi-Cal data (PRIME Metric Feasibility Analysis).

UCLA analyzed changes in the PRIME specified (mammogram for women age 50-74). PRIME specifications required a 2 year, 3 month look-back period. Therefore, trends for this rate were measured for two years during PRIME. Hospitals were intended to increase screening to diagnose breast cancer.

Analyses of DPHs showed a statistically significant change in this metric in the desired direction for PRIME patients during PRIME (8.37%) and a significant increase in the trend from before to during PRIME (13.99%, Exhibit 33). This increase was statistically significantly greater for PRIME patients vs. comparison patients (DD), by 3.28%.

Exhibit 33: DPH Trends in Metric 1.6.2: Breast Cancer Screening (Mammogram) Before and During PRIME for PRIME and Comparison Patients (Goal: Increase)

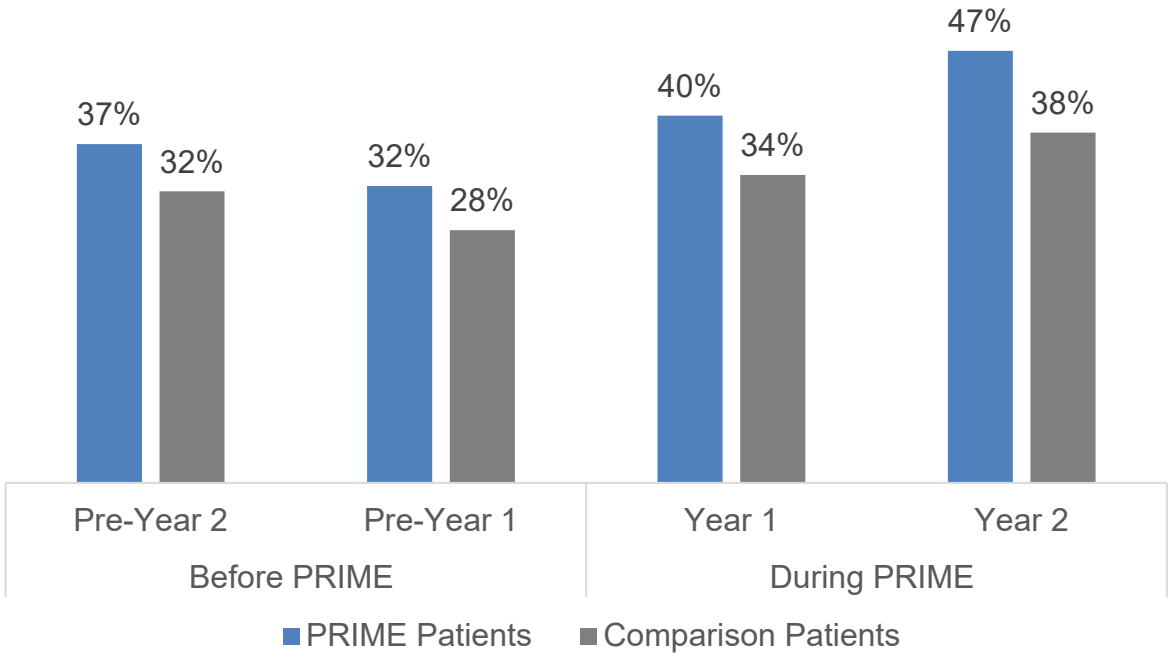


Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	-5.62%*	8.37%*	13.99%*	
Comparison Patients	-5.63%*	5.08%*	10.71%*	3.28%*

Source: UCLA analysis of Medi-Cal data, July 2014 to June 2020.
*Notes: * Denotes p≤0.05, a statistically significant difference. Average Annual Change Before PRIME is calculated as: (Pre-Year 1 – Pre-Year 2). Average Annual Change During PRIME is calculated as: (Year 2 – Year 1). Difference between changes is calculated as: (Average Annual Change During PRIME – Average Annual Change Before PRIME). Difference-in-difference is calculated as: (Difference between changes for PRIME patients – Difference between changes for comparison patients). Values in the graph are rounded for ease of presentation and may differ from exact values in the table. The analyses exclude patients with a COVID-19 diagnosis.*

Analysis of DMPHs showed a statistically significant change in this metric in the desired direction for PRIME patients during PRIME (7.06%), with a statistically significantly greater increase from before to during PRIME (11.62%) for PRIME patients (Exhibit 34). However, the rate of increase between PRIME and comparison patients was similar (DD).

Exhibit 34: DMPH Trends in Metric 1.6.2: Breast Cancer Screening (Mammogram) Before and During PRIME for PRIME and Comparison Patients (Goal: Increase)

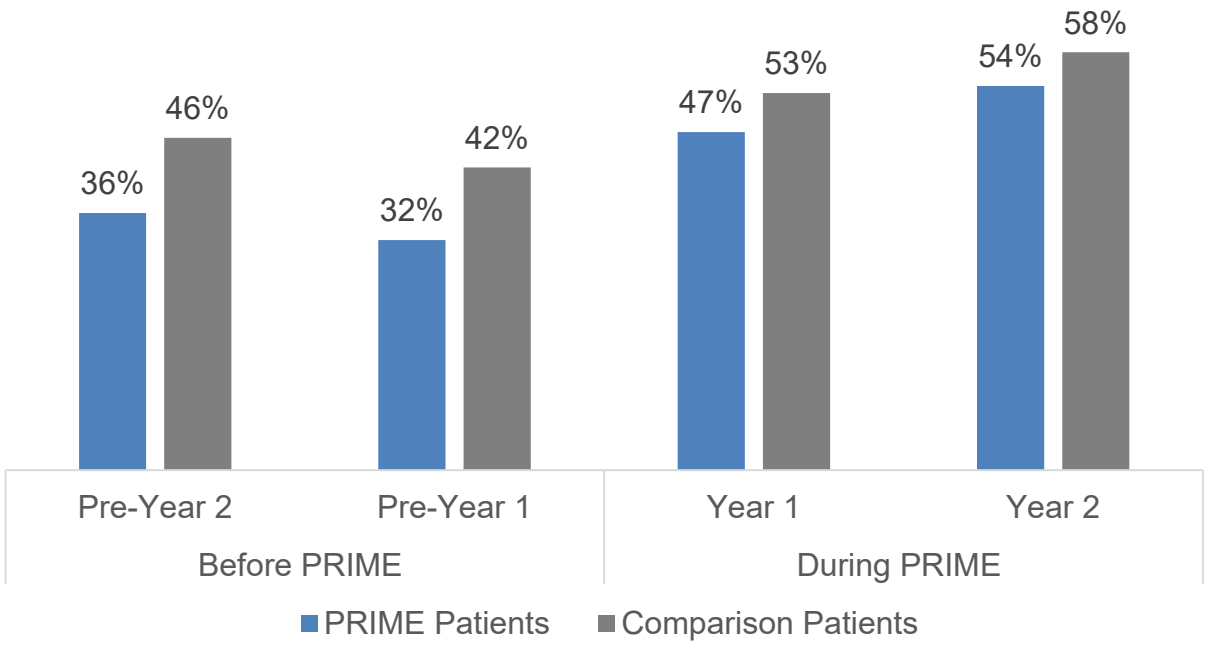


Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	-4.56%*	7.06%*	11.62%*	
Comparison Patients	-4.25%*	4.61%*	8.86%*	2.76%

Source and notes above.

UCLA analyzed changes in the PRIME specified Metric 1.6.3 Cervical Cancer Screening. The PRIME metric specification required a look-back period of 5 years for HPV screening and 3 years for Pap screening. However, trends for this rate were measured for 2 years, to standardize the look–back period. Analyses of DPHs showed that the percent of eligible patients who had a Pap or HPV screening increased to 54% in Year 2 (the 2-year look-back period includes those who were screened in Year 1 or Year 2). These rates increased significantly from before to during PRIME for PRIME patients (10.24%, Exhibit 35). There was no difference in trends between PRIME and comparison patients (DD).

Exhibit 35: DPH Trends in Metric 1.6.3: Cervical Cancer Screening Rates Before and During PRIME for PRIME and Comparison Patients (Goal: Increase)

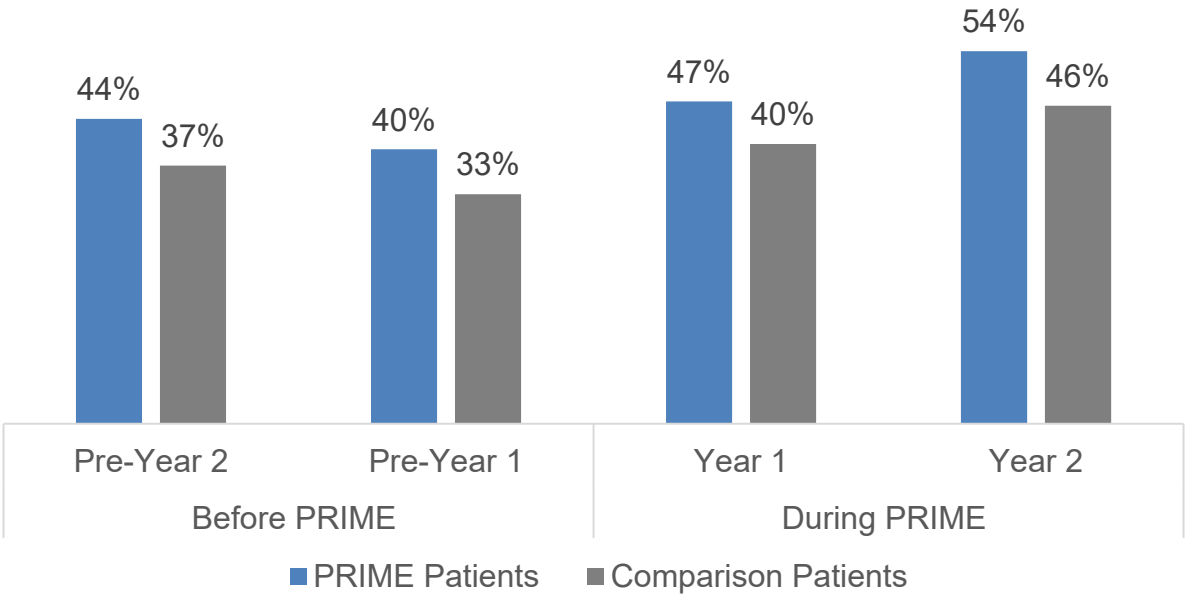


Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	-3.79%*	6.44%*	10.24%*	
Comparison Patients	-4.15%*	5.70%*	9.85%*	0.39%

Source and notes above.

The analyses of this metric for DMPHs showed a similar statistically significant increase for this metric from before to during PRIME for PRIME patients (11.65%, Exhibit 36). This increase was significantly greater for PRIME patients vs. comparison patients (DD), by 2.00%.

Exhibit 36: DMPH Trends in Metric 1.6.3: Cervical Cancer Screening Rates Before and During PRIME for PRIME and Comparison Patients (Goal: Increase)



Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	-4.38%*	7.27%*	11.65%*	2.00%*
Comparison Patients	-4.12%*	5.53%*	9.65%*	

Source and notes above.

Project 1.7 Obesity Prevention and Healthier Foods Initiative

Objectives

Project 1.7 was designed to reduce obesity by using evidence-based approaches to guide systematic delivery of related services by providers and promoting the availability of healthier foods in public settings such as hospitals. These goals were to be achieved by developing the needed infrastructure such as availability of data and development of protocols for obesity screening, referral, and treatment; as well as following care processes that promote population health such as providing healthier food options at hospital facilities and linking patients to community-based resources (Attachment Q).

Hypotheses

Participating hospitals promoted obesity prevention by screening for obesity, counseling to reduce weight, and provision of healthier foods.

Research Questions

1. What efforts did participating hospitals undertake to prevent obesity and promote healthier food initiatives?
2. Did participating hospitals report improved performance in Project 1.7 metrics during PRIME, consistent with project objectives?
3. Did project implementation lead to change in metrics for PRIME patients before and after PRIME and in comparison to the comparison patients?

Limitations

Research question 3 could not be examined because no metrics could be constructed from Medi-Cal data. PRIME Metric Feasibility Analysis for a detailed explanation.

Project Selection

A total of 12 hospitals (2 DPHs and 10 DMPHs) participated and reported metric performance data for this optional project. One DMPH dropped out of participation in DY 11. One DPH and one DMPH dropped in DY 12. One DMPH joined in DY 13. Two DMPHs joined in DY 15. Detailed information on hospital participation during PRIME can be found in Appendix B. Project Selection.

Findings for Project 1.7

Research Question 1: Summary of Project Implementation

Overall, hospitals made significant progress in implementing Project 1.7 by establishing data infrastructure and protocols for tracking obesity/BMI and preventive care services, implementing the Hospital Healthier Food Initiative by restructuring food services to improve access and selection of healthier choices, and implementing processes to provide preventive services with the goal of increasing access to care and addressing disparities.

Ten hospitals implementing Project 1.7 completed the survey about whether and when they implemented the suggested core components of this project as an indication of their overall approach to obesity prevention and healthier foods initiatives. For example, most hospitals had some data infrastructure, but all expanded their use of this data under PRIME. The majority (8) had data about high body mass index (BMI) or obesity before PRIME and 2 added it during PRIME. However, none of the hospitals were actively accessing and using it. Both DPHs had baseline data, but were not using it before PRIME; all the DMPHs collected baseline data specifically for PRIME.

Five hospitals identified disparities in care delivery for patients with high BMI based on language, 4 on race/ethnicity, and 3 on SO/GI. Among these categories, the most frequently identified disparities were outpatient visits by language (3), and readmissions by language (2) and race/ethnicity (2). Hospitals used 6 types of preventative service guidelines and resources; the most common was sourced from the CDC (4). Hospitals linked children (7) and adults (8) to community-based resources; these included education, self-management, and exercise classes. All hospitals prepared for or implemented the Hospital Healthier Food Initiative, in which they shifted toward healthier food options for patients, families, and providers through nutrition standards, labeling and marketing, and not frying food. Hospitals formed teams to implement the initiative, conducted policy and environmental assessments, and developed implementation and maintenance plans (9); engaged stakeholders and partners (8), and evaluated the impact of the initiative's efforts (7). All hospitals focused on water promotion, labeling, and healthier options for cafeteria meals; and 5 focused on improving vending machine options.

Data and metric-related challenges to implementation included IT infrastructure lacking data query ability, tracking, or reporting functions (4); variation in documentation by providers and staff (3); and requiring manual tracking or chart review (3); silo-ed departments and difficulty collaborating (3); and processes not being established system-

wide (3). These challenges were addressed by EHR/IT standardization or expansion across systems (4), process development from management and through quality improvement (3), expanding services and availability of those services (3), and standardizing processes across the system (2). A detailed description of Project 1.7 implementation is available in the PRIME Interim Report.

In the Preliminary Summative Evaluation Report , hospitals rated (from 1=very low to 5=very high) staff effort (4.3), financial investment (3.2), and level of difficulty (3.8) of Project 1.7 to be moderately high.

Research Question 2: Summary of Changes in Hospital-Reported Metric Achievement Rates

Performance of hospitals in Project 1.7 was measured by 3 metrics (Exhibit 37). All metrics changed in the intended direction. Detailed results are available in Appendix G. Project-Specific Trends in Metric Performance Project 1.7 – Obesity Prevention and Healthier Foods Initiative.

Exhibit 37: Project 1.7 Hospital Reported Metric Overview and Rate Changes Before DY 15

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care	Changed in the Intended Direction DPH	Changed in the Intended Direction DMPH
Body Mass Index (BMI) Screening and Follow-Up	1.7.1@	Increase	Process	Y	Y
Partnership for a Healthier America's Hospital Health Food Initiative External Food Service Verification	1.7.2	Increase	Process	Y	Y
Weight Assessment & Counseling for Nutrition and Physical Activity for Children & Adolescents	1.7.3	Increase	Process	Y	Y

Source: PRIME Metrics Specs, DY15YE. UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital. @ A trend break was issued for Metric 1.7.1 in DY 12 (17-007), so the change is measured from DY 12 to DY 14 for both DPH and DMPHs. Y: metric increased or decreased in the intended direction, N: metric did not increase or decrease in the intended direction. Assessment of changes in metric values excluded DY 15 due to disruptions in care delivery and utilization caused by the COVID-19 pandemic.

Domain 2: Targeted High-Risk or High-Cost Populations

Project 2.1 Improved Perinatal Care

Objectives

Project 2.1 was designed to promote quality improvement and use of best practices to deliver safe, efficient, and equitable care and subsequently improve maternal and child health. These goals were to be achieved by participating in statewide and national initiatives focused on improved perinatal and postpartum care, including care coordination to address co-morbidities, decreased unnecessary cesarean section (C-section) rates, reduced morbidity and mortality associated with maternal hemorrhage, and increased breastfeeding rates. Specific objectives can be found in Attachment Q.

Hypotheses

Participating hospitals improved maternal health outcomes by implementing projects focusing on quality improvement and use of best practices to improve maternal and child health.

Research Questions

1. What efforts did participating hospitals undertake to improve perinatal and postpartum care?
2. Did participating hospitals report improved performance in Project 2.1 metrics during PRIME?
3. Did project implementation lead to change in metric performance for PRIME patients before and during PRIME and in comparison to the comparison patients?

Limitations

Several metrics could not be constructed from Medi-Cal data by UCLA. See PRIME Metric Feasibility Analysis for a detailed explanation.

Project selection

A total of 21 hospitals (16 DPHs and 5 DMPHs) participated and reported metric performance data for this required project. One DMPH joined in DY 15. Detailed information on hospital participation during PRIME can be found in Appendix B. Project Selection.

Findings for Project 2.1

Research Question 1: Summary of Project implementation

Overall, hospitals made significant progress in implementing Project 2.1 by establishing data infrastructure and protocols for perinatal care, garnering support for exclusive breast feeding and Baby Friendly certification, and implementing CMQCC bundles for patient safety. Hospitals reported mixed metric improvements, and this varied by hospital type. Twenty 20 hospitals participating in Project 2.1 completed the survey about implementation activities.

For example, to achieve the recommended core components hospitals established the needed infrastructure by developing standardized protocol for scheduling follow up visits (15), adding an identifier in EHRs and registries to identify women requiring care coordination (7), and making referral arrangements with community services (7) such as County Public Health Nurses and WIC for prenatal care and education, and developing protocols for promoting visits. Hospitals utilized coordinators who linked patient to community resources before and after delivery. Some hospitals added specialized services for pregnant women who also had other health conditions. To reduce C-sections, hospitals developed infrastructure such as protocols for use of specific guideline-concordant tests and checklists, physician education, and frequent assessment of data to monitor performance, and amended or overhauled their protocols and trained staff to follow these protocols. The outcomes of these activities were reported in the self-reported metrics. Hospitals referred patients to support services, following traumatic deliveries, and educated high-risk patients about postpartum hemorrhage.

Before PRIME several hospitals had either achieved Baby-Friendly certification or had started the process. The number of Baby Friendly hospitals fluctuated, as hospitals may have let their certification lapse and needed to renew it.

Most hospitals developed infrastructure by establishing collaborative teams (19) identifying champions, assessed the preferences and characteristics of the patient population (11) and hired new staff (8) such as midwives to lead a doula program. To implement, hospitals monitored and shared data to encourage progress in reducing C-sections and promoting exclusive breastfeeding. Challenges included giving infants no food or drink other than breastmilk (9) and training all staff (4). To implement Project 2.1, hospitals participated in multiple quality improvement efforts including the California Maternal Quality Care Collaborative (CMQCC), Quest for Zero: Excellence in OB, Hospital Association Southern California Perinatal Safety Collaborative, and the Regional Perinatal Nurse Leadership.

Data and metric-related challenges included lack of health EHR functionality (8) variations in documentation by providers and staff (6), manual tracking or chart review (6), small denominator or numerator (5), and staff turnover (5). Successful solutions included EHR standardization or expansion (5), standardized processes across the system (6), and establishing meetings across teams (6). A detailed description of Project 2.1 implementation is available in the PRIME Interim Report.

In the Preliminary Summative Evaluation Report , hospitals rated (from 1=very low to 5=very high) staff effort (4.4), financial investment (3.7), and level of difficulty (3.9) of Project 2.1 to be moderately high.

Research Question 2: Summary of Changes in Hospital-Reported Metric Achievement Rates

Performance of hospitals in Project 2.1 was measured by 9 metrics (Exhibit 38). The results were mixed for both DPHs and DMPHs. Detailed results are available in Appendix G. Project-Specific Trends in Metric Performance Project 2.1 – Improved Perinatal Care.

Exhibit 38: Project 2.1 Hospital Reported Metric Rates and Changes through DY 14

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care	Changed in the Intended Direction DPH	Changed in the Intended Direction DMPH
Baby-Friendly Hospital Designation*	2.1.1	Increase	Process	Y	N
Exclusive Breast Milk Feeding	2.1.2	Increase	Process	Y	N
Obstetric (OB) Hemorrhage: Massive Transfusion	2.1.3	Decrease	Outcome	Y	N
OB Hemorrhage: Total Products Transfused (discontinued after DY 14)	2.1.4	Decrease	Outcome	Y	N
Cesarean Birth	2.1.5	Decrease	Outcome	Y	N
Prenatal Care	2.1.6	Increase	Process	Y	Y
Postpartum Care	2.1.6	Increase	Process	Y	Y

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care	Changed in the Intended Direction DPH	Changed in the Intended Direction DMPH
Severe Maternal Morbidity (SMM) per 100 Women with Obstetric Hemorrhage	2.1.7	Decrease	Outcome	N	Y
Unexpected Newborn Complications	2.1.8 ^	Decrease: Balancing	Outcome	Y	Y
OB Hemorrhage Safety Bundle*	2.1.9 **	Increase	Process	Y	Y

Source: PRIME Metrics Specs, DY 15YE. UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital.
**The target population for 2.1.1 and 2.1.9 are the PRIME Entity hospital(s).*
^This metric was a balancing measure, with the rationale that a low chance of unexpected newborn complications would be valued more than low-medium rates of obstetric procedures.
*** Metric 2.1.9 includes reporting for additional activities, for which DPHs improved and DMPHs had mixed results.*
Y: metric increased or decreased in the intended direction, N: metric did not increase or decrease in the intended direction,
Assessment of changes in metric values excluded DY 15 due to disruptions in care delivery and utilization caused by the COVID-19 pandemic.

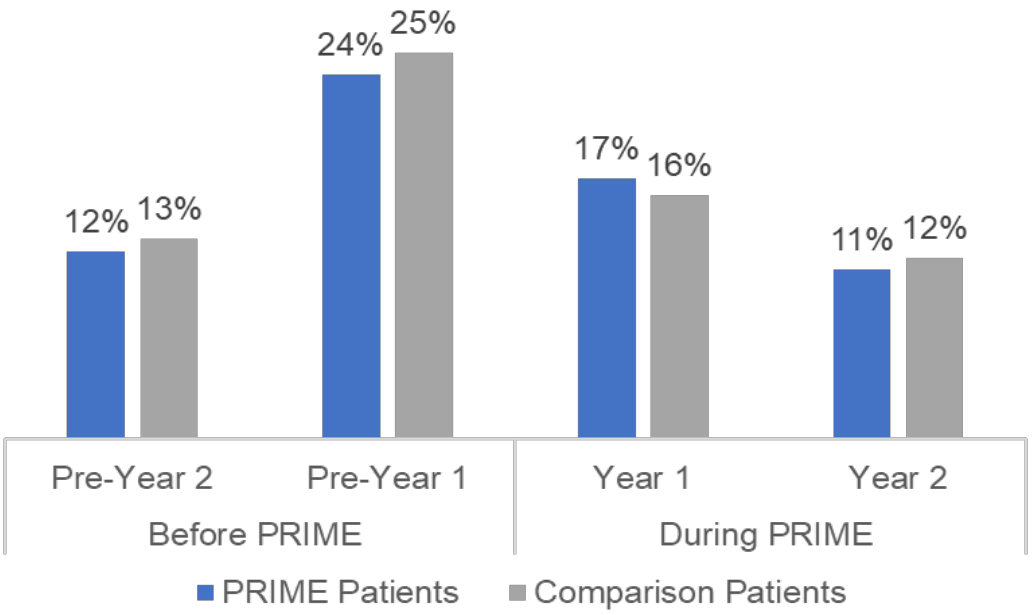
Research Question 3: Changes in Metrics between PRIME and Comparison Patients

UCLA analyzed changes in the PRIME specified metrics Metric 2.1.5 Cesarean Birth (CB), 2.1.6: NQF 1517: Prenatal Care, and 2.1.7: Severe Maternal Morbidity (SMM) per 100 women with obstetric hemorrhage before and during PRIME for PRIME and comparison patients. The availability of adequate information to construct these metrics using Medi-Cal data is described in Appendix G. Project-Specific Trends in Metric Performance: PRIME Metric Feasibility Analysis. Metric 2.1.5 was also constructed using HCAI data.

Metric 2.1.5 could not be constructed completely as indicated in the PRIME Metric Specifications due to lack of information to identify nulliparous patients, although this is consistent among PRIME and comparison patients. Hospitals were intended to decrease the rate of late-term labor CB in nulliparous women. In addition, this measure is only reported for two years during PRIME, because the number of patients with additional years of observation were smaller over time and were not representative of future pregnancies.

Analyses of DPHs showed a statistically significant decrease (the desired direction) in this metric for both PRIME patients (-5.93%) during PRIME and from before to during PRIME (-17.45%), but the difference was statistically similar (DD) for PRIME patients and comparison patients (Exhibit 39).

Exhibit 39: DPH Trends in Metric 2.1.5: Cesarean Births Before and During PRIME for PRIME and Comparison Patients (Goal: Decrease)

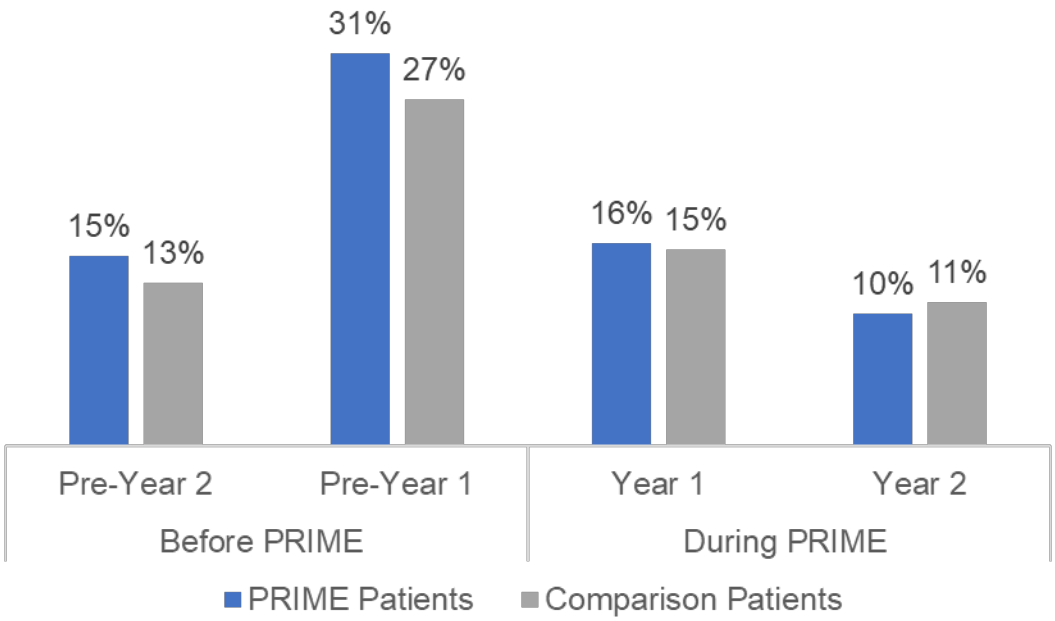


Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	11.52%*	-5.93%*	-17.45%*	-1.31%
Comparison Patients	12.08%*	-4.06%*	-16.14%*	

Source: UCLA analysis of Medi-Cal data, July 2014 to June 2020.
*Notes: * Denotes p≤0.05, a statistically significant difference. Average Annual Change Before PRIME is calculated as: (Pre-Year 1 – Pre-Year 2). Average Annual Change During PRIME is calculated as: (Year2 – Year 1). Difference between changes is calculated as: (Average Annual Change During PRIME – Average Annual Change Before PRIME). Difference-in-difference is calculated as: (Difference between changes for PRIME patients – Difference between changes for comparison patients). Values in the graph are rounded for ease of presentation and may differ from exact values in the table. The analyses exclude patients with a COVID-19 diagnosis.*

Analyses of DMPHs also showed a statistically significantly improvement for PRIME patients from before to during PRIME (-21.39%). Trends between the groups were statistically similar (DD).

Exhibit 40: DMPH Trends in Metric 2.1.5: Cesarean Births Before and During PRIME for PRIME and Comparison Patients (Goal: Decrease)

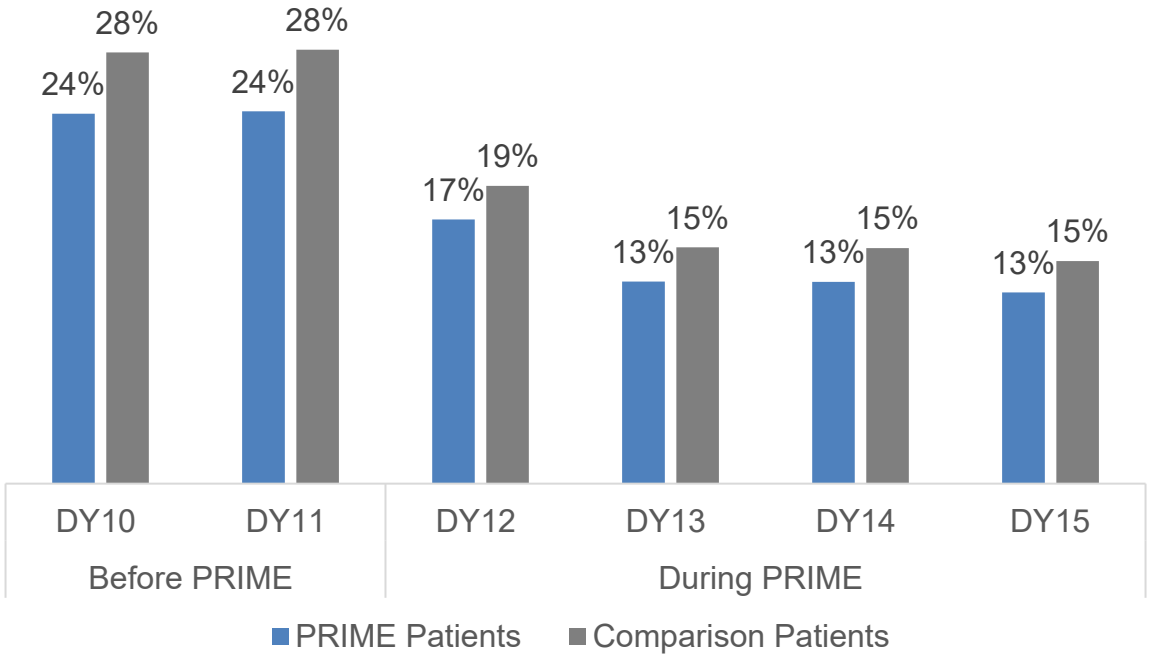


Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	15.88%*	-5.51%	-21.39%*	-2.86%
Comparison Patients	14.37%*	-4.16%*	-18.53%*	

Source and notes above.

UCLA also analyzed Metric 2.1.5 Cesarean Birth using HCAI data, in order to assess changes in discharges with all types of insurance. Hospitals were intended to decrease the rate of late-term labor CB in nulliparous women. Analyses of DPHs showed a significant decrease in this metric in the desired direction for both PRIME (1.59%). There was not a significant difference (DD) between the groups (Exhibit 41). Since HCAI is limited to hospitalizations, data is not available to restrict this to the PRIME eligible population, this analysis is cross-sectional, and the dates align with PRIME DYs.

Exhibit 41: DPH Trends in Metric 2.1.5: Cesarean Section Before and During PRIME for PRIME and Comparison Hospitals Using All Discharges in California Hospital Discharge (HCAI) Data (Goal: Decrease)



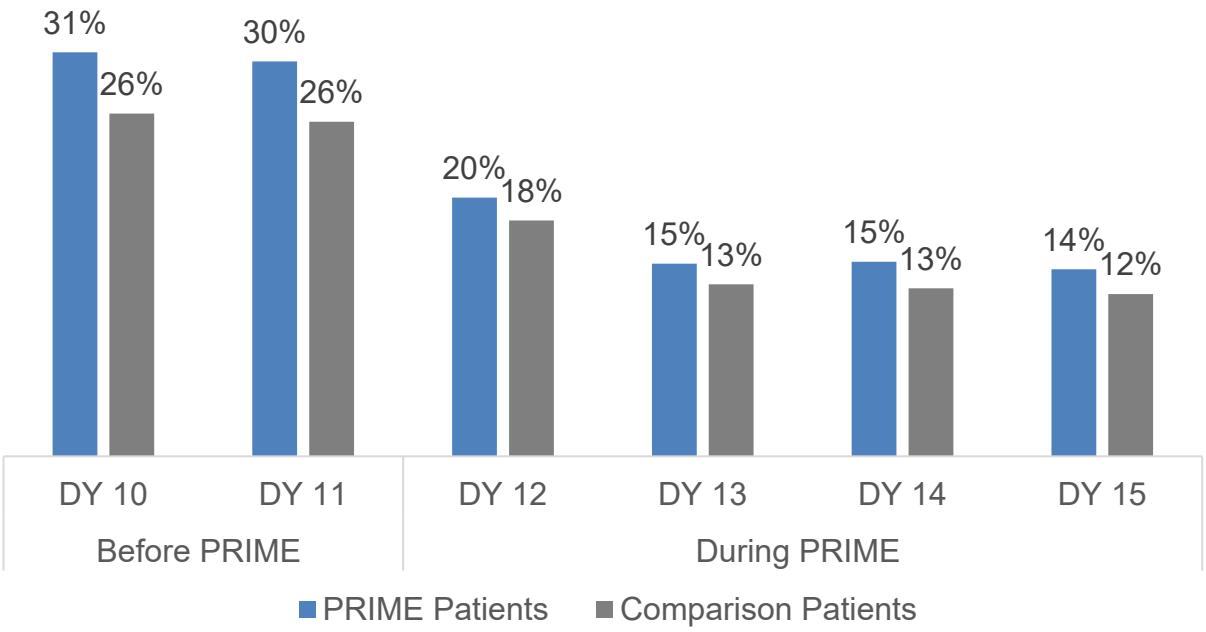
Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	0.16%	-1.59%*	-1.75%*	
Comparison Patients	0.18%	-1.64%*	-1.82%*	0.07%

Source: UCLA analysis of HCAI data, July 2014 to December 2019.
*Notes: * Denotes p≤0.05, a statistically significant difference. Average Annual Change Before PRIME is calculated as: (Pre-Year 1 – Pre-Year 2). Average Annual Change During PRIME is calculated as: (Year 4 – Year 1) /3. Difference between changes is calculated as: (Average Annual Change During PRIME – Average Annual Change Before PRIME). Difference-in-difference is calculated as: (Difference between changes for*

PRIME patients – Difference between changes for comparison patients). Values in the graph are rounded for ease of presentation and may differ from exact values in the table.

Trends were similar for DMPHs (Exhibit 42).

Exhibit 42: DMPH Trends in Metric 2.1.5: Cesarean Section Before and During PRIME for PRIME and Comparison Hospitals Using All Discharges in California Hospital Discharge (HCAI) Data (Goal: Decrease)

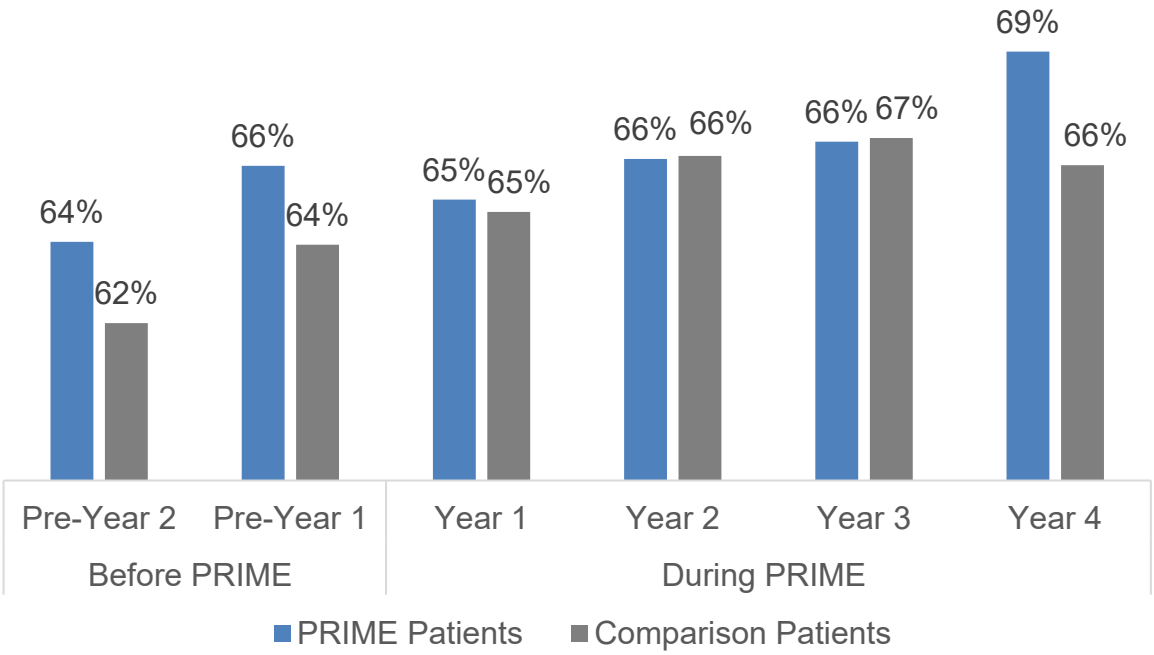


Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	-0.70%	-1.82%*	-1.13%*	
Comparison Patients	-0.63%	-1.87%*	-1.24%*	0.11%

Source and notes above.

UCLA analyzed changes in the PRIME specified Metric 2.1.6 – Prenatal Care. Hospitals were intended to increase the rate of prenatal care visits in the first trimester or soon after managed care assignment (which could not be replicated in claims) to the PRIME hospital. Analyses of DPHs showed a statistically significant increase in this metric in the desired direction for PRIME before (1.90%) and during PRIME (1.23%; Exhibit 43). However, the pattern of change from before to during and the pattern between PRIME and comparison patients (DD) was statistically similar.

Exhibit 43: DPH Trends in Metric 2.1.6: NQF 1517: Prenatal Care Before and During PRIME for PRIME and Comparison Patients (Goal: Increase)



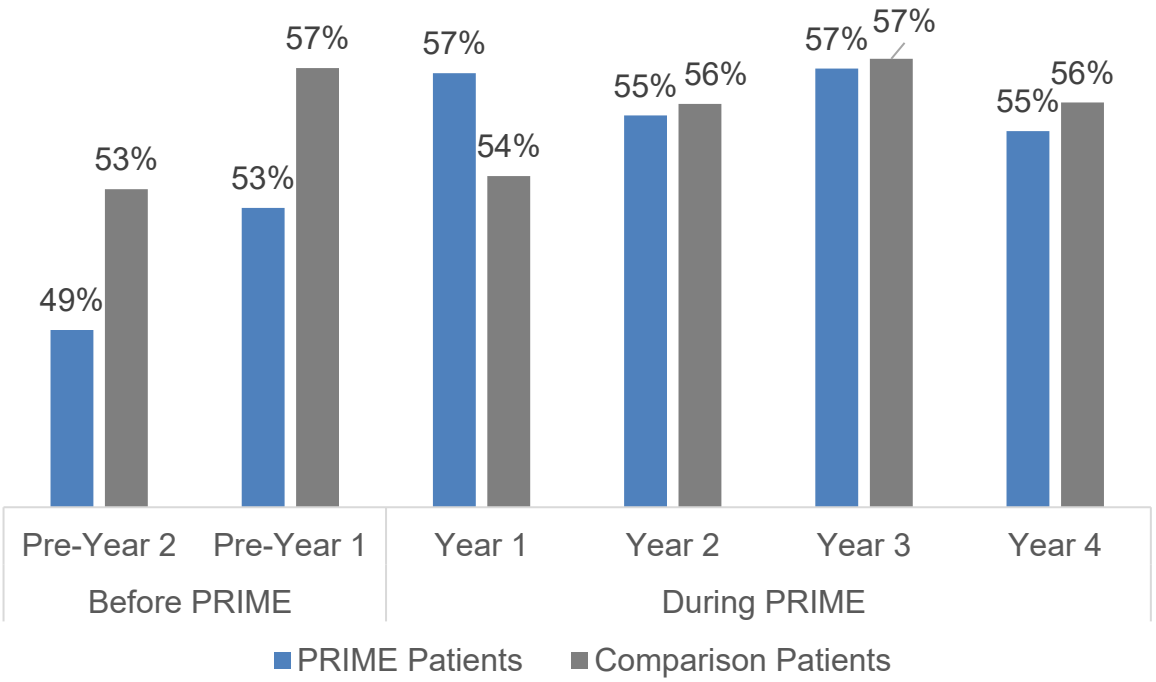
Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	1.90%*	1.23%*	-0.67%	0.89%
Comparison Patients	1.95%*	0.39%*	-1.56%*	

Source: UCLA analysis of Medi-Cal data, July 2014 to June 2020.
*Notes: * Denotes p≤0.05, a statistically significant difference. Average Annual Change Before PRIME is calculated as: (Pre-Year 1 – Pre-Year 2). Average Annual Change During PRIME is calculated as: (Year 4 – Year 1) /3. Difference between changes is calculated as: (Average Annual Change During PRIME – Average Annual Change Before*

PRIME). Difference-in-difference is calculated as: (Difference between changes for PRIME patients – Difference between changes for comparison patients). Values in the graph are rounded for ease of presentation and may differ from exact values in the table. The analyses exclude patients with a COVID-19 diagnosis.

Analyses of DMPHs showed no change during PRIME for PRIME patients, but a statistically significant change in this trend from before to during PRIME (Exhibit 44). However, the trend between the two groups (DD) was statistically similar.

Exhibit 44: DMPH Trends in Metric 2.1.6: NQF 1517: Prenatal Care Before and During PRIME for PRIME and Comparison Patients (Goal: Increase)

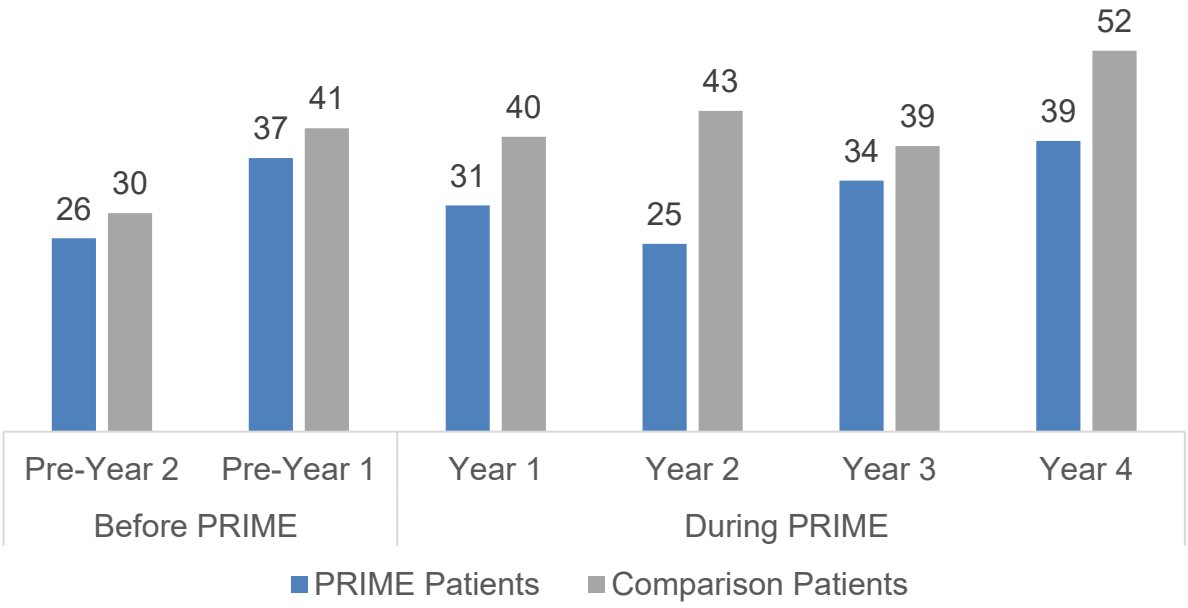


Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	3.56%	-0.56%	-4.12%*	-1.30%
Comparison Patients	3.53%	0.71%*	-2.82%	

Source and notes above.

UCLA analyzed changes in the PRIME specified Metric 2.1.7 - Severe Maternal Morbidity (SMM) per 100 Women with Obstetric Hemorrhage, with the limitation that for PRIME reporting, CMQCC calculated these rates with additional data that may not be in the claims methodology used by UCLA. A lower rate indicated better performance. Analyses of DPHs showed no statistically significant change in this metric for PRIME comparison patients either during PRIME or from before to during PRIME. The change in trend between the two groups (DD) was also statistically similar. This measure could not be constructed for DMPHs due to small sample size before PRIME.

Exhibit 45: DPH Trends in Metric 2.1.7: Severe Maternal Morbidity (SMM) per 100 Women with Obstetric Hemorrhage Before and During PRIME for PRIME and Comparison Patients (Goal: Decrease)



Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	10.84*	2.90	-7.94	-0.33
Comparison Patients	11.49*	3.88*	-7.61	

Source: UCLA analysis of Medi-Cal data, July 2014 to June 2020.
*Notes: * Denotes p≤0.05, a statistically significant difference. Average Annual Change Before PRIME is calculated as: (Pre-Year 1 – Pre-Year 2). Average Annual Change During PRIME is calculated as: (Year 4 – Year 1) /3. Difference between changes is*

calculated as: (Average Annual Change During PRIME – Average Annual Change Before PRIME). Difference-in-difference is calculated as: (Difference between changes for PRIME patients – Difference between changes for comparison patients). Values in the graph are rounded for ease of presentation and may differ from exact values in the table. The analyses exclude patients with a COVID-19 diagnosis.

Project 2.2 Care Transitions: Integration of Post-Acute Care

Objectives

The primary goal of Project 2.2 was to reduce avoidable readmissions by linking patients to ambulatory care following inpatient discharge. Successful transition to outpatient settings post-discharge is of particular relevance for public hospitals that have a higher than average readmission rate, potentially because they provide care to patients who are high-risk and have chronic conditions, behavioral health conditions, and unstable housing. This goal was achieved by 1) developing the needed infrastructure for successful care transition including using evidence-based models; 2) identifying high-risk patients; 3) developing standardized workflows and protocols; 4) establishing care transition activities including training staff, teaching patients' self-care, use of multidisciplinary teams, warm handoffs, and monitoring provider performance. Specific objectives can be found in Attachment Q.

Hypotheses

Participating hospitals implementation of care transition programs led to improved outcomes including increased follow-up care in outpatient settings and reduced readmissions. These outcomes were accomplished by implementing or expanding care transition processes such as developing standard protocols, linking patients to outpatient providers including warm hand-offs, and coordination with plans.

Research Questions

1. What care transition efforts did participating hospitals undertake to reduce readmission rates and increase follow-up in primary care settings post-discharge?
2. Did participating hospitals report improved performance in Project 2.2 metrics during PRIME?
3. Did project implementation lead to change in metric performance for PRIME patients before and during PRIME and in comparison to the comparison patients?

Limitations

Several metrics could not be constructed from Medi-Cal data by UCLA. See PRIME Metric Feasibility Analysis for a detailed explanation.

Project selection

A total of 31 hospitals (17 DPHs and 14 DMPHs) participated and reported metric performance data for this required project. Two DMPHs joined in DY 15. Detailed

information on hospital participation during PRIME can be found in Appendix B. Project Selection.

Findings for Project 2.2

Research Question 1: Summary of Project Implementation

Project 2.2 was the most commonly selected project and involved adapting models, implementing risk-assessment tools, and changing transition protocols and processes to more consistently link patients with community providers and resources. Hospitals varied in the consistency of these activities, and the majority had mid to high reliability across transition practices. Thirty hospitals participating in Project 2.2 completed the survey about implementation activities.

Hospitals reported that they adapted models and processes to implement risk-assessment for readmission and to establish the steps for implementing care transitions. The majority of hospitals adopted more than 1 care transition model, including the Transitional Care Model, Project Re-Engineered Discharge (RED), and Better Outcomes for Older Adults through Safe Transitions (BOOST) Model. DMPHs also frequently used the Care Transition Intervention (CTI). Many hospitals utilized EHR-based risk assessment tools, such as the Rothman or LACE index (19). Nearly all hospitals had protocols for medication management, transitions to subacute and long-term care, and discharge planning. Warm handoff processes were established before (7) and during (12) PRIME, and 5 more planned to do this. Similarly, hospitals had workflows to help patients without a usual source of care find a medical home which were developed before (11), during (11) or planned (5) in PRIME.

Nineteen hospitals had incorporated care transition elements into their protocols with local health plans. Hospitals incorporated elements to ensure smooth transitions to primary and specialty care providers (18). Hospitals also expanded their protocols and workflows for referring patients to community-based behavioral health and social service agencies; 12 did it before PRIME, 8 added it during PRIME, and 6 more planned to do so.

To implement this project, hospitals expanded their staff training about care transitions; moving from 10 before PRIME, 10 during PRIME, and 5 planning to do it. Discharge planning team most commonly included pharmacists (21) and palliative care providers (19). Some hospitals included mental health (9), substance use (5), and in-home supportive service (4) providers in these teams. The consistency of warm handoffs to transition patients to outpatient care varied across hospitals, with 13 did it most or all of

the time, 10 did it some of the time, and 7 rarely or never did this. Hospitals varied in the types and consistency of care transition services for patients and their caregivers; for example, a written transition care plan was always provided by 18 hospitals, but 1 hospital never did it.

Most hospitals conducted the following activities at least most of the time: engage patients in the care planning process (24), pre-discharge education (26), conduct timely communication with the receiving practitioner (17), and provide community-based support focusing on self- and follow-up care (15). Most hospitals helped patients establish a medical home if they didn't have one; 11 always and 18 sometimes did this. All hospitals monitored care transition outcomes but with varying frequency. The majority reported monthly monitoring tracking and reporting of readmission rates (19) and the timeliness of discharges (10), and investigating root causes or risk factors for readmission (11).

Ten hospitals monitored the timeliness of discharges more frequently. Six hospitals reported always using post-hospital visits and outpatient medication reconciliation protocols, but the majority reported using these protocols most of the time (18 and 13, respectively). Data and metric-related challenges to implementation included the lack of health information technology (16), lack of system-wide processes (12), followed by lacking in cooperation due to silo-ed departments (10). Hospitals mostly reported standardization of processes (10) and policies (13); and meetings across teams (10) as the best solutions. A detailed description of Project 2.2 implementation is available in the PRIME Interim Report.

In the Preliminary Summative Evaluation Report , hospitals rated (from 1=very low to 5=very high) staff effort (4.4), financial investment (3.7), and level of difficulty (4.1) of Project 2.2 to be moderately high.

Research Question 2: Summary of Changes in Hospital-Reported Metric Achievement Rates

Performance of hospitals in Project 2.2 was measured by 5 metrics (Exhibit 46Exhibit 49). All metrics changed in the intended direction for DMPHs but the results for DPHs were mixed. Detailed results are available in Appendix G. Project-Specific Trends in Metric Performance Project 2.2 - Care Transitions: Integration of Post-Acute Care.

Exhibit 46: Project 2.2 Hospital Reported Metric Rates and Changes through DY 14

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcomes of Care	Changed in the Intended Direction DPH	Changed in the Intended Direction DMPH
DHCS All-Cause Readmissions; Plan All-Cause Readmissions	2.2.1 @	Decrease	Outcome	Y	Y
H-CAHPS-Care Transition Metrics	2.2.2	Increase	Outcome	N	Y
Medication Reconciliation Post Discharge–30 Days	2.2.3	Increase	Process	Y	Y
Reconciled Medication List Received by Discharged Patients	2.2.4	Increase	Process	Y	Y
Timely Transmission of Transition Record	2.2.5	Increase	Process	Y	Y

Source: PRIME Metrics Specs, DY 15YE. UCLA analysis of the hospital-reported data, February to June 2021.
Notes: Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS).
DPH: designated public hospital, DMPH: district and municipal public hospital.
Y: metric increased or decreased in the intended direction, N: metric did not increase or decrease in the intended direction.

@ Metric 2.2.1 CMS Plan All Cause Readmission had a trending break (PPL 19-004) Analyses restricted to assessment of changes in metric values up to DY 15 due to disruptions in care delivery and utilization caused by the COVID-19 pandemic.

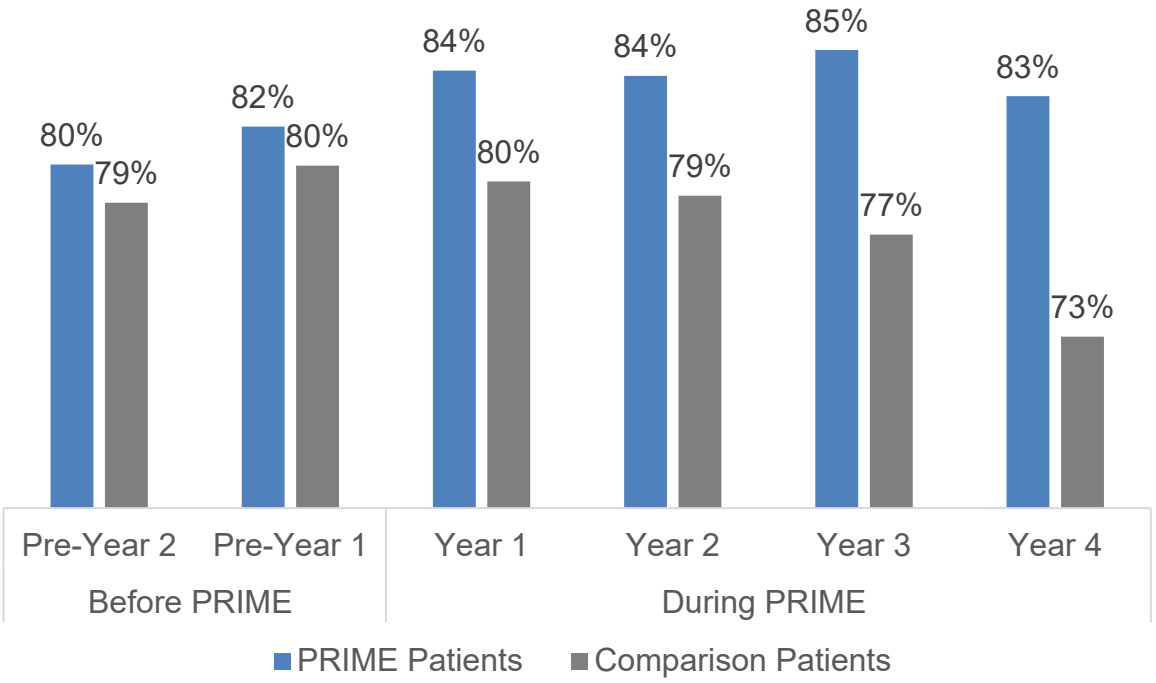
Research Question 3: Changes in Metrics between PRIME and Comparison Patients

UCLA analyzed changes in the PRIME specified metric 2.2.1: Plan All-Cause Readmissions before and during PRIME for PRIME and comparison patients and separately for DPHs and DMPHs. UCLA also analyzed changes in an additional measure: Outpatient Follow-Up Visit Rates within 30 Days of Hospitalization before and during PRIME for PRIME and comparison patients and separately for DPHs and DMPHs. The additional measure was designed to assess related outcomes of care transitions. A higher rate was anticipated. The availability of adequate information to construct these metrics using Medi-Cal data is described in Appendix G. Project-Specific Trends in Metric Performance: PRIME Metric Feasibility Analysis.

Metric 2.2.1: Plan All-Cause Readmissions was also measured for Project 1.3 and results can be seen in Exhibit 23 and Exhibit 24.

The analysis of outpatient follow-up visit rates within 30 days of discharge from hospitalization for DPHs showed no change for PRIME patients from before to during PRIME (Exhibit 47). However, the trend for comparison patients from before to during PRIME decreased statistically significantly, leading to a statistically significant difference in trends between the two groups (DD), a 1.76% higher rate for PRIME patients.

Exhibit 47: DPH Trends in UCLA Additional Metric: Outpatient Follow-Up Visit Rates within 30 Days of Hospitalization Before and During PRIME for PRIME and Comparison Patients (Goal: Increase)



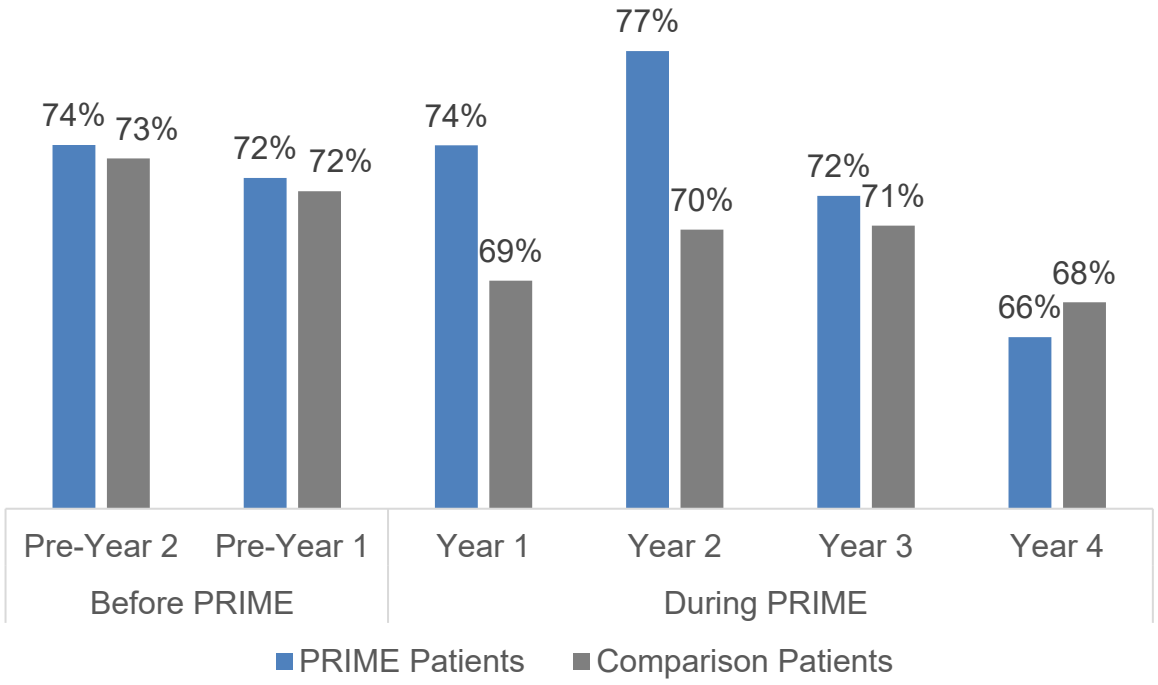
Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	1.58%*	-0.35%	-1.93%	1.76%*
Comparison Patients	1.54%*	-2.15%*	-3.69%*	

Source: UCLA analysis of Medi-Cal data, July 2014 to June 2020.
*Notes: * Denotes p≤0.05, a statistically significant difference. Average Annual Change Before PRIME is calculated as: (Pre-Year 1 – Pre-Year 2). Average Annual Change During PRIME is calculated as: (Year 4 – Year 1) /3. Difference between changes is calculated as: (Average Annual Change During PRIME – Average Annual Change Before PRIME). Difference-in-difference is calculated as: (Difference between changes for PRIME patients – Difference between changes for comparison patients). Values in the graph are rounded for ease of presentation and may differ from exact values in the table. The analyses exclude patients with a COVID-19 diagnosis.*

Analysis of DMPHs showed a statistically significant decrease in this measure during PRIME for PRIME patients but not a significant trend from before to during PRIME

(Exhibit 48). The trend for PRIME patients was statistically significantly lower (2.11%) for PRIME than comparison patients (DD).

Exhibit 48: DMPH Trends in UCLA Additional Metric: Outpatient Follow-Up Visit Rates within 30 Days of Hospitalization Before and During PRIME for PRIME and Comparison Patients (Goal: Increase)



Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	-1.23%	-2.39%*	-1.16%	-2.11%*
Comparison Patients	-1.22%	-0.27%	0.95%	

Source and notes above.

Project 2.3 – Complex Care Management for High Risk Medical Populations

Objectives

Project 2.3 was designed to improve the health of patients with complex conditions and reduce use of preventable ED visits by improving care coordination for better management of complex and high-risk patients. These goals were achieved by 1) using guideline concordant frameworks and staffing models; 2) training care teams on managing complex patients; and 3) systematic identification and coordination for these patients. In addition, the project's goals were to be achieved by managing the care of complex patients using established protocols and delivery of needed care. Specific objectives can be found in Attachment Q.

Hypotheses

Participating hospitals implemented complex care management programs for high-risk populations, leading to improved outcomes. These were accomplished by identification of complex patients, connecting them with care coordinators, provision of care by multidisciplinary teams, and using evidence-based care protocols.

Research Questions

1. What efforts did participating hospitals undertake to improve the health of patients with complex conditions?
2. Did participating hospitals report improved performance in Project 2.3 metrics during PRIME?
3. Did project implementation lead to changes in metric performance for PRIME patients before and during PRIME and in comparison to the comparison patients?

Limitations

Research question 3 could not be examined because no metrics could be constructed from Medi-Cal data. UCLA constructed Prevention Quality Overall Composite #90 for other projects but did not report it for this project because the metric was discontinued in DY 14. See PRIME Metric Feasibility Analysis for a detailed explanation.

Project selection

A total of 26 hospitals (17 DPHs and 9 DMPHs) participated and reported metric performance data for this required project. Detailed information on hospital participation during PRIME can be found in Appendix B. Project Selection.

Findings for Project 2.3

Research Question 1: Summary of Project Implementation

Overall, hospitals made significant progress in Project 2.3 by establishing multidisciplinary teams that focused on improved care management through standardized patient assessments, provision of educational materials and use of evidence-based guidelines. Twenty six hospitals participating in Project 2.3 completed the survey about implementation activities.

Hospitals reported using existing frameworks in PRIME for complex care management with various different care models. Half of hospitals (13) indicated adopting an embedded care manager model with managers assigned to dedicated sites, other hospitals (5) applied a centrally located care management model, and few used a hybrid model (2). Many hospitals annually (10) or more frequently (13) have provided training for care team members. Multidisciplinary care teams have been created, consisting of clinical support staff (17), case managers and case coordinators (14), mental health professionals (13) and substance use providers (10). Except for 1 DPH, which relied only on the frequency of emergency department visits and hospitalizations when identifying the target population, all other participating hospitals (26) identified their target population mainly based on the number of high-risk medical conditions. Detailing on the data sources and analytic methods used for targeting patients for care management intervention, hospitals indicated relying on patient encounters (23), disease registries (14) or other EHR functions and templates (18).

Most DPHs (16) focused on standardized patient assessments and evaluation, while majority of DMPHs used educational materials consistent with the cultural, linguistic, or health literacy level of patients (8) when managing the care of complex patients. Evidence-based practice guidelines, including commonly guidelines on smoking cessation (19), immunization (16) and mental health screening (13) were applied to reduce risk factors in the project's target population. Services patient navigators or promotoras in many hospitals always provided help retaining patients in care (9), promoting medication adherence (8), or helping patients with translation (7). The top metric and data-related challenges were lack in IT infrastructure (18), variation in systems due to multiple EHR/IT systems (9), the lack of processes being established system-wide and inadequate service availability (8). The most successful solutions to these challenges were standardization of EHR/IT systems (13), of documentation processes (9) and other processes across systems (7). A detailed description of Project 2.3 implementation is available in the PRIME Interim Report.

In the Preliminary Summative Evaluation Report , hospitals rated (from 1=very low to 5=very high) staff effort (4.3), financial investment (3.6), and level of difficulty (3.9) of Project 2.3 to be moderately high.

Research Question 2: Summary of Changes in Hospital-Reported Metric Achievement Rates

Performance of hospitals in Project 2.3 was measured by 4 metrics (Exhibit 49). All assessed metrics changed in the intended direction. Detailed results are available in Appendix G. Project-Specific Trends in Metric Performance Project 2.3 – Complex Care Management for High Risk Medical Populations.

Exhibit 49: Project 2.3 Hospital Reported Metric Rates and Changes through DY 14

Metric Name and Years Reported	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care	Changed in the Intended Direction DPH	Changed in the Intended Direction DMPH
Care Coordinator Assignment (retired after DY 12)	2.3.1*	Increase	Process	Y	N/A
Medication Reconciliation – 30 Days	2.3.2	Increase	Process	Y	Y
Prevention Quality Overall Composite #90 (retired after DY 13)	2.3.3	Decrease	Outcome	Y	Y
Timely Transmission of Transition Record	2.3.4	Increase	Process	Y	Y

Source: PRIME Metrics Specs, DY15YE. UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, DY: demonstration year.
** Denotes innovative metric.*
Y: metric increased or decreased in the intended direction, N: metric did not increase or decrease in the intended direction, N/A: trend was not measured (2.3.1 for DMPHs-metric was retired). Analyses restricted to assessment of changes in metric values up to

DY 15 due to disruptions in care delivery and utilization caused by the COVID-19 pandemic.

Project 2.4 Integrated Health Home for Foster Children

Objectives

Project 2.4 was designed to implement integrated health homes for children in the foster system, providing foster children with a “one-stop-shop” for fully integrated health services including physical and behavioral health, as well as needed substance abuse and social services. Specific objectives included: improved patient adherence to their treatment regimen; improved communication and documentation of communication and coordination with child welfare services; reduced avoidable acute care utilization (ED, inpatient admissions); and improved patient experience. Specific objectives can be found in Attachment Q.

Hypotheses

Participating hospitals improved delivery of care to foster children by providing an integrated physical and behavioral health home that included using multi-therapeutic care teams, provided preventive and all routine pediatric care issues, and provided linkages to child welfare/school systems/mental health/SUD/other social service agencies.

Research Questions

1. What efforts did participating hospitals undertake to engage to improve care delivery to foster children?
2. Did participating hospitals report improved performance in Project 2.4 metrics during PRIME?
3. Did project implementation lead to changes in metric performance for PRIME patients before and during PRIME and in comparison to the comparison patients?

Limitations

Research question 3 could not be examined because no metrics could be constructed from Medi-Cal data. See PRIME Metric Feasibility Analysis for a detailed explanation.

Project selection

A total of 5 DPHs participated and reported metric performance data for this optional project. One DPH dropped out of participation in DY 12. Detailed information on hospital participation during PRIME can be found in Appendix B. Project Selection.

Findings for Project 2.4

Research Question 1: Summary of Project Implementation

Overall, hospitals made significant progress in implementing Project 2.4 by establishing pediatric care teams, developing specific care coordination strategies addressing the complex care needs of foster children, and conducting risk assessments and multidisciplinary case conferences. A detailed description of Project 2.4 implementation is available in the PRIME Interim Report. Five hospitals participating in Project 2.4 completed the survey about implementation activities.

More specifically, hospitals established needed infrastructure including specific pediatric care teams and multi-disciplinary case conferences and care coordination strategies including promotion of integrated care between primary, behavioral health, and dental care, expanding staff and clinic capacity, improving systems for data sharing outside and within the system, and standardizing processes for capturing and reporting care for children in foster care. To implement this project, hospitals collaborated across agencies to identify and serve children and used qualitative and quantitative information and a standardized questionnaire to identify patient risk factors. They also participated in learning collaboratives beyond those provided by PRIME such as monthly meetings between PRIME hospitals to discuss the Project 2.4 innovative metric and an independent focus group to gain perspectives from young adults. Hospitals experienced challenges to project implementation including barriers to communication and data sharing between agencies, the need for targeted outreach to effectively engage the population and the unintended provision of the same services to a single foster child by multiple county hospitals. The top data-related challenges were the need for a high frequency of data updates, difficulties establishing robust systems for data exchange, the need to link or reconcile data across agencies, the use of multiple EHRs and inconsistencies in documentation of screening and care. Hospitals addressed these challenges by establishing formal data linkages between across agencies, establishing internal systems for tracking care for foster children, and increasing in-person collaboration between the hospital and external agencies. A detailed description of Project 2.4 implementation is available in the PRIME Interim Report.

In the Preliminary Summative Evaluation Report , hospitals rated (from 1=very low to 5=very high) staff effort (4.8), financial investment (3.5), and level of difficulty (4.5) of Project 2.4 to be high.

Research Question 2: Summary of Changes in Hospital-Reported Metric Achievement Rates

Performance of hospitals in Project 2.4 was measured by 8 metrics (Exhibit 50). All metrics changed in the intended direction. Detailed results are available in Appendix G. Project-Specific Trends in Metric Performance Project 2.4 - Integrated Health Home for Foster Children.

Exhibit 50: Project 2.4 Hospital Reported Metric Rates and Changes through DY 14

Metric Name and Reporting Period	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care	Changed in the Intended Direction DPH
Adolescent Well-Care Visit	2.4.1	Increase	Process	Y
Developmental Screening in the First Three Years of Life	2.4.2	Increase	Process	Y
Documentation of Current Medications in the Medical Record (0-18 y.o.)	2.4.3	Increase	Process	Y
Screening for Clinical Depression and Follow Up	2.4.4	Increase	Process	Y
Tobacco Use – Screening and Cessation Intervention (13 y.o. and older)	2.4.5	Increase	Process	Y
Well Child Visits- First 15 months of Life (reported DY 11-DY 12)	2.4.6	Increase	Process	Y^
Well Child Visits-Third, Fourth, Fifth, Sixth Years of Life	2.4.7	Increase	Process	Y
Comprehensive Medical Evaluation Following Foster Youth Placement in Foster Care (began in DY 13)	2.4.8*	Increase	Process	Y

Source: PRIME Metrics Specs, DY15YE. UCLA analysis of the hospital-reported data, February to June 2021.
Notes: Project 2.4-Specific PRIME Target Population: 1) Individuals with at least 1 encounter with the PRIME Entity Primary Care team during the first half of the

measurement period) AND 2) Child, 0 to less than 18 years old, in out of home placement under the jurisdiction of the local children's dependency system (as identified by the PRIME entity) at any point during the measurement period AND 3) If the child had more than one removal in the measurement period, for the purpose of this measure, use the earliest removal date that meets the Project 2.4 Tenure Criteria. Tenure Criteria: the child must continue to remain in protective custody under the jurisdiction of the local children's dependency system for a minimum of 30 consecutive days after the date of removal.
DPH: designated public hospital, y.o.: years old, DY: Demonstration Year,
** Denotes innovative metric,*
^ denotes metric from DY 12 to DY 13. Y: metric increased or decreased in the intended direction.
Analyses restricted to assessment of changes in metric values up to DY 15 due to disruptions in care delivery and utilization caused by the COVID-19 pandemic.

Project 2.5 – Transition to Integrated Care: Post Incarceration

Objectives

Project 2.5 was designed to improve the transition of care for those recently incarcerated from the criminal justice system into the public health care system. The main goals of the project were to enroll post-incarcerated patients in health coverage; establish them with primary care; and coordinate their care between medical, behavioral health, and social services. Specific objectives can be found in Attachment Q.

Hypotheses

Participating hospitals improved delivery of care to previously incarcerated populations by providing care transition programs, linking patients to medical homes, enrolling patients in coverage, and implementing processes to manage care and receipt of needed services.

Research Questions

1. What efforts did participating hospitals undertake to improve care for recently incarcerated populations?
2. Did participating hospitals report improved performance in Project 2.5 metrics during PRIME?
3. Did project implementation lead to changes in metric performance for PRIME patients before and during PRIME and in comparison to the comparison patients?

Limitations

Research question 3 could not be examined because no metrics could be constructed from Medi-Cal data. See PRIME Metric Feasibility Analysis for a detailed explanation.

Project selection

A total of 4 hospitals (2 DPHs and 2 DMPHs) participated and reported metric performance data for this optional project. Two DMPHs dropped out of participation this project in DY 12. Detailed information on hospital participation during PRIME can be found in Appendix B. Project Selection.

Findings for Project 2.5

Research Question 1: Summary of Project implementation

Overall, hospitals made significant progress in implementing Project 2.5 by increasing detection and treatment of substance abuse, hypertension, depression, and tobacco use

as well as supporting standardized, evidence-based measures of health care quality. Two hospital hospitals participating in Project 2.5 completed the survey about project implementation. A detailed description of Project 2.5 implementation is available in the PRIME Interim Report.

Hospitals reported data and metric-related challenges such as difficulties in identifying and tracking eligible patients, limited ability to capture the correct data and incorporate different data into a single system, difficulties with patient engagement, compliance with care, and changing provider practices. These challenges have been addressed by improvements to systems to consolidate data as well as by data and technology-driven solutions to improve patient engagement.

In the Preliminary Summative Evaluation Report , hospitals rated (from 1=very low to 5=very high) staff effort (3.5), financial investment (4.0), and level of difficulty (4.5) of Project 2.5 to be moderately high.

Research Question 2: Summary of Changes in Hospital-Reported Metric Achievement Rates

Performance of hospitals in project 2.5 was measured by 5 metrics (Exhibit 51). All assessed metrics changed in the intended direction. Detailed results are available in Appendix G. Project-Specific Trends in Metric Performance Project 2.5 – Transition to Integrated Care: Post Incarceration.

Exhibit 51: Project 2.5 Hospital Reported Metric Rates and Changes through DY 14

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care	Changed in the Intended Direction DPH
Alcohol and Drug Misuse, Sub-rate #1: Brief Annual Screen (began in DY 14)	2.5.1@	Increase	Process	N/A
Alcohol and Drug Misuse Screening, Brief Intervention, and Referral to Treatment (SBIRT) Sub-rate #2: Full Screen	2.5.1@	Increase	Process	Y
Controlling Blood Pressure	2.5.2	Increase	Outcome	Y

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care	Changed in the Intended Direction DPH
Prevention Quality Overall Composite #90 (retired DY 13)	2.5.3^	Decrease	Outcome	Y
Screening for Clinical Depression and Follow-Up	2.5.4	Increase	Process	Y
Preventative Care and Screening: Tobacco Use – Screening and Cessation Intervention	2.5.5	Increase	Process	Y

Source: PRIME Metrics Specs, DY15YE. UCLA analysis of the hospital-reported data, February to June 2021.
Notes: The Target Population are those in the PRIME Eligible Population who are incarcerated in prison and/or jail that are soon-to-be released, or released during the 6 months prior to the start of the measurement period and have at least one chronic health condition or are greater than 50 years old.
DPH: designated public hospital.
@ A sub-rate was added to Metric 2.5.1 in DY 14; a trending break was issued and Rate 1 in DY14 non-comparable to DY13. (PPL is 19-004). A trending break was issued for Metric 2.5.2 in DY 14 (PPL 19—002).
N: metric did not increase or decrease in the intended direction, N/A: trend was not measured through DY 14.
^ Denotes measurement period is different than DY11 – DY 14 (DPH).
Analyses restricted to assessment of changes in metric values up to DY 15 due to disruptions in care delivery and utilization caused by the COVID-19 pandemic.

Project 2.6 Chronic Non-Malignant Pain Management

Objectives

Project 2.6 was intended to promote identification and management of chronic pain using evidence-based models that are designed to improve outcomes. These goals were achieved by developing infrastructure, such as developing protocols and training providers about multimodal approaches to pain, and implementation activities, including monitoring adherence to policies and utilizing screening tools. Specific objectives can be found in Attachment Q.

Hypotheses

Participating hospitals improved delivery of pain management by implementing standardized protocols, establishing multidisciplinary teams, identifying and tracking patients on opioids, and treatment of patients with opioid use disorders.

Research Questions

1. What efforts did participating hospitals undertake to improve delivery of pain management and related outcomes?
2. Did participating hospitals report improved performance in Project 2.6 metrics during PRIME?
3. Did project implementation lead to changes in metric performance for PRIME patients before and during PRIME and in comparison to the comparison patients?

Limitations

Several metrics could not be constructed from Medi-Cal data by UCLA. See PRIME Metric Feasibility Analysis for a detailed explanation.

Project selection

A total of 15 hospitals (9 DPHs and 6 DMPHs) participated and reported metric performance data for this optional project. A DMPH joined in DY 15. Detailed information on hospital participation during PRIME can be found in Appendix B. Project Selection.

Findings for Project 2.6

Research Question 1: Summary of Project Implementation

Overall, hospitals were successful in establishing the infrastructure to better manage patients with chronic pain by developing specific protocols and strategies for providers, establishing multi-disciplinary chronic pain teams and provide staff training.

Implementation of common assessment tools, monitoring of policies on drug prescription, newly developed pain management protocols, processes for scheduling follow-up visits and referrals account for the significant progress that has been achieved implementing Project 2.6. Fourteen hospitals participating in Project 2.6 completed the survey about project implementation.

More specifically, hospitals reported that they established needed infrastructure by using evidence-based pain management frameworks (13), developing referral protocols for pain or addiction specialists (11), educating providers (11), distributing guidelines (8), or tracking opioid prescription patterns by providers (7). Hospitals trained PCPs (8) and specialists (6) to identify signs of prescription opioid use disorders and established multi-disciplinary chronic pain teams consisting of PCPs (12), medical staff (12), pharmacists (9), behavioral health specialists (8), and anesthesiologists or pain management providers (8). They used standardized approaches to identify at-risk patients, including ICD-10 codes (13), urine toxicology screenings (13), care agreements (11), and policies for physicians (8) and other medical professionals (11).

Hospitals implemented this project system-wide (8), on campus outpatient departments (7), or in off campus clinics and practices (5) and monitored adherence for tracking prescription refills in physicians (4), specialists (3) and others (5). Hospitals used the Patient Health Questionnaire (PHQ-9) (14), AUDIT (8), BPI (4), FAQ5 (4), and the Oswestry Low Back Disability Index (4) for depression, substance use, and pain management. Hospitals monitored physician or pharmacy shopping (13), physician-patient contracts concerning opioid treatment (13) and urine drug toxicology screening (13). All hospitals used pain care agreement with patients and safe prescribing practices protocols and many developed a scheduling process for pain-focused follow-up visits (10), handed out education brochures regarding pain management (10), and referred patients for methadone maintenance (10), substance use disorder treatment facilities (9), and Suboxone treatment (8).

Participation in learning collaboratives beyond those provided by PRIME was reported by 8 hospitals. Data and metric-related challenges to implementation included the lack of IT or EHR functionality (8), variation in documentation (7), the lack of established system-wide processes (7), and inadequate availability of services (4). The most successful solutions were expansion of the EHR across the system (6), standardized documentation processes for providers and staff (5), trained providers and staff (8), and standardized processes (6). A detailed description of Project 2.6 implementation is available in the PRIME Interim Report.

In the Preliminary Summative Evaluation Report , hospitals rated (from 1=very low to 5=very high) staff effort (3.8), financial investment (2.9), and level of difficulty (3.5) of Project 2.6 to be moderately high.

Research Question 2: Summary of Changes in Hospital-Reported Metric Achievement Rates

Performance of the hospitals in Project 2.6 was measured by 5 metrics, including 2.6.1 which had two sub-rates (Exhibit 52). All assessed metrics changed in the intended direction. Detailed results are available in Appendix G. Project-Specific Trends in Metric Performance Project 2.6 – Chronic Non-Malignant Pain Management.

Exhibit 52: Project 2.6 Hospital Reported Metric Rates and Changes through DY 14

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care	Changed in the Intended Direction DPH	Changed in the Intended Direction DMPH
Alcohol and Drug Misuse Sub-rate #1: Brief Annual Screen	2.6.1@	Increase	Process	N/A	N/A
Alcohol and Drug Misuse, Sub-rate #2: Full Screen, Brief Intervention, and Referral to Treatment (SBIRT)	2.6.1@	Increase	Process	Y	Y
Assessment and Management of Chronic Pain: Patients Diagnosed with Chronic Pain Who Are Prescribed an Opioid Who Have an Opioid Agreement Form and an Annual Urine Toxicology Screen	2.6.2	Increase	Process	Y	Y
Patients with Chronic Pain on Long Term Opioid Therapy Checked in PDMPs	2.6.3*	Increase	Process	Y	Y

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care	Changed in the Intended Direction DPH	Changed in the Intended Direction DMPH
Screening for Depression and Follow-Up	2.6.4	Increase	Process	Y	Y
Treatment of Chronic Non-Malignant Pain with Multi-Modal Therapy	2.6.5*	Increase	Process	Y	Y

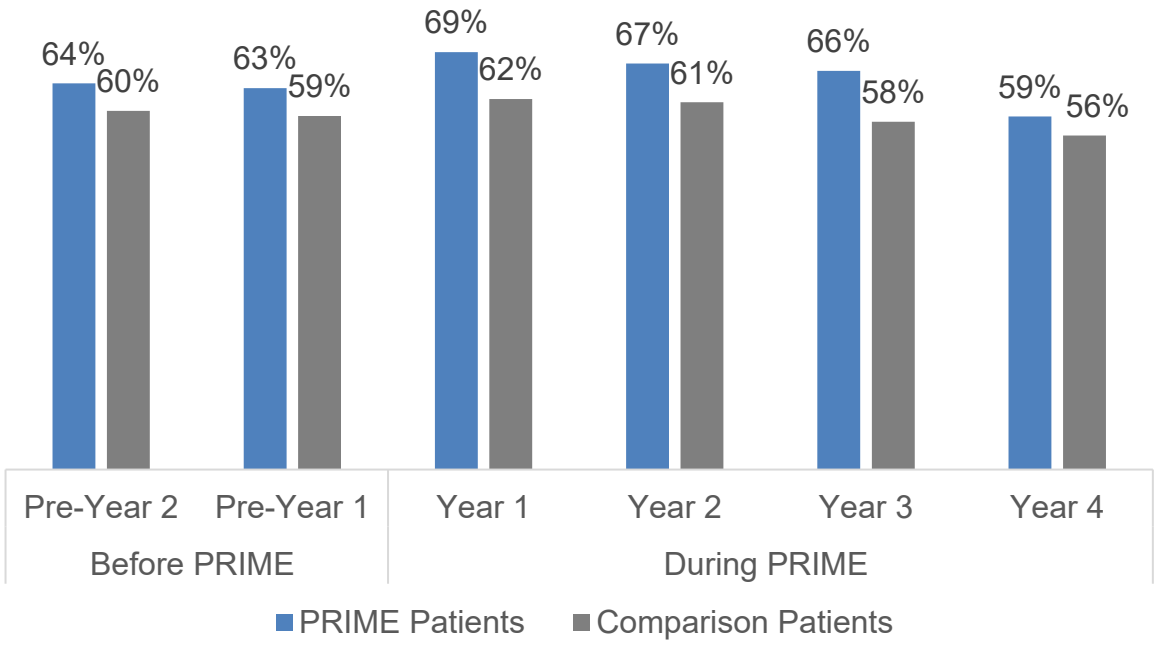
Source: PRIME Metrics Specs, DY 15YE. UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital.
** Denotes innovative metric.*
@ A sub-rate was added to 2.5.1 in DY 14.
Y: metric increased or decreased in the intended direction,
N/A: trend was not measured through DY 14.
Analyses restricted to assessment of changes in metric values up to DY 15 due to disruptions in care delivery and utilization caused by the COVID-19 pandemic.

Research Question 3: Changes in Metrics between PRIME and Comparison Patients

UCLA analyzed changes in the PRIME specified Metric 2.6.5: Treatment of Chronic Non-Malignant Pain with Multi-Modal Therapy before and during PRIME for PRIME and comparison patients and separately for DPHs and DMPHs. A higher rate indicated better performance. The availability of adequate information to construct these metrics using Medi-Cal data is described in the PRIME Metric Feasibility Analysis.

Analyses of DPHs showed a statistically significant decrease in the measure, not in the desired direction for PRIME patients during PRIME but no change in trends from before to during PRIME (Exhibit 53). The same pattern was observed for comparison patients. However, the trends for PRIME and comparison patients (DD) was statistically significantly different with a greater decrease for PRIME patients by 1.57%.

Exhibit 53: DPH Trends in Metric 2.6.5: Treatment of Chronic Non-Malignant Pain with Multi-Modal Therapy Before and During PRIME for PRIME and Comparison Patients (Goal: Increase)

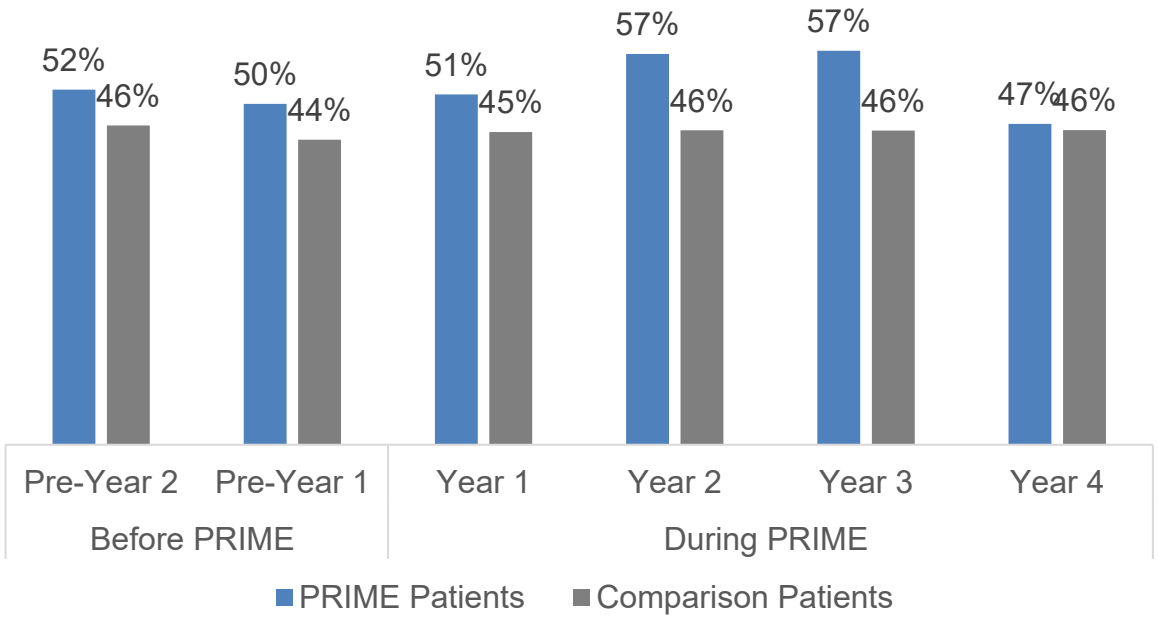


Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	-0.81%	-3.56%*	-2.75%	-1.57%*
Comparison Patients	-0.85%	-2.03%*	-1.18%	

Source: UCLA analysis of Medi-Cal data, July 2014 to June 2020.
*Notes: * Denotes p≤0.05, a statistically significant difference. Average Annual Change Before PRIME is calculated as: (Pre-Year 1 – Pre-Year 2). Average Annual Change During PRIME is calculated as: (Year 4 – Year 1) /3. Difference between changes is calculated as: (Average Annual Change During PRIME – Average Annual Change Before PRIME). Difference-in-difference is calculated as: (Difference between changes for PRIME patients – Difference between changes for comparison patients). Values in the graph are rounded for ease of presentation and may differ from exact values in the table. The analyses exclude patients with a COVID-19 diagnosis.*

Analysis of DMPHs showed a statistically similar trend for this time period between PRIME and comparison patients (DD, Exhibit 54).

Exhibit 54: DMPH Trends in Metric 2.6.5: Treatment of Chronic Non-Malignant Pain with Multi-Modal Therapy Before and During PRIME for PRIME and Comparison Patients (Goal: Increase)



Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	-2.07%*	-1.42%	0.65%	-1.52%
Comparison Patients	-2.07%*	0.10%	2.17%*	

Source and notes above.

Project 2.7 – Comprehensive Advanced Illness Planning and Care

Objectives

Project 2.7 was designed to improve the quality of end of life care by ensuring access to comprehensive palliative care that is aligned with patient preferences in hospital and community settings. Hospitals were to accomplish these goals by establishing the infrastructure for delivering palliative care, such as multidisciplinary care teams that are located in outpatient and inpatient settings and are trained to deliver this care; as well as following appropriate care processes, such as providing the needed care and linking patients to community-based providers. Specific objectives include: increase timely access to ambulatory and inpatient palliative care services, introduce Primary and/or Specialty Palliative Care services at the time of diagnosis of serious illness, relieve pain and other distressing symptoms, improve quality of life for both the patient and the family, improve concordance between patient/family preference and provision of care, and reduce avoidable acute care utilization.

Hypotheses

Participating hospitals improved quality of end-of-life care by ensuring access to comprehensive palliative care including implementing an inpatient and ambulatory palliative care program, developing standardized protocols for implementation, and improved access to hospice.

Research Questions

1. What efforts did participating hospitals undertake to improve the quality of end of life care?
2. Did participating hospitals report improved performance in Project 2.7 metrics during PRIME?
3. Did project implementation lead to changes in metric performance for PRIME patients before and during PRIME and in comparison to the comparison patients?

Limitations

Research question 3 could not be examined because no metrics could be constructed from Medi-Cal data. See PRIME Metric Feasibility Analysis for a detailed explanation.

Project selection

A total of 13 hospitals (5 DPHs and 8 DMPHs) participated and reported metric performance data for this optional project. One DMPH dropped out of participation in DY

13. Detailed information on hospital participation during PRIME can be found in Appendix B. Project Selection.

Findings for Project 2.7

Research Question 1: Summary of Project Implementation

Overall, hospitals made progress in Project 2.7 by establishing and clarifying both inpatient and outpatient treatment preferences and care plans, improving palliative care services to patients with advanced illnesses, and referring patients to hospice earlier. Thirteen hospitals participating in Project 2.7 completed the survey about implementation.

More specifically, almost all participating hospitals implemented all but one core components during PRIME. Reporting on needed infrastructure, almost half of all (6) participating hospitals indicated participation or planned participation in a Provider Orders for Life-Sustaining Treatment (POLST) registry, while majority of hospitals (9) had no plans to implement telehealth for palliative care or home health as part of PRIME. Some hospitals provided palliative care training for frontline clinicians (10), communication skills (10), and symptom management (10). Hospitals created palliative care teams under PRIME with a palliative care doctor and a social worker (13), had a palliative care team in both inpatient and outpatient settings (10), and partnerships with hospice (13), and cooperated with palliative care training programs (9). Hospitals developed or planned to develop quantitative inclusion criteria for determining patients who would benefit from receipt of advanced illness planning and care (13), either implemented data analytics systems to capture relevant information for advanced illness planning and care or planned to do so as part of PRIME (11). Common additions to ambulatory and inpatient palliative care programs during PRIME included effective coordination (9), interprofessional care planning (9), and individualized and comprehensive patient assessments (7). Additionally, pursuant to Senate Bill No. 1004, DHCS established palliative care services for certain eligible conditions for Medi-Cal managed care and fee-for-service beneficiaries in January 2018.

To implement Project 2.7, all hospitals indicated offering patient education (13). Most hospitals encouraged providers to initiate advance care planning discussions (10) and offered advance care planning at point of diagnosis of advanced illness (9). Hospitals allowed hospice providers accessed the advanced illness care plan through EHR (7), fax (3) and email (1). Hospitals (6) had a palliative care program in both ambulatory and inpatient settings.

Data and metric-related challenges to implementation included lack of data query ability, tracking, or reporting function (7), requirements of manual tracking or chart review (6), inadequate availability of services (5), lack of system-wide processes (3) and small denominator or numerators (3). These challenges were addressed by standardizing EHR/IT processes (3), implementing standardized tools/screening (3), provider and staff training and increased capacity (3), as well as through expansion of services and availability of services (5). A detailed description of Project 2.7 implementation is available in the PRIME Interim Report

In the Preliminary Summative Evaluation Report, hospitals rated (from 1=very low to 5=very high) staff effort (4.5), financial investment (3.8), and level of difficulty (4.1) of Project 2.7 to be high.

Research Question 2: Summary of Changes in Hospital-Reported Metric Achievement Rates

Performance of hospitals in Project 2.7 was measured by 6 metrics (Exhibit 55). All accessed metrics changed in the intended direction for DMPHs but the results for DPHs were mixed. Detailed results are available in Appendix G. Project-Specific Trends in Metric Performance Project 2.7 – Comprehensive Advanced Illness Planning and Care

Exhibit 55: Project 2.7 Hospital Reported Metric Rates and Changes through DY 14

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care	Changed in the Intended Direction DPH	Changed in the Intended Direction DMPH
Advance Care Plan	2.7.1	Increase	Process	Y	Y
Ambulatory Palliative Team Established (DY 11-DY 13)	2.7.2*	Increase	Process	N/A	N/A
MWM #8 - Treatment Preferences (Inpatient)	2.7.3	Increase	Process	Y	Y
MWM #8 - Treatment	2.7.4*	Increase	Process	Y	Y

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care	Changed in the Intended Direction DPH	Changed in the Intended Direction DMPH
Preferences (Outpatient)					
Palliative Care Service Offered to Patients with Advanced Illness	2.7.5*	Increase	Reporting	N	Y
Proportion Admitted to Hospice for Less than 3 Days	2.7.6	Decrease	Process	Y	Y

Source: PRIME Metrics Specs, DY15YE. UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital,
DMPH: district and municipal public hospital. DY: Demonstration Year,
** Denotes innovative metric.*
Y: metric increased or decreased in the intended direction,
N: metric did not increase or decrease in the intended direction,
N/A: trend was not measured through DY 14.
Analyses restricted to assessment of changes in metric values up to DY 15 due to disruptions in care delivery and utilization caused by the COVID-19 pandemic.

Domain 3: Resource Utilization Efficiency

Project 3.1 Antibiotic Stewardship

Objectives

Project 3.1 was designed to reduce the resistance of infections to antimicrobials by implementing an antibiotic stewardship program that reduces antibiotic use for nonbacterial diseases and optimizes antibiotic use for bacterial infections. These goals were to be achieved by developing the necessary infrastructure such as a multidisciplinary and trained team and protocols for appropriate antibiotic use; as well as implementing the project broadly through stewardship rounds and monitoring provider performance. Specific objectives can be found in Attachment Q.

Hypotheses

Participating hospitals improved antibiotic stewardship and reduced rates of inappropriate antibiotic use by implementing policies and procedures that trained providers and encouraged them to follow policies.

Research Questions

1. What efforts did participating hospitals undertake to improve antibiotic stewardship and reduced rates of inappropriate antibiotic use?
2. Did participating hospitals report improved performance in Project 3.1 metrics during PRIME?
3. Did project implementation lead to changes in metric performance for PRIME patients before and during PRIME and in comparison to the comparison patients?

Limitations

Several metrics could not be constructed from Medi-Cal data by UCLA. See PRIME Metric Feasibility Analysis for a detailed explanation.

Project Selection

A total of 15 hospitals (5 DPHs and 10 DMPH) participated and reported metric performance data for this optional project. Detailed information on hospital participation during PRIME can be found in Appendix B. Project Selection.

Findings for Project 3.1

Research Question 1: Summary of Project Implementation

Overall, participating hospitals made progress in establishing the needed infrastructure by focusing on the selection of 2 evidence-based models, establishing policies in hospitals, emergency departments, and system-wide. Hospitals promoted best practices by organizing stewardship rounds for team members such as pharmacists and medical support staff and trained these and other staff.

Project 3.1 was designed to reduce the resistance of infections to antimicrobials by implementing an antibiotic stewardship program. Twelve hospitals participating in Project 3.1 completed the implementation survey. Hospitals reported on specific infrastructure established for this project and nearly all utilized 1 or more antibiotic stewardship models (11) including the California Antimicrobial Stewardship Program (7) and the CDC antibiotic stewardship diver diagram change package (5). Hospitals most commonly established antimicrobial use policies system-wide (6), in the hospital (8), and the emergency department (7). When reporting on how this project was implemented, almost all hospitals organized stewardship rounds (10). Hospitals mostly invited pharmacists (9), and physician champions (6); DMPHs generally included medical support staff (5, DPH 1). Hospitals conducted training on antimicrobial policies, particularly to physicians (11) and pharmacy staff (11) and monitored physicians (9), and pharmacy staff (9) on adherence to policies. Many hospitals also implemented the “Public Commitment” strategy in their hospitals (9) and most established it mainly within their Emergency Departments (8). All hospitals participated in 1 or more learning collaboratives during PRIME.

Data and metric-related challenges to implementation included the lack of IT/EHR functionality (10), followed by manual tracking of data (6), and lack of system-wide processes (5). The most successful solutions were the standardization of EHR/IT (4), provider and staff training (6), and standardization of processes (5). A detailed description of Project 3.1 implementation is available in the PRIME Interim Report.

In the Preliminary Summative Evaluation Report, hospitals rated (from 1=very low to 5=very high) staff effort (4.1), financial investment (3.0), and level of difficulty (3.5) of this project.

Research Question 2: Summary of Changes in Hospital-Reported Metric Achievement Rates

Performance of hospitals in Project 3.1 was measured by 5 metrics (Exhibit 56). All assessed metrics changed in the intended direction except Metric 3.1.4 for DPHs. Detailed results are available in Appendix G. Project-Specific Trends in Metric Performance Project 3.1 Antibiotic Stewardship.

Exhibit 56: Project 3.1 Hospital Reported Metric Rates and Changes Through DY 14

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care	Changed in the Intended Direction DPH	Changed in the Intended Direction DMPH
Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis	3.1.1@	Increase	Process	Y	Y
Avoidance of Antibiotic Treatment with Low Colony Urinary Cultures (retired after DY 11)	3.1.2*	Decrease	Process	N/A	N/A
National Healthcare Safety Network (NHSN) Antimicrobial Use Measure	3.1.3	Decrease	Process	Y	Y
Peri-Operative Prophylactic Antibiotics Administered After Surgical Closure	3.1.4	Decrease	Process	N	Y
Reduction in Hospital Acquired Clostridium Difficile Infections	3.1.5	Decrease	Outcome	Y	Y

Source: PRIME Metrics Specs, DY 15YE. UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital,
@ A Trending break was issued for Metric 3.1.1 in DY 12 (17-007), so the trend was assessed for a different time period.
** Denotes innovative metric,*
Y: metric increased or decreased in the intended direction,
N: metric did not increase or decrease in the intended direction,

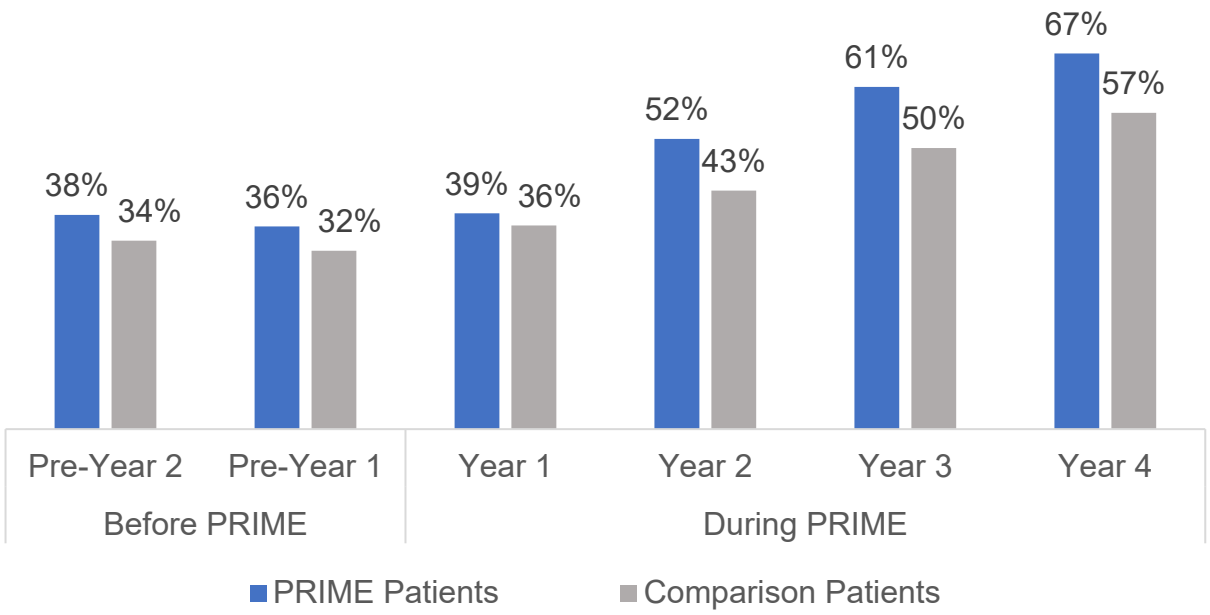
N/A: metric was only active one year and trend was not measured.
Assessment of changes in metric values excluded DY 15 due to disruptions in care delivery and utilization caused by the COVID-19 pandemic.

Research Question 3: Changes in Metrics between PRIME and Comparison Patients

UCLA analyzed changes in the PRIME specified Metric 3.1.1: Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis before and during PRIME for PRIME and comparison patients and separately for DPHs and DMPHs. The availability of adequate information to construct these metrics using Medi-Cal data is described in Appendix G. Project-Specific Trends in Metric Performance: PRIME Metric Feasibility Analysis.

Hospitals were intended to increase the percentage of patients with a diagnosis of acute bronchitis who were not prescribed or dispensed an antibiotic prescription. Analyses of DPHs showed a statistically significant change in this metric in the desired direction for both PRIME (11.59%) and comparison (8.53%) patients from before to during PRIME (Exhibit 57). However, the level of change (DD) during PRIME was statistically similar between the two groups.

Exhibit 57: DPH Trends in Metric 3.1.1: Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis Before and During PRIME for PRIME and Comparison Patients (Goal: Increase)



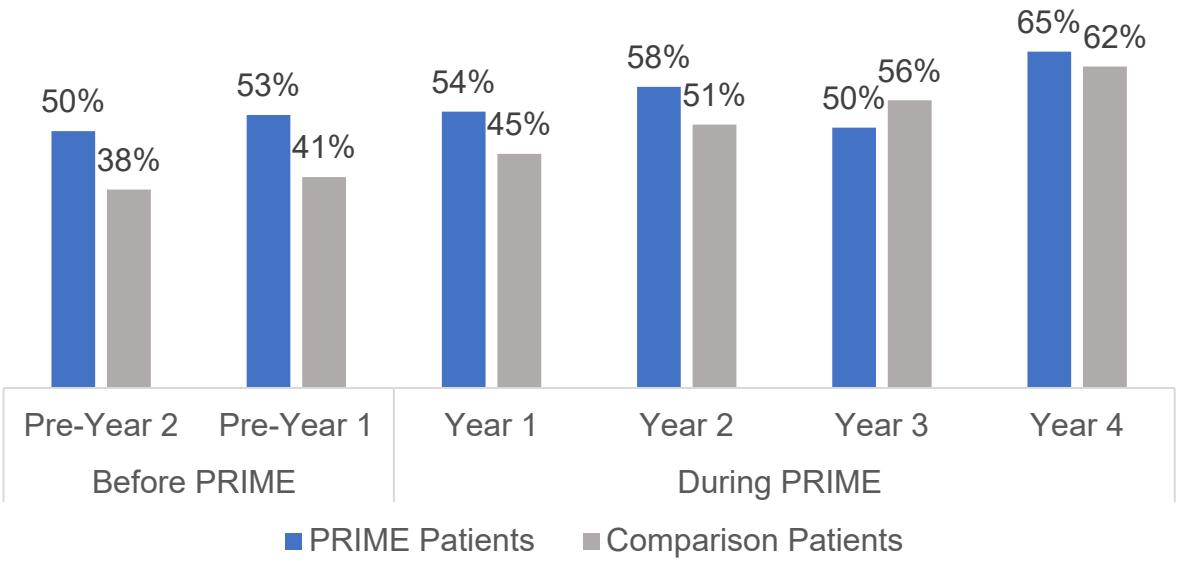
Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	-2.06%	9.53%*	11.59%*	3.06%

Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference -in- Difference (DD)
Comparison Patients	-1.81%	6.72%*	8.53%*	

Source: UCLA analysis of Medi-Cal data, July 2014 to June 2020.
*Notes: * Denotes p≤0.05, a statistically significant difference. Average Annual Change Before PRIME is calculated as: (Pre-Year 1 – Pre-Year 2). Average Annual Change During PRIME is calculated as: (Year 4 – Year 1) /3. Difference between changes is calculated as: (Average Annual Change During PRIME – Average Annual Change Before PRIME). Difference-in-difference is calculated as: (Difference between changes for PRIME patients – Difference between changes for comparison patients). Values in the graph are rounded for ease of presentation and may differ from exact values in the table. The analyses exclude patients with a COVID-19 diagnosis.*

Analyses of DMPHs showed a statistically significant change during PRIME for PRIME and comparison patients but a statistically similar change from before to during PRIME and a similar level of change (DD) for the two groups (Exhibit 58).

Exhibit 58: DMPH Trends in Metric 3.1.1: Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis Before and During PRIME for PRIME and Comparison Patients (Goal: Increase)



Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	3.12%	3.88%*	0.76%	
Comparison Patients	2.41%	5.64%*	3.23%	-2.47%

Source and notes above.

Project 3.2 Resource Stewardship: High-Cost Imaging

Objectives

Project 3.2 focused on high-cost imaging services, in order to reduce inappropriate utilization of imaging, and increase the amount of cost-effective and evidence-based imaging performed in the system of care. Specific objectives include reducing the number of unnecessary/inappropriate studies and improving the use of evidence-based, lower cost imaging modalities when imaging is warranted. Specific objectives can be found in Attachment Q.

Hypothesis

Participating hospitals reduced use of high cost unnecessary imaging and reduced variations within hospitals by implementing policies and procedures that trained providers and encouraged them to follow policies.

Research Questions

1. What efforts did participating hospitals engage in to reduce the use of high cost unnecessary imaging and reduce variations within hospitals?
2. Did participating hospitals report improved performance in Project 3.2 metrics during PRIME, consistent with project objectives?
3. Did project implementation lead to change in metrics for PRIME patients before and during PRIME and in comparison to the comparison patients?

Limitations

Research question 3 could not be examined because no metrics could be constructed from Medi-Cal data. See PRIME Metric Feasibility Analysis for a detailed explanation.

Project Selection

A total of 9 hospitals (5 DPHs and 4 DMPHs, 1 DMPH dropped out of participation in DY 12) participated and reported metric performance data for this optional project. Detailed information on hospital participation can be found in Appendix B. Project Selection.

Findings for Project 3.2

Research Question 1: Summary of Project Implementation

Overall, participating hospitals made significant progress in implementing Project 3.2. All hospitals focused on monitoring the use of CT and MRI imaging to reduce the number of unnecessary/inappropriate studies and improve the use of evidence-based, lower cost imaging modalities when imaging is authorized. Hospitals established needed

infrastructure by using a variety of evidence-based models to develop protocols and decision support tools to promote appropriate use. Hospitals monitored use to promote better stewardship and improved the processes through standardization and improving provider buy-in by engaging them in meetings. Eight hospitals participating in Project 3.2 completed the implementation survey.

When detailing the infrastructure established for this project, most hospitals reported applying the American College of Radiology Appropriateness Criteria model (6). Other frameworks used included nationally published clinical decision rules (1), Choosing Wisely (2) and Image Wisely (1). Strategies for high-cost imaging have mainly been developed by comparing their organization with other hospitals (4).

When implementing this project, the majority of hospitals indicated providing support in decision-making on high-cost imaging (8), especially with evidence-based guidelines and decision support tools (6). All participating hospitals monitored the use of CT and MRI imaging procedures and none monitored PET or nuclear imaging procedures for PRIME implementation. Participation in learning collaboratives beyond those provided by PRIME has been reported by 4 hospitals. The level of effort spent on this project has been high (8 of 10), with the utmost efforts being reported for project implementation (10), engagement with internal stakeholders (10) and efforts due to unanticipated changes in metrics (10). The top data and metric-related challenges to implementation cited by hospitals were requirements of manual tracking and chart review (3), variation in systems due to multiple EHRs/IT systems (2), challenges due to performance already being at a high level (2), lack of processes being established system-wide (4) and silo-ed operation of departments (2). Hospitals addressed these challenges by standardization of EHR/IT processes or expansion across systems (2), standardization of processes across systems (3) and having meetings across teams (2). A detailed description of Project 3.2 implementation is available in the PRIME Interim Report.

In the Preliminary Summative Evaluation Report, hospitals rated (from 1=very low to 5=very high) staff effort (3.9), financial investment (3.4), and level of difficulty (3.4) of this project.

Research Question 2: Summary of Changes in Hospital-Reported Metric Achievement Rates

Performance of hospitals in Project 3.2 was measured by 4 metrics (Exhibit 59). All metrics changed in the intended direction for DMPHs but the results for DPHs were mixed. Detailed results are available in Appendix G. Project-Specific Trends in Metric Performance Project 3.2 Resource Stewardship: High-Cost Imaging.

Exhibit 59: Project 3.2 Hospital Reported Metric Rates Through DY 14

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care	Changed in the Intended Direction DPH	Changed in the Intended Direction DMPH
Don't Do Imaging for Uncomplicated Headaches (Choosing Wisely) *(retired after DY 14)*	3.2.1*^	Decrease	Process	N	Y
Appropriate Emergency Department Utilization of CT for Pulmonary Embolism	3.2.2	Increase	Process	Y	Y
Use of Imaging Studies for Low Back Pain	3.2.3	Increase	Process	N	Y
Appropriate Use of Imaging Studies for Low Back Pain (Anytime)	3.2.4*^@	Increase	Process	Y	Y
Inappropriate Use of Imaging Studies for Low Back Pain	3.2.4*@^	Decrease	Process	Y	Y

Source: PRIME Metrics Specs, DY 15YE. UCLA analysis of the hospital-reported data, February to June 2021.

Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, CT: Computed Tomography.
** Denotes innovative metric.*
@ A Trending break was issued for Metric 3.2.4 in DY 14 (PPL 19-002 19-003) and Metric 3.2.4 changed over time; in DY 11 the metric had 3 stratified levels, from DY 12 to

DY 14 the metric had 2 levels; rate #1: Appropriate Imaging for LBP and rate #2: Inappropriate Imaging for LBP, and in DY 15 the metric had 3 rates; an overall metric which measured appropriate use of imaging for patients with low back pain, sub-metric #1 which measured appropriate use of plain x-ray for low back pain, and sub-metric #2 which measured appropriate use of advanced imaging for low back pain.
Y: metric increased or decreased in the intended direction,
N: metric did not increase or decrease in the intended direction.
^ Denotes measurement period is different than DY11 – DY 14 (DPH) or DY12 – DY14 (DMPH).
Analyses restricted to assessment of changes in metric values through DY 14 due to disruptions in care delivery and utilization caused by the COVID-19 pandemic.

Project 3.3 Resource Stewardship: Therapies Involving High Cost Pharmaceuticals

Objectives

Project 3.3 was designed to promote resource stewardship to reduce costs and move toward efficient use of high-cost medications or moderate-cost medications with high prescribing volume. Participating PRIME hospitals were to develop robust resource stewardship programs. This was to be accomplished through a decision analysis and increased use of decision support mechanisms in order to guide clinician use of targeted therapies involving high-cost medications. By establishing multidisciplinary teams of experts with committed time to monitor and contain pharmaceuticals costs and investing in resource stewardship, the project aimed at yielding significant savings. Specific objectives included increasing the appropriate use of high-cost pharmaceutical therapies, decreasing inappropriate use of high-cost pharmaceutical therapies, improving use of shared decision making with patients, driving down health-care costs through improved used of targeted mediations and prescribing behaviors, and optimizing use of the federal 340B Drug Pricing Program (if eligible). The 340B program allows eligible public hospitals to purchase outpatient pharmaceuticals at the manufacturer's reduced, wholesale price. Hospitals could optimize the program by utilizing and sharing templates and tools for monitoring compliance. Specific objectives can be found in Attachment Q.

Hypotheses

Participating hospitals improved high-cost pharmaceutical stewardship by implementing policies and procedures that trained providers and encouraged them to follow policies.

Research Questions

1. What efforts did participating hospitals undertake to improve high-cost pharmaceutical stewardship?
2. Did participating hospitals report improved performance in project 3.3 metrics during PRIME?
3. Did project implementation lead to change in metrics for PRIME patients before and after PRIME and in comparison to the comparison patients?

Limitations

Research question 3 could not be examined because no metrics could be constructed from Medi-Cal data. See PRIME Metric Feasibility Analysis for a detailed explanation.

Project selection

A total of 8 hospitals (7 DPHs and 1 DMPHs) participated and reported metric performance data for this required project. Detailed information on hospital participation during PRIME can be found in Appendix B. Project Selection.

Findings for Project 3.3

Research Question 1: Summary of Project Implementation

Overall, participating hospitals succeeded in implementing this project by selecting high cost or moderate cost medications with high volume and improving the appropriate use of these medications. Hospitals used various selection criteria to identify their targeted medications, including the impact on health and patient safety. Hospitals focused on changing provider practices by incorporating additional team members such as a pharmacist and medical support staff, improved system-wide standardization of processes, and increased the frequency of feedback on performance as a strategy to promote stewardship. Eight hospitals participating in Project 3.3 completed the implementation survey.

More specifically, hospitals included a variety of medical conditions and different pharmaceuticals treating each of the selected conditions. Hospitals chose an increasing variation of three, six, nine, twelve, and fifteen pharmaceuticals per metric per year. Selection of pharmaceuticals was based on utilization levels overall and at inpatient and outpatient pharmacies. The rationale applied to the selection process was mainly based on the impact of pharmaceuticals on improvements in health (3 hospitals) and on assessments of patient safety and cost data for medications with low-cost alternatives that had equal efficacy (3). Hospitals who participated in the 340B program to purchase outpatient pharmaceuticals at the manufacturer's wholesale price reported using tools and software that allowed them to manage medications and obtain data for the metrics.

When reporting on how this project was implemented, hospitals indicated mainly including physician champions (8) and pharmacists (8) or medical support staff (5) under PRIME. Hospitals tried to change provider practice pattern by increasing feedback frequency (5), more training guidelines (3) and providing mentoring (1). They also participated in 4 different learning collaboratives (Primary Care based Hepatitis C Treatment Expansion Initiative, CPQCC/Statewide Collaborative and AHRQ/National Collaborative). Participating hospitals reported a high level of difficulty in implementing Project 3.3 with the overall level of effort being higher for the DMPH (10 of 10) than the DPHs (7.7).

Data and metric-related challenges to implementation included lack of IT and health information infrastructure (4), variation in documentation and systems used (2), lack of processes being established system-wide (4), silo-ed operation of departments (2) and small denominators or numerators (2). These challenges were addressed by standardizing IT and health information processes, standardizing of processes (2) and implementing provider and staff training (2). A detailed description of Project 3.3 implementation is available in the PRIME Interim Report.

In the Preliminary Summative Evaluation Report , hospitals rated (from 1=very low to 5=very high) staff effort (4.1), financial investment (2.9), and level of difficulty (4.1) of this project.

Research Question 2: Summary of Changes in Hospital-Reported Metric Achievement Rates

Performance in Project 3.3 was measured by 4 metrics (Exhibit 60). All metrics changed in the intended direction for DPHs that selected 9 pharmaceuticals but all other results were mixed or trends were not observable. Detailed results are available in Appendix G. Project-Specific Trends in Metric Performance Project 3.3. Resource Stewardship: Therapies Involving High-Cost Pharmaceuticals.

Exhibit 60: Project 3.3 DPH Hospital Reported Metric Rates Through DY 14

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care	Changed in the Intended Direction DPH		
				(3)	(6)	(9)
Adherence to Medications	3.3.1*	Increase	Process	Y	N	Y
Documentation of Current Medications in the Medical Record *(retired after DY 11)*	3.3.2	Increase	Process	N/A	N/A	N/A
High-Cost Pharmaceutical Ordering Protocols	3.3.3*	Increase	Process	Y	Y	Y
Documentation of Medication Reconciliation in the Medical Record for Patients on High-Cost Pharmaceuticals *(new metric in DY 12)*	3.3.4*	Increase	Process	N/A	Y	Y

Source: PRIME Metrics Specs, DY 15YE. UCLA analysis of the hospital-reported data, February to June 2021.

*Notes: DMPH: district and municipal public hospital, DY: Demonstration Year * Denotes innovative metric, Y: metric increased or decreased in the intended direction, N: metric did not increase or decrease in the intended direction, N/A: metric was only active one*

year and trend was not measured. Analyses restricted to assessment of changes in metric values through DY 14 due to disruptions in care delivery and utilization caused by the COVID-19 pandemic.

All results were mixed or trends were not observable for DMPHs (Exhibit 61). Detailed results are available in Project 3.3. Resource Stewardship: Therapies Involving High-Cost Pharmaceuticals.

Exhibit 61 : Project 3.3 DMPH Hospital Reported Metric Rates

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care	Changed in the Intended Direction DMPH		
				(3)	(6)	(9)
Adherence to Medications	3.3.1*	Increase	Process	N/A	N	Y
Documentation of Current Medications in the Medical Record *(retired after DY 11)*	3.3.2	Increase	Process	N/A	N/A	N/A
High-Cost Pharmaceutical Ordering Protocols	3.3.3*	Increase	Process	N/A	Y	Y
Documentation of Medication Reconciliation in the Medical Record for Patients on High-Cost Pharmaceuticals *(new metric in DY 12)*	3.3.4*	Increase	Process	N/A	Y	N
Adherence to Medications	3.3.1*	Increase	Process	N/A	N	Y

Source: PRIME Metrics Specs, DY 15YE. UCLA analysis of the hospital-reported data, February to June 2021.
*Notes: DMPH: district and municipal public hospital, DY: Demonstration Year, * Denotes innovative metric. Y: metric increased or decreased in the intended direction, N: metric*

did not increase or decrease in the intended direction, N/A: metric was only active one year and trend was not measured. Analyses restricted to assessment of changes in metric values through DY 14 due to disruptions in care delivery and utilization caused by the COVID-19 pandemic.

Project 3.4 Resource Stewardship: Blood Products

Objectives

Project 3.4 was designed to promote efficiency in management of blood products and transfusion, which are highly common and costly procedures. This goal was to be achieved by using evidence-based guidelines and decision support tools, developing and streamlining clinical processes, and tracking clinical outcomes to better manage blood products. Specific objectives included reduced wastage of blood products dispensed to the patient care area; reduced wastage of blood products in the hospital inventory that never get dispensed; developing and implementing patient blood management (PBM) protocols to improve appropriate use of blood and blood products by health providers; and improving clinical outcomes of transfusion and reduce adverse events from transfusion. Further detail on objectives and suggested core components of this project can be found in Attachment Q.

Hypotheses

Participating hospitals improved blood product stewardship by implementing policies and procedures that trained providers and encouraged them to follow policies.

Research Questions

1. What efforts did participating hospitals undertake to improved blood product stewardship?
2. Did participating hospitals report improved performance in project 3.4 metrics during PRIME?
3. Did project implementation lead to change in metrics for PRIME patients before and after PRIME and in comparison to the comparison patients?

Limitations

Research question 3 could not be examined because no metrics could be constructed from Medi-Cal data. See PRIME Metric Feasibility Analysis for a detailed explanation.

Project selection

A total of 6 hospitals (2 DPHs and 4 DMPH; 1 DMPH dropped out of participation in DY 11) participated and reported metric performance for this optional project. Detailed information on hospital participation during PRIME can be found in Appendix B. Project Selection.

Findings for Project 3.4

Research Question 1: Summary of Project Implementation

Overall, participating hospitals made significant progress in implementing Project 3.4 by implanting blood products management programs and methodologies; establishing a transfusion committee; and evaluating the impact of using blood products, including performance feedback and dashboards. Five hospitals participating in Project 3.4 completed the implementation survey.

More specifically, all or nearly all participating hospitals reported implementing all the core components, except for participating in testing of novel metrics for a blood products management program. Hospitals implementing this project reported applying 1 or more blood management programs from the American Association of Blood Banks (AABB). When asked about the specific infrastructure established, hospitals indicated using computerized physician order entries (4 hospitals) and specific decision support tools based on evidence-based guidelines (3). When detailing on specific measures supporting the implementation of this project, hospitals monitored the use of blood products by assessing the adequacy of documentation and appropriateness of use of blood products (5) and examination of safety implications of blood products (4).

The most effective quality improvement efforts using Plan-Do-Study-Act (PDSA) cycles have been the change of order sets (3), updating computerized physician order entries to include emergencies and follow transfusion guidelines (2), and implementation of pre-op anemia screening protocols (2). All 5 hospitals mentioned participation in learning collaboratives. The overall level of difficulty in implementing Project 3.4 was high for DPHs (8.5 of 10) and medium for DMPHs (6). The highest level of effort has been spent on engaging internal stakeholders (4) and conducting staff training, respectively meeting implementation requirements (3). Data and metric-related challenges to implementation included variation in documentation within the system (2), lack of IT infrastructure (3), the challenge that hospitals were already performing at a high level (1), silo-ed operation of departments (1), small denominators or numerators (1) and inadequate availability of services (2). These most successful solutions to these challenges were standardization of documentation processes (3), development and clarification of operational definitions or systems (1), implementation of provider and staff training (1), increased capacity and establishing meetings across teams (1). A detailed description of Project 3.4 implementation is available in the PRIME Interim Report.

In the Preliminary Summative Evaluation Report , hospitals rated (from 1=very low to 5=very high) staff effort (4.2), financial investment (3.0), and level of difficulty (3.8) of this project.

Research Question 2: Summary of Changes in Hospital-Reported Metric Achievement Rates

Participating hospitals' performance in Project 3.4 was measured by 5 metrics (Exhibit 62). The results were mixed for both DPHs and DMPHs. Detailed results are available in Appendix G. Project-Specific Trends in Metric Performance Project 3.4 – Resource Stewardship: Blood Products.

Exhibit 62: Project 3.4 Hospital Reported Metric Rates Through DY 14

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care	Changed in the Intended Direction DPH	Changed in the Intended Direction DMPH
ePBM-01 Pre-Op Anemia Screening, Selected Elective Surgical Patients	3.4.1	Increase	Process	Y	N
ePBM-02 Pre-Op Hemoglobin Level, Selected Elective Surgical Patients *(retired after DY 13)*	3.4.2^	Increase	Process	NA	NA
ePBM-03 Pre-Op Type and Cross-match, Type and Screen, Selected Elective Surgical Patients	3.4.3	Increase	Process	Y	N
ePBM-04 Initial Transfusion Threshold	3.4.4^	Increase	Process	NA	NA
ePBM-05 Outcome of Patient Blood Management, Selected Elective Surgical Patients (*retired after DY 13)*	3.4.5^	Decrease	Outcome	N	N

Source: PRIME Metrics Specs, DY 15YE. UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, ePBM: Electronic Patient Blood Management,
DY: Demonstration Year.

NA: Metric included a stratification that was not available in the hospital-reported data analyzed by UCLA.
^Denotes measurement period is different than DY11 – DY 14 (DPH) or DY12 – DY14 (DMPH).
Analyses restricted to assessment of changes in metric values through DY 14 due to disruptions in care delivery and utilization caused by the COVID-19 pandemic.

Trends in Overarching Utilization Measures

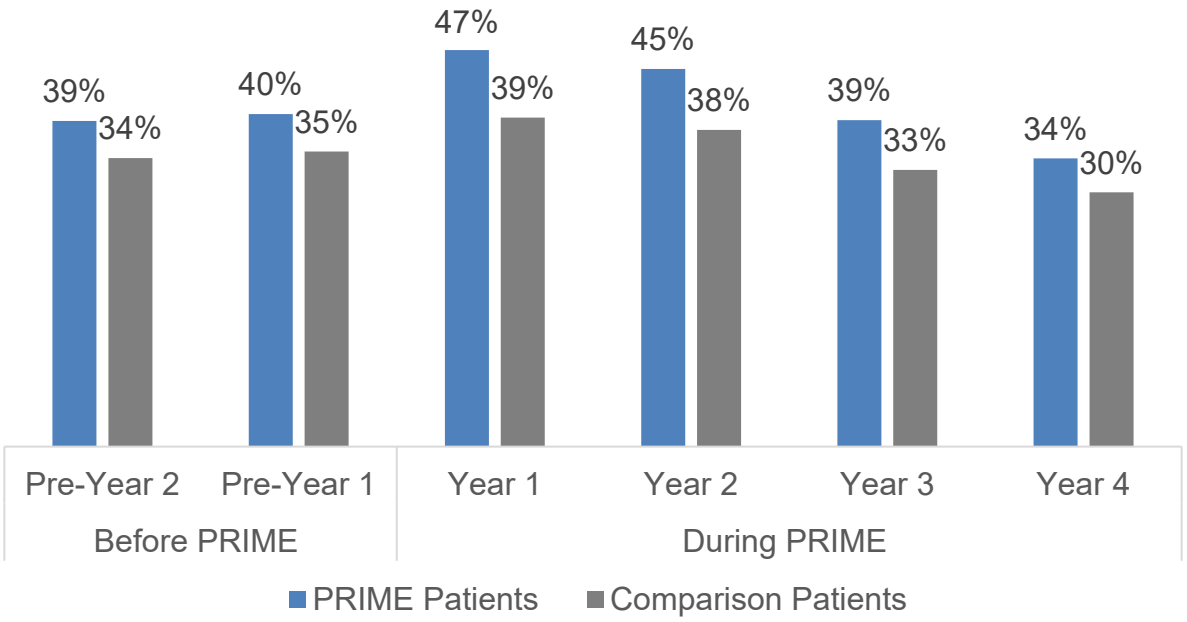
This chapter presents the evidence on how participating PRIME hospitals changed performance on overarching utilization measures. This analysis was achieved by using Medi-Cal enrollment and claims data and a quasi-experimental design and DD methodology. A detailed explanation of the DD methodology is provided in Appendix C. Difference-in-Difference (DD) Data and Methodology.

UCLA created and analyzed 6 additional measures that were not specified by PRIME as metrics, but provided a better understanding of the potential impact of the program. PRIME activities such as provision of patient-centered, data-driven, and team-based care; increased capacity to provide point of care services, complex care management, and population health management; and provision of high-quality care that integrates physical and behavioral health services and coordinates care in different settings were likely to promote access to primary and specialty care and reduce the need for ED visits and hospitalizations. UCLA created two measures of ED visits and hospitalizations to examine whether PRIME reduced the possibility of any such visits (percentage of beneficiaries with any ED visits or hospitalizations) and to examine the rate of these visits (number of ED visits or hospitalizations per 1,000 beneficiaries per year). Each measure conveys a different perspective on the impact of PRIME on utilization of these services. The volume of primary care visits and specialty care services were measured per 1,000 beneficiaries per year and volume of ED visits and hospitalizations were measured per beneficiary per year. UCLA analyzed changes in trends in these measures for PRIME and comparison patients 2 years before PRIME and 4 years during PRIME using the DD methodology.

Emergency Department Utilization Trends

UCLA analyzed Medi-Cal data for trends in the percentage of patients with any ED visits in the year, inclusive of those that were followed by hospitalizations, for DPHs and DMPHs separately. The DPH analysis showed that the percentage of patients with any ED visits statistically significantly decreased from before to during PRIME for PRIME (5.10%) and comparison (3.70%) patients, with a statistically significant greater decrease (DD, 1.40%) for PRIME patients (Exhibit 63).

Exhibit 63: DPH Percentage of Patients with Any ED Visits Before and During PRIME for PRIME and Comparison Patients (Goal: Decrease)



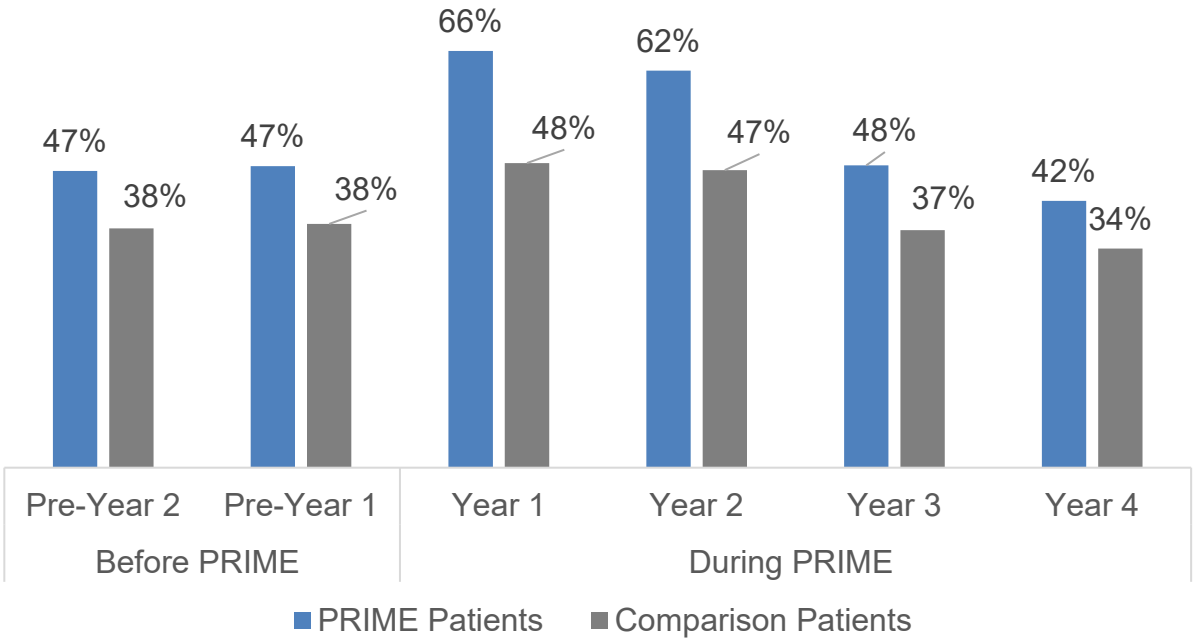
Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	0.80%*	-4.31%*	-5.10%*	
Comparison Patients	0.70%*	-2.97%*	-3.70%*	-1.40%*

Source: UCLA analysis of Medi-Cal data, July 2014 to June 2020.
*Notes: * Denotes p≤0.05, a statistically significant difference. Average Annual Change Before PRIME is calculated as: (Pre-Year 1 – Pre-Year 2). Average Annual Change During PRIME is calculated as: (Year 4 – Year 1) /3. Difference between changes is calculated as: (Average Annual Change During PRIME – Average Annual Change Before PRIME). Difference-in-difference is calculated as: (Difference between changes*

for PRIME patients – Difference between changes for comparison patients). Values in the graph are rounded for ease of presentation and may differ from exact values in the table. The analyses exclude patients with a COVID-19 diagnosis.

The DMPH analysis showed a similar pattern to DPHs but with a statistically significant greater decrease (DD, 3.42%) for PRIME vs. comparison patients (Exhibit 64).

Exhibit 64: DMPH Percentage of Patients with Any ED Visits Before and During PRIME for PRIME and Comparison Patients (Goal: Decrease)

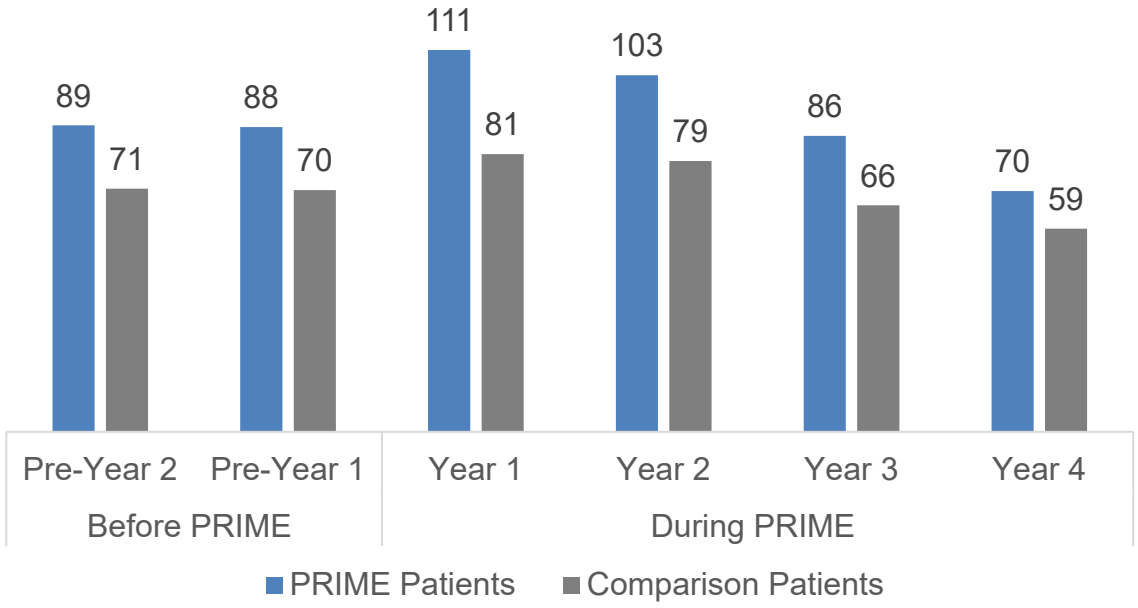


Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference -in- Difference (DD)
PRIME Patients	0.75%*	-7.86%*	-8.61%*	
Comparison Patients	0.71%*	-4.48%*	-5.19%*	-3.42%*

Source and notes: See above.

UCLA further analyzed trends in the number of ED visits per 1,000 beneficiaries per year. For DPHs, the analysis showed a statistically significant decrease for PRIME (-13.13) and comparison (-6.81) patients from before to during PRIME (Exhibit 65). This decrease was significantly greater for PRIME patients (DD) by 6.32 visits per 1,000 beneficiaries per year.

Exhibit 65: DPH Number of ED Visits per 1,000 Beneficiaries per Year, Before and During PRIME for PRIME and Comparison Patients (Goal: Decrease)

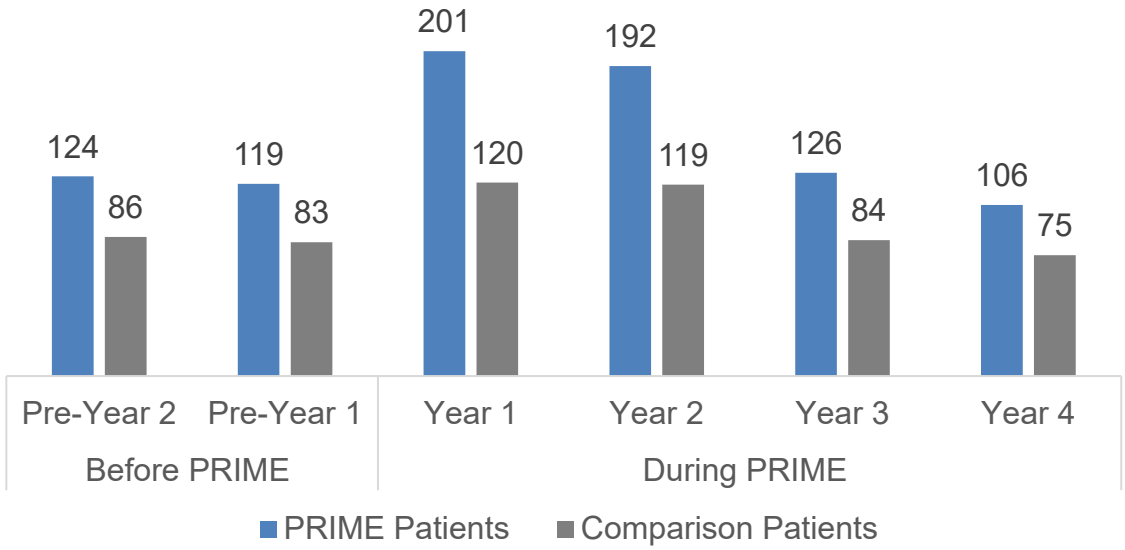


Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	-0.52	-13.65*	-13.13*	
Comparison Patients	-0.40	-7.21*	-6.81*	-6.32*

Source: UCLA analysis of Medi-Cal data, July 2014 to June 2020.
*Notes: * Denotes p≤0.05, a statistically significant difference. Average Annual Change Before PRIME is calculated as: (Pre-Year 1 – Pre-Year 2). Average Annual Change During PRIME is calculated as: (Year 4 – Year 1) /3. Difference between changes is calculated as: (Average Annual Change During PRIME – Average Annual Change Before PRIME). Difference-in-difference is calculated as: (Difference between changes for PRIME patients – Difference between changes for comparison patients). Values in the graph are rounded for ease of presentation and may differ from exact values in the table. The analyses exclude patients with a COVID-19 diagnosis.*

Analysis of DMPH data showed a similar trend as DPHs; the decline in number of ED visits for PRIME patients (DD) was greater than comparison patients by 15.36 ED visits per 1,000 beneficiaries per year (Exhibit 66).

Exhibit 66: DMPH Number of ED Visits per 1,000 Beneficiaries per Year, Before and During PRIME for PRIME and Comparison Patients (Goal: Decrease)



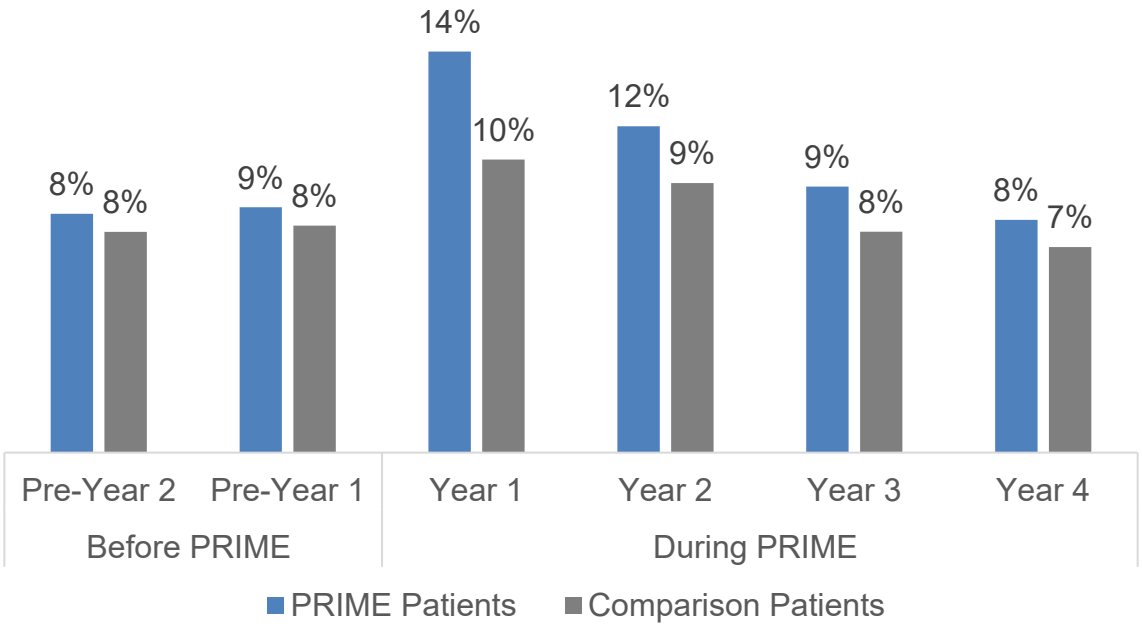
Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	-4.65*	-31.76*	-27.11*	
Comparison Patients	-3.23*	-14.98*	-11.75*	-15.36*

Source and notes: See above.

Hospitalization Utilization Trends

UCLA analyzed trends in the percent of patients who had any hospitalizations for PRIME and comparison patients 2 years before PRIME and 4 years during PRIME for DPHs and DMPHs. The DPH analysis showed a decrease for both PRIME (2.22%) and comparison (1.25%) patients from before to during PRIME (Exhibit 67), and this decrease was statistically significantly greater for PRIME patients (DD), by 0.97%.

Exhibit 67: DPH Percentage of Patients with Any Hospitalizations Before and During PRIME for PRIME and Comparison Patients (Goal: Decrease)



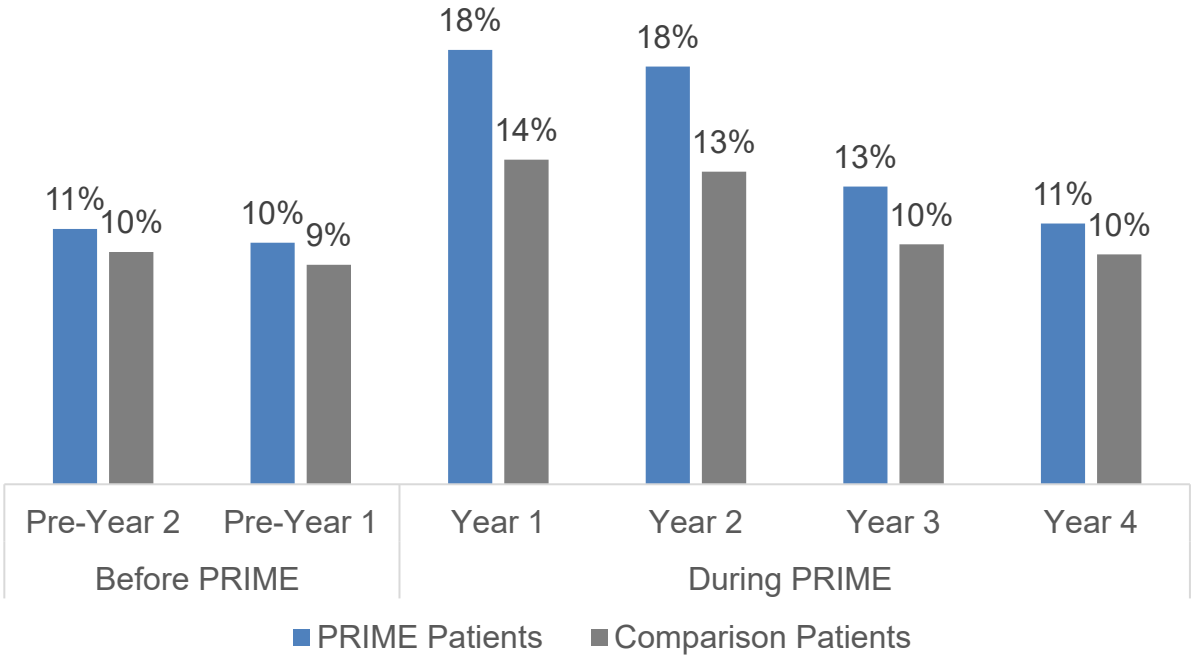
Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	0.24%	-1.98%*	-2.22%*	
Comparison Patients	0.22%	-1.03%*	-1.25%*	-0.97%*

Source: UCLA analysis of Medi-Cal data, July 2014 to June 2020.
*Notes: * Denotes p≤0.05, a statistically significant difference. Average Annual Change Before PRIME is calculated as: (Pre-Year 1 – Pre-Year 2). Average Annual Change During PRIME is calculated as: (Year 4 – Year 1) /3. Difference between changes is calculated as: (Average Annual Change During PRIME – Average Annual Change Before PRIME). Difference-in-difference is calculated as: (Difference between changes for PRIME patients – Difference between changes for comparison patients). Values in*

the graph are rounded for ease of presentation and may differ from exact values in the table. The analyses exclude patients with a COVID-19 diagnosis.

The analysis of DMPHs showed a statistically higher magnitude of decrease for PRIME patients (DD), by 1.07% (Exhibit 68).

Exhibit 68: DMPH Percentage of Patients with Any Hospitalizations Before and During PRIME for PRIME and Comparison Patients (Goal: Decrease)

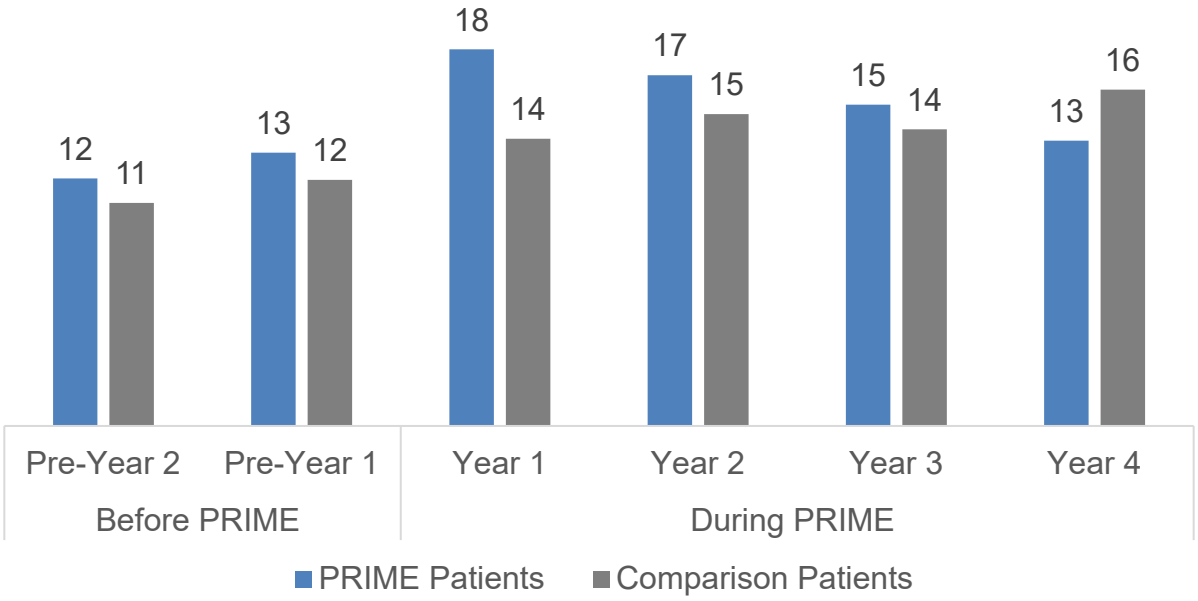


Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	-0.59%*	-2.46%*	-1.87%*	-1.07%*
Comparison Patients	-0.54%*	-1.34%*	-0.80%*	

Source and notes: See above.

In addition, UCLA analyzed trends in the number of hospitalizations per 1,000 beneficiaries per year for PRIME and comparison patients 2 years before PRIME and 4 years during PRIME for DPHs and DMPHs. The analysis of DPH data showed a statistically significantly greater decrease for PRIME patients (DD), by 2.33 hospitalizations per 1,000 beneficiaries per year (Exhibit 69).

Exhibit 69: DPH Number of Hospitalizations per 1,000 Beneficiaries per Year, Before and During PRIME for PRIME and Comparison Patients (Goal: Decrease)



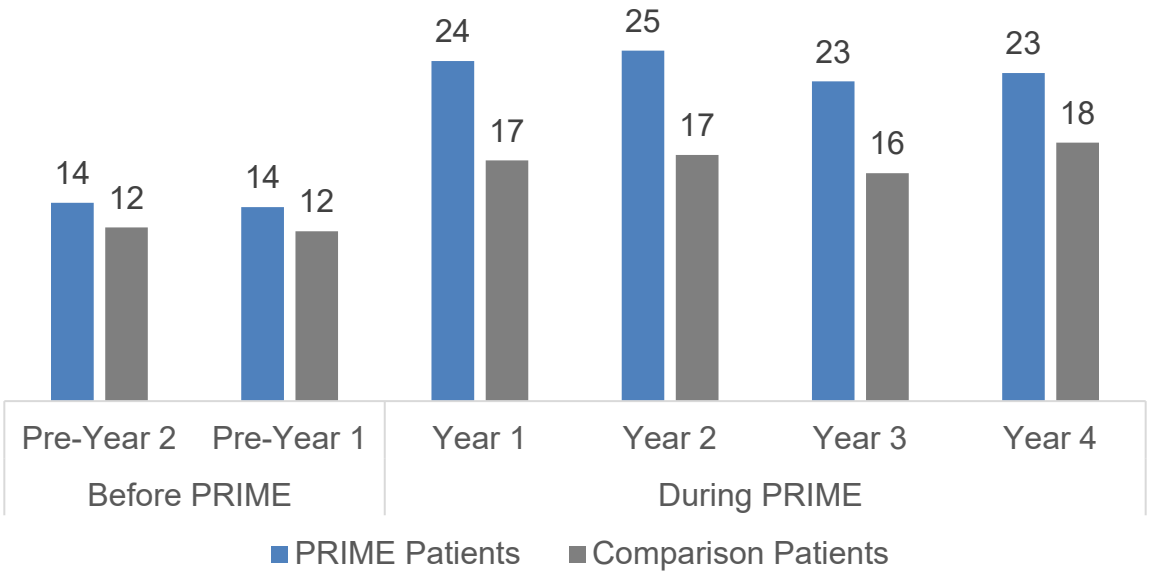
Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference -in- Difference (DD)
PRIME Patients	1.22*	-1.44*	-2.66*	
Comparison Patients	1.10*	0.77*	-0.33	-2.33*

Source: UCLA analysis of Medi-Cal data, July 2014 to June 2020.
*Notes: * Denotes p≤0.05, a statistically significant difference. Average Annual Change Before PRIME is calculated as: (Pre-Year 1 – Pre-Year 2). Average Annual Change During PRIME is calculated as: (Year 4 – Year 1) /3. Difference between changes is calculated as: (Average Annual Change During PRIME – Average Annual Change Before PRIME). Difference-in-difference is calculated as: (Difference between changes for PRIME patients – Difference between changes for comparison patients). Values in*

the graph are rounded for ease of presentation and may differ from exact values in the table. The analyses exclude patients with a COVID-19 diagnosis.

The DMPH analysis did not show any significant changes in trends in number of hospitalizations per 1,000 beneficiaries per year for PRIME or comparison patients from before to during PRIME (Exhibit 70).

Exhibit 70: DMPH Number of Hospitalizations per 1,000 Beneficiaries per Year Before and During PRIME for PRIME and Comparison Patients (Goal: Decrease)



Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	-0.31	-0.29	0.02	
Comparison Patients	-0.27	0.42*	0.69	-0.67

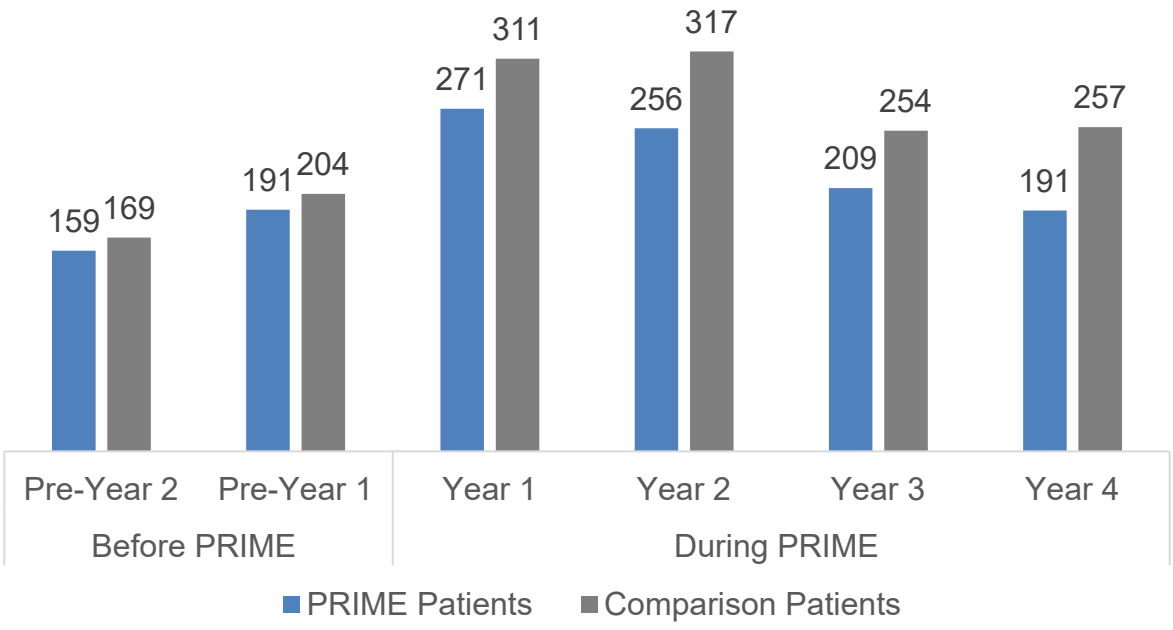
Source and notes: See above.

Primary Care Utilization Trends

UCLA analyzed trends in the number of primary care visits for evaluation and management (E&M) per 1,000 beneficiaries per year for PRIME and comparison patients 2 years before PRIME and 4 years during PRIME for DPHs and DMPHs. E&M visits are a subset of encounters that include physician diagnosis, rather than encounters that are limited to procedures, vaccinations, and lab tests. The volume of primary care visits was expected to increase during PRIME in the short term as an indicator of increased access. PRIME activities may have led to lower per 1,000 beneficiary rates of these visits in the longer term compared to control as PRIME patient care was increasingly managed by PRIME interventions such as team-based approaches, registries, routine vaccines and screenings, and alternatives to face-to-face provider visits.

The DPH analysis showed a statistically significant decline in this measure from before to during PRIME for both PRIME and comparison patients, and this decrease was statistically significantly greater (DD) by 6.68 visits for PRIME patients (Exhibit 71).

Exhibit 71: DPH Number of Primary Care Visits per 1,000 Beneficiaries per Year, Before and During PRIME for PRIME and Comparison Patients (Goal: Increase)

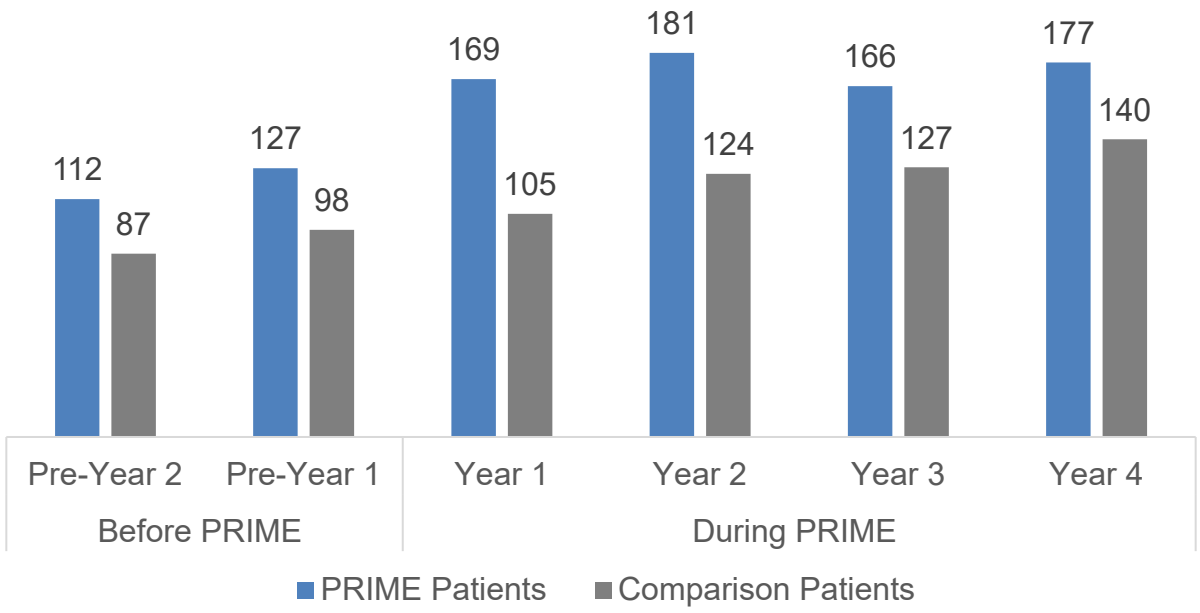


Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference -in- Difference (DD)
PRIME Patients	32.49*	-26.88*	-59.37*	
Comparison Patients	34.62*	-18.07*	-52.69*	-6.68*

Source: UCLA analysis of Medi-Cal data, July 2014 to June 2020.
*Notes: * Denotes p≤0.05, a statistically significant difference. Average Annual Change Before PRIME is calculated as: (Pre-Year 1 – Pre-Year 2). Average Annual Change During PRIME is calculated as: (Year 4 – Year 1) /3. Difference between changes is calculated as: (Average Annual Change During PRIME – Average Annual Change Before PRIME). Difference-in-difference is calculated as: (Difference between changes for PRIME patients – Difference between changes for comparison patients). Values in the graph are rounded for ease of presentation and may differ from exact values in the table. The analyses exclude patients with a COVID-19 diagnosis.*

The DMPH analysis showed a statistically significant decrease in E&M primary care visits for PRIME patients (11.94) per 1,000 beneficiaries per year from before to during PRIME and no change for comparison patients (Exhibit 72). This led to a statistically significant decrease of 12.46 visits for PRIME patients (DD).

Exhibit 72: DMPH Number of Primary Care Visits per 1,000 Beneficiaries per Year, Before and During PRIME for PRIME and Comparison Patients (Goal: Increase)



Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	14.56*	2.62*	-11.94*	-12.46*
Comparison Patients	11.21*	11.73*	0.52	

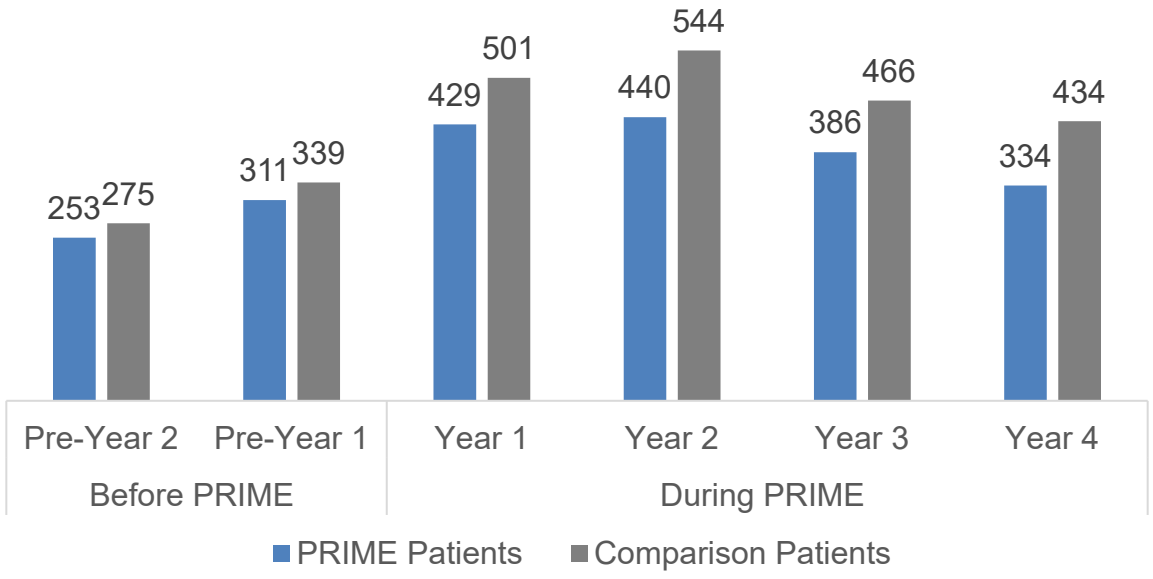
Source and notes: See above.

Specialty Care Utilization Trends

In addition, UCLA analyzed trends in the number of specialty care services, inclusive of E&M visits and procedures, per 1,000 beneficiaries per year for PRIME and comparison patients 2 years before PRIME and 4 years during PRIME for DPHs and DMPHs. PRIME activities were anticipated to promote access to specialty care (Attachment Q-Project 1.3). The volume of these services was expected to increase during PRIME because demand for specialty care services across California was expected to increase due to expanded health coverage and an increasing population (Attachment Q – Project 1.3 Specialty Care). PRIME activities were intended to promote access to the specialty care team, improve efficiency in the provision of care (both in-person and virtual), improve coordination and collaboration with referring providers, and engage patients, which may lower the long-term volume of specialty services per beneficiary.

The DPH analysis showed a statistically significant decrease in specialty services from before to during PRIME for both PRIME (-89.95) and comparison (-85.88) patients (Exhibit 73). The magnitude of change between the two groups (DD) was statistically similar.

Exhibit 73: DPH Number of Specialty Care Services per 1,000 Beneficiaries per Year Before and During PRIME for PRIME and Comparison Patients (Goal: Increase)

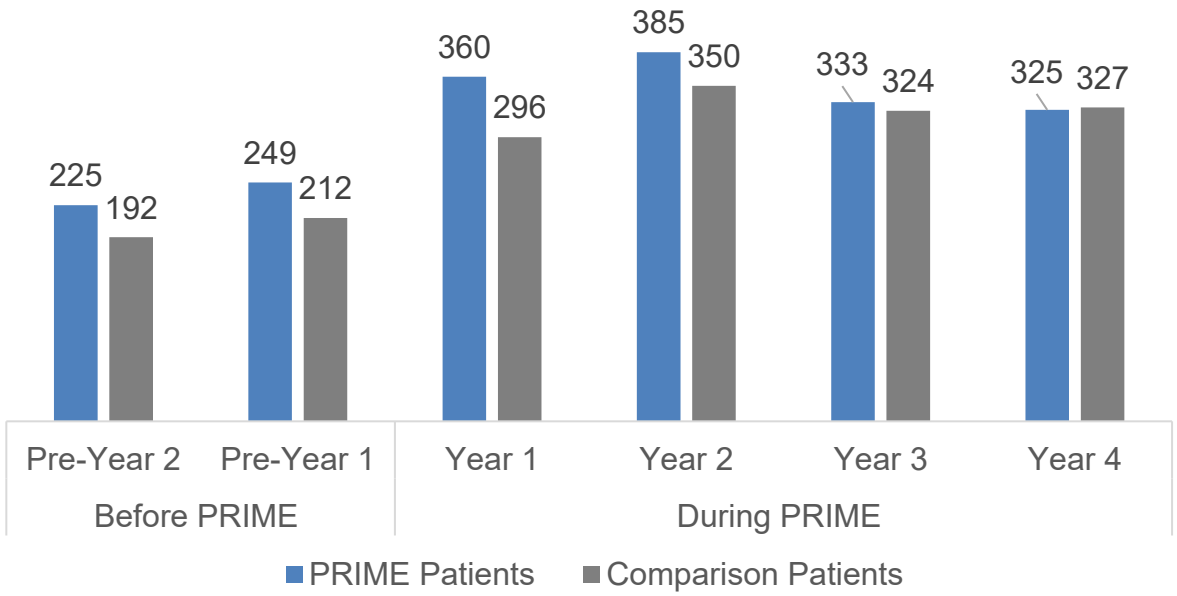


Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference -in- Difference (DD)
PRIME Patients	58.28*	-31.67*	-89.95*	
Comparison Patients	63.40*	-22.48*	-85.88*	-4.07

Source: UCLA analysis of Medi-Cal data, July 2014 to June 2020.
*Notes: * Denotes p≤0.05, a statistically significant difference. Average Annual Change Before PRIME is calculated as: (Pre-Year 1 – Pre-Year 2). Average Annual Change During PRIME is calculated as: (Year 4 – Year 1) /3. Difference between changes is calculated as: (Average Annual Change During PRIME – Average Annual Change Before PRIME). Difference-in-difference is calculated as: (Difference between changes for PRIME patients – Difference between changes for comparison patients). Values in the graph are rounded for ease of presentation and may differ from exact values in the table. The analyses exclude patients with a COVID-19 diagnosis.*

The DMPH analysis showed a statistically significant decrease for PRIME (35.22 fewer services) and comparison (9.79 fewer services) patients from before to during PRIME (Exhibit 74). This led to a statistically significantly greater decrease for PRIME patients (DD), by 25.43 specialty services per 1,000 beneficiaries per year.

Exhibit 74: DMPH Number of Specialty Care Services per 1,000 Beneficiaries per Year Before and During PRIME for PRIME and Comparison Patients (Goal: Increase)



Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference -in- Difference (DD)
PRIME Patients	23.65*	-11.57*	-35.22*	
Comparison Patients	20.14*	10.35*	-9.79*	-25.43*

Source and notes: See above.

Trends in Estimated Medi-Cal Payments

UCLA calculated estimated payments for all services rendered before and after PRIME implementation for PRIME patients and the comparison group using Medi-Cal claims and encounter data. Payments were estimated by creating mutually exclusive categories of service and attributing a fee to each Medi-Cal claim in that category (Appendix D: Methods of Attributing Payment Amounts to Claims). This methodology allowed UCLA to estimate payments for PRIME and comparison patients 2 years before PRIME and 4 years during PRIME and assess if payments for PRIME patients decreased more than for comparison patients using the DD methodology. The DD models were developed for DPHs and DMPHs separately and controlled for age, gender, race/ ethnicity, county, chronic condition diagnosis, and provider type. UCLA developed DD models to measure changes in total estimated payments and in specific categories of services including ED visits, hospitalizations, outpatient pharmacy, and outpatient services.

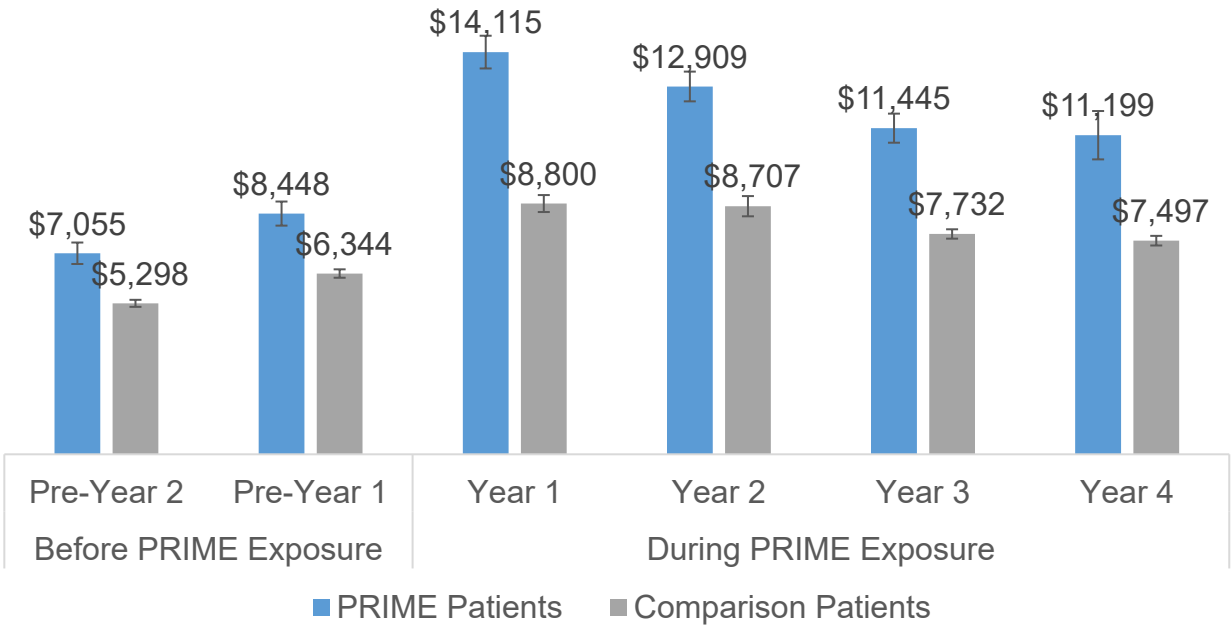
The payment amounts reported in this section are estimates and not equivalent to overall Medi-Cal expenditures for multiple reasons, including significant differences between this attribution methodology vs. per member per month payments to managed care plans for enrolled beneficiaries. See Appendix D: Methods of Attributing Payment Amounts to Claims for further detail and limitations. These estimated payments are primarily intended to compare change in trends between PRIME and comparison patients.

Total Estimated Payments

UCLA analyzed changes in total estimated payments for PRIME and comparison patients 2 years before PRIME and 4 years during PRIME for DPHs and DMPHs. PRIME activities were anticipated to decrease total Medi-Cal payments due to improved delivery of needed services (better care) and patient outcomes (better health). A decrease in ED visits and hospitalizations was expected to lead to lower payments associated with these services. A decrease in payments for outpatient services and use of prescription medications was also expected due to improvements in patient outcomes and a lower need for overutilization of these categories of service.

The analysis for DPHs showed that payments were increasing statistically significantly for both PRIME and comparison patients prior to PRIME and they decreased for both during PRIME (Exhibit 75). However, the decline for PRIME patients ($2,365) was significantly greater than the decrease for comparison patients ($1,480) by $885 (DD) per beneficiary per year.

Exhibit 75: DPH Estimated Total Payments per Beneficiary per Year, Before and During PRIME for PRIME and Comparison Patients

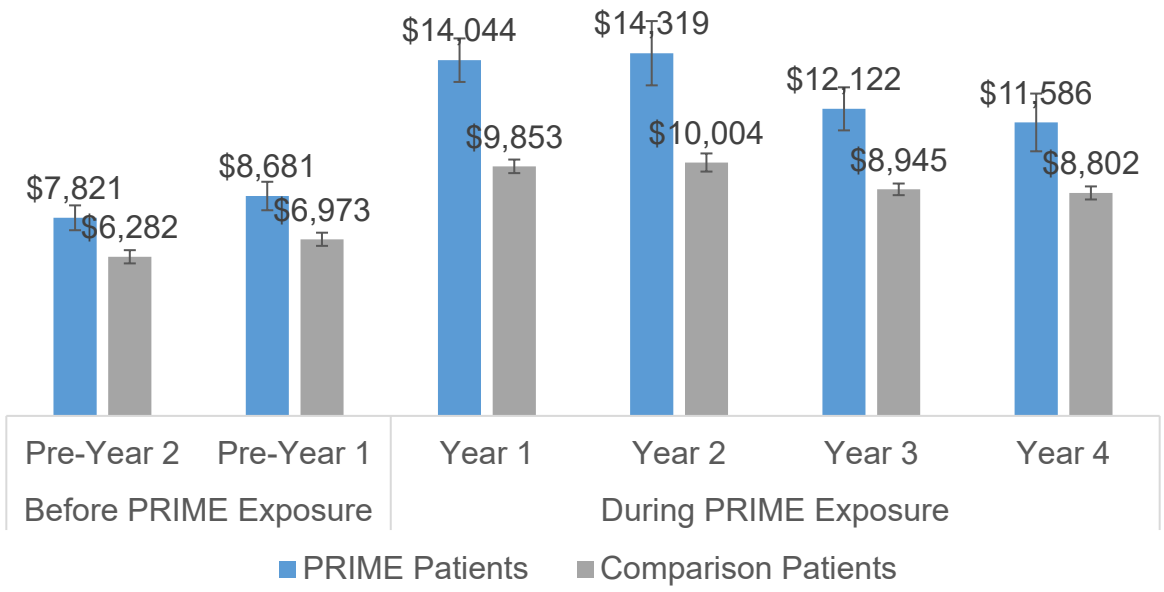


Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	$1,393*	-$972*	-$2,365*	
Comparison Patients	$1,046*	-$434*	-$1,480*	-$885*

Source: UCLA analysis of Medi-Cal data, July 2014 to June 2020.
*Notes: * Denotes p≤0.05, a statistically significant difference. Average Annual Change Before PRIME is calculated as: (Pre-Year 1 – Pre-Year 2). Average Annual Change During PRIME is calculated as: (Year 4 – Year 1) /3. Difference between changes is calculated as: (Average Annual Change During PRIME – Average Annual Change Before PRIME). Difference-in-difference is calculated as: (Difference between changes for PRIME patients – Difference between changes for comparison patients). The analyses exclude patients with a COVID-19 diagnosis.*

The analysis for DMPHs showed a similar pattern and a statistically significantly greater decrease in estimated payments for PRIME ($1,679) vs. comparison patients ($1,041) by $638 (DD) per beneficiary per year (Exhibit 76).

Exhibit 76: DMPH Estimated Total Payments per Beneficiary per Year Before and During PRIME for PRIME and Comparison Patients



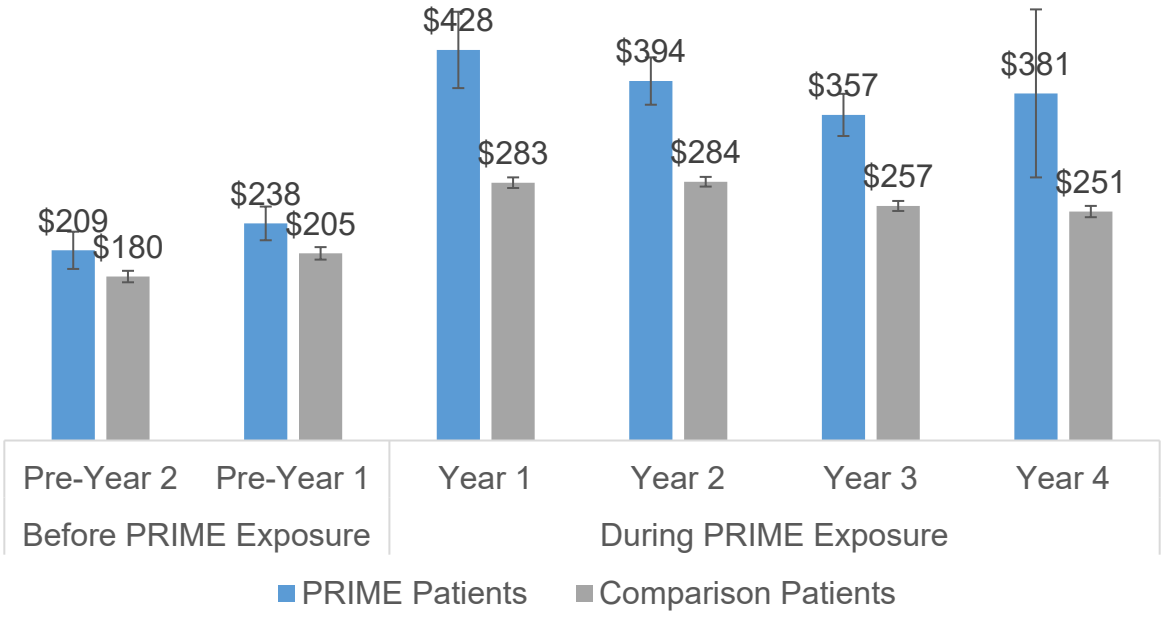
Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	$860*	-$819*	-$1,679*	
Comparison Patients	$691*	-$350*	-$1,041*	-$638*

Source and notes: See above.

Estimated Emergency Department Payments

Emergency department payments included payments for all services that took place in the emergency room and all services on the same day of the emergency department visit, excluding visits with primary care providers, and included payment for emergency department visits that resulted in a hospitalization but not payment for the resulting hospitalization. The analysis of DPH data showed a statistically significant decrease for PRIME ($45) and comparison patients ($36) per beneficiary per year, but the difference between the two estimated decreases (DD) was not statistically significant (Exhibit 77).

Exhibit 77: DPH Estimated Emergency Department Payments per Beneficiary per Year, Before and During PRIME for PRIME and Comparison Patients



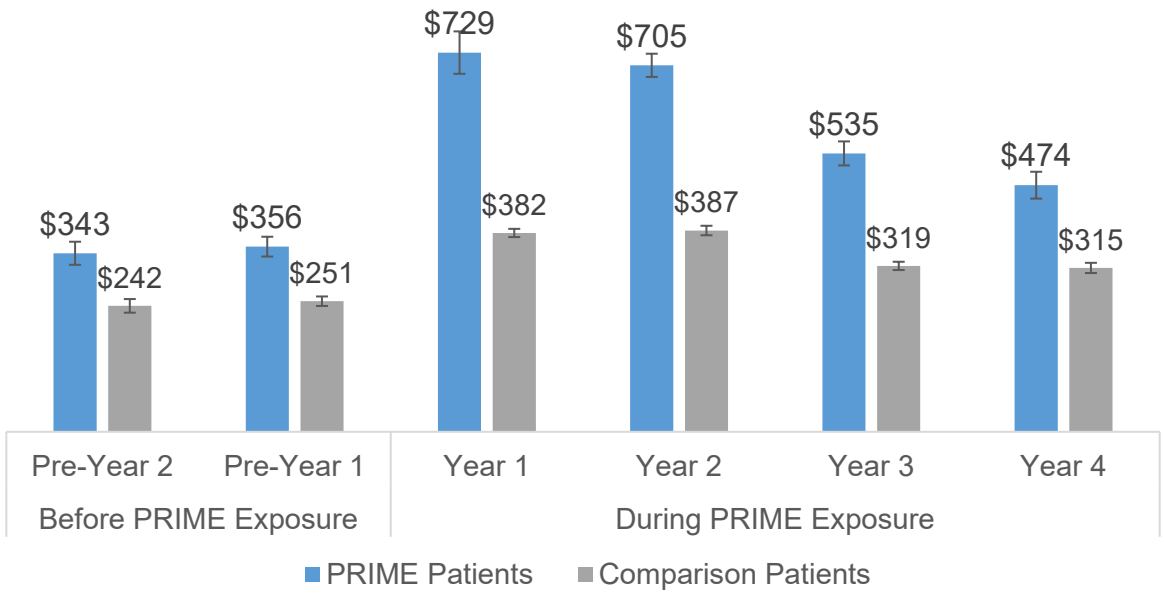
Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	$29*	-$16	-$45*	
Comparison Patients	$25*	-$11*	-$36*	-$9

Source: UCLA analysis of Medi-Cal data, July 2014 to June 2020.
*Notes: * Denotes p≤0.05, a statistically significant difference. Average Annual Change Before PRIME is calculated as: (Pre-Year 1 – Pre-Year 2). Average Annual Change During PRIME is calculated as: (Year 4 – Year 1) /3. Difference between changes is calculated as: (Average Annual Change During PRIME – Average Annual Change*

Before PRIME). Difference-in-difference is calculated as: (Difference between changes for PRIME patients – Difference between changes for comparison patients). The analyses exclude patients with a COVID-19 diagnosis.

The analysis of DMPH data showed a statistically significantly greater decrease in estimated emergency department payments for PRIME ($98) vs. comparison patients ($31) by $67 (DD) per beneficiary per year (Exhibit 78).

Exhibit 78: DMPH Estimated Emergency Department Payments per Beneficiary Per Year Before and During PRIME for PRIME and Comparison Patients



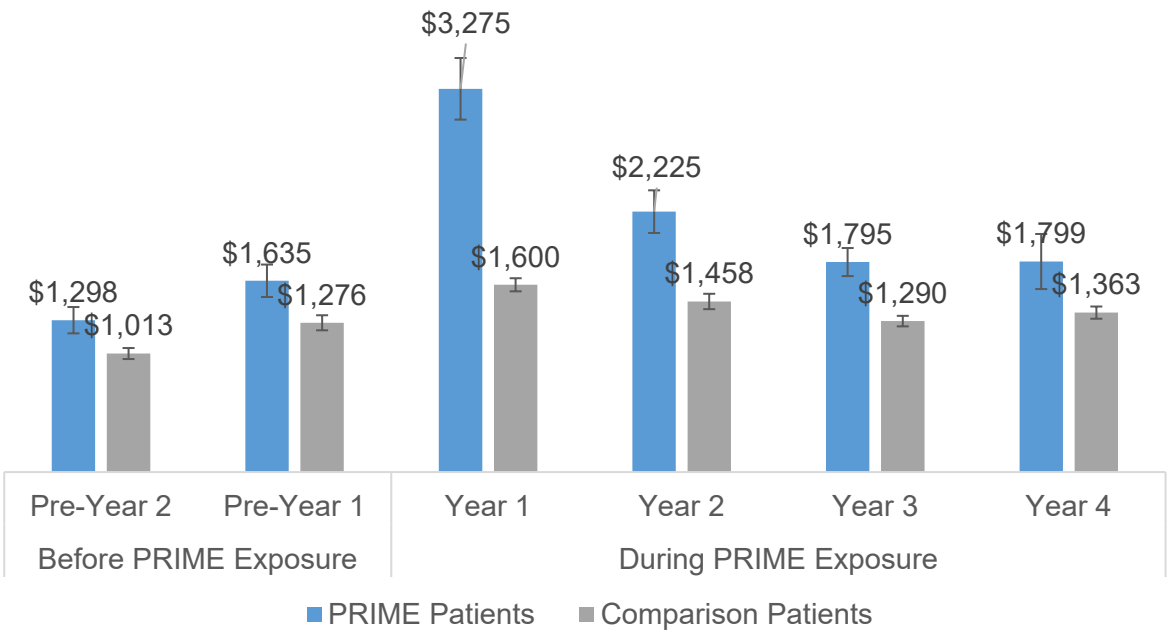
Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	$13	-$85*	-$98*	
Comparison Patients	$9	-$22*	-$31*	-$67*

Source and notes: See above.

Estimated Payments for Hospitalizations

Estimated payments for hospitalizations included all services that took place during a stay, excluding visits with primary care providers on the first or last day of the stay. The DPH analysis showed a statistically significantly greater decrease in estimated payments for PRIME ($829) vs. comparison patients ($342) by $487 (DD) per beneficiary per year (Exhibit 79).

Exhibit 79: DPH Estimated Payments for Hospitalizations per Beneficiary Per Year Before and During PRIME for PRIME and Comparison Patients

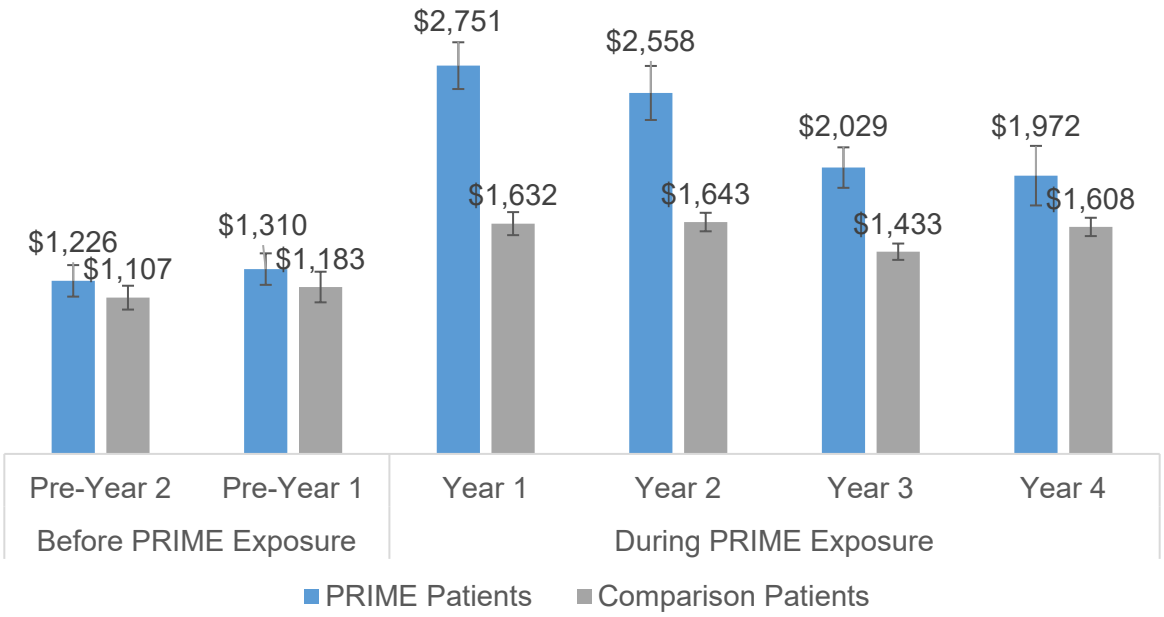


Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	$337*	-$492*	-$829*	
Comparison Patients	$263*	-$79*	-$342*	-$487*

Source: UCLA analysis of Medi-Cal data, July 2014 to June 2020.
*Notes: * Denotes p≤0.05, a statistically significant difference. Average Annual Change Before PRIME is calculated as: (Pre-Year 1 – Pre-Year 2). Average Annual Change During PRIME is calculated as: (Year 4 – Year 1) /3. Difference between changes is calculated as: (Average Annual Change During PRIME – Average Annual Change Before PRIME). Difference-in-difference is calculated as: (Difference between changes for PRIME patients – Difference between changes for comparison patients). The analyses exclude patients with a COVID-19 diagnosis.*

The DMPH analysis showed a statistically significantly greater decrease in estimated payments for PRIME ($344) vs. comparison patients ($84) by $260 (DD) per beneficiary per year (Exhibit 80).

Exhibit 80: DMPH Estimated Payments for Hospitalizations per Beneficiary Per Year Before and During PRIME for PRIME and Comparison Patients



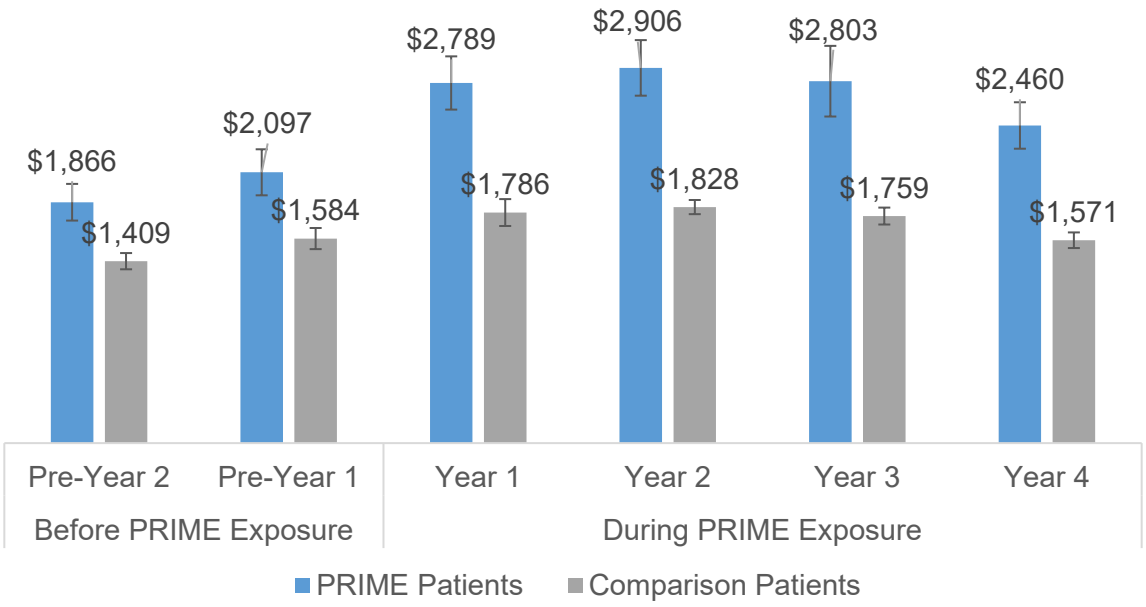
Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	$84	-$260*	-$344*	
Comparison Patients	$76	-$8	-$84	-$260*

Source and notes: See above.

Estimated Outpatient Pharmacy Payments

Estimated outpatient pharmacy payments included all prescription drug claims filled in an outpatient setting. The DPH data showed a statistically significant decrease for both PRIME ($341) and comparison ($247) patients per beneficiary per year and this decline was significantly greater for PRIME patients by $94 (DD) (Exhibit 81).

Exhibit 81: DPH Estimated Outpatient Pharmacy Payments per Beneficiary per Year Before and During PRIME for PRIME and Comparison Patients

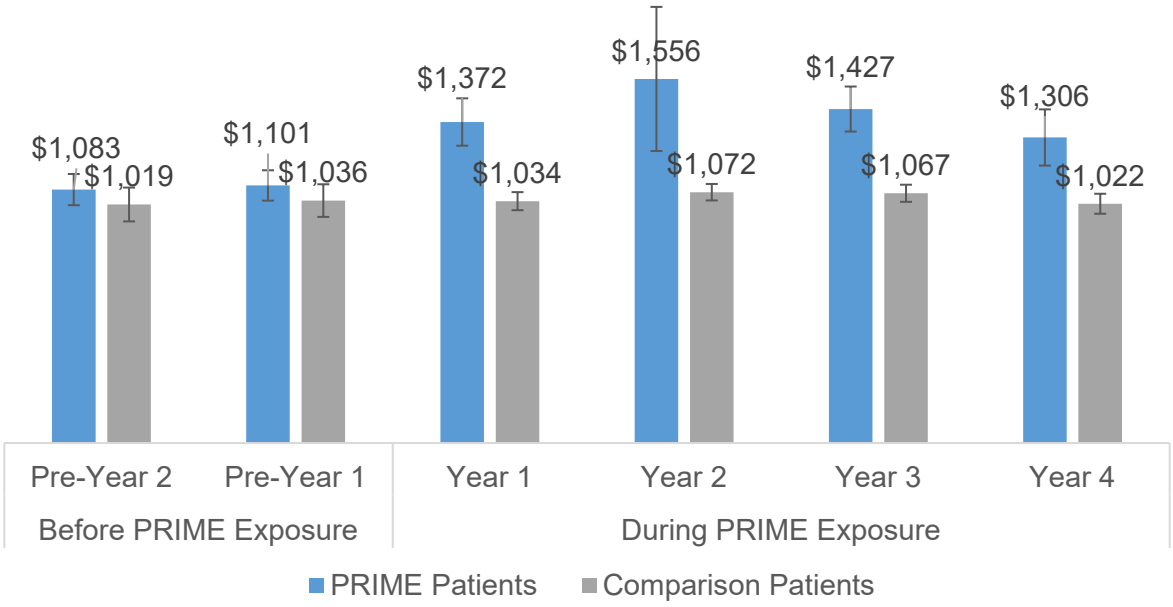


Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	$231*	-$110*	-$341*	
Comparison Patients	$175*	-$72*	-$247*	-$94*

Source: UCLA analysis of Medi-Cal data, July 2014 to June 2020.
*Notes: * Denotes p≤0.05, a statistically significant difference. Average Annual Change Before PRIME is calculated as: (Pre-Year 1 – Pre-Year 2). Average Annual Change During PRIME is calculated as: (Year 4 – Year 1) /3. Difference between changes is calculated as: (Average Annual Change During PRIME – Average Annual Change Before PRIME). Difference-in-difference is calculated as: (Difference between changes for PRIME patients – Difference between changes for comparison patients). The analyses exclude patients with a COVID-19 diagnosis.*

The DMPH analysis showed a decrease for PRIME ($40) and comparison ($21) patients, though neither change was statistically significant. Therefore, there was a greater but not a statistically significant decline ($19) for PRIME patients (Exhibit 82).

Exhibit 82: DMPH Estimated Outpatient Pharmacy Payments per Beneficiary Per Year Before and During PRIME for PRIME and Comparison Patients



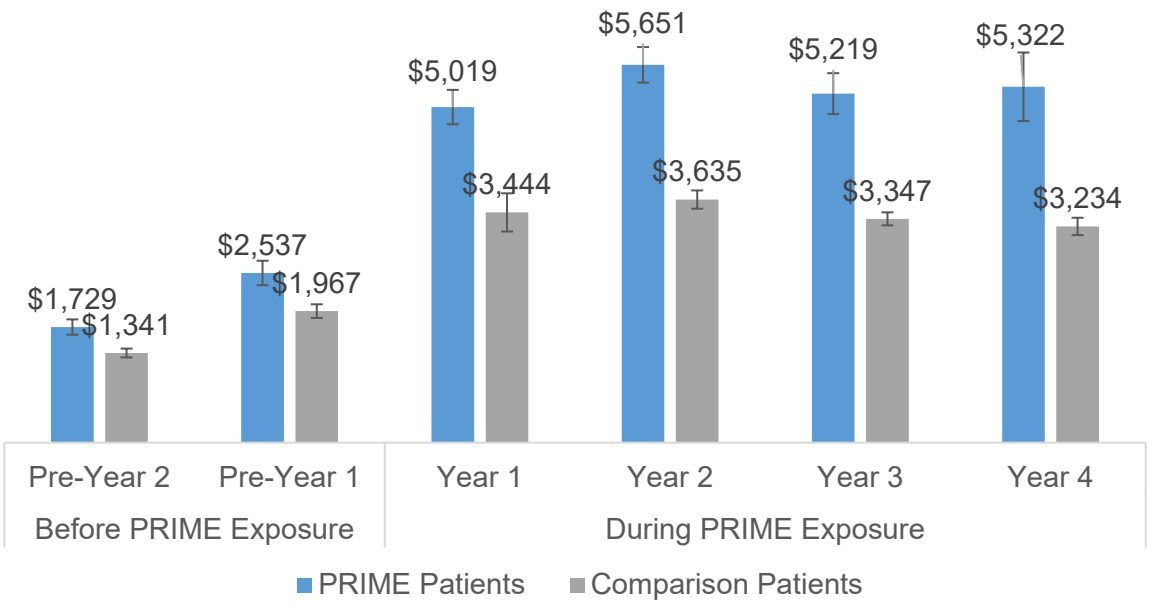
Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	$18	-$22	-$40	
Comparison Patients	$17	-$4	-$21	-$19

Source and notes above.

Estimated Payments for Outpatient Services

Outpatient services include all services provided on an outpatient basis, excluding prescription medications. Analysis of DPH data showed a statistically significant decrease for PRIME ($707) and comparison ($696) from before to during PRIME (Exhibit 83). This difference (DD) was greater, but not statistically significant, for PRIME patients.

Exhibit 83: DPH Estimated Outpatient Services Payments per Beneficiary Per Year Before and During PRIME for PRIME and Comparison Patients



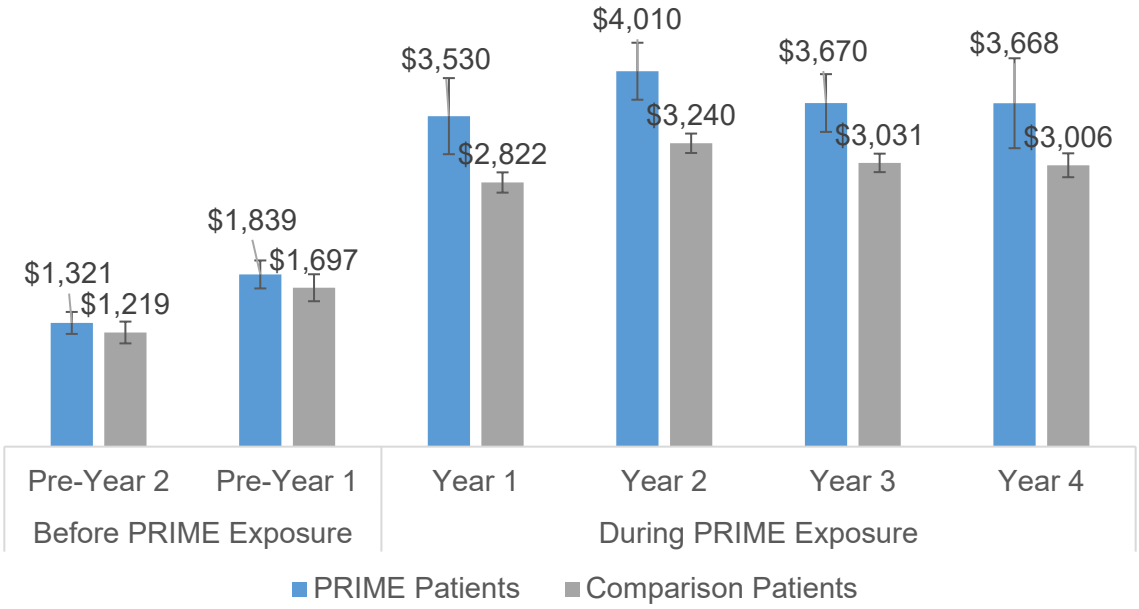
Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference -in- Difference (DD)
PRIME Patients	$808*	$101	-$707*	
Comparison Patients	$626*	-$70	-$696*	-$11

Source: UCLA analysis of Medi-Cal data, July 2014 to June 2020.
*Notes: * Denotes p≤0.05, a statistically significant difference. Average Annual Change Before PRIME is calculated as: (Pre-Year 1 – Pre-Year 2). Average Annual Change During PRIME is calculated as: (Year 4 – Year 1) /3. Difference between changes is calculated as: (Average Annual Change During PRIME – Average Annual Change Before PRIME). Difference-in-difference is calculated as: (Difference between changes*

for PRIME patients – Difference between changes for comparison patients). The analyses exclude patients with a COVID-19 diagnosis.

The analysis of DMPH data showed a similar pattern in estimated payments for outpatient services to DPH data and a greater, but not statistically significant decrease, for PRIME patients (Exhibit 84).

Exhibit 84: DMPH Estimated Outpatient Services Payments per Beneficiary Per Year Before and During PRIME for PRIME and Comparison Patients



Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes	Difference-in-Difference (DD)
PRIME Patients	$518*	$46	-$472*	
Comparison Patients	$478*	$61*	-$417*	-$55

Source and notes above.

Value-Based Payment under PRIME

This chapter provides an overview of how participating PRIME hospitals received payment for performance using standard metrics and their progress in adoption of alternative payment models (APMs). UCLA used data from DHCS and hospital annual reports to examine total PRIME payments, trends in achievement of pre-defined targets for metrics by hospitals, and details on adoption of APMs.

PRIME Payments to Participating Hospitals

PRIME was funded with a combination of federal, state, and local funds. PRIME included up to $7.5 billion in total funding, with $3.7 billion available from the federal government and the remaining from local funds provided by PRIME hospitals. Separately, the state and federal governments provided administrative oversight of the program. Of the total PRIME funding, 21.44% per year was projected for the first 3 demonstration years. Funding was planned to be phased down by 10 percent in DY 14 and an additional 15 percent in DY 15. Of the total available funds, DPHs were projected to receive 87.5% ($6.531 billion) and the DMPHs were projected to receive 12.5% ($933 million). The original PRIME allocations changed by the end of PRIME for a number of reasons, including discontinued participation of 3 DMPH hospitals and changes in project participation during the program.

PRIME included additional opportunities for entities to reclaim unclaimed funds. The Unearned Funds Pool, specific to each hospital system's unearned funds, was available if a performance target was not met and the hospital system was unable to fully claim funds. The hospital had this second opportunity to earn up to 90% of the unearned funds by over-performing on other metrics. If a hospital did not earn these funds, it had a third opportunity in the following DY to earn funds from this pool by over-performing on the same metric it did not meet the performance target in the prior DY. Finally, hospitals had the final opportunity to claim remaining funds from the High Performance Pools, which were separate for DPMHs and DPHs, and available for hospitals that achieved ≥90th percentile benchmark performance or 20% gap closure in any of the 19 eligible metrics in the six DPH-required PRIME projects.

In DY 15, CMS approved additional payment flexibilities due to the COVID-19 pandemic public health emergency (COVID-19 Flexibilities for PRIME CMS Approval Letter). As a result, hospitals could receive payments on reported metrics equivalent to their performance in DY 14 or the DY 14 statewide average performance for PRIME hospitals, whichever was higher. Additionally, hospitals were eligible to claim the remaining unearned- funds from DYs 14 and 15 based on their over-performance in DY

14. Hospitals were also eligible to claim DY 15 high performance pool funds based on their DY 14 distribution of the high performance pool.

The analyses of DHCS payments to PRIME hospitals showed that hospitals collectively received nearly all of the total PRIME allocation by the end of the program, leaving less than 0.1% that remained unearned (Exhibit 85). The majority of the payments were to DPHs ($6.531 billion) and the remaining payments were to DMPHs ($927 million). DPHs received 95.01% of their allocations through metric performance and the remaining 4.99% from unearned and high-performance pool funds. DMPHs earned 87.12% of their allocations from metric performance and most of the remaining allocation through supplemental funds.

Exhibit 85: PRIME Payments to DPHs and DMPHs

Hospital Type	Total Allocation	Percent of allocation earned for metric performance*	Percent of allocation earned from supplemental funds	Percent of allocation not earned
DPH	$ 6,531,000,000	95.01%	4.99%	0.00%
DMPH	$ 933,000,000	87.12%	12.24%	0.64%
Total	$ 7,464,000,000	94.03%	5.89%	0.08%

Source: UCLA analysis of DHCS payments to PRIME hospitals, May 2021.
Note: Supplemental funds include unearned fund and the high performance pool funds.
** The following section contains additional detail about these payments.*

Trends in Project Metric Achievement Values

PRIME payments to hospitals were primarily based on their successful achievement of pre-defined targets per metric. DHCS determined payment based on achievement values (AV) for each performance metric (see Interim Report Payment Methodology for more information). Metrics were categorized as pay-for-reporting (P4R) for the hospitals' first reporting year, then many metrics transitioned in later years to pay-for-performance (P4P). For the purposes of this evaluation, UCLA categorized metrics as either process (indicators of better care) or outcome (indicators of better health).

P4R metrics received an AV of 0 (not met) or 1 (fully met). P4P payments were dependent on the level of achievement compared to performance targets using AVs ranging from 0 (not met), 0.5, 0.75, to 1 (fully met). Achievement targets were based on established 25th and 90th percentile benchmarks for metrics, if available. Hospitals were paid based on their progress in reaching the 25th percentile, closing the 10% gap

towards benchmarks or maintaining the 90th percentile, depending on their baseline performance. In DYs 11 and 12, DPHs and DMPHs were on two separate payment tracks. Both hospital types were eligible for 25% of DY 11 funding for submission of the 5-year project plans. DPHs could earn the remainder for submission of data, whereas DMPHs could earn the remainder for completion of infrastructure building process measures. For DMPHs' DY 12 payments, up to 40% of funds were available for achieving infrastructure building metrics and the remaining 60% was available based on submission of data.

Payment amounts for metrics differed by hospital. If a hospital's denominator for a metric did not have a minimum of 30 patients, that metric's AV was excluded because the metric data was considered statistically unstable. In these cases, funding for these metrics was redistributed to all other metrics in the same project that had statistically stable rates.

In the Preliminary Summative Evaluation Report , UCLA assessed metric achievement by calculating the average achievement value by Metric type (P4R vs. P4P and process vs. outcome) from DY 11 to DY 14. All metrics that were partially or fully achieved (a value greater than 0) were considered as achieved in this analyses because few metrics had an achievement value between 0 and 1. Detailed methods were described in the Interim Report Achievement Value Analysis: Methodology and Metric-Specific Averages, by Hospital Type. UCLA reported on the total number of metrics by type including P4R vs. P4P and process vs. outcome metrics and examined trends in AVs from DY 11 to DY 14. Data showed a total of 103 metrics across 18 projects were reported by hospitals at any time during the first 4 years of the program and the number of metrics varied by year from 96 (DY 11), 98 (DY 12), 95 (DY 13), and 89 (DY 14). Changes in the number of metrics included retiring metrics that were no longer considered representative or recommended, and replacement or addition of metrics over time as the projects progressed and specific tasks were accomplished.

Of the 103 metrics, 79% measured the care processes that hospitals were expected to follow and 21% measured the outcomes of care provided by hospitals. The great majority of metrics (82%) measured hospital performance under Domain 1 (41%) and Domain 2 (41%) projects. All 96 metrics in DY 11 were pay for reporting (P4R), but the proportion of P4R metrics decreased to 64% (DY 12), 36% (DY 13), and 12% (DY 14) as metrics transitioned from P4R to pay for performance P4P. All metrics were P4R during DY 11 for DPHs and DY 12 for DMPHs (except 2 DMPHs that reported data in DY 11), reflecting the different start times for data reporting for each group of hospitals.

The average AVs for P4P Outcome metrics decreased over time and was somewhat lower than P4P Process measures. P4P Outcome metric average AVs among DPHs ranged from 0.83 in DY 12 to 0.76 in DY 14; DMPHs ranged from 0.62 in DY 12 to 0.60 in DY 14. For P4P Process metrics, DPHs were at 0.92 in all years; DMPHs ranged from 0.71 in DY 12 to 0.77 in DY 14. These findings corresponded to the gradually and increasingly challenging target rates that may have resulted in lower AVs in later years as well as a shift in metrics from P4R to P4P.

Trends in AVs were not calculated for DY 15 due to changes in payment methodologies during the COVID-19 public health emergency.

Progress in Adoption of Alternative Payment Models (APMs)

A major goal of PRIME was to escalate the capacity of DPHs to adopt and operate under APMs, which require accountability for quality and costs of care. This approach included ensuring that all DPHs had at least one contract with a MCP and an increase the proportion of assigned enrollees under MCPs who are subject to other APMs. DPH contracts with MCPs could include specific services such as primary care only or primary care and some specialty care only, or could be global (primary, specialty, ancillary and/or hospital care) and all inclusive (STCs Attachment R). In addition, DPH contracts with MPCs could include value-based payment (VBP) models that qualify as APMs defined by The Health Care Payment Learning & Action Network in Categories 3A (upside gainsharing) and 3B (upside gainsharing and downside risk) and Category 4A (condition specific population-based payments).

All 17 DPHs reported at least one type of STC approved capitation contract or other APMs in 2020 (Data not shown). Overall there was an 8% increase in the number of patients who were covered by any type of APM from 2018 to 2020 and 13% increase from 2019 to 2020. These rates reflected notable underlying variation by hospital, differences in types of APMs included, and changes in reporting methodology over time.

Exhibit 86: Number of Unique Assigned Lives in APM Arrangements, by Calendar Year

Year	Number Of Unique Assigned Lives In APM Arrangements	Percentage change between 2020 and prior years
2018	882,888	8%
2019	846,523	13%
2020	954,215	--

Source: UCLA analysis of APM Tracker submitted to DHCS.
Note: Hospitals reported the total number of assigned lives, not limited to those who were PRIME eligible. Data was reported by calendar year not DY.

DPHs reported adoption of three tiers of STC approved capitation models (Exhibit 87). The most common form of capitation contract in 2020 was partial or primary care only (11), followed with 2 that had primary and some specialty care and 4 that had global contracts. In addition to these capitation models, 4 DPHs reported a total of 9 other APMs, including 6 contracts based on 4A: Bundled payments with full risk APM.

Exhibit 87: Number of APM Contracts and Assigned Enrollees, by Calendar Year

Contract type				
	Contracts	Assigned		
Partial (primary care only)	8	245,438	11	357,533
Partial-plus (primary care and some specialty care)	3	23,282	2	3,624
Global (primary, specialty, ancillary and/or hospital care)	4	343,900	4	349,406
Total	**15**	**612,620**	**17**	**710,563**
3A: Total cost of care shared savings (upside only)	1	35,964	--	--
3B: Shared savings/risk tied to cost of care (upside/downside)	1	36,222	1	50,000
4A: Bundled payments with full risk	5	0	6	0
4A: Condition-specific capitated payments	1	92,483	1	97,518
4A: Episode-based payments with full risk	1	152,610	1	149,501
Total	**9**	**317,279**	**9**	**297,019**

Source: UCLA analysis of APM Tracker submitted to DHCS.
Note: Some hospitals had more than one APM arrangement in the same year or more than one STC approved capitation model contract. Data was reported by calendar year not DY.

Achievement of Overarching Evaluation Goals

Goal 1. Increase the capabilities of participating PRIME entities to furnish patient-centered, data-driven, team-based care to Medi-Cal beneficiaries, especially those who are high utilizers or at risk of becoming high utilizers.

Findings

The changes in capabilities of hospitals to provide patient-centered, data-driven, and team-based care overall and for Medi-Cal beneficiaries at risk of or already using a high volume of services was described in detail in the PRIME Interim Evaluation Report. PRIME was specifically designed to promote capabilities identified in Goal 1. Of the 18 PRIME projects, 6 were required for DPHs and 3 focused on outpatient care delivery transformation that included developing the infrastructure and care processes to provide patient-centered, data-driven, and team-based care. The other 3 required projects focused on populations at risk of or already using a high volume of services and were implemented by the majority of PRIME hospitals.

The evaluation provided significant evidence that participating hospitals set out to address Goal 1 and conducted related activities. Capabilities for data driven care depended on health information technology and electronic health records. Patient-centered and team-based care are other essential principals of outpatient care delivery redesign and all three are emphasized in models of care such as the PCMH. During PRIME, this model was adopted by 17 of 23 hospitals participating in Project 1.2 Ambulatory Care Redesign. Accomplishing Goal 1 required other fundamental changes in hospital infrastructure and care delivery processes. A broad examination of implementation by hospitals in the Interim Report indicated system-wide advances in developing administrative and personnel capacity; improving EHR content and functionality; and expanding use of tools such as registries and telehealth to manage patients and increase access. While there were variations in project-specific scope and infrastructure development activities undertaken, hospitals made advances through preliminary assessment of the status quo, adoption of evidence-based models, development of decision-support tools and referral protocols, increasing staffing capacity, IT solutions, development of comprehensive multi-disciplinary teams, and development of population management tools. In the interim and within the first two years of PRIME implementation, hospitals had succeeded in establishing this

infrastructure to varying degrees depending on the specific activity. For example, most hospitals significantly restructured administrative teams and several developed partnerships with external providers to prepare for PRIME implementation and reported building on synergies with other ongoing initiatives. Fewer implemented major changes in IT capacity during PRIME.

Specific data on capacity building for data-driven care indicated that some hospitals lacked enterprise-wide EHRs prior to PRIME, which was a barrier in use of data. In addition, some hospitals reported limitations in EHR functionality that allowed use of data in care delivery and population management. During PRIME, many were able to improve such functionality.

Project 1.2 Ambulatory Care Redesign was implemented by all DPHs and 5 DMPHs, which was specifically focused on "patient-centered, data-driven, and team-based care." Among participating hospitals, 17 undertook efforts to receive PCMH recognition or certification, 17 undertook implementation of new technologies to promote data driven care, and 18 reported improving staff engagement in team-based care.

The interim indicated that 19 DPHs and 16 DMPHs reported organizing providers to deliver team-based care. Under Project 1.2 Ambulatory Care Redesign, hospitals provided details of how they engaged primary care providers in care teams, including increasing communication and interaction, providing support for improving workflows, providing training, and scheduling time for regular meetings and daily huddles. Team-based care was also emphasized in Project 1.3 Specialty Care Redesign. Implemented by all DPHs and 2 DMPHs, 13 hospitals implemented models to deliver team-based care using similar approaches as reported for primary care providers. Team-based care was also promoted under Project 2.2 Care Transitions by 23 hospitals, under Project 2.5 Transitions to Integrated Care by 1 hospital, and under Project 2.6 Chronic Non-Malignant Pain Management by 8 hospitals.

In the Preliminary Summative Evaluation Report , hospitals rated their success in achieving the goals of Project 1.2 Ambulatory care redesign. DPHs rated their effort as 7.9 (out of 10) and DMPH non-CAHs reported it as 9.0 while DMPH CAHs reported it as 8.0. Nineteen hospitals reported 31 unfinished activities, though 23 of these were scheduled to be completed following PRIME regardless of further funding. Examples of activities that remained unfinished included developing patient registries and obtaining PCMH certification.

The above findings provide evidence of achievement of Goal 1 by PRIME hospitals. Findings indicated that many PRIME hospitals obtained patient-centered medical home

recognition, established enterprise-wide EHRs and increasing capabilities for data-driven care data-driven, and established teams to deliver team-based care. These achievements were essential elements of primary and specialty care redesign and were indicative of improvements in the quality of care (better care).

Goal 2. Improve the capacity of participating PRIME entities to provide point of care services, complex care management, and population health management by strengthening their data analytic capacity to drive system-level improvement and culturally competent care.

Findings

Improving capacity of hospitals to better manage patients hinged on strengthening their data analytic capacity. This effort was implicitly dependent on having highly functional EHRs and the ability to share information with other organizations.

In the PRIME Interim Evaluation Report, many hospitals reported using a combination of EHRs in outpatient, ED, and hospital settings and occasional need to access data from older EHRs no longer in use. Most hospitals were working towards a consolidated EHR that would increase the ability of the hospital to conduct the data analytics needed for better managing patients in all settings and for various purposes. Despite these fundamental challenges, the majority of hospitals reported that their existing EHRs supported point of care delivery (47), patient engagement (45), care coordination (35), and population health management (28). In addition, all hospitals reported the use of up to 16 condition-specific registries for population health management with the most common registries used being the ones for diabetes, tobacco use, and hypertension. Most hospitals (27) participated in Health Information Exchanges to facilitate the exchange of data between organizations, despite challenges in system interoperability and resources needed to join them.

Establishing data analytic systems based on EHRs and registries was a core component of multiple projects and selected by 19 hospitals for Project 2.3 Complex Care Management for High Risk Medical Populations, 1 hospital for Project 2.5 Transition to Integrated Care: Post Incarceration, 12 hospitals for Project 2.7 Comprehensive Advanced Illness Planning and Care, 6 hospitals for Project 3.3 Resource Stewardship: Therapies Involving High Cost Pharmaceuticals, and 5 hospitals for Project 3.4. Under Project 2.7 Resource Stewardship: Blood Products, 8 hospitals reported using data analytics to capture information related to advanced illness planning and care.

The increased data capacity to collect REAL/SO/GI data was expected to promote delivery of culturally competent care. Available data indicated that most hospitals collected granular REAL/SO/GI data (40 of 52), trained staff to gather complete and

accurate REAL/SO/GI data (41), and captured REAL/SO/GI data through the EHR/EMR (39). A smaller number also stratified (29) and validated (30) the data and created dashboards (16). Hospitals elaborated on the significant challenges of collecting REAL/SO/GI data due to sensitivity of the questions and resource intensive changes to EHRs.

In addition to promoting data analytic capacity, hospitals reported on how they improved management of their patients. Overall, 20 hospitals developed and improved interventions targeting patients by risk level for population management. Hospitals most frequently used risk stratification for behavioral health conditions, diabetes, and other chronic conditions; incorporated disease management into provider team workflows; used individual treatment plans; and used multiple modes of care delivery including calls, group visits and home visits.

In the Preliminary Summative Evaluation Report , hospitals reported that unfinished but continuing activities for Projects 1.6, 2.2, and 2.7 included development of EHR capabilities for data analytics to support population health management.

The above findings provided substantial evidence of achievement of Goal 2 by PRIME hospitals. Findings indicated that many PRIME hospitals increased the functionality of their EHRs under PRIME and data sharing capacity with external organizations, which were crucial criteria for delivery of point of care, complex care management, and population health management. Hospitals also promote their ability to deliver culturally competent care by collection of REAL/SO/GI data and including it in dashboards. These achievements were indicative of improvements in the ability to provide higher quality of care (better care).

Goal 3. Improve population health and health outcomes for Medi-Cal beneficiaries served by participating PRIME entities, as evidenced by the achievement of performance goals related to clinical improvements, effective preventive interventions, and improved patient experience metrics.

Findings

PRIME required improvements in population health and health outcomes demonstrated by performance in 103 metrics, which included several metric sub-rates that were treated as individual metrics and given individual performance targets. Most (74) metrics were standardized and vetted by national organizations and 29 were innovative metrics as of DY 15. Most metrics started as P4R without a target value for performance and most were transitioned to P4P by the end requiring achievement of targets. Targets for P4P measures were increased over time for continued and greater improvements in outcomes during PRIME. Several innovative metrics were modified during PRIME, frequently for increased accuracy. During PRIME, hospitals reported on metric achievement rates (ARs) reflecting actual rates for each metric as well as achievement values (AVs) reflecting whether the annual predetermined targets were achieved.

UCLA assessed changes in ARs and AVs; detailed AR results were reported in Project Specific chapters (Appendix G. Project-Specific Trends in Metric Performance) and AV results in the Interim Evaluation Report and in Exhibit 88. For an overview, UCLA examined how many ARs had changed in the intended direction during PRIME and average AVs in DY 14 for DPHs and DMPHs. Note that change in ARs were at times restricted by trend breaks that led to a shorter observation period and excluded metrics based on denominators less than 30. Exhibit 88 shows a high-level overview of aggregate changes in ARs and average AVs in DY 14 overall and by PRIME projects. ARs included 4 metrics that had two trending breaks, 6 metrics that had 3 sub-rates, and 2 metrics that had 2 sub-rates. Among DPHs, data indicated that 107 of 115 (93%) metrics including related sub-rates and additional trend breaks moved in the intended direction through DY 14. This corresponded to an average DPH AV of 0.88 in DY 14 indicating that most hospitals attained their targets for the great majority of metrics in that year. These data differed by project. For example, in Project 1.1 DPHs reported 9 metrics with measurable trends, all of which had ARs changing in the intended direction and an average AV of 0.95 indicating that hospitals reached their targets for the great majority of these metrics. Among DMPHs, 77 of 93 (82%) metrics had ARs that

changed in the right direction with an average AV of 0.73 in DY 14. There were also differences in these data by project.

Exhibit 88: DPH and DMPH-reported achievement rates (ARs) and achievement values (AVs) in DY 14

Project	DPH		DMPH	
Project	**Number of metrics with achievement rate in the intended direction^**	**Average AV for P4P Metrics in DY 14**	**Number of metrics with achievement rate in the intended direction^**	**Average AV for P4P Metrics in DY 14**
1.1*	9/9	0.95	6/7	1.00
1.2+	13/13	0.86	12/13	0.77
1.3	7/7	0.76	5/7	0.67
1.4*	5/5	0.83	4/5	0.77
1.5+	5/5	0.94	4/4	0.74
1.6	5/5	0.95	5/5	0.53
1.7*+	6/6	0.72	5/5	0.63
2.1**	9/10	0.91	5/10	0.56
2.2	4/5	0.84	5/5	0.69
2.3	4/4	0.98	3/3	0.89
2.4	8/8	0.83	--	--
2.5	5/5	0.88	--	--
2.6	5/5	0.95	5/5	1.00
2.7	5/5	0.94	5/5	0.75
3.1+	4/5	0.81	3/3	0.46
3.2**	3/5	0.97	5/5	0.86
3.3*	7/8	0.69	4/6	1.00
3.4	3/5	1.00	1/5	0.44
Total	**107/115**	**0.88**	**77/93**	**0.73**

Source: UCLA analysis of the hospital-reported achievement rates and achievement values.

*Notes: ^ARs are reported for metrics implemented for more than one year. * Metrics 1.1.7, 1.4.1, 1.7.3, 3.3.1, 3.3.3, and 3.3.4 include 3 sub-rates each. ** Metrics 2.1.6 and 3.2.4 include 2 sub-rates each. + Metrics 1.2.7.i, 1.5.2.i, 1.7.1, and 3.1.1 had a trend break in DY 12 therefore two separate trends were measured. -- indicates no trend was measured because DMPHs did not participate in Project 2.4 and 2 DMPHs participated in Project 2.5 for one year. Differences in the total number of metrics between*

participating DPH and DMPHs is because some DMPHs did not report data for at least 2 years to calculate a trend.

Using Medi-Cal data, a quasi-experimental approach, and difference-in-difference (DD) methodology, UCLA conducted additional analyses comparing trends in metric performance before and during PRIME for PRIME and comparison patients (Trends in Overarching Utilization Measures). These analyses differed fundamentally from ARs reported by hospitals in several ways. ARs for DPHs included patients with all forms of health insurance while the DD methodology was primarily based on Medi-Cal beneficiary data. ARs for DMPHs only included Medi-Cal patients. In addition, Medi-Cal data did not have a sufficient lookback period or available data were sparse or more limited than the information available in medical records at participating hospitals for some metrics. Also, metric definitions changed over time but UCLA used the DY 15 year-end metric definitions to create standard metrics for all DYs.

These and other limitations including differences in patients that received care at PRIME hospitals and comparison patients who received care from other providers and may have impacted the DD findings. PRIME hospitals serve proportionally more Medi-Cal beneficiaries than other providers and have a higher case mix, and are frequently larger institutions with more beds and sites such as hospitals, primary care, and specialty care facilities (see Interim Report Overview of PRIME Implementation: Participating Hospital Characteristics). Because the Medi-Cal beneficiaries were concentrated in DPHs and DMPHs, the comparison patients were frequently patients of smaller private hospitals or community-based providers. The propensity score matching methodology alleviated these differences to some degree but not completely (see Appendix C. Difference-in-Difference (DD) Data and Methodology).

Other data limitations included different observation periods for PRIME cohorts. For example, patients attributed to PRIME in DY 12 could be observed for four years but patients first attributed to PRIME in later years had shorter observation periods of three or two years. Additional information about this method is in Appendix C. Difference-in-Difference (DD) Data and Methodology.

The detailed DD analyses are presented in Appendix C. Difference-in-Difference (DD) Data and Methodology. The following exhibits provide a high-level overview of these findings. Exhibits also include high-level information on underlying differences between PRIME specifications and how these metrics were created. Detailed information on these differences can be found in PRIME Metric Feasibility Analysis.

Of the 12 metrics constructed using Medi-Cal data for DPHs, 7 metrics changed in the intended direction during PRIME (Exhibit 89). Among these, metrics 1.2.3.c. NQF 0034: Colorectal Cancer Screening, 1.2.8. AHRQ PQI #90, 1.6.2. Breast Cancer Screening, 1.6.3. Cervical Cancer Screening, 2.1.5 Cesarean Birth, and 3.1.1 Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis also had a trend in the intended direction from before to during PRIME. Metric 1.6.2. Breast Cancer Screening showed a greater increase in the intended direction for PRIME vs. comparison patients by 3.28%.

Exhibit 89: DPH Results for PRIME Specified Metrics Using Medi-Cal Data

Metric	Trend during PRIME changed significantly in the intended direction?	Trend from before to during PRIME changed significantly in the intended direction?	Trend for PRIME patients was better than comparison patients (DD)?
DPH			
1.2.3.c. NQF 0034: Colorectal Cancer Screening^	Y	Y	NS
1.2.8. AHRQ PQI #90	Y	Y	NS
1.3.2 and 2.2.1 Plan All-Cause Readmissions	N	NS	NS
1.4.2. Annual Monitoring for Patients on Persistent Medications	N	N	NS
1.4.3. INR Monitoring for Individuals on Warfarin	NS	NS	NS
1.6.2. Breast Cancer Screening^	Y	Y	Y (3.28%)
1.6.3. Cervical Cancer Screening^	Y	Y	NS

Metric	Trend during PRIME changed significantly in the intended direction?	Trend from before to during PRIME changed significantly in the intended direction?	Trend for PRIME patients was better than comparison patients (DD)?
DPH			
2.1.5 Cesarean Birth^	Y	Y	NS
2.1.6 NQF 1517: Prenatal Care	Y	NS	NS
2.1.7. Severe Maternal Morbidity (SMM) per 100 Women with Obstetric Hemorrhage^	NS	NS	NS
2.6.5 Treatment of Chronic Non-Malignant Pain with Multi-Modal Therapy	N	NS	N (-1.57%)
3.1.1 Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis	Y	Y	NS

Source: UCLA analysis of Medi-Cal data, July 2014 to June 2020.
Notes: ^ indicates the metric has been modified from the PRIME specifications. Green Y indicates trend is statistically significant in the intended direction. Red N indicates trend is statistically significant in the unintended direction. Gray NS indicates not statistically significant.

Exhibit 90 shows that 6 metrics changed in the intended direction during PRIME among DMPHs. Metrics 1.2.3.c Colorectal Cancer Screening, 1.2.8. AHRQ PQI #90, 1.6.3 Cervical Cancer Screening, 1.6.2. Breast Cancer Screening, and 2.1.5 Cesarean Birth had a trend in the intended direction from before to during PRIME. In addition, 1.2.8. AHRQ PQI #90 (-0.22%), 1.3.2 and 2.2.1 Plan All-Cause Readmissions (-2.37%), and 1.6.3 Cervical Cancer Screening (2.00%) showed a greater trend in the intended direction for PRIME vs. comparison patients.

Exhibit 90: DMPH Results for PRIME Specified Metrics Using Medi-Cal Data

Metric	Trend during PRIME changed significantly in the intended direction?	Trend from before to during PRIME changed significantly in the intended direction?	Trend for PRIME patients was better than comparison patients (DD)?
DMPH			
1.2.3.c. NQF 0034: Colorectal Cancer Screening^	Y	Y	NS
1.2.8. AHRQ PQI #90	Y	Y	Y (-0.22%)
1.3.2 and 2.2.1 Plan All-Cause Readmissions	NS	NS	Y (-2.37%)
1.4.2. Annual Monitoring for Patients on Persistent Medications	N	N	NS
1.6.2. Breast Cancer Screening^	Y	Y	NS
1.6.3. Cervical Cancer Screening^	Y	Y	Y (2.00%)
2.1.5 Cesarean Birth^	Y	Y	NS
2.1.6 NQF 1517: Prenatal Care	NS	N	NS
2.6.5 Treatment of Chronic Non-Malignant Pain with Multi-Modal Therapy	NS	NS	NS
3.1.1 Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis	Y	NS	NS

Source: UCLA analysis of Medi-Cal data, July 2014 to June 2020.
Notes: ^ indicates the metric has been modified from the PRIME specifications. Green Y indicates trend is statistically significant in the intended direction. Red N indicates trend is statistically significant in the unintended direction. Gray NS indicates not statistically significant.

Exhibit 91 shows findings for 3 PRIME specified project metrics using California Hospital Discharge data in order to show changes in trends for discharges with all types of insurance between participating and comparison hospitals. The data showed that 2.1.5 Cesarean Birth rates decreased significantly as intended both during PRIME and from before to during PRIME for DPHs and DMPHs. However, these trends were not statistically different between PRIME and comparison hospitals.

Exhibit 91: Results for PRIME Specified Metrics Using California Discharge Data for All Types of Insurance

Metric	Trend during PRIME changed significantly in the intended direction?	Trend from before to during PRIME changed significantly in the intended direction?	Trend for PRIME patients was better than comparison patients (DD)?
DPH			
1.2.8. AHRQ PQI #90	NS	NS	NS
1.3.2 and 2.2.1 Plan All-Cause Readmissions	NS	NS	NS
2.1.5 Cesarean Birth^	Y	Y	NS
DMPH			
1.2.8. AHRQ PQI #90	NS	NS	NS
1.3.2 and 2.2.1 Plan All-Cause Readmissions	NS	NS	NS
2.1.5 Cesarean Birth^	Y	Y	NS

Source: UCLA analysis of California Hospital Discharge data (HCAI), July 2014 to June 2019.
Notes: ^ indicates the metric has been modified from the PRIME specifications. Green Y indicates trend is statistically significant in the intended direction. Red N indicates trend is statistically significant in the unintended direction. Gray NS indicates not statistically significant.

Exhibit 92 shows results of additional (but not PRIME-specified) measures designed to provide more information on specific project implementation. Data for DPHs showed that the average number of mental health visits among all beneficiaries, relevant to Project 1.1, increased during PRIME, and this increase was higher among PRIME vs. comparison patients (0.06 visits per person per year). Data also showed that trends for outpatient follow-up visit rates within 30 days of hospitalizations relevant to Project 2.2 did not change during PRIME but the trend was higher for PRIME vs. comparison patients (1.76%). These trends for DMPHs did not change in the intended direction.

Exhibit 92: Project Specific Additional Measures Using Medi-Cal Data

Measure	Trend during PRIME changed significantly in the intended direction?	Trend from before to during PRIME changed significantly in the intended direction?	Trend for PRIME patients was better than comparison patients (DD)?
DPH			
1.1. Average Number of Mental Health Visits Per Beneficiary, Per Year	Y	NS	Y (0.06)
1.1. Average Number of Substance Use Disorder Treatment Visits Per Beneficiary, Per Year	N	N	N (-0.08)
2.2 Outpatient Follow-Up Visit Rates within 30 Days of Hospitalizations	NS	NS	Y (1.76%)
DMPH			
1.1. Average Number of Mental Health Visits Per Beneficiary, Per Year	NS	NS	NS
1.1. Average Number of Substance Use Disorder Treatment Visits Per Beneficiary, Per Year	N	N	N (-0.14)
2.2 Outpatient Follow-Up Visit Rates within 30 Days of Hospitalizations	N	NS	N (-2.11%)

Source: UCLA analysis of Medi-Cal data, July 2014 to June 2020.
Notes: Green Y indicates trend is statistically significant in the intended direction. Red N indicates trend is statistically significant in the unintended direction. Gray NS indicates not statistically significant.

Exhibit 93 shows results of overall utilization measures for DPHs and DMPHs and whether the trends change in the hypothesized intended direction. DPH data showed that the percentage of enrollees with ED visits and hospitalizations decreased during PRIME, and this decline was greater for PRIME patients than it was for the comparison patients (-1.4% and -0.97, respectively). The same trends were observed for number of ED visits (-6.32) and hospitalizations (-2.33). In contrast, the trends in number of primary care visits decreased more for PRIME patients versus the comparison patients, and trends for specialty care services was similar between the two groups. Among DMPHs the number of (-15.36) and percentage of enrollees with ED visits (-3.42%) also decreased during PRIME more significantly for PRIME patients than comparison patients. However, while the trends in percentage of enrollees with hospitalizations showed a greater decline for PRIME patients than comparison patients (-1.07%), the trends in number of hospitalizations did not change. In addition, the number of DMPH primary care visits increased during PRIME but the trends were not different between the PRIME and comparison patients. The trends for specialty care services decreased more for PRIME patients than the comparison patients.

Exhibit 93: Overarching Utilization Measures Using Medi-Cal Data

Metric	Trend during PRIME changed significantly in the intended direction?	Trend from before to during PRIME changed significantly in the intended direction?	Trend for PRIME patients was similar or better than comparison patients (DD)?
DPH			
Percentage of Enrollees with Any ED Visits	Y	Y	Y (-1.40%)
ED Visits per 1,000 Beneficiaries per Year	Y	Y	Y (-6.32)
Percentage of Enrollees with Any Hospitalizations	Y	Y	Y (-0.97%)
Hospitalizations per 1,000 Beneficiaries per Year	Y	Y	Y (-2.33)
Primary Care Visits per 1,000 Beneficiaries per Year	N	N	N (-6.68)

Metric	Trend during PRIME changed significantly in the intended direction?	Trend from before to during PRIME changed significantly in the intended direction?	Trend for PRIME patients was similar or better than comparison patients (DD)?
Specialty Care Services per 1,000 Beneficiaries per Year	N	N	NS
DMPH			
Percentage of Enrollees with Any ED Visits	Y	Y	Y (-3.42%)
ED Visits per 1,000 Beneficiaries per Year	Y	Y	Y (-15.36)
Percentage of Enrollees with Any Hospitalizations	Y	Y	Y (-1.07%)
Hospitalizations per 1,000 Beneficiaries per Year	NS	NS	NS
Primary Care Visits per 1,000 Beneficiaries per Year	Y	N	N (-12.46)
Specialty Care Services per 1,000 Beneficiaries per Year	N	N	N (-25.43)

Source: UCLA analysis of Medi-Cal data, July 2014 to June 2020.
Notes: Green Y indicates trend is statistically significant in the intended direction. Red N indicates trend is statistically significant in the unintended direction. Gray NS indicates not statistically significant.

Exhibit 94 shows results of payment measures for DPHs and DMPHs and whether the trends change in the hypothesized intended direction. DPH data showed that a greater decline in total payments (-$865), hospitalization payments (-$487), and outpatient pharmacy payments (-$94) for PRIME patients than the comparison patients. In addition, data show a decline in ED visits and outpatient services from before to during PRIME but these trends were not significantly different between PRIME and comparison patients. For DMPHs, data showed a greater decline in payments for total payments (-$836), ED payments (-$67), and hospitalization payments (-$260) for PRIME vs. comparison patients. Data also showed a decline in outpatient services from before to during PRIME.

Exhibit 94: Payment Measures Using Medi-Cal Data

Metric	Trend during PRIME changed significantly in the intended direction?	Trend from before to during PRIME changed significantly in the intended direction?	Trend for PRIME patients was similar or better than comparison patients (DD)?
DPH			
Total Payments	Y	Y	Y (-$865)
Payments for Emergency Department Visits	NS	Y	NS
Payments for Hospitalizations	Y	Y	Y (-$487)
Payments for Outpatient Pharmacy	NS	Y	Y (-$94)
Payments for Outpatient Services	NS	Y	NS
DMPH			
Total Payments	Y	Y	Y (-$836)
Payments for Emergency Department Visits	Y	Y	Y (-$66)
Payments for Hospitalizations	Y	Y	Y (-$260)
Payments for Outpatient Pharmacy	NS	NS	NS
Payments for Outpatient Services	NS	Y	NS

Source: UCLA analysis of Medi-Cal data, July 2014 to June 2020.
Notes: Green Y indicates trend is statistically significant in the intended direction. Red N

indicates trend is statistically significant in the unintended direction. Gray NS indicates not statistically significant.

The above evidence indicates that participating hospitals succeeded in improving population health and health outcomes of Medi-Cal beneficiaries. The evidence from the analysis of ARs indicates that PRIME hospitals mostly succeeded in improving health of all patients including Medi-Cal beneficiaries by attaining performance targets related to clinical improvements, preventive interventions, and patient experiences.

The independent evaluation of these metrics among Medi-Cal beneficiaries attributed to these hospitals and comparison patients was challenging due to lack of adequate data to fully replicate PRIME specifications. Nevertheless, these analyses provided supportive evidence of success for some performance metrics indicating better performance among PRIME hospitals. The metrics with greater improvements corresponded to outcomes of systematic redesign of primary care, improved delivery of preventive care, and care of high-risk high-cost populations.

Improvements in PRIME metrics in the intended direction were consistent with qualitative evaluation data that indicated more favorable hospital ratings on achievement of goals, unfinished activities, difficulty, and sustainability. For example, successes in metrics such as 1.6.2 Breast Cancer Screening for DPHs was supported by higher rating of achievement of goals (8.2/10), medium level of difficulty (3.7/5), higher integration in routine of care (4.2/5), and higher rates of sustainability (4.5/5) for Project 1.6. Similarly, findings for 1.2.8. AHRQ PQI #90 for DMPHs was supported by higher rating of achievement of goals (9/10 for DMPH non-CAHs and 8/10 for DMPH CAHs), lower level of difficulty, higher integration in routine care (4.2), and higher rates of sustainability (4.1) in Project 1.2.

Conversely, lack of improvement in PRIME metrics in the intended direction was explained by the qualitative evaluation data indicating more unfinished activities and higher effort in addition to lower ratings of achievement of goals and integration into routine care. For example, lack of improvement for 2.2 Outpatient Follow-Up Visit Rates within 30 Days of Hospitalizations for DMPHs was explained by lower ratings of achievement of Project 2.2 goals (DMPH non-CAHs 6.9/10), unfinished activities (ability to identify high-risk patients in the EHR, staff training for care transitions, collaboration with SNFs, and home visits), high levels of staff effort (4.4), medium integration into routine care (3.9), and medium sustainability (3.5). Similarly, lack of improvement for Project 2.6 optional metric of Treatment of Chronic Non-Malignant Pain with Multi-Modal Therapy for DPHs was explained in part by unfinished activities in patient tracking and providing provider feedback on chronic pain management, medium staff effort (3.8/5),

and low financial investment (2.9/5). Lack of improvements for other optional metrics such as SUD Treatment Visits per Beneficiary per Year and Primary Care Visits per 1,000 Beneficiaries per Year for DPH and DMPHs were explained by high levels of difficulty of and staff effort as well as numerous unfinished activities.

The assessment of overarching utilization and payment data provided definitive evidence in support of improvements in PRIME outcomes such as reduced use of hospitalizations and ED visits as well as their associated payments. An additional analysis of change in ED visits and hospitalizations by race/ethnicity for DPHs indicated that Latinx PRIME patients may have experienced a greater reduction in the number of ED visits and hospitalizations than other groups, indicating the possibility that PRIME may have improved equity in these outcomes (Emergency Department and Hospitalization Utilization Trends by Race/Ethnicity). Together, these findings suggest PRIME helped achieve goals consistent with the Triple Aim components of better health and lower costs.

Goal 4. Improve the ability of participating PRIME entities to furnish, in the most appropriate setting, high-quality care that integrates physical and behavioral health services and coordinates care in different settings for targeted vulnerable Medi-Cal beneficiaries.

Findings

Care coordination is a critical approach in models of care delivery such as patient-centered medical homes and management of complex patients and an important tool in promoting care integration. With a few exceptions, PRIME projects were inherently dependent on care coordination and care integration for success.

Care coordination was a core component of multiple PRIME projects and selected by 17 hospitals in Project 1.2, 13 hospitals in Project 1.3, 5 hospitals in Project 2.4, and 8 hospitals in Project 2.6. It was also an essential approach used in Projects 1.1, 2.1, and 2.2.

Specific information on care coordination was provided in Project 1.2, where hospitals reported incorporating care coordinators (18) and case managers (13) in primary care sites frequently in on-campus and off-campus clinics, regularly training and monitoring them, and using multiple and diverse staff for care coordination including community health workers and navigators.

Integration was an explicit goal of Project 1.1 and successful integration of behavioral health and primary care depended on the ability of the 22 participating PRIME hospitals to ensure that patients with behavioral health needs were identified and referred to behavioral health care providers and received the needed services. Successful integration required a number of activities including ensuring comprehensive EHRs that include behavioral health data, availability of clear referral protocols and training providers and staff on how to use them, behavioral health specific registries and staff that monitor and manage the care of patients with these conditions, co-location of behavioral health and primary care providers in the same settings, constructing multidisciplinary teams that meet regularly and jointly develop individualize treatment plans, frequent quality improvement activities to promote integration, and prioritizing behavioral health as an institutional goal with support and buy-in for behavioral health integration by leadership and staff. The detailed evaluation of Project 1.1 in the PRIME Interim Evaluation Report and summarized in Project 1.1 – Integration of Behavioral Health & Primary Care provided ample evidence that participating hospitals made significant progress in integrating behavioral health and primary care. The high level of effort required to accomplish integration was reflected in the number of unfinished activities reported for this project, with 13 DPHs reporting the need to develop depression registries, increase behavioral health staff SBIRT screening, and implement additional processes for better communication and referral to behavioral health staff.

System-wide, care coordination and care integration were supported most frequently by informal relationships with external providers but many had memorandums of understanding (26) and contractual relationships (24) as well and fewer were co-located (17).

The above findings provide the needed evidence of achievement of Goal 4 by PRIME hospitals. Findings indicated evidence of increased coordinating patient care and integrating behavioral health among participating PRIME hospitals, particularly for patients with a more complex profile. These achievements indicate progress in system integration that is needed for improvements in the quality of care (better care) and patient health (better health).

Goal 5. Move participating PRIME entities towards value-based payments through the adoption of alternative payment models.

Findings

PRIME moved participating hospitals towards value-based care using two strategies. The first was to reimburse hospitals for participating in PRIME projects based on attaining metric performance targets. Based on each hospital's performance, DHCS determined the achievement value (AV) for each metric and paid hospitals according to that AV. Hospitals were allowed to recoup lost revenues due to underperformance in metrics by performing better in those or other metrics in future years. AVs indicated the degree to which the hospital made progress toward meeting pre-determined targets (range 0-1).

The average AVs for P4R metrics throughout PRIME for DPHs were 0.94-1.00 and for DMPHs were 0.81-1.00 (from the Preliminary Summative Report). Average AVs were lower for P4P metrics for both DPHs (0.76-0.92) and DMPHs (0.60-0.77). The lower average AVs for P4P metrics were observed in later years of PRIME in part due to the higher performance rate targets in each consecutive demonstration year. The higher average AVs of DPHs compared to DMPHs was likely in part due to participation in a previous waiver program, DSRIP, which led to development of infrastructure and care processes participating DPHs could continue to leverage into PRIME. Other likely reasons may have included more staffing resources and expertise, data reporting capabilities, and EHR capabilities. Ultimately, the P4R metric AVs indicated significant progress in ability of hospitals to report performance metrics and the P4P metric reporting indicated substantial progress in the ability of hospitals to improve outcomes under value-based payment.

The second strategy under PRIME was increasing participation of participating hospitals in APMs following the framework by The Health Care Payment Learning & Action Network (LAN). PRIME required hospitals to have contractual agreements with APMs in Categories 3A (upside gainsharing) and 3B (upside gainsharing and downside risk) and Category 4A (condition specific population-based payments). PRIME also required at least one contract with a Medi-Cal managed care plan (as noted in the PRIME Special Terms and Conditions, Attachment R). These contracts were classified under Category 4N (capitated payments not linked to quality) in the LAN framework. Data showed that all DPHs reported at least one APM by end of the program. A total of 17 Category 4N, 1 Category 3A, 1 Category 3B, and 8 Category 4A contracts were established during PRIME (evidence from analyses presented in Value-Based Payment under PRIME).

Collectively, the two PRIME strategies increased the capacity of PRIME hospitals to perform under APMs. This capacity was synergistically reinforced and perpetuated through participation of DPHs and DMPHs in the Quality Incentive Pool (QIP), a continuing program established in 2017 that links managed care payments to hospitals to metric achievement (PRIME Synergies with Other Programs).

Conclusions and Policy Implications

This Final Summative Evaluation Report includes data on the PRIME implementation and outcomes provided in the Interim and Preliminary Summative Evaluation Report s finalized in 2020. Collectively, the three reports provided extensive documentation of the infrastructure developed and the processes followed in implementing each PRIME project, hospital-reported progress in achieving performance targets, and independent analyses of Medi-Cal and other data on performance metrics as well as overarching health care utilization measures and related payments. The Interim Evaluation Report provided evidence that hospitals developed and enhanced needed infrastructure and instigated changes in care delivery processes.

The data in the Preliminary Summative Evaluation Report showed synergies between PRIME projects with other initiatives and provided evidence of sustainability of PRIME near the end of the program. Data also indicated high rates of achievement of metrics and changes in the intended direction.

The Final Summative Evaluation Report provided an independent assessment of performance metrics and showed support for change in trends in some metrics. This report also provided evidence for achievement of the overarching goals of PRIME, particularly success in reducing utilization of hospitalizations and emergency department visits and an overall reduction in payments attributable to the program. This report further included evidence that the COVID-19 pandemic disrupted the ability of hospitals to implement PRIME projects. But, hospitals addressed this disruption through innovation and modifications and reported that some PRIME projects improved their ability to respond to the pandemic.

The progress in better care, better health, and lower costs under PRIME are perpetuated in California through linking managed care payments to improved care processes and patient outcomes for public hospitals. This policy is likely to exert a significant influence on the public health care system in California and the state's obligations to serve Medicaid beneficiaries because these hospitals are the primary providers of specialty and acute care services to these beneficiaries.

PRIME findings also have implications at the federal level and for other states. The findings highlighted that hospital changes in care delivery under PRIME were synergistic with their mission and many had started such projects. Yet, resource intensiveness of many of these projects was a barrier to advancement of goals and the infusion of PRIME funding played a crucial role in starting or instigating rapid progress. PRIME can also be a valuable example of how to promote better care, better health, and lower costs in public health care delivery systems and Medicaid programs in other states. The extensive detail of PRIME implementation, the challenges and approaches to addressing them, and outcomes of these efforts can be used to design similar programs using best practices and inform the results that can be anticipated elsewhere.

Appendix A. PRIME Evaluation COVID-19 Survey Respondents and Questions; Analysis

Exhibit 95: PRIME Evaluation COVID-19 Survey Respondents by Hospital Type

Designated Public Hospitals (DPH)
1. Alameda Health System
2. Arrowhead Regional Medical Center
3. Contra Costa Regional Medical Center
4. Kern Medical Center
5. Los Angeles County Dept. of Health Services
6. Natividad Medical Center
7. Riverside University Health System
8. San Francisco General Hospital
9. San Joaquin General Hospital
10. San Mateo Medical Center
11. Santa Clara Valley Medical Center
12. UC Davis Medical Center
13. UC Irvine Medical Center
14. UC Los Angeles Medical Center
15. UC San Diego Medical Center
16. UC San Francisco Medical Center
17. Ventura County Medical Center
District/Municipal Public Hospitals without Critical Access Hospital Designation (DMPH)
1. Antelope Valley Hospital, Lancaster
2. El Camino Hospital, Mountain View
3. El Centro Regional Medical Center, El Centro
4. Kaweah Delta Health Care District, Visalia
5. Lompoc Valley Medical Center, Lompoc
6. Marin General Hospital, Greenbrae
7. Oak Valley Hospital District, Oakdale
8. Palo Verde Hospital, Blythe
9. Palomar Medical Center, Escondido (including Pomerado Hospital, Poway)
10. Pioneers Memorial Healthcare District, Brawley
11. Salinas Valley Memorial Healthcare System
12. San Gorgonio Memorial Hospital, Banning
13. Sierra View District Hospital, Porterville
14. Sonoma Valley Hospital, Sonoma

Designated Public Hospitals (DPH)
15. Tri-City Medical Center, Oceanside
16. Washington Hospital Healthcare System, Fremont
District/Municipal Public Hospitals with Critical Access Hospital Designation (DMPH CAH)
1. Bear Valley Community Hospital, Big Bear Lake
2. Eastern Plumas Health Care, Portol
3. Healdsburg District Hospital, Healdsburg (North Sonoma Health Care District)
4. Jerold Phelps Community Hospital, Garberville
5. John C. Fremont Healthcare District, Mariposa
6. Kern Valley Healthcare District, Lake Isabella
7. Mammoth Hospital, Mammoth Lakes
8. Mayers Memorial Hospital District, Fall River Mills
9. Mendocino Coast District Hospital, Fort Bragg
10. Modoc Medical Center, Alturas
11. Northern Inyo Hospital, Bishop
12. Plumas District Hospital, Quincy
13. San Bernardino Mountains Community Hospital, Lake Arrowhead
14. Seneca Healthcare District, Chester
15. Southern Inyo Hospital, Lone Pine
16. Tahoe Forest Hospital District, Truckee
17. Trinity Hospital, Weaverville (Mountain Communities Healthcare District)

COVID-19 Survey Questions for the PRIME Evaluation

Introduction and Instructions

1) This questionnaire is designed to gather additional information for the PRIME final evaluation report.

We are conducting a survey on:
(1) the potential impact of the COVID-19 pandemic on PRIME staffing, services, and sustainability, and
(2) how PRIME infrastructure and integrated care delivery approaches may have helped with local response to COVID-19.

We thank you for taking the time to complete this questionnaire.
If you are able to submit responses to the survey by **Friday October 23, 2020,** that would be greatly appreciated.

Please enable cookies on your browser to avoid unwanted complications interacting with the website. With cookies enabled, the survey link will allow you to complete the survey over multiple sessions and make edits to previous responses, as long as the same computer and browser are used.

The evaluation team is available to answer your questions at prime@chpr.em.ucla.edu. If you prefer to speak by phone, please email us your contact information and a member of the evaluation team will follow up with you as soon as possible.

2) **Please indicate your entity's name:** (drop-down)

3) **Please indicate your entity's type:**
   ☐ Designated Public Hospital (DPH) system
   ☐ District/Municipal Public Hospital without Critical Access Hospital designation (DMPH)
   ☐ DMPH that is also a Critical Access Hospital (CAH)

4) **Please enter your name and contact information.**
   Name:
   Email Address:
   Phone Number:

5) **How many clinics does your entity have? If greater than 20, you can provide an estimate.**
    - **a.** Total primary care clinics owned or operated by the entity:
    - **b.** Total specialty care clinics that are owned or operated by the entity (include any that are colocated with primary care):

Impact of COVID-19 on PRIME Activities

The purpose of this question is to assess how COVID has affected your implementation of PRIME.

6) On a scale of 0 to 10, where 0 = Not at all impacted and 10 = Extremely impacted, please indicate **how COVID-19 has impacted your ability to implement each of the following infrastructure or processes under PRIME**. If your hospital does not provide a specific service, please select "NA." Please briefly describe the changes and impact.
    a. Impact of COVID on PRIME Activity (Choose one numeric rating): 0 = not at all impacted by COVID, 1, 2, 3, 4, 5 = somewhat impacted by COVID, 6, 7, 8, 9, 10 = extremely impacted by COVID, N/A do not provide this service.
    b. When applicable, please briefly describe how COVID-19 has affected each component under PRIME. Please describe both: (1) positive and negative impact on this PRIME activity, and (2) any innovations or adaptations you have made to this PRIME activity in response to COVID. If you did not implement a listed activity, please write "N/A."

    Categories:
    a. Dedicated staffing for PRIME activities
    b. Patient data collection (e.g., REAL/SOGI)
    c. Behavioral health screening and follow-up
    d. Cancer screening and follow-up
    e. Providing primary care visits
    f. Providing specialty care visits
    g. Providing inpatient care
    h. Providing emergency room care
    i. Outpatient care coordination (e.g., referrals, scheduling appointments based on referrals, follow-up post-referrals, etc.)
    j. Coordination of care transitions following hospital discharge
    k. Facilitating care management for high-risk populations (e.g., homeless individuals, foster youth, post-incarceration care)
    l. Promoting efficiency in resource utilization

m. Addressing disparities in chronic health conditions
n. Participation in risk-based contracts (e.g., managed care)
o. Hospital reimbursement
p. Meeting process-related PRIME metrics
q. Meeting outcome-related PRIME metrics
r. Working with external partners
s. Other (please specify:

Impact of COVID-19 on Sustainability of PRIME

The purpose of this question is to assess the impact of COVID on the sustainability of PRIME.

7) On a scale of 1 to 10, where 0 = Greatly reduced, 5 = No impact, and 10 = Greatly improved, please indicate the extent to which **your response to COVID-19 has affected the sustainability of PRIME activities after the end of PRIME.**

Continuation of PRIME activities after external support for the program ends: 0 = Greatly reduced sustainability of PRIME, 1, 2, 3, 4, 5 = No impact on sustainability of PRIME, 6, 7, 8, 9, 10 = Greatly improved sustainability of PRIME

8) Please describe **how COVID-19 has affected the sustainability of PRIME** activities after the end of PRIME. (Free response)

Impact of PRIME Projects on COVID-19 Response

The purpose of this question is to assess the impact of implementing specific PRIME projects on your response to COVID.

9) On a scale of 0 to 10, where 0 = No improvement and 10 = Very great improvement, please indicate the extent to which your **implementation of the following PRIME projects promoted or improved your hospital's response to COVID-19**. If your hospital did not participate in a project, please select "NA."

a. Impact of PRIME Project on COVID-19 Response (Choose one numeric rating): 0 = not at all COVID response, 1, 2, 3, 4, 5 = somewhat improved COVID response, 6, 7, 8, 9, 10 = extremely improved COVID response, N/A did not participate in this project

b. When applicable, please describe how this PRIME project impacted your COVID-19 response efforts. If you did not participate in this project, please write “N/A.”

Projects:

a. Project 1.1: Behavioral Health Integration
b. Project 1.2: Primary Care Redesign
c. Project 1.3: Specialty Care Redesign
d. Project 1.4: Patient Safety in the Ambulatory Setting
e. Project 1.5: Million Hearts® Initiative
f. Project 1.6: Cancer Screening & Follow-Up
g. Project 1.7: Obesity Prevention & Healthier Foods Initiative
h. Project 2.1: Perinatal Care
i. Project 2.2: Care Transitions
j. Project 2.3: Complex Care Management for High-Risk Populations
k. Project 2.4: Integrated Health Home for Foster Children
l. Project 2.5: Post-Incarceration Care
m. Project 2.6: Chronic Pain Management
n. Project 2.7: Advance Care Planning
o. Project 3.1: Antibiotic Stewardship
p. Project 3.2: Resource Stewardship: High-Cost Imaging
q. Project 3.3: Resource Stewardship: High-Cost Pharmaceuticals
r. Project 3.4: Resource Stewardship: Blood Products

Impact of PRIME Infrastructure and Processes on COVID-19 Response

The purpose of this question is to assess the impact of specific PRIME infrastructure and processes on your response to COVID.

10) On a scale of 0 to 10, where 0 = Not at all improved and 10 = Extremely improved, please indicate the extent to which your **development of the following infrastructure or processes as part of PRIME promoted or improved your hospital's response to COVID-19**. If your hospital did not implement any of the following as part of PRIME, please select “NA.”

a. Impact of PRIME Activity on COVID-19 Response (Choose one numeric rating): 0 = not at all COVID response, 1, 2, 3, 4, 5 = somewhat improved COVID response, 6, 7, 8, 9, 10 = extremely improved COVID response, N/A did not participate in this project
b. When applicable, please describe how each of these elements driven by PRIME was incorporated you’re your COVID-19 response efforts. If you did not implement this activity, please write “N/A.”

Projects:

a. Data infrastructure (e.g., electronic health record; data analytics, reporting, or sharing processes)
b. PRIME staff
c. Data collection of patient demographics (e.g., REAL/SOGI)
d. Panel management tools developed during PRIME (e.g., registries, outreach processes)
e. Systems for inter-provider communication (e.g., eReferral, meetings, conference software)
f. Systems for provider-patient communication (e.g., secure messaging, telehealth)
g. Care coordination processes (e.g., intake and assessment, development of comprehensive care plan, referrals, etc.)
h. Processes for coordinating care transitions
i. Processes for facilitating care management for high-risk populations
j. PRIME-related learning collaboratives
k. Relationships with other PRIME partners
l. Other (please specify:

11) Is there anything we haven't asked that you think is important for us to know? Please denote N/A if not applicable. (Free response)

Selected PRIME Evaluation COVID-19 Survey Results

Exhibit 96: Hospital-Reported Selected Examples of Negative Impact of COVID-19 on PRIME Implementation

Category	Negative Impacts	Illustrative Quote(s)
Health Care Utilization	Lower patient census for primary, specialty, emergency, and inpatient care.	Patients were non-compliant on coming to the hospital for their labs/[mammograms] due to fears of contracting COVID-19. (San Bernardino) [The] COVID first surge resulted in lower ED [emergency department] usage, but COVID infection prevention policies impacted care paths, staffing and PPE [personal protective equipment] availability, impacting patient flow. (UC Irvine) We did not shut down. However, many patients did not come in to see their primary care doctors. (Seneca)
	Increased demand for behavioral health services or care due to delayed or forgone healthcare	COVID made it difficult to see our patients in person, especially over the first few months of the pandemic. Once patients returned, we were seeing higher levels of behavioral health needs, which we responded to. (Mammoth)
	Telehealth delivery of some services not appropriate or accessible	…all preventive screenings were dropped, [and we were] unable to focus on these as we adjusted to telehealth (primarily telephone) visit modalities. (Santa Clara)
Staffing Capacity and Operations	Disruptions in coordination with care partners	[There was] a lack of collaboration between care transitions/care managers/private clinics because everyone else had their own emergency response. (Alameda) Our outpatient services were affected as we were not allowed into SNF [skilled nursing facilities] and other areas in which we provide palliative care services. (Antelope Valley)
	Staff shortages from reassignment to COVID-19 response, furloughs, and illness	Staff who were normally assigned to outreach and QI activities were reassigned to COVID related duties: coordinating testing, rescheduling to video visits, sanitizing. (UC Davis)

Category	Negative Impacts	Illustrative Quote(s)
		…Many staff were out of commission as they contracted the virus and had to be quarantined. (San Joaquin)
Financing and quality of care	Difficulty maintaining quality in risk-based contracts	The numbers of visits are lower than normal…we were not able to provide the level of care that we are expected as a VBC [Value-Based Care] provider, thus not being able to meet some of the quality measures. (San Francisco)
	Lower income due to reduced patient census and telehealth visits	There was a delay of elective surgeries, and avoidance of utilizing the hospital unless absolutely necessary. Coupled with increased costs in procurement of PPE [personal protective equipment] and testing supplies, increased staffing needs to respond to COVID, there was a clear impact on hospital finance. (Marin) We were still paid according to contracts, but telehealth reimbursement is far lower than in-office visits, about 25% of the cost according to our CEO. (Jerold Phelps)

Source: UCLA analysis of the COVID-19 Survey, October to November 2020.
Note: Sample included 50 participating PRIME hospitals. One participating DMPH non-CAH hospital did not respond to the survey.

Exhibit 97: Innovations or Adaptations of PRIME Hospitals in Response to the COVID-19 Pandemic Challenges

Category	Innovations or Adaptations	Illustrative Quote(s)
Health Care Utilization	Development of virtual data collection and communication tools	[Behavioral health screening] questions are addressed during the "rooming" process which happens similarly whether the visit is in person or via telemedicine. (John C. Fremont)
	Creation of protocols for no-contact transfer of tests and supplies	[Lack of blood pressure] cuffs was identified during telehealth visits. [We] partnered with our primary managed care plan to ensure these patients receive blood pressure monitors. This created an opportunity for our staff to see a demo of how our patients

Category	Innovations or Adaptations	Illustrative Quote(s)
		measure their blood pressures and coach them through it virtually. (Riverside) SFHN is in-process of testing workflows for mailing FIT [Fecal Immunochemical Test] kits to patients and using text message and outreach calls to follow up with patients. (San Francisco)
	Expansion of telehealth for visits and care coordination	We quickly pivoted to offering telehealth visits…we are seeing more patients than when we only offered face-to-face visits. (Natividad) With reduction in visit volume and big shift to virtual visits particularly in primary care, we have seen some disparities increase. Mitigation efforts include expanding interpreter services for virtual visits and expanding languages offered in the patient portal. (UC San Francisco)
Data infrastructure and communication tools	Expansion or improvement of data reporting infrastructure	We also developed new analytic reports that identified the % of patients seen virtually vs. in-person and the overall volume of patients reached via any modality. (San Francisco)
	Implementation of project management and meeting software	Most rural organizations and partners closed their doors in efforts of protecting community. Meetings initially were conducted by phone and then transitioned into Zoom meetings. These meetings allowed partners to collaborate and better understand how needs were being met in various settings. (Kern Valley)
Care protocols and quality maintenance	Implementation of new algorithms or protocols for care	The impact of COVID was positive in terms of improving communication and continuity of care during discharge of high-risk patients…A discharge algorithm was created…and is updated as needed. (Marin)
	Strengthening of external partnerships for quality improvement and pandemic response	This project specifically also helped foster collaboration between Ambulatory Care, Public Health, and the Human Services Agency. These relationships made collaboration easier during this time of crisis. (Ventura County)

Category	Innovations or Adaptations	Illustrative Quote(s)
	Additional community sources of care became available	We also had new care options become available including beds at other community hospitals and isolation and quarantine hotels. (San Francisco)

Source: UCLA analysis of the COVID-19 Survey, October to November 2020.
Note: Sample included 50 participating PRIME hospitals. One participating DMPH non-CAH hospital did not respond to the survey.

Exhibit 98: Selected Examples of Hospital Perspectives on the Impact of COVID-19 on Sustainability of PRIME

Effect of COVID on Sustainability	N	Illustrative Quote(s)
Reduced Sustainability of PRIME	29	The COVID 19 pandemic has resulted in significant financial burden to our organization. It is unlikely that we will have the resources to do significant performance improvement on metrics that are not continuing in the new iteration of QIP. (Alameda) COVID has highlighted limitations within a rural health community, such as transportation and digital access barriers. This has influenced what metrics within QIP we will adopt. (Tahoe)
No Impact on Sustainability of PRIME	13	Many of the workflows integrated into the PRIME metrics implemented over the past few years were developed in line with health system priorities, not solely because of PRIME. Therefore, after PRIME ends the health system will still be supporting these workflows. (UC Los Angeles)
Improved Sustainability of PRIME	8	The infrastructure for quality and performance improvement shifted from a siloed approach to one that is integrated into the healthcare system establishing avenues of multi directional communication between quality improvement, executive leadership and frontline staff and providers. (Riverside) Because of COVID-19, we had to quickly enhance and increase our virtual visits and educate all staff to care for patients virtually if needed. This structure and education remain and we are able to provide care virtually at a high capacity regardless of PRIME external support. (UC San Diego)

Source: UCLA analysis of the COVID-19 Survey, October to November 2020.
Note: Sample included 50 participating PRIME hospitals. One participating DMPH non-CAH hospital did not respond to the survey. N's represent number of hospitals reporting each category of impact.

Exhibit 99: Impact of Implementing PRIME Projects on COVID-19 Response

PRIME Project	Illustrative Quote(s)
1.1 Behavioral Health Integration	PRIME helped us to manage the co-conditions of COVID, such as tobacco use, diabetes and high blood pressure. (Kern Medical) …as a result of the behavioral health integration project, AHS implemented behavioral health staff and the ability to conduct a warm-handoff for patients with behavioral health needs at all of our wellness centers. Warm handoffs are continuing in virtual visits, and our behavioral health team uses both phone and video visits with patients. (Alameda) The PRIME project helped with the overwhelming behavioral and mental health issues that patients were and continue to experience. Because workflow processes were in place, referrals since COVID have increased by 200%. (Tahoe Forest)
1.2 Primary Care Redesign	[We] leveraged bulk outreach and automated phone call systems originally piloted for cancer screenings; these became the pre-visit screening process to ensure that patients coming on site could do so safely. (UC San Francisco) PRIME enabled us to acquire a Population Health management system, which gave us the tool we needed to track/manage COVID patients. (Palo Verde)
1.3 Specialty Care Redesign	Over the course of the PRIME program, we expanded the use of eConsults and eReferrals. eConsult now covers 26 different specialties. This was very helpful, in conjunction with telehealth, to limit the amount of in-person care necessary. (Ventura) Our ability to provide specialty care has brought on multiple providers within our organization. A few of these specialists who are general surgeons have been key players in intubating and care for COVID positive patients. (Lompoc Valley)
1.4 Patient Safety	The outreach system we developed for this project helped us when contacting patients with COVID. (Kern) The acquisition of additional lab equipment (e.g., centrifuge) before the pandemic helped in augmenting the lab capacity for the additional testing requirements during the pandemic. (Santa Clara)
1.5 Million Hearts®	In-place registries helped address high risk patients and those existing patients in the [Million Hearts] program already had access to and were educated on home monitoring equipment. (Tahoe Forest) …workflows to review real time data supported outreach to patients in need of gap closures, specifically those patients with

PRIME Project	Illustrative Quote(s)
	uncontrolled blood pressure in need of medication adjustment and face to face visits. (Kaweah Delta)
1.6 Cancer Screening	Our ability to track patients with our population health tools has been helpful during COVID-19 recovery efforts. (Los Angeles) We had been using an outreach approach for our colorectal screening kits to mail to the patient's home that still works well during COVID. (San Mateo)
1.7 Healthier Foods	It [PRIME] allowed us to do a lot of weight management over the phone. (Arrowhead) The relationships developed with our FQHC partners with this program allowed us to eventually be able to do telehealth nutrition counseling. (Palomar)
2.1 Perinatal Care	OB [obstetric emergency] response drills and hemorrhage drills (3 each quarter) had impact on staff readiness for COVID response. (Contra Costa) The outreach system we developed for this project helped us when contacting patients with COVID. (Kern Medical)
2.2 Care Transitions	Care transition workflows embedded into the Epic EMR system and automated transmission, maintained communication in hectic surge conditions. Consistent Medication reconciliation and improved accuracy of medication history has some impact on planning and risk analysis in COVID care. (UC Irvine) Under our care transitions project, we have the family caregiver support network that has partnered with other agencies in the community to provide and get resources to our elderly/vulnerable population that have been advised to not go shopping. (Lompoc Valley)
2.3 CCM for High-Risk Populations	The CCM team responded to an urgent need from Marin County Health and Human Services to support a new care coordination and health education outreach effort for COVID positive or Persons Under Investigation (PUI) individuals in the Latino community residing in high-infection-risk region of the county. (Marin) Consistent Medication reconciliation and improved accuracy of medication history has some impact on planning and risk analysis in COVID care. (UC Irvine)
2.4 Foster Children Health Homes	This project specifically also helped foster collaboration between Ambulatory Care, Public Health, and the Human Services Agency. These relationships made collaboration easier during this time of crisis. (Ventura)
2.5 Post Incarceration Care	During the pandemic, our jails moved aggressively to decrease the population of inmates. Some of the programs we put in place

PRIME Project	Illustrative Quote(s)
	helped connect these patients with their PCP upon discharge. (Natividad)
2.6 Pain Management	We built an Opioid Safety registry as part of the metric's QI work, which did allow us to provide telehealth to patients on chronic opiates by enabling us to better manage the population as a whole (especially for patients who have many co-morbidities). (San Francisco) Relationships established during PRIME with Providers/PCPs [primary care providers] at RHCs [rural health clinics] allowed completion of pain agreements and supported continued care and opioid prescribing as needed. (Kaweah Delta)
2.7 Advance Care Planning	Advance Care Planning became even more important during the pandemic, and our streamlined palliative care service that was created during PRIME became a strong platform for ensuring patients with advanced illness could update their treatment preferences within the context of the pandemic. (UC San Francisco) PRIME allowed us to open a brand new outpatient palliative care clinic, and also increase staffing on the inpatient palliative care team. As such, the PC [palliative care] team hired through PRIME was positioned to respond quickly to COVID-related needs. (Marin)
3.1 Antibiotic Stewardship	Having strong infection control and EVS [environmental services] policies developed by our ASP [Antibiotic Stewardship Program] team has been of great benefit in reducing unnecessary COVID exposure to our staff and patients. The ASP team worked together in collaboration with the hospitalist medical group in developing an order set specific to COVID related treatments. (San Gorgonio) Our projects to improve and streamline care for patients with sepsis has crossed over to providing improved care to our septic COVID patients. (Northern Inyo)
3.2 High-Cost Imaging	Establishing the best practice advisories in [the] EHR is a helpful tool which has been used during the pandemic. (Contra Costa)
3.3 High-Cost Pharmaceuticals	[We used] communication and process structure developed for [the] build and implementation of ordering protocols and BPAs [best practice advisories]. (Riverside)
3.4 Blood Products	This project helped us develop a standardized pre-operative process. This standardized process made it easier to safely perform emergent surgeries while conserving PPE early on in the pandemic. (Ventura)

Source: UCLA analysis of the COVID-19 Survey, October to November 2020.

Note: Sample included 50 participating PRIME hospitals. One participating DMPH non-CAH hospital did not respond to the survey.

Exhibit 100: Selected Examples of Hospital Perspectives on Impact of PRIME Infrastructure on COVID-19 Response

PRIME Component	Illustrative Quote(s)
Data infrastructure	We replicated the same advanced dashboard for all COVID related aspects; it helped us with interoperability capability and sharing the data efficiently. (Contra Costa) Early on, we began tracking COVID-19 tests and infections by Race/Ethnicity, Age, and Gender. These mechanisms were readily available because they had been made standard through PRIME. (Ventura) …the unity of the data analytics/quality teams, along with relationships with community partners for data sharing formed through PRIME, were absolutely important components of the COVID response because they allowed for quick and nimble teamwork across organizations. (Marin)
Systems for provider-patient communication	MyChart utilization has risen from as little as 11% to 60% engagement in some of the clinics. Providers have begun to respond to patient recordings of their home glucose monitoring earlier with these tools. (Riverside) …[our] outpatient clinics have been maintaining anywhere from 10-20% gap from pre-COVID appointment volumes…Without telemedicine, this would not have been possible. (El Centro)
Panel management tools	Our population health tools were particularly helpful in flagging those patients with chronic conditions who were at greater risk during pandemic related care disruptions. (Los Angeles) Because we were accustomed to reviewing patient registries monthly, we were able to continue that practice and monitor patients who needed appointments as soon as we started accepting patients. (Mammoth) Outreach processes were extremely valuable to the COVID response (these included automated phone calls, bulk MyChart messages, and centralized hotline). (UC San Francisco)
Systems for inter-provider communication	Over the course of the PRIME program, we expanded the use of eConsults and eReferrals. eConsult now covers 26 different specialties. This was very helpful to limit the amount of in-person care necessary by eliminating additional specialty visits that could be handled via eConsult. (Ventura) PCPs [primary care providers] were able to receive transition of care document of patients discharged. (Palo Verde)
PRIME staff	PRIME staff, in particular our business intelligence and analytics teams, were critical to developing dashboards and reports to

PRIME Component	Illustrative Quote(s)
	evaluate our COVID response and the burden of COVID infections among our patients. (Alameda) Having the IT infrastructure in place to monitor Gaps in Care lists in the clinics allowed for focused outreach to patients in need of face to face visits. (Kaweah Delta) The staff that we hired and the processes that we established for our PRIME outreach better prepared us for our patient outreach to our vulnerable populations during the shelter in place. (Salinas Valley) Because of the PRIME Program, we had the staff necessary to respond the influx of mental health issues that were a result of COVID-19 isolation. (El Camino) The PRIME Coordinator quickly shifted roles to assist in the transition of the COVID response. (Lompoc Valley)
Relationships with other PRIME partners	It was helpful to hear other hospitals' experiences and innovations for coping with COVID through the various PRIME platforms, especially the group phone calls and webinars. (Northern Inyo) Learning Collaboratives helped to disseminate rapidly changing clinical practice and organizational workflows to respond to the initial COVID surge. (UC Irvine)

Source: UCLA analysis of the COVID-19 Survey, October to November 2020.
Note: Sample included 50 participating PRIME hospitals. One participating DMPH non-CAH hospital did not respond to the survey.

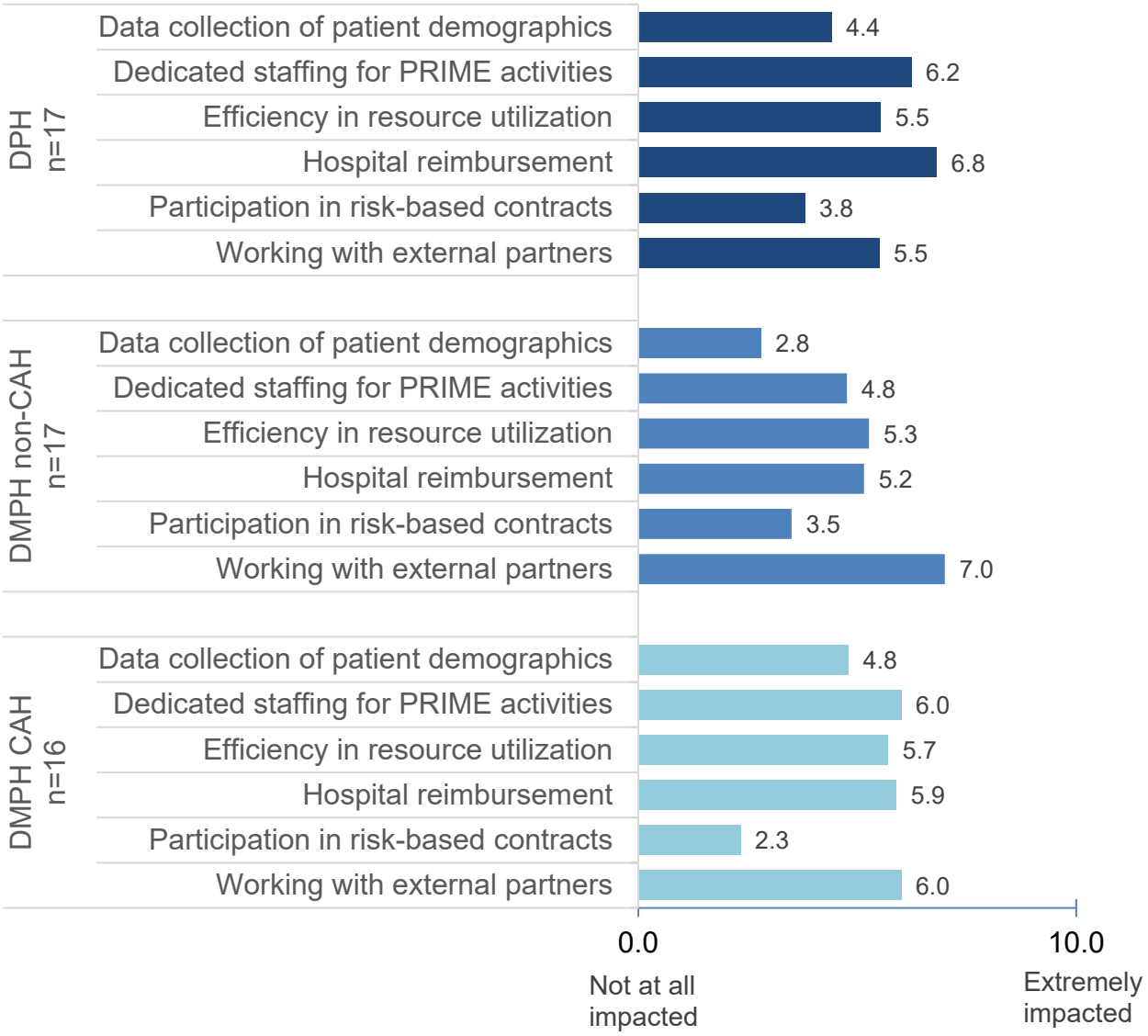
Exhibit 101: Perspectives on Impact of PRIME Processes on COVID Response

PRIME Component	Illustrative Quote(s)
Care coordination processes	…documentations of intake, assessment, and care plan [were] adapted for use in COVID-19 patient management and home monitoring. (Santa Clara) We have over 100 patients enrolled in this program that has direct relationship with Chronic Care Management Coordinators. Their work never slowed during COVID, still remains strong, and the patients are grateful to have the assistance managing an already complex health system to one that seemed nearly impossible during COVID. (El Centro)
Processes for facilitating care management for high-risk populations	[We] utilized existing community partnerships and relationships to link patients with needed resources such as food, shelter and delivered medications. (Alameda) The LACE [index] score process developed in PRIME helped identify high risk COVID patients. (Natividad) In conjunction with our PRIME efforts, we developed a chronic conditions report that helped the clinics with outreach to vulnerable patients during the pandemic…it displays the

PRIME Component	Illustrative Quote(s)
	patients last appointment and any future appointments so that staff can prioritize outreach with the goal of keeping these patients safely at home to the extent possible. (Ventura)
Processes for coordinating care transitions	[Our] Care Transitions Outreach Team continued to call all patients post-discharge, and leveraged their automated phone call system to offer results follow up and symptom monitoring for positive COVID cases. (UC San Francisco) Care transition workflows embedded into the Epic EMR [electronic medical record] system and automated transmission, maintained communication in hectic COVID initial surge conditions. (UC Irvine)
Data collection of patient demographics	Demographics quickly became a key factor that was tracked in the COVID data. (Lompoc Valley) Our detailed REAL data has allowed AHS to stratify our COVID 19 infection data by demographic factors, and in particular identify an outbreak in our Maya Mam population, so that we could partner with the County to conduct structured outreach and interventions on this population. (Alameda) We collected the demographic information for more than 99% of our assigned patient population which help us to find the disparities and make plan to address the disparities. (Contra Costa)

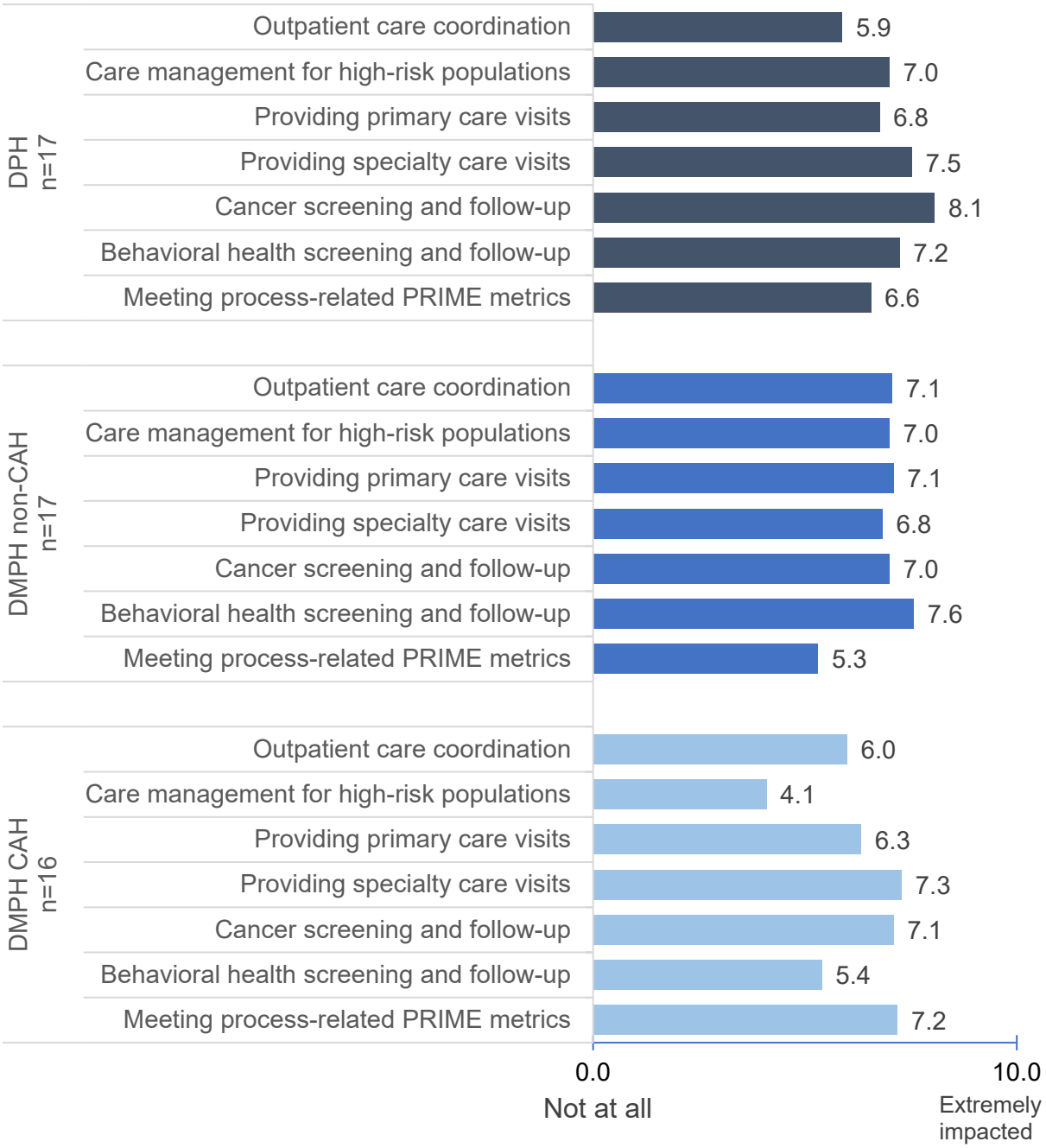
Source: UCLA analysis of the COVID-19 Survey, October to November 2020.
Note: Sample included 50 participating PRIME hospitals. One participating DMPH non-CAH hospital did not respond to the survey.

Exhibit 102: Hospital Ratings of Impact of COVID-19 on PRIME Implementation, by Hospital Type



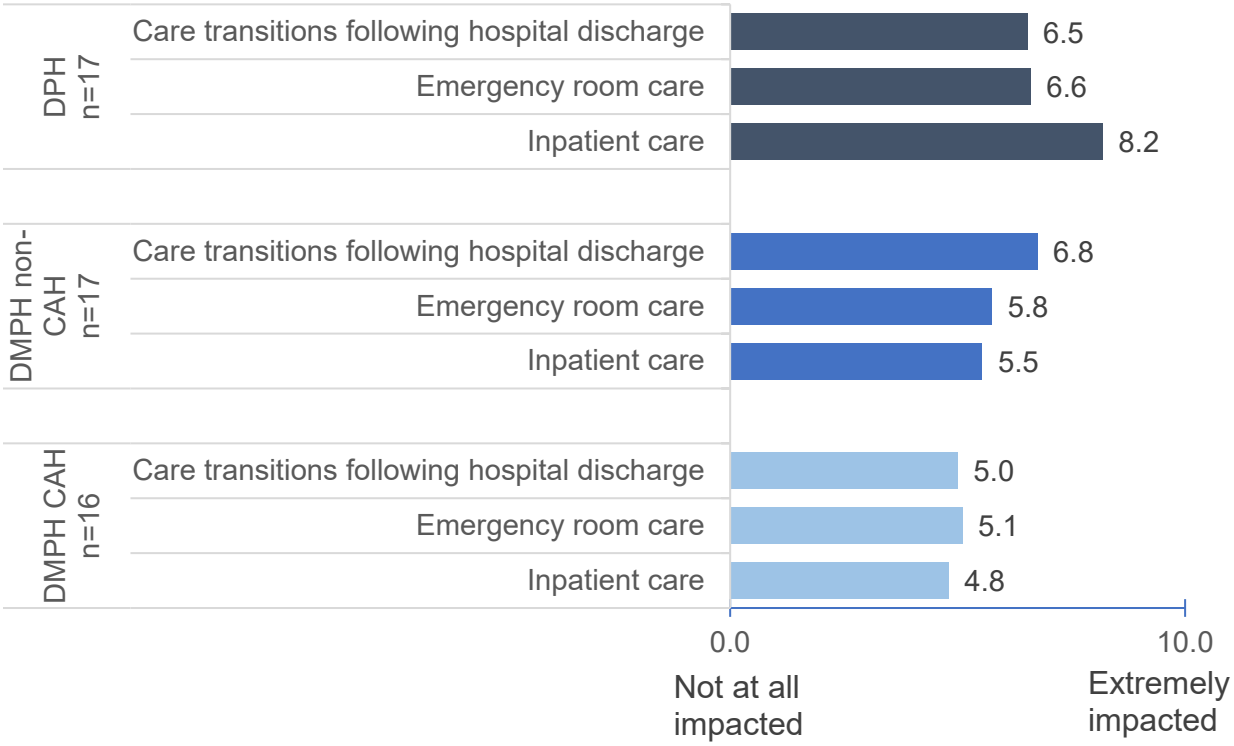
Source: UCLA analysis of the COVID-19 Survey, October to November 2020.
Note: Sample included 50 participating PRIME hospitals. One participating DMPH non-CAH hospital did not respond to the survey.

Exhibit 103: Hospital Ratings of Impact of COVID-19 on Outpatient Care Processes during PRIME, by Hospital Type



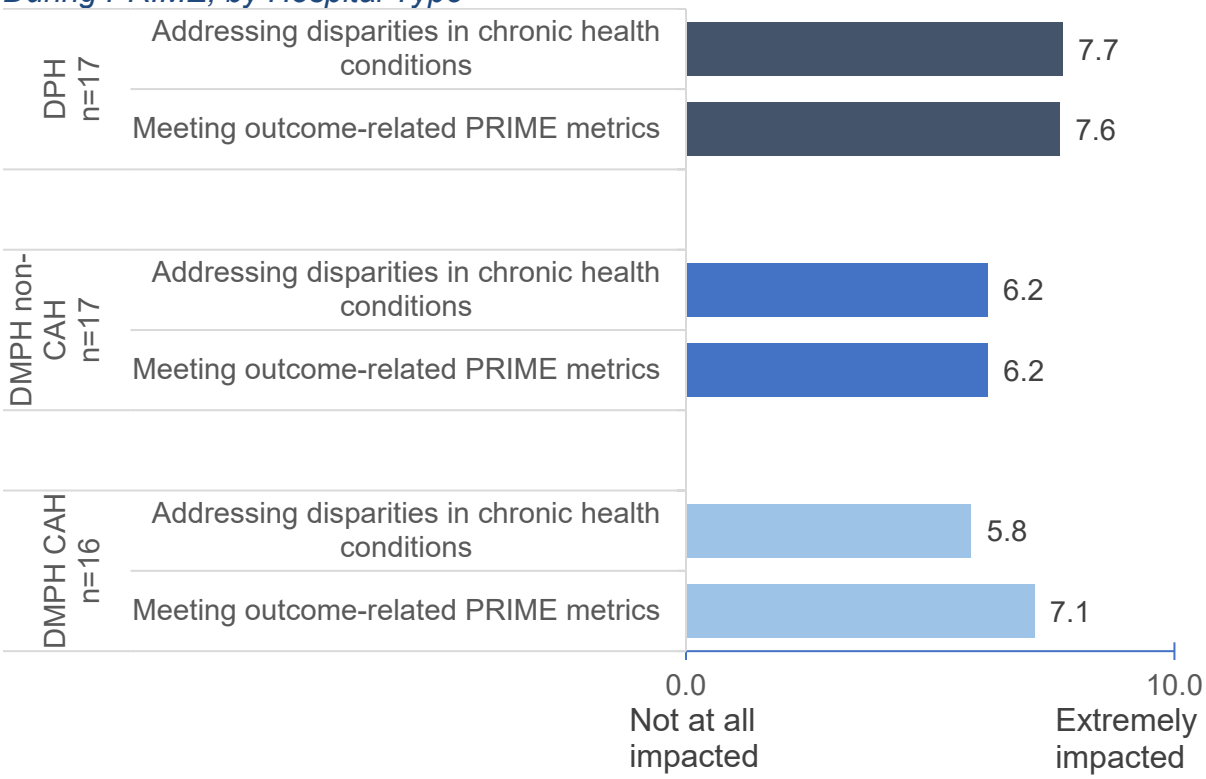
Source: UCLA analysis of the COVID-19 Survey, October to November 2020.
Note: Sample included 50 participating PRIME hospitals. One participating DMPH non-CAH hospital did not respond to the survey.

Exhibit 104: Hospital Ratings of Impact of COVID-19 on Care for Acute Conditions during PRIME, by Hospital Type



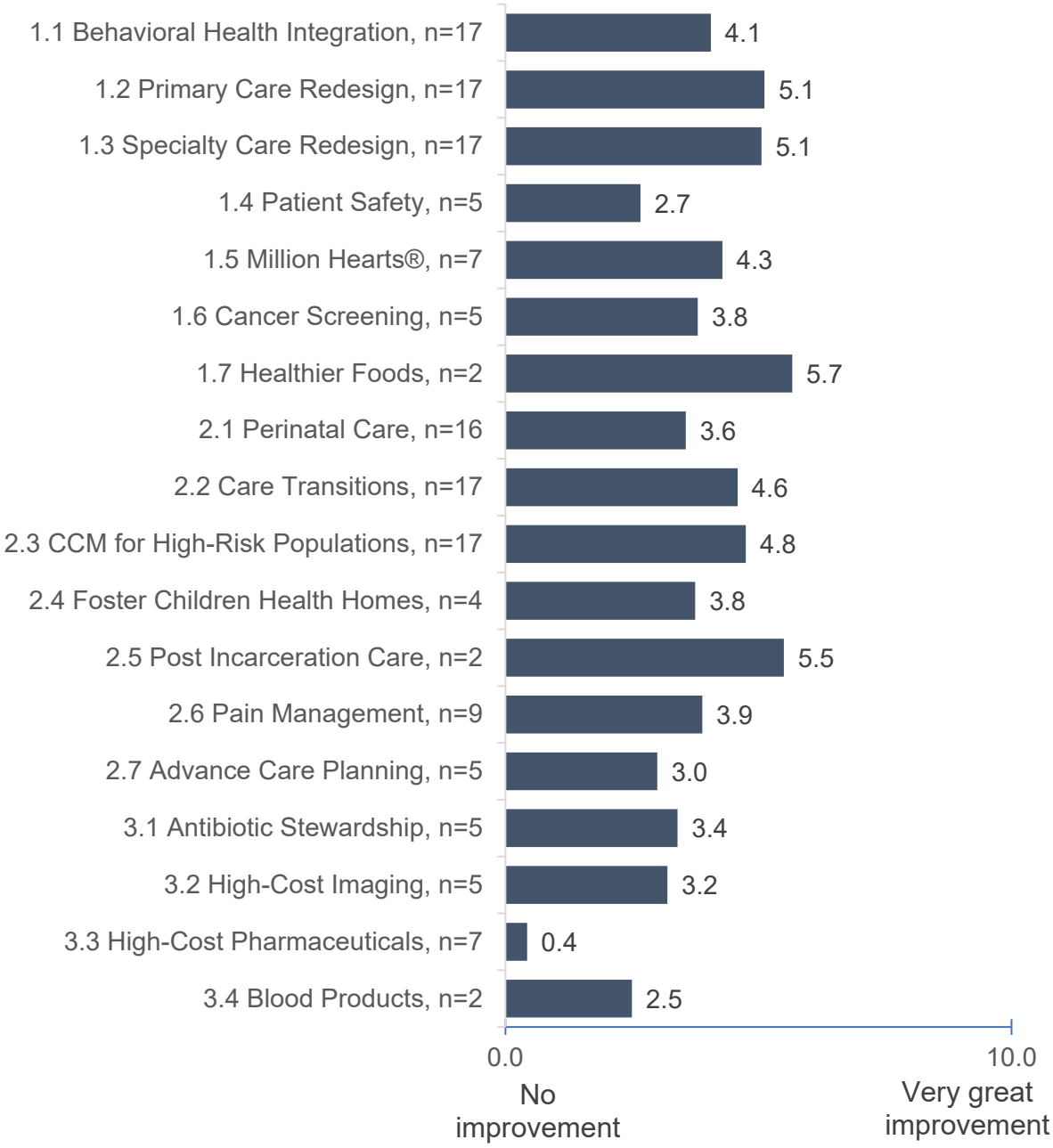
Source: UCLA analysis of the COVID-19 Survey, October to November 2020.
Note: Sample included 50 participating PRIME hospitals. One participating DMPH non-CAH hospital did not respond to the survey.

Exhibit 105: Hospital Ratings of Impact of COVID-19 on Improving Health Outcomes During PRIME, by Hospital Type



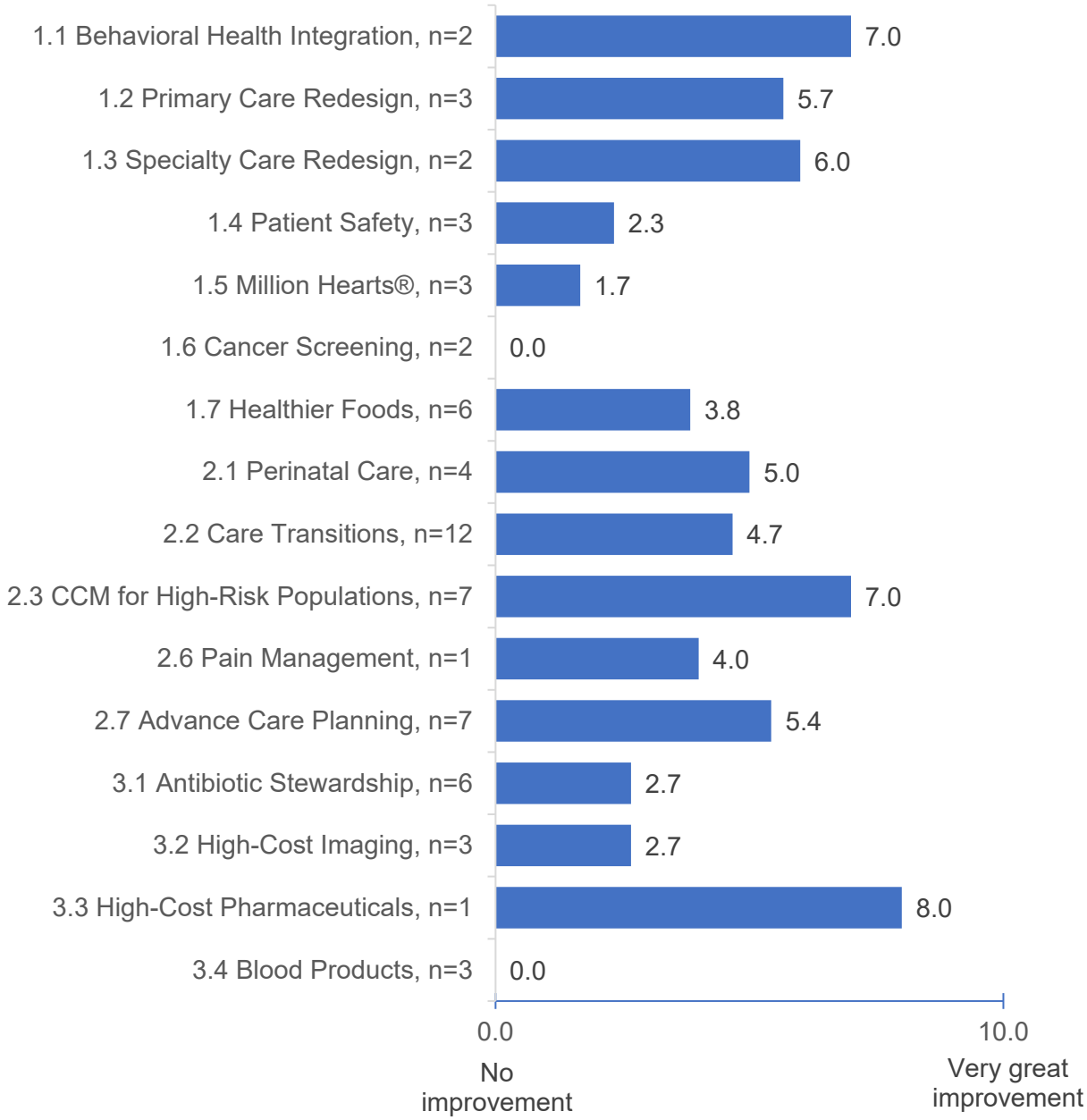
Source: UCLA analysis of the COVID-19 Survey, October to November 2020.
Note: Sample included 50 participating PRIME hospitals. One participating DMPH non-CAH hospital did not respond to the survey.

Exhibit 106: Impact of PRIME Project Implementation on COVID-19 Response among DPHs



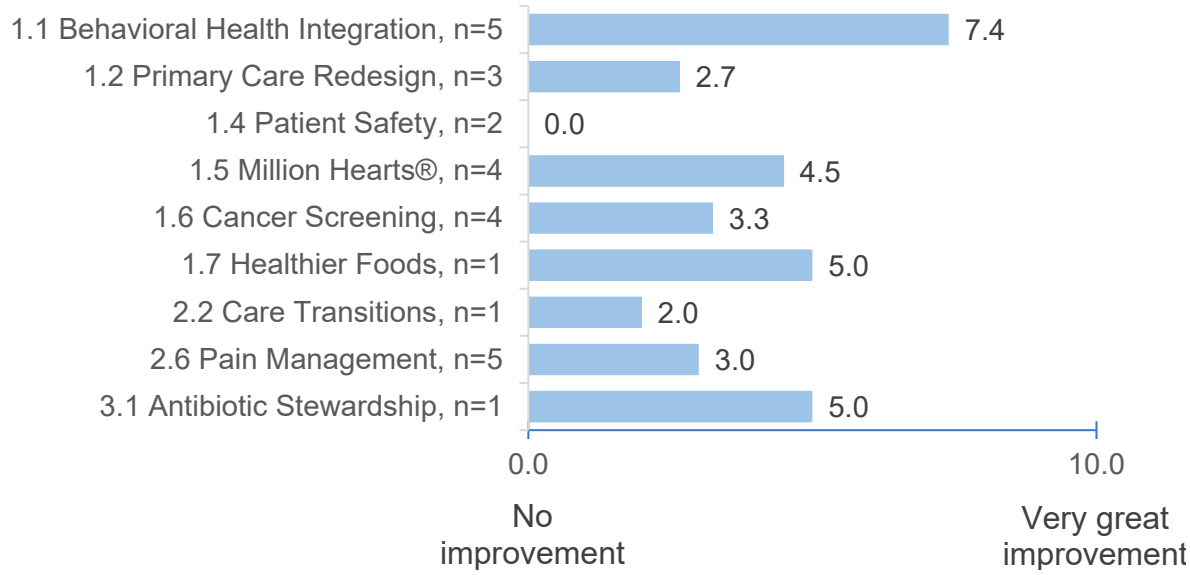
Source: UCLA analysis of the COVID-19 Survey, October to November 2020.
Note: Sample included 17 participating PRIME designated public hospitals.

Exhibit 107: Impact of PRIME Project Implementation on COVID-19 Response among DMPH non-CAHs



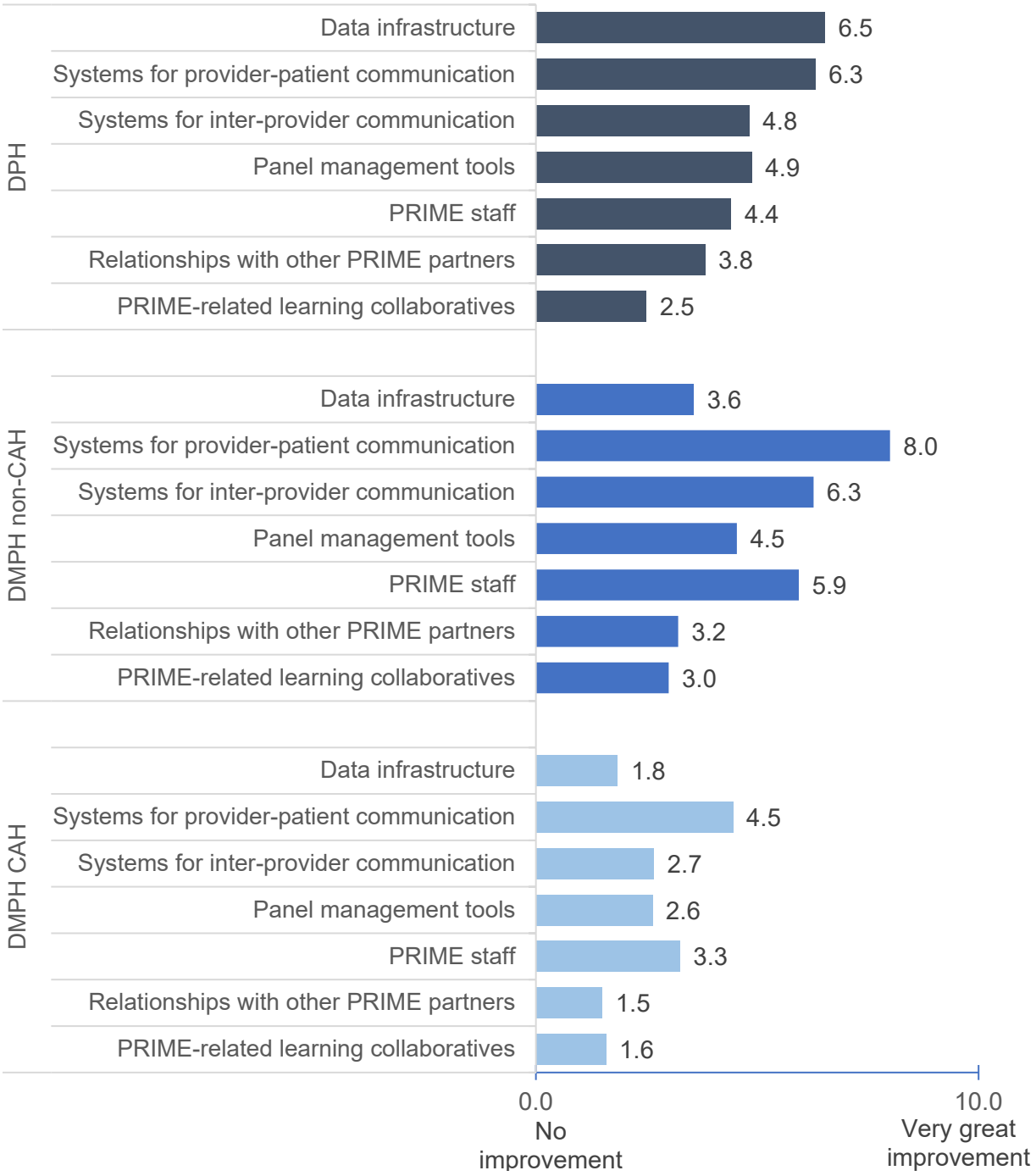
Source: UCLA analysis of the COVID-19 Survey, October to November 2020.
Notes: Note: Sample included 16 participating PRIME district and municipal hospitals without critical access hospital designation (DMPH non-CAH). One participating DMPH non-CAH hospital did not respond to the survey.

Exhibit 108: Impact of PRIME Project Implementation on COVID-19 Response among DMPH CAHs



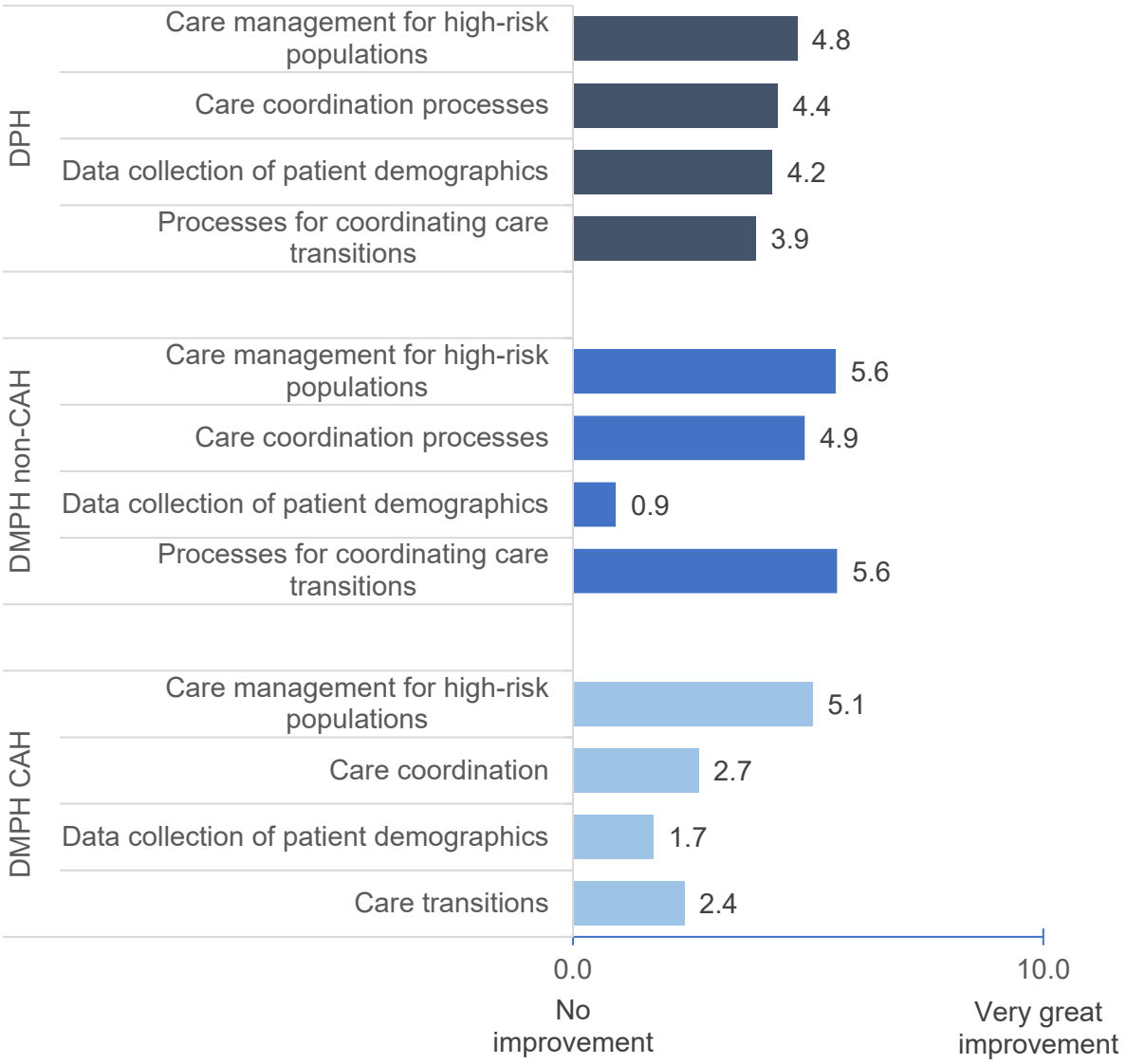
Source: UCLA analysis of the COVID-19 Survey, October to November 2020.
Notes: Note: Sample included 17 participating PRIME district and municipal hospitals with critical access hospital designation (DMPH CAH).

Exhibit 109: Impact of Developing PRIME Infrastructure on COVID-19 Response, by Hospital Type



Source: UCLA analysis of the COVID-19 Survey, October to November 2020.
Note: Sample included 50 participating PRIME hospitals. One participating DMPH non-CAH hospital did not respond to the survey.

Exhibit 110: Impact of Developing PRIME Care Processes on COVID-19 Response, by Hospital Type



Source: UCLA analysis of the COVID-19 Survey, October to November 2020.
Note: Sample included 50 participating PRIME hospitals. One participating DMPH non-CAH hospital did not respond to the survey.

Appendix B. Project Selection

A total of 17 DPHs participated in PRIME (Exhibit 111). Projects 1.1-1.3, 2.1-2.3 were required for DPHs, however San Mateo was not able to implement 2.1 due to not having maternity services.

Exhibit 111: DPH Project Selections (Number that Ever Selected the Project)

Project	1.1	1.2	1.3	1.4	1.5	1.6	1.7	2.1	2.2	2.3	2.4	2.5	2.6	2.7	3.1	3.2	3.3	3.4
Number selected	17	17	17	6	7	6	2	16	17	17	5	2	9	5	5	5	7	2
Alameda	X	X	X	D[12]	X[12]	D[12]		X	X	X			X		X			
Arrowhead	X	X	X				X	X	X	X	D[12]		X[12]		X			
Contra Costa	X	X	X			X		X	X	X	X		X			X		
Kern Medical	X	X	X	X				X	X	X		X				X		
Los Angeles	X	X	X	X		X	X	X	X	X		X		X	X		X	
Natividad	X	X	X		X			X	X	X			X					X
Riverside	X	X	X		X			X	X	X			X				X	
San Francisco	X	X	X		X			X	X	X			X				X	
San Joaquin	X	X	X			X		X	X	X				X		X		
San Mateo	X	X	X			X			X	X	X		X			X		
Santa Clara	X	X	X	X				X	X	X	X						X	
UC Davis	X	X	X		X			X	X	X			X			X		
UC Irvine	X	X	X	X				X	X	X			X		X			
UC Los Angeles	X	X	X	X				X	X	X				X			X	
UC San Diego	X	X	X		X			X	X	X				X	X		X	
UC San Francisco	X	X	X			X		X	X	X				X			X	
Ventura	X	X	X		X			X	X	X	X							X

Source: DHCS. Data available from January 2020.
Notes: X- Project implemented; D- Project discontinued from year prior; Number (i.e.11) Year Project discontinued or added.

A total of 20 DMPH Non-CAHs participated in PRIME (Exhibit 112). Coalinga, Sonoma West, and Tulare stopped PRIME participation.

Exhibit 112: DMPH Non-CAH Project Selections (Number that Ever Selected the Project)

Project	1.1	1.2	1.3	1.4	1.5	1.6	1.7	2.1	2.2	2.3	2.4	2.5	2.6	2.7	3.1	3.2	3.3	3.4
Number selected	4	4	2	6	7	4	7	5	14	9	0	1	1	8	7	4	1	4
Antelope Valley						D[12]		X	X	X				X	X	X		X
Coalinga					D[12]		D[12]											
El Camino	X							X										X
El Centro		X					X15									X		
Hazel Hawkins										X								
Kaweah Delta		X	X		X				X	X			X	X				
Lompoc Valley			X		X		X		X						X15			
Marin								X15	X15	X				X				
Oak Valley		X		X														
Palo Verde	X								X	X								
Palomar				D[13]	D[13]		X		X	X				X	X	X	X	D[11]
Pioneers				X		X			X						X			
Salinas Valley				X	X	X			X	X				X	X			X
San Gorgonio							X		X						X			
Sierra View							X		X	X				X				
Sonoma Valley									X									
Sonoma West									X									
Tri-City	D[12]			D[13]	X		X	X	X	X		D[12]		D[13]	X			
Tulare	D	D		D	D	D												
Washington								X	X15					X		D[12]		

Source: DHCS. Data available from January 2020.
Notes: X- Project implemented; D- Project discontinued from year prior; Number (i.e.11) Year Project discontinued or added.

A total of 17 DMPH CAHs participated in PRIME (Exhibit 113).

Exhibit 113: DMPH CAH Project Selections (Number that Ever Selected the Project)

Project																		
Number selected	3	4	0	2	5	4	2	1	1	0	0	0	5	0	3	0	0	0
Bear Valley													X					
Eastern Plumas	X												X15					
Healdsburg					X	X	D13											
Jerold Phelps					X										D13			
John C. Fremont		X																
Kern Valley	X																	
Mammoth	X	D13			X								X					
Mayers					D^{13}		X^{13}											
Mendocino						X												
Modoc		X																
Northern Inyo															X			
Plumas													X		X15			
San Bernardino				X														
Seneca								X15	X15									
Southern Inyo		X				X												
Tahoe					X								X					
Trinity				X		X												

Source: DHCS. Data available from January 2020.
Notes: X- Project implemented; D- Project discontinued from year prior; Number (i.e.11) Year Project discontinued or added.

Appendix C. Difference-in-Difference (DD) Data and Methodology

This appendix describes the data sources and methodology used to independently assess PRIME hospitals' success in improving care and health outcomes. UCLA developed PRIME-specified metrics and several other indicators of health care utilization and compared changes in these metrics between PRIME patients and a comparable sample of other Medi-Cal beneficiaries before and during PRIME implementation. UCLA also compared PRIME hospitals' success with other comparable hospitals in California before and during PRIME implementation using confidential patient discharge data (PDD) maintained by the California Department of Health Care Access and Information (HCAI), formerly the California Office of Statewide Health Planning and Development (OSHPD)

The methodology used to select a comparable sample of Medi-Cal beneficiaries in this Final PRIME Summative Evaluation Report has been refined and is different from that used for the PRIME Interim Evaluation Report. Previously, UCLA identified the Medi-Cal comparison group from the universe of patients of most similar hospitals to PRIME hospitals. UCLA then applied the PRIME patient attribution criteria. However, this selection method led to identification of too few Medi-Cal beneficiaries and a potentially unrepresentative sample frame. UCLA addressed this limitation at the time by using propensity score modeling. For the Final Summative Evaluation Report, UCLA requested a sample frame only using the PRIME patient attribution criteria.

A second major difference in the PRIME and comparison patient selection in this Final Summative Evaluation Report is using cohorts of patients. Selecting cohorts also meant that the baseline period for each cohort was different. This methodology improved the reliability of DD estimates but reduced the sample of PRIME patients.

Data Sources

UCLA used Medi-Cal monthly enrollment and claims from the Medi-Cal Management Information System/Decision Support System (MIS/DSS) data warehouse utilizing a dataset provided by DHCS to construct the PRIME and comparison groups, construct metrics, and conduct the DD analyses. UCLA used hospital discharge and financial data from HCAI to identify comparable hospitals, construct metrics, and conduct the DD analyses.

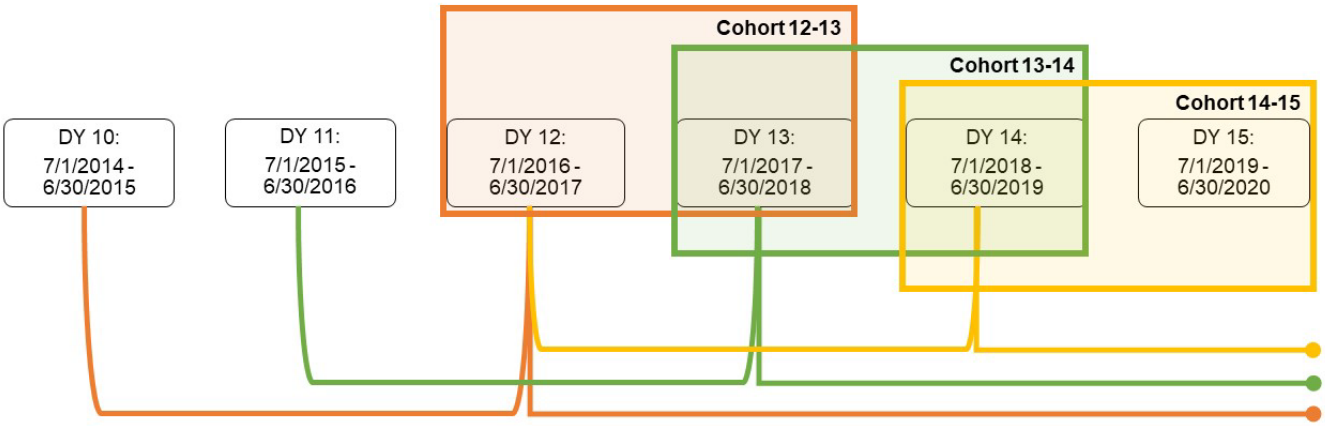
Selection of PRIME Patients and Comparable Medi-Cal Beneficiaries Using Medi-Cal Data

UCLA requested PRIME hospitals to supply their billing National Provider Identifiers, including outpatient affiliates and outpatient clinics that provided care to PRIME patients in order to

identify Medi-Cal beneficiaries that could be attributed to PRIME. UCLA then followed the PRIME program criteria for attribution of patients to hospitals. PRIME attribution criteria included having two or more primary care visits within the demonstration year (DY) with a DPH with the first visit occurring within the first six months of the year and the second visit occurring anytime within the DY but not on the same date as the first visit. For DMPHs, a similar attribution method was required but attribution was based on any two encounters and not two primary care visits.

In response to DHCS' request to reduce the volume of patient data requested for the analyses, UCLA developed a methodology to select a random and representative sub-set of the PRIME patients. This was accomplished by identifying three cohorts of PRIME patients who had been attributed to a PRIME hospital for two consecutive years. Exhibit 114 displays the selection of each cohort, and the before and during PRIME periods covered by each cohort. For example, a patient who was first attributed to a DPH in DY 12 and DY 13 was in Cohort 12-13 (orange group), and a patient who was first attributed to a DPH in DY 14 and DY 15 would be in Cohort 14-15 (yellow group). UCLA obtained the enrollment and claims data for the cohort's patients for two years prior to their attribution to this cohort (DY 10 and DY 11 in the first example; DY 12 and DY 13 in the second example). All patients were followed as long as they had Medi-Cal enrollment, up to the end of DY 15. UCLA did not request data for individuals first attributed to PRIME in DY 15 since they did not have adequate exposure to the program to measure their care outcomes. PRIME patients with less than 2 months of Medi-Cal enrollment per year were excluded from further analyses because their inclusion would reduce reliability of DD estimates.

Exhibit 114: PRIME Cohort Construction and Observation Timeline



Note: Separate cohorts were constructed for DPHs and DMPHs.

Exhibit 115: PRIME Cohort Alignment with PRIME Demonstration Years (DYs)

Cohort	Pre-Year 1	Pre-Year 2	Year 1	Year 2	Year 3	Year 4
Cohort 12-13	DY 10	DY 11	DY 12	DY 13	DY 14	DY 15

Cohort	Pre-Year 1	Pre-Year 2	Year 1	Year 2	Year 3	Year 4
Cohort 13-14	DY 11	DY 12	DY 13	DY 14	DY 15	--
Cohort 14-15	DY 12	DY 13	DY 14	DY 15	--	--

Notes: Demonstration Year (DY). Latter cohorts have baseline data coinciding with the demonstration, but did not meet criteria for being a PRIME patient during their baseline period- this is further specified in Availability of Baseline Utilization Data.

Following these criteria, DHCS provided a list of all Medi-Cal beneficiaries that fit these criteria between July 1, 2013 and June 30, 2020, approximately 500,000 PRIME patients. To avoid overlap between DPH and DMPH patients, UCLA first attributed patients to DPHs and then attributed the remaining patients to DMPHs.

For every PRIME patient in the sample, UCLA obtained a random sample of approximately 3 Medi-Cal beneficiaries who had no contact with a PRIME hospital but had 2 or more encounters with providers and could be included in the comparison group, a total of 1.4 million beneficiaries.

Selection of Comparison Group

UCLA used a propensity score model to identify comparison groups that had similar characteristics of Medi-Cal beneficiaries who were attributed to PRIME, as described above. Two models were created using the entire pool of PRIME and potential comparison patients. Models included indicators for demographics and baseline health status, risk level, health care utilization, paid amounts per claim, and settings of care. The models predicted the likelihood of being attributed as a DPH or DMPH PRIME patient. A propensity score was then created for everyone in the respective denominators using the gradient boosting machine learning method, which had a higher prediction power, led to a balanced sample, and accounted for likely interactions of all the indicators in the model. Additional models were developed for DPH and DMPH samples to create specific propensity scores for each PRIME metric.

Availability of Baseline Utilization Data

The baseline period included July 2014 to June 2016, reflecting two year prior to DY 12 and including DY 11. DPHs were reporting DY 11 as the baseline for their performance metrics, and the majority of DMPHs had not begun implementation or reporting of metrics in this year. Analyses of availability of baseline data for PRIME and comparison patients showed that the majority (77.8%) of DPH patients had service utilization in both years of baseline (Exhibit 116). Another 13.7% had utilization data for the year immediately prior to attribution to DPHs (2nd Pre-Year). A small percentage only had data two years prior to attribution to DPHs (1.2%) and 7.3% had no baseline utilization data. The utilization data availability was relatively similar for DMPHs with (79.4%) who had baseline utilization data in both baseline years (Exhibit 117). The entire sample of PRIME and comparison patients were included in the DD analyses to avoid small sample sizes and promote the ability to identify changes in metrics.

Exhibit 116: Baseline Utilization Data Availability for DPH PRIME and Comparison Groups

Baseline utilization data availability	PRIME DPHs		Comparison to DPH	
	N	%	N	%
No Baseline Data	14,370	7.3%	53,800	8.7%
One Year of Baseline Data (1st Pre-Year)	2,403	1.2%	8,101	1.3%
One Year of Baseline Data (2nd Pre-Year)	27,107	13.7%	97,376	15.7%
Both Baseline Years	153,772	77.8%	462,353	74.4%
Total	197,652	100.0%	621,630	100.0%

Source: UCLA analysis of Medi-Cal claims data.

Exhibit 117: Baseline Utilization Data Availability for DMPH PRIME and Comparison Groups

Baseline utilization data availability	PRIME DMPHs		Comparison to DMPH	
	N	%	N	%
No Baseline Data	7,482	6.8%	22,590	7.5%
One Year of Baseline Data (1st Pre-Year)	1,489	1.3%	4,744	1.6%
One Year of Baseline Data (2nd Pre-Year)	13,318	12.1%	34,361	11.5%
Both Baseline Years	88,157	79.8%	237,658	79.4%
Total	110,446	100.0%	299,353	100.0%

Source: UCLA analysis of Medi-Cal claims data.

Differences in Patient Characteristics before and after Propensity Score Matching

A propensity score matching methodology was used to create a comparison group that was similar to the PRIME patients. This methodology varied based on availability of baseline utilizations data, resulting in 4 models each for DPH and DMPHs samples. For example, for the sample with no baseline data, the comparison patients were elected using demographics available in enrollment data. For patients with only one year of baseline data, the comparison patients were selected using that year of utilization data. For patients with both years of baseline data, the comparison patients were selected using the change in trends in the two years of baseline data. The latter approach was essential in satisfying the parallel odds assumptions of DD models. In other words, this methodology ensured that patterns of change in any outcome

examined was similar for the PRIME and comparison patients prior to PRIME and differences during PRIME could be attributed to PRIME implementation.

The propensity score models for assessment of changes in PRIME specified and additional metrics included demographics (e.g., age), provider characteristics (e.g., size of the billing provider), PRIME cohort, patient health status (e.g., has asthma), and service utilization (e.g., ED visits). The models for assessment of changes in PRIME payments included payments (e.g., ED payments) instead of service utilization.

Exhibit 121 displays the characteristics of PRIME and comparison patients before (unweighted) and after (weighted) applying the propensity score weights to DPH and comparison patients in the four groups with different availability of utilization data for payment models. The data indicated a significant improvement in similarity between PRIME and comparison patients with both years of baseline data. For example, 82% of PRIME and 89% of comparison patients had diabetes in the unweighted data, but this difference diminished to 87% and 88% respectively, following applying the propensity score weights. However, this difference remained statistically significant potentially because of the large sample sizes.

Exhibit 118: Changes in Sample Characteristics Following Weighting the Data with Propensity Scores for DPH PRIME and Comparison Patients, for those with Both Baseline Years

	Baseline Utilization Data for Both Years					
	Unweighted			Weighted		
	PRIME	Comp.	Sig.	PRIME	Comp.	Sig.
Age						
0-18	24%	42%	***	43%	40%	***
19-45	24%	24%		18%	23%	
46-64	39%	24%		28%	26%	
65+	13%	10%		10%	11%	
Region						
Bay Area, Central	76%	42%	***	59%	48%	***
North	0%	6%		4%	5%	
South	24%	52%		38%	48%	
Race/ Ethnicity						
White	19%	21%	***	20%	21%	***
Latinx	45%	50%		49%	49%	
Black/African American	11%	7%		8%	8%	
Asian/Pacific Islander	12%	11%		11%	11%	
Other	13%	11%		13%	11%	
Gender						
Male	41%	40%	***	44%	41%	***
Female	59%	60%		56%	59%	
English Speaking						
No	41%	40%	***	39%	41%	***
Yes	59%	60%		61%	59%	
Number of patients per billing provider (Quartile)						
1- lowest	26%	25%	***	27%	26%	**
2	24%	25%		25%	25%	
3	27%	25%		25%	25%	
4- highest	23%	25%		23%	24%	

	Baseline Utilization Data for Both Years					
	Unweighted			Weighted		
	PRIME	Comp.	Sig.	PRIME	Comp.	Sig.
Number of rendering providers per billing provider (Quartile)						
1- lowest	26%	26%	***	26%	26%	*
2	24%	24%		25%	24%	
3	26%	25%		24%	25%	
4- highest	24%	25%		25%	25%	
Cohort						
DY12-13	61%	68%	***	64%	67%	***
DY13-14	22%	18%		20%	18%	
DY14-15	17%	15%		16%	15%	
Has Asthma						
Yes	8%	9%	***	10%	9%	*
Has COPD						
Yes	5%	5%	***	5%	5%	
Has Depression						
Yes	9%	6%	***	7%	6%	*
Has Diabetes						
Yes	18%	11%	***	13%	12%	***
Has Hypertension						
Yes	25%	16%	***	19%	18%	*
Has Alcohol use disorder						
Yes	3%	2%	***	2%	2%	NS
Has Obesity						
Yes	9%	8%		7%	8%	
CDPS Score	0.91	0.87	***	0.93	0.96	**
Payment						
Total	$54	$141	***	$59	$97	*
ED	$2	$5	***	$2	$2	NS
Hospitalization	$(10)	$(8)	NS	$(14)	$(8)	NS

	Baseline Utilization Data for Both Years					
	Unweighted			Weighted		
	PRIME	Comp.	Sig.	PRIME	Comp.	Sig.
Prescription	$19	$55	***	$23	$37	*

Source: UCLA analysis of Medi-Cal data.
*Notes: P: PRIME, C: comparison, Sig.: statistical significance or p-value. NS: not significant. * p<0.05, ** p<0.01, *** p<0.001*

Exhibit 119: Changes in Sample Characteristics Following Weighting the Data with Propensity Scores for DPH PRIME and Comparison Patients, for those with One Baseline Year of Utilization

	Baseline Utilization Data for 1st Pre-Year						Baseline Data for 2nd Pre-Year					
	Unweighted			Weighted			Unweighted			Weighted		
	PRIME	Comp.	Sig.	PRIME	Comp.	Sig.	PRIME	Comp.	Sig.	PRIME	Comp.	Sig.
Age												
0-18	9%	24%	***	19%	22%	*	39%	55%	***	58%	54%	***
19-45	39%	41%		37%	40%		25%	21%		18%	21%	
46-64	41%	29%		34%	31%		29%	19%		19%	20%	
65+	10%	7%		10%	7%		7%	4%		5%	5%	
Region												
Bay Area, Central	73%	35%	***	57%	40%	***	81%	43%	***	60%	48%	**
North	--	5%		--	4%		0%	5%		3%	4%	
South	27%	61%		43%	56%		19%	52%		37%	47%	
Race/ Ethnicity												
White	16%	18%	***	17%	18%	NS	14%	18%	***	15%	17%	*
Latinx	49%	54%		53%	54%		47%	48%		48%	48%	
Black/African American	11%	8%		9%	8%		6%	5%		6%	5%	
Asian/Pacific Islander	12%	11%		12%	11%		14%	11%		12%	12%	
Other	12%	8%		9%	9%		18%	17%		19%	18%	
Gender												

	Baseline Utilization Data for 1st Pre-Year						Baseline Data for 2nd Pre-Year					
	Unweighted			Weighted			Unweighted			Weighted		
	PRIME	Comp.	Sig.	PRIME	Comp.	Sig.	PRIME	Comp.	Sig.	PRIME	Comp.	Sig.
Male	38%	36%	*	39%	37%	NS	44%	44%	NS	48%	45%	**
Female	62%	64%		61%	63%		56%	56%		52%	55%	
English Speaking												
No	38%	39%	NS	37%	39%	NS	43%	36%	***	35%	37%	*
Yes	62%	61%		63%	61%		57%	64%		65%	63%	
Number of patients per billing provider (Quartile)												
1- lowest	23%	23%	NS	25%	23%	NS	24%	24%	**	24%	24%	NS
2	25%	25%		25%	25%		25%	24%		24%	25%	
3	26%	27%		27%	27%		25%	25%		26%	25%	
4- highest	25%	25%		23%	25%		26%	26%		26%	26%	
Number of rendering providers per billing provider (Quartile)												
1- lowest	23%	22%	NS	23%	22%	NS	27%	25%	***	25%	25%	NS
2	25%	25%		25%	25%		23%	24%		23%	24%	
3	24%	25%		24%	25%		28%	26%		26%	26%	
4- highest	28%	28%		28%	28%		23%	25%		26%	25%	
Cohort												
DY12-13	41%	48%	***	43%	47%	NS	48%	48%	**	45%	48%	*
DY13-14	33%	27%		31%	28%		32%	32%		33%	32%	
DY14-15	27%	25%		26%	25%		19%	20%		21%	20%	
Has Asthma												

	Baseline Utilization Data for 1st Pre-Year						Baseline Data for 2nd Pre-Year					
	Unweighted			Weighted			Unweighted			Weighted		
	PRIME	Comp.	Sig.	PRIME	Comp.	Sig.	PRIME	Comp.	Sig.	PRIME	Comp.	Sig.
Yes	6%	6%	NS	5%	6%	NS	3%	3%	NS	3%	3%	NS
Has COPD												
Yes	3%	3%	NS	0.04	0.03	NS	2%	0.02	***	2%	2%	NS
Has Depression												
Yes	7%	5%	***	6%	5%	NS	5%	3%	***	3%	4%	NS
Has Diabetes												
Yes	17%	11%	***	15%	12%	**	11%	7%	***	7%	7%	NS
Has Hypertension												
Yes	23%	15%	***	18%	16%	*	16%	10%	***	10%	10%	NS
Has Alcohol use disorder												
Yes	3%	2%	*	3%	2%	NS	3%	3%	**	2%	3%	*
Has Obesity												
Yes	8%	8%		7%	8%		5%	4%		3%	4%	
CDPS Score	0.68	0.68	NS	0.68	0.74	NS	1.32	1.29	***	1.37	1.50	***
Payment												
Total	$368	$659	***	$427	$514	NS	$652	$1,613	***	$846	$1,017	*
ED	$16	$28	***	$17	$21	*	$19	$38	***	$22	$26	NS
Hospitalization	$103	$125	NS	$106	$106	NS	$325	$885	***	$439	$530	NS
Prescription	$79	$179	***	$110	$122	NS	$47	$119	***	$76	$69	NS

Source: UCLA analysis of Medi-Cal data.
*Notes: P: PRIME, C: comparison, Sig.: statistical significance or p-value. NS: not significant. * p<0.05, ** p<0.01, *** p<0.001*

Exhibit 120: Changes in Sample Characteristics Following Weighting the Data with Propensity Scores for DPH PRIME and Comparison Patients, for those with No Baseline Utilization

	No Baseline Utilization Data					
	Unweighted			Weighted		
	PRIME	Comp.	Sig.	PRIME	Comp.	Sig.
Age						
0-18	33%	52%	***	48%	48%	NS
19-45	27%	22%		22%	23%	
46-64	32%	22%		25%	24%	
65+	8%	4%		5%	5%	
Region						
Bay Area, Central	79%	44%	***	56%	51%	NS
North	0%	5%		2%	4%	
South	21%	51%		41%	45%	
Race/ Ethnicity						
White	12%	16%	***	15%	15%	NS
Latinx	54%	51%		52%	52%	
Black/African American	6%	4%		4%	5%	
Asian/Pacific Islander	12%	11%		11%	11%	
Other	16%	17%		17%	17%	
Gender						
Male	43%	43%	NS	42%	43%	NS
Female	57%	57%		58%	57%	
English Speaking						
No	50%	40%	***	41%	42%	*
Yes	50%	60%		59%	58%	
Number of patients per billing provider (Quartile)						
1- lowest	24%	25%	***	26%	25%	NS
2	25%	26%		25%	26%	
3	24%	26%		26%	25%	
4- highest	27%	23%		24%	24%	

	No Baseline Utilization Data					
	Unweighted			Weighted		
	PRIME	Comp.	Sig.	PRIME	Comp.	Sig.
Number of rendering providers per billing provider (Quartile)						
1- lowest	26%	25%	***	25%	25%	***
2	24%	27%		26%	26%	
3	27%	27%		25%	27%	
4- highest	23%	21%		25%	21%	
Cohort						
DY12-13	42%	43%	***	40%	43%	***
DY13-14	36%	34%		35%	34%	
DY14-15	22%	23%		25%	23%	

*Source: UCLA analysis of Medi-Cal data. Notes: P: PRIME, C: comparison, Sig.: statistical significance or p-value. NS: not significant. * p<0.05, ** p<0.01, *** p<0.001*

Similar patterns are observed for DMPH PRIME and comparison patients following weighting the samples using the propensity score methodology.

Exhibit 121: Changes in Sample Characteristics Following Weighting the Data with Propensity Scores for DMPH PRIME and Comparison Patients, Among those with Both Baseline Years of Utilization Data

	Both Baseline Years					
	PRIME	Comp.	Sig.	PRIME	Comp.	Sig.
	Unweighted			**Weighted**		
Age						
0-18	25%	35%	***	38%	35%	***
19-45	33%	27%		24%	27%	
46-64	27%	17%		21%	19%	
65+	15%	21%		17%	19%	
Region						

	Both Baseline Years					
	PRIME	Comp.	Sig.	PRIME	Comp.	Sig.
	Unweighted			**Weighted**		
Bay Area, Central	53%	41%	***	48%	43%	***
North	9%	7%		9%	8%	
South	38%	52%		43%	49%	
Race/ Ethnicity						
White	31%	26%	***	29%	27%	***
Latinx	52%	44%		49%	45%	
Black/African American	5%	9%		7%	8%	
Asian/Pacific Islander	2%	9%		5%	8%	
Other	9%	12%		10%	11%	
Gender						
Male	36%	40%	***	42%	41%	**
Female	64%	60%		58%	59%	
English Speaking						
No	31%	36%	***	33%	35%	***
Yes	69%	64%		67%	65%	
Number of patients per billing provider (Quartile)						
1- lowest	25%	25%	***	26%	25%	**
2	25%	25%		25%	25%	
3	28%	25%		27%	25%	
4- highest	22%	25%		23%	24%	
Number of rendering providers per billing provider (Quartile)						
1- lowest	25%	26%	***	25%	26%	NS
2	25%	25%		25%	25%	
3	28%	25%		26%	25%	
4- highest	22%	25%		24%	24%	
Cohort						
DY12-13	62%	62%	**	64%	62%	**
DY13-14	22%	21%		21%	21%	

	Both Baseline Years					
	PRIME	Comp.	Sig.	PRIME	Comp.	Sig.
	Unweighted			**Weighted**		
DY14-15	16%	17%		16%	17%	
Has Asthma						
Yes	11%	6%	***	9%	8%	***
Has COPD						
Yes	9%	5%	***	7%	6%	***
Has Depression						
Yes	10%	5%	***	7%	6%	***
Has Diabetes						
Yes	16%	11%	***	13%	12%	***
Has Hypertension						
Yes	24%	16%	***	19%	17%	***
Has Alcohol use disorder						
Yes	3%	2%	***	2%	2%	NS
Has Obesity						
Yes	10%	5%	***	7%	6%	
CDPS Score	0.91	0.82	***	0.93	0.96	NS
Payment	$ 38	$ 111	***	$ 47	$ 46	NS
Total cost	$ 1	$ 3	***	$ 0	$ (4)	NS
ED cost	$ (14)	$ 0	**	$ (12)	$ (18)	NS
Hospitalization cost	$ 2	$ 21	***	$ 6	$ 8	NS
Prescription Cost	$ 19	$ 55	***	$ 23	$ 37	NS

*Source: UCLA analysis of Medi-Cal data. Notes: P: PRIME, C: comparison, Sig.: statistical significance or p-value. NS: not significant. * p<0.05, ** p<0.01, *** p<0.001*

Notes: Cost values among those with 2 baseline years are a trend, averaged per month. Cost values for those with 1 baseline year is the monthly average cost. If no baseline data was available, the health-status and cost measures are not available. -- Small cells have been redacted and cells around them rounded to prevent back-calculation.

Exhibit 122: Changes in Sample Characteristics Following Weighting the Data with Propensity Scores for DMPH PRIME and Comparison Patients, Among those with One Year of Baseline Utilization Data

	One Year of Baseline Data (1st Pre-Year)						One Year of Baseline Data (2nd Pre-Year)					
	PRIME	Comp.	Sig.	PRIME	Comp.	Sig.	PRIME	Comp.	Sig.	PRIME	Comp.	Sig.
	Unweighted			**Weighted**			**Unweighted**			**Weighted**		
Age												
0-18	10%	20%	***	20%	19%	NS	41%	40%	***	48%	43%	***
19-45	53%	50%		47%	49%		29%	32%		26%	30%	
46-64	27%	19%		22%	21%		23%	17%		18%	18%	
65+	10%	11%		11%	11%		8%	11%		8%	10%	
Region												
Bay Area, Central	48%	35%	***	44%	37%	**	55%	38%	***	48%	42%	***
North	8%	7%		7%	7%		9%	6%		7%	7%	
South	44%	58%		49%	56%		36%	56%		45%	52%	
Race/ Ethnicity												
White	29%	23%	***	27%	24%	*	27%	24%	***	25%	25%	NS
Latinx	54%	49%		51%	50%		54%	43%		49%	45%	
Black/African American	7%	10%		10%	9%		3%	7%		6%	6%	
Asian/Pacific Islander	2%	7%		2%	7%		3%	8%		5%	7%	
Other	7%	10%		10%	10%		13%	17%		15%	16%	
Gender												
Male	34%	38%	**	39%	38%	NS	43%	43%	NS	46%	44%	*
Female	66%	63%		61%	62%		57%	57%		54%	56%	
English Speaking												
No	26%	27%	NS	27%	27%	NS	30%	30%	NS	30%	30%	NS
Yes	74%	73%		73%	73%		70%	70%		70%	70%	
Number of patients per												

	One Year of Baseline Data (1st Pre-Year)						One Year of Baseline Data (2nd Pre-Year)					
	PRIME	Comp.	Sig.	PRIME	Comp.	Sig.	PRIME	Comp.	Sig.	PRIME	Comp.	Sig.
	Unweighted			Weighted			Unweighted			Weighted		
billing provider (Quartile)												
1- lowest	22%	20%	**	22%	20%	NS	28%	24%	***	26%	25%	*
2	24%	24%		25%	24%		28%	25%		26%	25%	
3	25%	29%		26%	29%		26%	26%		27%	26%	
4- highest	29%	27%		28%	27%		19%	25%		21%	24%	
Number of rendering providers per billing provider (Quartile)												
1- lowest	22%	21%	*	21%	21%	NS	29%	25%	***	26%	26%	NS
2	21%	24%		25%	24%		26%	25%		25%	25%	
3	32%	29%		31%	29%		26%	25%		26%	25%	
4- highest	25%	26%		24%	26%		19%	26%		23%	24%	
Cohort												
DY12-13	45%	44%	NS	42%	44%	NS	50%	49%	**	49%	49%	NS
DY13-14	30%	30%		30%	30%		31%	32%		32%	32%	
DY14-15	24%	26%		28%	26%		20%	19%		19%	19%	
Has Asthma												
Yes	7%	5%	***	7%	5%		4%	3%	***	4%	3%	*
Has COPD												
Yes	5%	3%	**	0.04	0.03		4%	0.02	***	3%	2%	*
Has Depression												
Yes	8%	5%	***	7%	6%		5%	4%	***	4%	4%	NS
Has Diabetes												
Yes	14%	8%	***	13%	9%		10%	6%	***	7%	7%	*
Has Hypertension												
Yes	19%	11%	***	16%	12%	NS	15%	9%	***	11%	10%	*

	One Year of Baseline Data (1st Pre-Year)						One Year of Baseline Data (2nd Pre-Year)					
	PRIME	Comp.	Sig.	PRIME	Comp.	Sig.	PRIME	Comp.	Sig.	PRIME	Comp.	Sig.
	Unweighted			**Weighted**			**Unweighted**			**Weighted**		
Has Alcohol use disorder												
Yes	4%	2%	**	5%	3%	NS	3%	3%	*	3%	3%	NS
Has Obesity												
Yes	9%	6%	***	7%	6%	NS	6%	4%	***	4%	4%	NS
CDPS Score	0.72	0.62	**	0.71	0.76		1.04	1.23	***	1.12	1.28	***
Payment	$ 363	543.32	***	$ 386	$ 469		$ 711	$ 1,114	***	$ 767	$ 890	*
Total cost	$ 26	$ 49	***	$ 33	$ 38	**	$ 28	$ 56	***	$ 34	$ 39	NS
ED cost	$ 100	$ 199	***	$ 108	$ 188		$ 265	$ 526	***	$ 305	$ 419	*
Hospitalization cost	$ 59	$ 70	NS	$ 65	$ 58		$ 41	$ 59	***	$ 42	$ 46	NS
Prescription Cost	$ 79	$ 179	***	$ 110	$ 122	**	$ 47	$ 119	***	$ 76	$ 69	NS

Source: UCLA analysis of Medi-Cal data.
Notes: Cost values among those with 2 baseline years are a trend, averaged per month. Cost values for those with 1 baseline year is the monthly average cost. If no baseline data was available, the health-status and cost measures are not available. -- Small cells have been redacted and cells around them rounded to prevent back-calculation.

Exhibit 123: Changes in Sample Characteristics Following Weighting the Data with Propensity Scores for DMPH PRIME and Comparison Patients, Among those with No Baseline Utilization Data

	No Baseline Data					
	PRIME	Comp.	Sig.	PRIME	Comp.	Sig.
	Unweighted			**Weighted**		
Age						
0-18	37%	38%	***	39%	38%	*
19-45	29%	31%		30%	31%	
46-64	25%	19%		22%	21%	
65+	8%	12%		9%	11%	
Region						
Bay Area, Central	57%	40%	***	46%	44%	NS

	No Baseline Data					
	PRIME	Comp.	Sig.	PRIME	Comp.	Sig.
	Unweighted			**Weighted**		
North	10%	6%		7%	7%	
South	33%	54%		47%	49%	
Race/ Ethnicity						
White	27%	23%	***	23%	24%	NS
Latinx	56%	47%		49%	49%	
Black/African American	3%	6%		8%	5%	
Asian/Pacific Islander	2%	7%		6%	6%	
Other	13%	17%		14%	16%	
Gender						
Male	44%	42%	NS	44%	43%	NS
Female	56%	58%		56%	57%	
English Speaking						
No	34%	34%	NS	32%	34%	*
Yes	66%	66%		68%	66%	
Number of patients per billing provider (Quartile)						
1- lowest	29%	26%	***	26%	27%	NS
2	29%	26%		26%	27%	
3	25%	25%		26%	25%	
4- highest	17%	23%		22%	22%	
Number of rendering providers per billing provider (Quartile)						
1- lowest	30%	27%	***	25%	28%	*
2	27%	26%		26%	26%	
3	24%	26%		27%	25%	
4- highest	19%	21%		22%	21%	
Cohort						
DY12-13	45%	47%	***	48%	47%	NS
DY13-14	35%	33%		34%	33%	
DY14-15	20%	20%		18%	20%	

Source: UCLA analysis of Medi-Cal data.
Notes: Cost values among those with 2 baseline years are a trend, averaged per month. Cost values for those with 1 baseline year is the monthly average cost. If no baseline data was available, the health-status and cost measures are not available. -- Small cells have been redacted and cells around them rounded to prevent back-calculation.

Selection of PRIME and Comparison Hospitals Using HCAI Data

UCLA used HCAI hospital discharge and financial data to identify the most similar private hospitals in California. Hospitals were selected based on their organizational characteristics such as principal service type and teaching status as well as care delivery characteristics such as case mix. The methodology for selection of these hospitals is described in detail in PRIME Interim Report, Appendix E: Selection of Comparison Hospitals.

PRIME Metric Feasibility Analysis

Construction of Process and Outcome Metrics

Using the final restricted samples, UCLA followed the PRIME Reporting Manual DY 15YE in constructing the process and outcome metrics required from PRIME hospitals. UCLA carefully examined these specifications to determine which metrics could be replicated in Medi-Cal data and created those metrics. During PRIME, metric specifications frequently changed for each reporting period to improve measurement accuracy and address various unforeseen challenges. UCLA used the PRIME Reporting Manual DY 15YE to construct these metrics, which led to differences between these metric values and those reported by PRIME hospitals. This methodology was consistently applied to both PRIME and comparison samples and therefore was not expected to limit the reliability and validity of the analyses. UCLA also made modifications to some metrics as needed to account for limitations of using claims data.

UCLA also created 9 additional measures either related to a project or relevant to the PRIME program as a whole which were not required as performance measures from PRIME hospitals but were conceptualized as informative intermediate outcomes of potential changes in patterns of delivery of care. These additional metrics, the rationale for their creation, and the numerator and denominators used are indicated in Exhibit 124.

Exhibit 124: Additional Outcome Metrics for Assessing Impact of PRIME

Related Project	Metric Name	Achievement Measured by Increase or Decrease	Definition	Concept
1.1	**Average Number of Mental Health Visits per Beneficiary per Year**	Increase	Average number of mental health visits per person per year for all beneficiaries 18+, excluding Short-Doyle claims	Change in patterns of behavioral service utilization.
1.1	**Average Number of Substance Use Disorder Treatment Visits per Beneficiary per Year**	Increase	Average number of substance use disorder visits per person per year for all beneficiaries 18+, excluding Short-Doyle claims	Change in patterns of behavioral service utilization.
2.2	**Outpatient Follow-up Visits after an Inpatient Admission within 30 days**	Increase	Percent of patients who had at least one inpatient stay with an outpatient follow-up visit within 30 days of discharge.	Change in patterns of follow-up care after hospitalization.
Overall	**Primary Care Visits per 1,000 Beneficiaries per Year**	Increase	For a particular measurement period, the total number of primary care visits normalized by the total number of Medi-Cal enrolled member months, multiplying the result by 1,000.	Change in patterns of primary care delivery.

Related Project	Metric Name	Achievement Measured by Increase or Decrease	Definition	Concept
Overall	**Specialty Care Visits per 1,000 Beneficiaries per Year**	Increase	For a particular measurement period, the total number of specialty care visits normalized by the total number of Medi-Cal enrolled member months, multiplying the result by 1,000.	Change in patterns of specialty care delivery.
Overall	**ED Visits per 1,000 Beneficiaries per Year**	Decrease	Number of ED visits, including ED visits that resulted in a hospitalization, normalized by the total number of Medi-Cal enrolled member months, multiplying the result by 1,000.	Change in patterns of emergency service utilization.
Overall	**Percent of Beneficiaries with Any ED Visits**	Decrease	Percent of all beneficiaries with any ED visits, including ED visits that resulted in a hospitalization.	Change in patterns of emergency service utilization.
Overall	**Hospitalizations per 1,000 Beneficiaries per Year**	Decrease	Number of hospitalizations normalized by the total number of Medi-Cal enrolled member months, multiplying the result by 1,000.	Change in patterns of hospitalizations.
Overall	**Percent of Beneficiaries with Any Hospitalizations**	Decrease	Percent of all beneficiaries with any hospitalizations.	Change in patterns of hospitalizations.

Source: UCLA analysis of PRIME metrics.

PRIME Metric Feasibility Analysis

Among the PRIME metrics from the DY 15 manual, 16 metrics were deemed feasible to use for difference-in-difference analysis (Exhibit 125). Some metrics were not feasible due to one or more of the following issues: (1) the metric required additional data from EHRs, (2) the metric included codes that were seriously underreported in Medi-Cal claims, or (3) the metric restricted the eligible population to a sample size that was not sufficient for analysis. Color-coding in the table indicates which metrics belongs in each project; bold font indicates that the project is feasible.

Exhibit 125: PRIME Metric Feasibility Analysis using Claims Data

Project	Metric	Full Name	Feasibility in Claims	Notes
1.1	1.1.1.a	Alcohol and Drug Misuse (SBIRT)	No	SBIRT codes are seriously underreported in claims
1.1	1.1.2	Care coordinator assignment	No	Metric discontinued in DY 13
1.1	1.1.3.d	NQF 0059: Comprehensive Diabetes Care: HbA1c Poor Control (>9.0%)	No	HbA1c test value set codes are seriously underreported in claims.
1.1	1.1.4	NQF 0710: Depression Remission at 12 Months [grouped with 1.1.7]	No	Replaced by Metric 1.1.7 in DY 13
1.1	1.1.5.f	Screening for Clinical Depression and follow-up	No	Clinical depression screening codes are seriously underreported in claims
1.1	1.1.6.t	Tobacco Assessment and Counseling	No	Tobacco screening and cessation intervention codes are seriously underreported in claims
1.1	1.1.7	Depression Remission or Response for Adolescents and Adults (DRR) [grouped with 1.1.4]	No	No appropriate CPT/HCPCS procedure codes for PHQ-9 scores
1.2	1.2.1.a	Alcohol and Drug Misuse (SBIRT)	No	SBIRT codes are seriously underreported in claims
1.2	1.2.10	REAL and/or SO/GI disparity reduction	No	SO/GI information is not provided in claims
1.2	1.2.11	REAL data completeness	No	Separate information on detailed race and ethnicity is not provided in claims

Project	Metric	Full Name	Feasibility in Claims	Notes
1.2	1.2.12.f	Screening for Clinical Depression and follow-up	No	Clinical depression screen codes are seriously underreported in claims
1.2	1.2.13	SO/GI data completeness	No	SO/GI information is not provided in claims
1.2	1.2.14.t	Tobacco Assessment and Counseling	No	Tobacco screening and cessation intervention codes are seriously underreported in claims
1.2	1.2.2	NQF 0005 CG-CAHPS: Provider Rating	No	No value sets or codes were included in this metric
1.2	**1.2.3.c**	**NQF 0034: Colorectal Cancer Screening**	**Yes**	Constructed without specified lookback period. UCLA cannot construct eCQM version which may provide additional information.
1.2	1.2.4.d	NQF 0059: Comprehensive Diabetes Care: HbA1c Poor Control (>9.0%)	No	HbA1c test value set codes are seriously underreported in claims
1.2	1.2.5.b	NQF 0018: Controlling Blood Pressure	No	No EMR data to determine specific blood pressure readings
1.2	1.2.6	Documented REAL and/or SOGI disparity reduction plan	No	Metric discontinued in DY 13
1.2	1.2.7.i	NQF 0068 Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antithrombotic	No	Aspirin and antiplatelet therapy codes are seriously underreported in claims
1.2	**1.2.8**	**AHRQ PQI #90**	**Yes**	
1.2	1.2.9	Primary Care Redesign metrics stratified by REAL categories and SOGI	No	Metric discontinued in DY 13
1.3	1.3.1	Closing the referral loop: receipt of specialist report (CMS504)	No	No indicator of specialty care referrals is available in claims
1.3	**1.3.2**	**DHCS All-Cause Readmissions – Statewide Collaborative QIP measure**	**Yes**	Constructed without the requirement that patients received a specialty care visit during the measurement period

Project	Metric	Full Name	Feasibility in Claims	Notes
1.3	1.3.3	NQF # 0041 Influenza Immunization	No	Unclear whether influenza immunization codes are well-reported in claims
1.3	1.3.4	Post Procedure ED visits	No	Metric discontinued in DY 14
1.3	1.3.5	Request for Specialty Care Turnaround Rate	No	No appropriate data for specialty care requests in claims
1.3	1.3.6	Specialty Care Touches: Specialty expertise requests managed via non-face to face specialty encounters	No	No appropriate data for specialty care requests in claims
1.3	1.3.7	Tobacco Assessment and Counseling	No	Tobacco screening and cessation intervention codes are seriously underreported in claims
1.4	1.4.1	Abnormal Results Follow-up	No	No appropriate data for abnormal lab test results in claims
1.4	**1.4.2**	**Annual Monitoring for Patients on Persistent Medications**	**Yes**	
1.4	**1.4.3**	**INR Monitoring for Individuals on Warfarin**	**Yes**	DMPH sample too small to measure
1.5	1.5.1.b	Controlling Blood Pressure	No	No medical record data to determine specific blood pressure readings
1.5	1.5.2.i	Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antithrombotic	No	Aspirin and antiplatelet therapy codes are seriously underreported in claims
1.5	1.5.3	QPP # 317 Preventative Care and Screening: Screening for High Blood Pressure and Follow- Up Documented	No	Blood pressure reading and follow-up codes are seriously underreported in claims
1.5	1.5.4.t	Tobacco Assessment and Counseling	No	Tobacco screening and cessation intervention codes are seriously underreported in claims
1.6	1.6.1	BIRADS to Biopsy	No	No appropriate codes for BIRADS assessment categories in claims

Project	Metric	Full Name	Feasibility in Claims	Notes
1.6	**1.6.2**	**Breast Cancer Screening**	**Yes**	Constructed without all exclusion criteria. UCLA cannot construct eCQM version which may provide additional information.
1.6	**1.6.3**	**Cervical Cancer Screening**	**Yes**	Constructed without specified lookback period. Instead, looks Pap at rates annually. UCLA cannot construct eCQM version which may provide additional information.
1.6	1.6.4.c	Colorectal Cancer Screening	No	Certain screenings require over three additional years prior to the measurement period
1.6	1.6.5	Receipt of appropriate follow-up for abnormal CRC screening	No	No appropriate codes for positive FIT/FOBT results in claims
1.7	1.7.1	BMI Screening and Follow-up	No	No appropriate codes for documentation of BMI follow-up plan in claims
1.7	1.7.2	Partnership for a Healthier America's Hospital Health Food Initiative external food service verification	No	Metric achievement is based on reporting certain criteria, not using patient-level claims
1.7	1.7.3	Weight Assessment & Counseling for Nutrition and Physical Activity for Children & Adolescents	No	Denominator is too small for stable statistical analysis
2.1	2.1.1	Baby Friendly Hospital designation	No	Metric achievement is based on reporting certain criteria, not using patient-level claims
2.1	2.1.2	Exclusive Breast Milk Feeding (PC-05)	No	No appropriate codes for breast milk feeding in claims
2.1	2.1.3	OB Hemorrhage: Massive Transfusion	No	No appropriate data for PRBC units in claims
2.1	2.1.4	OB Hemorrhage: Total Products Transfused	No	No appropriate data for PRBC units in claims
2.1	**2.1.5**	**PC-02 Cesarean Section**	**Yes**	UCLA lacks information on whether it is a patient's first C-Section birth (nulliparous). UCLA added ICD-9 codes to to account for pre-October 2015 claims.

Project	Metric	Full Name	Feasibility in Claims	Notes
2.1	2.1.6	NQF 1517: Postpartum Care	No	Not possible to distinguish between newborn and mother claims when they share a Medi-Cal ID in claims data
2.1	**2.1.6**	**NQF 1517: Prenatal Care**	**Yes**	
2.1	**2.1.7**	**Severe Maternal Morbidity (SMM) per 100 women with obstetric hemorrhage**	**Yes**	UCLA lacks underlying claims data; too few people in DMPHs to report.
2.1	2.1.8	Unexpected Newborn Complications	No	Not possible to distinguish between newborn and mother claims when they share a Medi-Cal ID in claims data
2.1	2.1.9	National Obstetric Patient Safety Bundle	No	Metric achievement is based on reporting certain criteria, not using patient-level claims
2.2	**2.2.1**	**DHCS All-Cause Readmissions – Statewide Collaborative QIP measure**	**Yes**	
2.2	2.2.2	H-CAHPS: Care Transition Metrics	No	No value sets or codes were included in this metric; data not available in claims
2.2	2.2.3	NQF 0097: Medication Reconciliation – 30 days	No	Cannot link medication reconciliation to inpatient discharges in claims
2.2	2.2.4	Reconciled Medication List Received by Discharged Patients	No	No medical record/EHR data
2.2	2.2.5	Timely Transmission of Transition Record	No	No medical record/EHR data
2.3	2.3.1	Care coordinator assignment	No	Metric discontinued in DY 13
2.3	2.3.2	NQF 0097: Medication Reconciliation – 30 days	No	Cannot link medication reconciliation to inpatient discharges in claims
2.3	2.3.3	Prevention Quality Overall Composite #90	No	Metric discontinued in DY 14
2.3	2.3.4	Timely Transmission of Transition Record	No	No medical record/EHR data
2.4	2.4.1	Adolescent Well-Care Visits	No	Foster care population is not stable for a large enough sample size in claims

Project	Metric	Full Name	Feasibility in Claims	Notes
2.4	2.4.2	Developmental Screening in the First Three Years of Life	No	Foster care population is not stable for a large enough sample size in claims
2.4	2.4.3	Documentation of Current Medications in the Medical Record (0-18 yo)	No	Foster care population is not stable for a large enough sample size in claims
2.4	2.4.4	Screening for Clinical Depression and Follow-up	No	Foster care population is not stable for a large enough sample size in claims
2.4	2.4.5	Tobacco Assessment and Counseling (13 yo and older)	No	Foster care population is not stable for a large enough sample size in claims
2.4	2.4.6	Well Child Visits - First 15 months of life	No	Metric discontinued in DY 13
2.4	2.4.7	Well Child Visits - Third, Fourth, Fifth, and Sixth Years of life	No	Foster care population is not stable for a large enough sample size in claims
2.4	2.4.8	Comprehensive Medical Evaluation Following Foster Youth Placement in Foster Care	No	Foster care population is not stable for a large enough sample size in claims
2.5	2.5.1	Alcohol and Drug Misuse (SBIRT)	No	No reliable denominator construction for incarcerated individuals in claims
2.5	2.5.2	Controlling Blood Pressure	No	No reliable denominator construction for incarcerated individuals in claims
2.5	2.5.3	AHRQ PQI #90	No	No reliable denominator construction for incarcerated individuals in claims
2.5	2.5.4	Screening for Clinical Depression and follow-up	No	No reliable denominator construction for incarcerated individuals in claims
2.5	2.5.5	Tobacco Assessment and Counseling	No	No reliable denominator construction for incarcerated individuals in claims
2.6	2.6.1	Alcohol and Drug Misuse (SBIRT)	No	SBIRT codes are seriously underreported in claims
2.6	2.6.2	Assessment and management of chronic pain	No	Codes are underreported in claims data

Project	Metric	Full Name	Feasibility in Claims	Notes
2.6	2.6.3	Patients with chronic pain on long term opioid therapy checked in PDMPs	No	No medical record/EHR data for Prescription Drug Monitoring Program (PDMP) notation
2.6	2.6.4	Screening for Clinical Depression and follow-up	No	Clinical depression screen codes are seriously underreported in claims
2.6	**2.6.5**	**Treatment of Chronic Non-Malignant Pain with Multi-Modal Therapy**	**Yes**	
2.7	2.7.1	NQF 0326: Care Plan	No	Care plan codes are seriously underreported in claims
2.7	2.7.2	Ambulatory Palliative Team Established	No	No value sets or codes were included in this metric
2.7	2.7.3	MWM#8 - Treatment Preferences (Inpatient)	No	No appropriate codes for patient treatment preferences in claims
2.7	2.7.4	MWM#8 - Treatment Preferences (Outpatient)	No	No appropriate codes for patient treatment preferences in claims
2.7	2.7.5	Palliative care service offered at time of diagnosis of advanced illness	No	No medical record/EHR data for referrals
2.7	2.7.6	Proportion admitted to hospice for less than 3 days	No	UCLA lacked information on discharge status for community based hospice users
3.1	**3.1.1**	**NQF 0058: Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis**	**Yes**	
3.1	3.1.2	Avoidance of antibiotic treatment in adults with low colony urinary cultures	No	Metric discontinued in DY 12
3.1	3.1.3	NQF 2720: National Healthcare Safety Network Antimicrobial Use Measure	No	Antimicrobial use is seriously underreported per inpatient day in claims

Project	Metric	Full Name	Feasibility in Claims	Notes
3.1	3.1.4	Peri-operative Prophylactic Antibiotics Administered After Surgical Closure	No	No data for clean surgical cases or surgical end times in claims
3.1	3.1.5	Reduction in Hospital Acquired Clostridium Difficile Infections	No	No data for Clostridium difficile Infection (CDI) Laboratory-identified events (LabID events)
3.2	3.2.1	Imaging for Routine Headaches (Choosing Wisely)	No	Metric discontinued in DY 15
3.2	3.2.2	Inappropriate Pulmonary CT Imaging for Patients at Low Risk for Pulmonary Embolism	No	No appropriate codes for positive lab test results in claims
3.2	3.2.3	Use of Imaging Studies for Low Back Pain	No	Refer to Metric 3.2.4
3.2	3.2.4	Use of Imaging Studies for Low Back Pain (red flags, no time limit)	No	Unreliable reporting of data. UCLA cannot construct eCQM version which may provide additional information.
3.3	3.3.1	Adherence to Medications	No	No data for Proportion of Days Covered (PDC) in claims
3.3	3.3.2	Documentation of Current Medications in the Medical Record [grouped with 3.3.4]	No	Metric discontinued in DY 12
3.3	3.3.3	High-cost pharmaceuticals ordering protocols	No	No data for ordering protocol information in claims
3.3	3.3.4	Documentation of Current Medications in the Medical Record [grouped with 3.3.2]	No	No medical record/EHR data for medication reconciliation
3.4	3.4.1	ePBM-01 Pre-op Anemia Screening, Selected Elective Surgical Patients	No	No appropriate codes for hemoglobin laboratory tests and elective surgical procedures
3.4	3.4.2	ePBM-02 Pre-op Hemoglobin Level, Selected Elective Surgical Patients	No	No appropriate codes for hemoglobin laboratory tests and elective surgical procedures

Project	Metric	Full Name	Feasibility in Claims	Notes
3.4	3.4.3	ePBM-03 Pre-op Type and Crossmatch, Type and Screen, Selected elective Surgical Patients	No	No appropriate codes for pre-op type/screens/cross-matches and elective surgical procedures
3.4	3.4.4	ePBM-04 Initial Transfusion Threshold	No	No appropriate codes for hemoglobin laboratory tests
3.4	3.4.5	ePBM-05 Outcome of Patient Blood Management, Selected Elective Surgical Patients	No	No appropriate codes for hemoglobin laboratory tests and elective surgical procedures

Source: UCLA analysis of PRIME metrics.

Difference-in-Difference (DD) Modeling

UCLA assessed the impact of PRIME for each metrics for DPHs and DMPHs separately, using the DD modeling approach. The predictors in these models included demographics (gender, age, race/ethnicity, primary language), months of Medi-Cal enrollment, baseline risk scores, and propensity weights. The models predicted changes in metrics before and during PRIME for PRIME patients and comparison group attributed to DPHs and DMPHs and differences in these differences.

UCLA used logistic regression models for binary metrics (e.g., 1.6.2: Breast Cancer Screening, 2.1.6: Prenatal Care) and a zero-inflated count model with Poisson distribution for count metrics (e.g., Primary Care Visits per 1,000 Members, Specialty Care Visits per 1,000 Members) and PRIME payments. The exposure option within a Generalized Linear Model (GLM) was used to adjust for different number of months of Medi-Cal enrollment and the subsequent different lengths of exposure to PRIME. All analyses of individual-level metrics were analyzed based on Medi-Cal member months.

UCLA included DY 15 data in the DD analyses after assessing the impact of the COVID-19 pandemic on available data. The COVID-19 diagnosis code first appeared in April 2020, three months before the end of PRIME implementation and about two weeks after the California cases began to rise. The analyses about 1% of PRIME patients had this diagnosis and the drop in service utilization after the lockdown had largely recovered by June. In addition, UCLA did not receive data on enrollees first attributed to PRIME in DY 15 by DHCS request. This minimized the impact of COVID-19 diagnosis and the California lockdown on the data. To address the potential undue impact of COVID-19 diagnosis on outcomes, UCLA excluded all beneficiaries with this diagnosis from the DD analyses. In addition, UCLA assessed whether the DD results were different if DY 15 was excluded from the analyses and found that exclusion of DY 15 had an adverse impact on metric performance findings.

Description of Patients in Each Group for the Difference in Difference Analysis

The following section presents demographic data for the PRIME patients and comparison patients for each measure and overall sample. Dash (--) formatting denotes that there was a small cell (less than 11) and the number has been redacted. Additionally, selected cells in the same row and/or column that could be used to back-calculate the redacted numbers have also been rounded to prevent back-calculating small cells. The “% Col” represents the distribution of that variable among the total, so each variable will add to approximately 100% due to rounding and redactions. Additionally, some metrics may include age ranges that are a sub-set of the age groups; the DY 15 PRIME metric specifications contains additional detail. Chronic Illness and Disability Payment System (CDPS) measures the diversity of diagnoses and burden of illness and used here as an indicator of severity. DPH: designated public hospital, DMPH: district and municipal public hospital.

Exhibit 126: Project 1.1 Average Number of Substance Use Disorder Treatment Visits Before and During PRIME for PRIME and Comparison Patients

Demographics	DPH PRIME	DPH Comparison	DPH P-Value	DMPH PRIME	DMPH Comparison	DMPH P-Value
N	147,464	361,030		7,130	201,856	
	% Col	**% Col**		**% Col**	**% Col**	
Cohort						
DY12-13	63%	65%	.003	65%	62%	.393
DY13-14	22%	20%		20%	22%	
DY14-15	15%	15%		15%	16%	
Age						
0-18	6%	5%	<.001	9%	5%	<.001
19-45	33%	38%		40%	42%	
46-64	45%	42%		31%	26%	
65+	15%	15%		20%	27%	
Gender						
Male	38%	35%		40%	36%	
Female	62%	65%	<.001	60%	64%	.032
Race/ Ethnicity						
White	25%	25%	.015	43%	31%	<.001
Latinx	39%	39%		30%	35%	
Black/African American	9%	9%		6%	10%	
Asian American/ Pacific Islander	13%	15%		7%	11%	
Other	13%	13%		13%	13%	
English Speaking						
No	35%	38%	.001	23%	31%	<.001
Yes	65%	62%		77%	69%	
Region						
Bay Area, Central	59%	47%	<.001	41%	39%	<.001
North	4%	5%		14%	7%	
South	37%	48%		46%	53%	
	Average	**Average**		**Average**	**Average**	
Months of Enrollment	10.89	10.90	.597	10.52	10.92	.002
Baseline CDPS Score	1.05	0.92	.072	1.03	0.87	.196

Source: UCLA analysis of Medi-Cal data

Exhibit 127: Metric 1.2.3c: Colorectal Cancer Screening Before and During PRIME for PRIME and Comparison Patients

Demographics	DPH PRIME	DPH Comparison	DPH P-Value	DMPH PRIME	DMPH Comparison	DMPH P-Value
N	84,399	167,804		10,695	68,538	
	% Col	**% Col**		**% Col**	**% Col**	
Cohort						
DY12-13	65%	70%	.013	74%	68%	.001
DY13-14	19%	18%		14%	19%	
DY14-15	16%	12%		11%	14%	
Age						
46-64	82%	79%	<.001	62%	64%	.519
65+	18%	21%		38%	36%	
Gender						
Male	44%	40%	.031	45%	41%	.290
Female	56%	60%		55%	59%	
Race/ Ethnicity						
White	27%	26%	.175	34%	34%	.483
Latinx	32%	33%		37%	31%	
Black/African American	11%	9%		7%	9%	
Asian American/ Pacific Islander	15%	17%		11%	12%	
Other	15%	14%		12%	14%	
English Speaking						
No	37%	44%	<.001	41%	40%	.787
Yes	63%	56%		59%	60%	
Region						
Bay Area, Central	54%	46%	.004	54%	39%	<.001
North	8%	5%		6%	8%	
South	37%	49%		40%	53%	
	Average	**Average**		**Average**	**Average**	
Months of Enrollment	11.66	11.56	<.001	11.70	11.65	.071
Baseline CDPS Score	1.52	1.07	.004	1.39	1.20	.017

Source: UCLA analysis of Medi-Cal data

Exhibit 128: Metric 1.2.8: Prevention Quality Overall Composite (PQI) #90 Before and During PRIME for PRIME and Comparison Patients

Demographics	DPH PRIME	DPH Comparison	DPH P-Value	DMPH PRIME	DMPH Comparison	DMPH P-Value
N	147,464	361,030		24,479	201,856	
	% Col	**% Col**		**% Col**	**% Col**	
Cohort						
DY12-13	63%	65%	<.001	68%	62%	.305
DY13-14	22%	20%		20%	22%	
DY14-15	16%	15%		12%	16%	
Age						
0-18	6%	5%	<.001	6%	6%	.472
19-45	33%	38%		36%	41%	
46-64	45%	42%		24%	26%	
65+	16%	15%		33%	27%	
Gender						
Male	37%	35%	<.001	35%	36%	.923
Female	63%	65%		65%	64%	
Race/ Ethnicity						
White	25%	25%	.024	28%	30%	.461
Latinx	39%	40%		35%	37%	
Black/African American	9%	9%		8%	9%	
Asian American/ Pacific Islander	14%	14%		18%	11%	
Other	14%	13%		10%	13%	
English Speaking						
No	35%	37%	<.001	24%	32%	.057
Yes	65%	63%		76%	68%	
Region						
Bay Area, Central	58%	47%	<.001	42%	40%	.501
North	4%	5%		5%	7%	
South	38%	48%		54%	53%	
	Average	**Average**		**Average**	**Average**	
Months of Enrollment	10.89	10.89	.843	11.03	10.93	.532
Baseline CDPS Score	1.04	0.87	.002	1.38	0.89	.128

Source: UCLA analysis of Medi-Cal data.

Exhibit 129: Metric 1.3.2: Plan All-Cause Readmissions Before and During PRIME for PRIME and Comparison Patients

Demographics	DPH PRIME	DPH Comparison	DPH P-Value	DMPH PRIME	DMPH Comparison	DMPH P-Value
N	41,645	67,262		5,165	32,544	
	% Col	**% Col**		**% Col**	**% Col**	
Cohort						
DY12-13	67%	74%	<.001	66%	67%	.687
DY13-14	20%	15%		19%	19%	
DY14-15	13%	10%		15%	13%	
Age						
0-18	2%	1%	.005	2%	2%	.603
19-45	35%	34%		45%	48%	
46-64	62%	63%		51%	48%	
65+	1%	1%		2%	2%	
Male	44%	44%	.944	47%	47%	.877
Female	56%	56%		53%	53%	
Race/ Ethnicity						
White	31%	32%	.195	36%	35%	.660
Latinx	37%	35%		37%	35%	
Black/African American	12%	13%		10%	12%	
Asian American/ Pacific Islander	9%	8%		5%	5%	
Other	12%	12%		13%	12%	
English Speaking						
No	27%	25%	.078	21%	19%	.049
Yes	73%	75%		79%	81%	
Region						
Bay Area, Central	54%	46%	.007	60%	34%	<.001
North	6%	6%		6%	7%	
South	40%	48%		35%	60%	
	Average	**Average**		**Average**	**Average**	
Months of Enrollment	11.56	11.59	.262	11.36	11.49	.134
Baseline CDPS Score	3.12	2.66	<.001	2.61	2.49	.241

Source: UCLA analysis of Medi-Cal data

Exhibit 130: Metric 1.4.2: Annual Monitoring for Patients on Persistent Medications Before and During PRIME for PRIME and Comparison Patients

Demographics	DPH PRIME	DPH Comparison	DPH P-Value	DMPH PRIME	DMPH Comparison	DMPH P-Value
N	24,012	95,013		447	23,722	
	% Col	**% Col**		**% Col**	**% Col**	
Cohort						
DY12-13	70%	73%	<.001	71%	69%	.114
DY13-14	18%	16%		20%	19%	
DY14-15	13%	11%		9%	13%	
Age						
0-18	0%	0%	.134	0%	1%	.058
19-45	19%	17%		18%	21%	
46-64	67%	69%		70%	61%	
65+	14%	14%		12%	17%	
Gender						
Male	44%	41%	.003	40%	43%	.320
Female	56%	59%		60%	57%	
Race/ Ethnicity						
White	22%	23%	.117	36%	28%	<.001
Latinx	40%	39%		34%	35%	
Black/African American	12%	11%		8%	11%	
Asian American/Pacific Islander	15%	16%		6%	13%	
Other	12%	12%		16%	13%	
English Speaking						
No	38%	41%	.001	31%	35%	.123
Yes	62%	59%		69%	65%	
Region						
Bay Area, Central	53%	42%	<.001	100%	33%	<.001
North	0%	5%			4%	
South	47%	53%			63%	
	Average	**Average**		**Average**	**Average**	
Months of Enrollment	11.87	11.90	.342	11.90	11.87	.278
Baseline CDPS Score	1.58	1.19	<.001	1.95	1.30	<.001

Source: UCLA analysis of Medi-Cal data

Exhibit 131: Metric 1.4.3: International Normalized Ratio (INR) Monitoring for Individuals on Warfarin Before and During PRIME for PRIME and Comparison Patients

Demographics	DPH PRIME	DPH Comparison	DPH P-Value	DMPH PRIME	DMPH Comparison	DMPH P-Value
N	1,769	2,460		696	770	
	% Col	**% Col**		**% Col**	**% Col**	
Cohort						
DY12-13	82%	89%	<.001	85%	84%	.659
DY13-14	13%	7%		12%	12%	
DY14-15	6%	4%		4%	5%	
Age						
0-18	0%	0%	.902	1%	0%	.627
19-45	20%	19%		24%	22%	
46-64	65%	65%		53%	54%	
65+	16%	16%		22%	24%	
Gender						
Male	53%	51%	.278	49%	53%	.349
Female	47%	49%		51%	47%	
Race/ Ethnicity						
White	24%	34%	<.001	39%	39%	.015
Latinx	37%	30%		25%	32%	
Black/African American	14%	13%		9%	9%	
Asian American/ Pacific Islander	14%	12%		16%	8%	
Other	11%	12%		12%	12%	
English Speaking						
No	36%	31%	.009	26%	29%	.358
Yes	64%	69%		74%	71%	
Region						
Bay Area, Central	52%	45%	.034	47%	29%	<.001
North	1%	7%		9%	7%	
South	47%	48%		44%	64%	
	Average	**Average**		**Average**	**Average**	
Months of Enrollment	11.80	11.74	.082	11.72	11.70	.767
Baseline CDPS Score	2.52	2.47	.558	2.91	2.69	.459

Source: UCLA analysis of Medi-Cal data.

Exhibit 132: Metric 1.6.2: Breast Cancer Screening (Mammogram) Before and During PRIME for PRIME and Comparison Patients

Demographics	DPH PRIME	DPH Comparison	DPH P-Value	DMPH PRIME	DMPH Comparison	DMPH P-Value
N	16,837	94,878		5,291	40,111	
	% Col	**% Col**		**% Col**	**% Col**	
Cohort						
DY12-13	69%	73%	<.001	67%	68%	.327
DY13-14	18%	16%		18%	19%	
DY14-15	14%	11%		15%	13%	
Age						
46-64	83%	79%	<.001	72%	60%	<.001
65+	17%	21%		28%	40%	
Gender						
Female	100%	100%	NA	100%	100%	NA
Race/ Ethnicity						
White	23%	25%	<.001	39%	34%	<.001
Latinx	36%	35%		36%	30%	
Black/African American	13%	9%		8%	9%	
Asian American/Pacific Islander	16%	19%		4%	13%	
Other	12%	13%		12%	15%	
English Speaking						
No	42%	48%	<.001	33%	39%	<.001
Yes	58%	52%		67%	61%	
Region						
Bay Area, Central	57%	41%	<.001	36%	38%	<.001
North	--	5%		13%	8%	
South	43%	54%		52%	54%	
	Average	**Average**		**Average**	**Average**	
Months of Enrollment	11.15	11.14	.899	11.27	11.24	.628
Baseline CDPS Score	1.06	0.77	<.001	1.18	0.89	<.001

Source: UCLA analysis of Medi-Cal data
Dash (--) formatting denotes that there was a small cell (less than 11) and the number has been redacted. Additionally, selected cells in the same row and/or column that could be used to back-calculate the redacted numbers have also been rounded to prevent back-calculating small cells.

Exhibit 133: Metric 2.1.5: Cesarean Births Before and During PRIME for PRIME and Comparison Patients

Demographics	DPH PRIME	DPH Comparison	DPH P-Value	DMPH PRIME	DMPH Comparison	DMPH P-Value
N	6,585	22,224		1,204	17,501	
	% Col	**% Col**		**% Col**	**% Col**	
Cohort						
DY12-13	62%	63%	.662	60%	58%	.343
DY13-14	22%	22%		22%	26%	
DY14-15	16%	15%		18%	16%	
Age						
0-18	8%	6%	.173	7%	7%	.540
19-45	92%	94%		93%	93%	
46-64	0%	0%	--	--	0%	
Gender						
Female	100%	100%	NA	100%	100%	NA
Race/ Ethnicity						
White	15%	18%		21%	21%	
Latinx	57%	55%	.013	53%	54%	.076
Black/African American	9%	9%		15%	11%	
Asian American/Pacific Islander	7%	7%		3%	5%	
Other	12%	11%		7%	9%	
English Speaking						
No	25%	23%	.075	13%	16%	.186
Yes	75%	77%		87%	84%	
Region						
Bay Area, Central	69%	58%	<.001	40%	39%	.166
North	1%	6%		3%	7%	
South	30%	36%		56%	54%	
	Average	**Average**		**Average**	**Average**	
Months of Enrollment	11.82	11.79	.050	11.77	11.68	.011
Baseline CDPS Score	1.14	1.01	.001	0.93	1.02	.001

Source: UCLA analysis of Medi-Cal data.

Exhibit 134 Metric 2.1.6: NQF 1517: Prenatal Care Before and During PRIME for PRIME and Comparison Patients

Demographics	DPH PRIME	DPH Comparison	DPH P-Value	DMPH PRIME	DMPH Comparison	DMPH P-Value
N	5,839	26,277		1,339	17,911	
	% Col	**% Col**		**% Col**	**% Col**	
Cohort						
DY12-13	64%	66%	.773	70%	58%	.075
DY13-14	22%	20%		22%	25%	
DY14-15	14%	14%		9%	17%	
Age						
0-18	2%	5%	<.001	8%	6%	.662
19-45	98%	95%		92%	94%	
46-64	0%	0%		--	0%	
Gender						
Female	100%	100%		100%	100%	
Race/ Ethnicity						
White	13%	19%		32%	20%	.139
Latinx	60%	56%	.109	39%	54%	
Black/African American	9%	8%		19%	11%	
Asian American/Pacific Islander	9%	7%		1%	5%	
Other	10%	10%		10%	9%	
English Speaking						
No	33%	23%	.105	4%	16%	<.001
Yes	67%	77%		96%	84%	
Region						
Bay Area, Central	65%	53%	.017	24%	37%	<.001
North	0%	6%		0%	6%	
South	35%	41%		75%	57%	
	Average	**Average**		**Average**	**Average**	
Months of Enrollment	11.30	11.23	.495	11.20	11.14	.811
Baseline CDPS Score	0.97	0.73	.066	0.87	0.78	.611

Source: UCLA analysis of Medi-Cal data. Notes: Small cell redacted (--) and surrounding cells rounded to prevent back-calculation.

Exhibit 135: Metric 2.1.7: Severe Maternal Morbidity (SMM) per 100 women with Obstetric Hemorrhage Before and During PRIME for PRIME and Comparison Patients

Demographics	DPH PRIME	DPH Comparison	DPH P-Value	DMPH PRIME	DMPH Comparison	DMPH P-Value
N	1,453	2,957		201	2,235	
	% Col	**% Col**		**% Col**	**% Col**	
Cohort						
DY12-13	58%	61%	.547	56%	61%	.304
DY13-14	26%	25%		23%	24%	
DY14-15	15%	14%		21%	16%	
Age						
0-18	7%	6%	.459	6%	7%	.426
19-45	92%	94%		94%	92%	
46-64	1%	1%		-	0%	
Female	100%	100%		100%	100%	
Race/ Ethnicity						
White	13%	15%	.449	17%	19%	<.001
Latinx	52%	54%		47%	51%	
Black/African American	11%	9%		27%	14%	
Asian American/Pacific Islander	10%	9%		--	6%	
Other	14%	13%		--	10%	
English Speaking						
No	27%	26%	.553	7%	16%	.002
Yes	73%	74%		93%	84%	
Region						
Bay Area, Central	74%	63%	.007	22%	43%	<.001
North	1%	6%		--	8%	
South	25%	31%		77%	50%	
	Average	**Average**		**Average**	**Average**	
Months of Enrollment	11.85	11.77	.019	11.71	11.66	.601
Baseline CDPS Score	1.46	1.28	.015	1.52	1.27	.071

Source: UCLA analysis of Medi-Cal data.
Notes: Small cell redacted (--) and surrounding cells rounded to prevent back-calculation.

Exhibit 136: Metric 1.6.3. Cervical Cancer (Pap or HPV) Screening Rates Before and During PRIME for PRIME and Comparison Patients

Demographics	DPH PRIME	DPH Comparison	DPH P-Value	DMPH PRIME	DMPH Comparison	DMPH P-Value
N	25,202	161,768		9,578	65,282	
	% Col	**% Col**		**% Col**	**% Col**	
Cohort						
DY12-13	62%	69%	.001	62%	61%	.003
DY13-14	20%	18%		22%	22%	
DY14-15	18%	13%		15%	16%	
Age						
19-45	37%	42%	.679	47%	52%	.004
46-64	60%	55%		49%	45%	
65+	3%	3%		4%	4%	
Gender						
Female	100%	100%		100%	100%	
Race/ Ethnicity						
White	23%	25%	.017	34%	32%	<.001
Latinx	40%	40%		41%	36%	
Black/African American	13%	10%		9%	11%	
Asian American/Pacific Islander	13%	14%		4%	9%	
Other	11%	11%		12%	12%	
English Speaking						
No	32%	36%	<.001	24%	24%	.705
Yes	68%	64%		76%	76%	
Region						
Bay Area, Central	63%	43%	.014	38%	38%	.001
North	1%	6%		11%	8%	
South	35%	51%		51%	55%	
	Average	**Average**		**Average**	**Average**	
Months of Enrollment	10.91	11.00		11.05	11.01	
Baseline CDPS Score	0.80	0.58		0.89	0.62	

Source: UCLA analysis of Medi-Cal data

Exhibit 137: Project 2.2 UCLA Additional Metric: Outpatient Follow-Up Visit Rates within 30 Days of Hospitalization Before and During PRIME for PRIME and Comparison Patients

Demographics	DPH PRIME	DPH Comparison	DPH P-Value	DMPH PRIME	DMPH Comparison	DMPH P-Value
N	73,573	153,982		27,851	98,090	
	% Col	**% Col**		**% Col**	**% Col**	
Cohort						
DY12-13	68%	69%	.078	64%	66%	.570
DY13-14	20%	19%		21%	21%	
DY14-15	12%	13%		14%	13%	
Age						
0-18	18%	19%	.141	12%	13%	.556
19-45	32%	33%		38%	40%	
46-64	36%	34%		24%	22%	
65+	13%	14%		26%	25%	
Gender						
Male	38%	37%	.266	38%	35%	.048
Female	62%	63%		62%	65%	
Race/ Ethnicity						
White	24%	25%	.534	30%	30%	.287
Latinx	43%	43%		40%	40%	
Black/African American	10%	10%		8%	10%	
Asian American/Pacific Islander	9%	10%		10%	8%	
Other	14%	13%		11%	12%	
English Speaking						
No	33%	33%	.922	26%	27%	.597
Yes	67%	67%		74%	73%	
Region						
Bay Area, Central	54%	51%	.155	46%	43%	.086
North	5%	5%		3%	6%	
South	40%	45%		51%	52%	
	Average	**Average**		**Average**	**Average**	
Months of Enrollment	11.51	11.46	.003	11.57	11.49	.003
Baseline CDPS Score	2.56	2.34	<.001	2.70	2.23	<.001

Source: UCLA analysis of Medi-Cal data.

Exhibit 138: Metric 2.6.5: Treatment of Chronic Non-Malignant Pain with Multi-Modal Therapy Before and During PRIME for PRIME and Comparison Patients

Demographics	DPH PRIME	DPH Comparison	DPH P-Value	DMPH PRIME	DMPH Comparison	DMPH P-Value
N	18,941	96,376		4,856	39,403	
	% Col	**% Col**		**% Col**	**% Col**	
Cohort						
DY12-13	73%	75%	.143	71%	70%	.845
DY13-14	15%	15%		19%	18%	
DY14-15	13%	10%		11%	11%	
Age						
0-18	4%	6%	.205	5%	6%	.268
19-45	32%	30%		30%	33%	
46-64	52%	51%		43%	38%	
65+	12%	13%		21%	23%	
Gender						
Male	40%	34%	.182	36%	37%	.752
Female	60%	66%		64%	63%	
Race/ Ethnicity						
White	30%	32%	.569	44%	39%	.258
Latinx	36%	33%		29%	30%	
Black/African American	14%	13%		9%	12%	
Asian American/Pacific Islander	8%	8%		3%	5%	
Other	12%	13%		14%	13%	
English Speaking						
No	30%	27%	.362	13%	21%	<.001
Yes	70%	73%		87%	79%	
Region						
Bay Area, Central	60%	52%	.461	61%	44%	<.001
North	6%	9%		16%	11%	
South	34%	40%		22%	45%	
	Average	**Average**		**Average**	**Average**	
Months of Enrollment	11.88	11.79	<.001	11.82	11.71	<.001
Baseline CDPS Score	1.42	1.53	.121	2.10	1.67	.167

Source: UCLA analysis of Medi-Cal data

Exhibit 139: Metric 3.1.1: Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis Before and During PRIME for DMPH PRIME and Comparison Patients

Demographics	DPH PRIME	DPH Comparison	DPH P-Value	DMPH PRIME	DMPH Comparison	DMPH P-Value
N	2,392	41,650		3,927	15,506	
	% Col	**% Col**		**% Col**	**% Col**	
Cohort						
DY12-13	77%	78%	.131	64%	69%	.041
DY13-14	16%	13%		26%	20%	
DY14-15	7%	8%		9%	11%	
Age						
0-18	2%	1%	.245	1%	1%	.053
19-45	39%	44%		57%	57%	
46-64	57%	53%		38%	40%	
65+	2%	2%		4%	2%	
Gender						
Male	25%	29%	.082	32%	31%	.825
Female	75%	71%		68%	69%	
Race/ Ethnicity						
White	25%	29%	.068	37%	34%	.349
Latinx	38%	38%		36%	36%	
Black/African American	11%	10%		11%	13%	
Asian American/Pacific Islander	16%	12%		4%	6%	
Other	10%	11%		12%	11%	
English Speaking						
No	33%	29%	.136	16%	18%	.111
Yes	67%	71%		84%	82%	
Region						
Bay Area, Central	36%	42%	<.001	33%	36%	.800
North	0%	8%		9%	8%	
South	64%	50%		58%	56%	
	Average	**Average**		**Average**	**Average**	
Months of Enrollment	11.86	11.85	.779	11.85	11.77	<.001
Baseline CDPS Score	1.64	1.09	<.001	1.82	1.05	<.001

Source: UCLA analysis of Medi-Cal data.

Exhibit 140: Overarching Utilization Measures (including Percent of Enrollees with Any ED Visits or Hospitalization, ED Visits or Hospitalization per 1,000 Beneficiaries)

Demographics	DPH PRIME	DPH Comparison	DPH P-Value	DMPH PRIME	DMPH Comparison	DMPH P-Value
N	196,372	617,704		108,769	296,794	
	% Col	**% Col**		**% Col**	**% Col**	
Cohort						
DY12-13	58%	62%	<.001	60%	59%	.009
DY13-14	24%	22%		24%	24%	
DY14-15	18%	16%		16%	17%	
Age						
0-18	46%	43%	<.001	40%	36%	<.001
19-45	19%	23%		25%	28%	
46-64	26%	25%		20%	19%	
65+	9%	9%		15%	17%	
Gender						
Male	44%	42%	<.001	43%	41%	.002
Female	56%	58%		57%	59%	
Race/ Ethnicity						
White	19%	20%	<.001	27%	27%	<.001
Latinx	49%	49%		49%	45%	
Black/African American	8%	7%	<.001	7%	8%	
Asian American/ Pacific Islander	11%	11%		6%	8%	
Other	14%	13%		11%	12%	
English Speaking						
No	39%	40%	<.001	32%	34%	<.001
Yes	61%	60%		68%	66%	
Region						
Bay Area, Central	59%	48%		48%	43%	
North	3%	5%		8%	8%	
South	38%	47%		44%	49%	
	Average	**Average**		**Average**	**Average**	
Months of Enrollment	10.33	10.46	<.001	10.49	10.70	<.001
Baseline CDPS Score	1.10	1.02	<.001	1.04	0.96	.001

Source: UCLA analysis of Medi-Cal data.

Exhibit 141: Overarching Utilization Measures (PCP and Specialty Care)

Demographics	DPH PRIME	DPH Comparison	DPH P-Value	DMPH PRIME	DMPH Comparison	DMPH P-Value
N	147,464	361,030		81,441	201,856	
	% Col	**% Col**		**% Col**	**% Col**	
Cohort						
DY12-13	62%	65%	<.001	62%	62%	.809
DY13-14	22%	20%		22%	22%	
DY14-15	16%	15%		16%	16%	
Age						
0-18	6%	5%	<.001	7%	6%	<.001
19-45	33%	38%		40%	41%	
46-64	44%	41%		31%	28%	
65+	16%	15%		22%	26%	
Gender						
Male	38%	35%	<.001	37%	36%	.074
Female	62%	65%		63%	64%	
Race/ Ethnicity						
White	24%	25%	.038	33%	32%	<.001
Latinx	39%	39%		41%	37%	
Black/African American	10%	9%		7%	9%	
Asian American/Pacific Islander	14%	15%		7%	10%	
Other	13%	13%		11%	12%	
English Speaking						
No	36%	37%	.006	29%	31%	.001
Yes	64%	63%		71%	69%	
Region						
Bay Area, Central	59%	47%	<.001	46%	42%	<.001
North	3%	5%		9%	8%	
South	38%	48%		45%	51%	
	Average	**Average**		**Average**	**Average**	
Months of Enrollment	10.90	10.90	.796	10.88	10.95	.004
Baseline CDPS Score	1.03	0.88	.014	1.00	0.95	.183

Source: UCLA analysis of Medi-Cal data.

Data and Methodology Limitations

Data Limitations

All Medi-Cal data used had a minimum run-out of 6 months to ensure that the great majority of the claims were received and adjudicated by DHCS. However, the COVID-19 pandemic in the last quarter of DY 15 may have led to delays in submission of claims by providers and therefore less complete claims. The accuracy of managed care claims was lower in 2014 but has increasingly improved since 2015. Overall, managed care claims may be less complete than FFS claims.

Mental health and substance use data did not include Short-Doyle claims because they were not available in the data. Additionally, the following types of claims were not available: Dental, Early and Periodic Screening, Diagnostic and Treatment (EPSDT), Targeted Case Management (TCM), and Family Planning, Access, Care, and Treatment (FPACT), In-Home Supportive Services (IHSS), Department of Developmental Services (DDS) Waiver Program/DSS Personal Care Program, or DDS/DMH, because they were not anticipated to change due to PRIME.

UCLA did not have access to data on which Medi-Cal beneficiaries were assigned to each PRIME hospital by managed care plans, and thus was not able to replicate the DPH PRIME Eligible Population #2 (individuals of all ages who are in Medi-Cal Managed Care with 12 months of continuous assignment to the PRIME Entity during the Measurement Period).

Baseline utilization data was not available for all PRIME patients, which led to some limitations in the construction of the control group and DD analyses (see Availability of Baseline Utilization Data). Similarly, data for construction of some PRIME specified metrics that required long look-back periods were not available.

In HCAI data, neither managed care assignment or information about DPH Population #1 (individuals of all ages with at least 2 encounters with the PRIME Entity Primary Care team during the measurement period) were available. Likewise, the DMPH PRIME Eligible Criteria (individuals of all ages with at least 2 encounters of any kind) was not available in HCAI data.

Methodology Limitations

The metrics constructed by UCLA differed from the hospital-reported metrics because the former were based only on claims data and the latter included some metrics that required more comprehensive clinical information from medical records or EHR data. In addition, DPH hospital-reported metrics were not confined to Medi-Cal beneficiaries and included privately-insured and uninsured patients. These other data sources were not available to UCLA.

UCLA constructed an analytic sample that was restricted to a subset of all PRIME patients and all analyses were adjusted for confounding factors. Therefore, the DD results are not directly comparable to hospital reported performance metrics.

The DD analyses were impacted by cohort construction. Specifically, the baseline periods for cohorts 13-14 and 15-16 overlapped with PRIME implementation period. For example, the baseline period for cohort 13-14 included DY 12. However, this was not considered to be a major limitation because each cohort was included as an indicator in the DD models and these two cohorts constituted a relatively small proportion of PRIME patients.

Another modeling strategy that may have led to limitations in the DD analyses was inclusion of hospitals in analyses of a project's metric regardless of the length of time implementing or when they began or ended participation in that project. This modeling strategy was used because it was not feasible to develop reliable models that accounted for hospitals changing project selection over time. Therefore, the DD analyses assumed that any participation in a project was likely to impact metrics regardless of the duration of participation.

The identification of the comparison group in Medi-Cal data for the DD analyses had limitations, including challenges of selecting an appropriate comparison group and available data for construction of metrics and overall impact of PRIME. Specifically, PRIME included all public hospitals in California that provide care to the great majority of Medi-Cal patients in the state. Therefore, identification of an appropriate comparison group was challenging due to fundamental differences in payer and case mix as well as financing and operational aspects of care between public hospitals and other providers. UCLA used statistical tools to mitigate the existing systemic and patient selection bias but may not have eliminated it.

For the HCAI analyses, selection of similar hospitals were limited by the fact that DPHs and DMPHs participating in PRIME were fundamentally different from private hospitals in California both in their characteristics and their patient mix (see Appendix F Difference-in-Difference in the Interim Report).

Finally, the Medi-Cal DD findings presented in this report are not directly comparable to those included in the interim report due to two substantial changes in methodology. These include a change in selection of PRIME and control patients and change in how baseline and PRIME intervention periods are determined. More detail is provided in Appendix C. Difference-in-Difference (DD) Data and Methodology.

Appendix D: Methods of Attributing Payment Amounts to Claims

Background

PRIME was expected to improve quality of care and patient outcomes and lead to efficiencies in care under Medi-Cal. The evaluation plan included examining the changes in Medi-Cal expenditures due to PRIME. However, the great majority of services under Medi-Cal are provided by managed care plans that receive a specific capitation amount per member per month and do not bill for individual services received by Medi-Cal beneficiaries. While managed care plans are required to submit claims to Medi-Cal, these claims frequently include payment amounts of unclear origin that are different from the Medi-Cal fee schedule. A small and unique subset of Medi-Cal beneficiaries are not enrolled in managed care and receive care under the fee-for-service (FFS) reimbursement methodology and have claims with actual charges and paid values. FFS claims are reimbursed primarily using fee schedules developed by Medi-Cal. The capitation amounts for managed care plans are developed using the same fee schedules by Mercer annually, using complex algorithms and other data not included in claims.

To address the gaps in reliable and consistent payment data for all claims, UCLA estimated the amount of payment per Medi-Cal claim under PRIME using various Medi-Cal fee schedules for services covered under the program. The methodology included (1) specifying categories of service observed in the claims data, (2) classifying all adjudicated claims into these service categories, (3) attributing a dollar payment value to each claim using available fee schedules and drug costs, and (4) examining differences between these and available external estimates. UCLA estimated payments for both managed care and FFS claims to promote consistency in payments across groups and to avoid discrepancies due to different methodologies.

The payment estimates generated using this methodology are not actual Medi-Cal expenditures for health care delivered during PRIME. Rather, they represent the estimated amount of payment for services and are intended for measuring whether PRIME led to efficiencies by reducing the total payments for PRIME patients before and after the program, and in comparison to a group of comparison patients that were not touched by participating PRIME hospitals in the same timeframe.

Service Category Specifications

Data Sources

UCLA used definitions from multiple sources to categorize and define different types of services. These sources included Medi-Cal provider manuals, HEDIS value set, DHCS 35C File, American Medical Association's CPT Codebook, National Uniform Code Committee's taxonomy code set, and other available sources.

- DHCS's Medi-Cal provider manuals included billing and coding guidelines for provider categories and some services.
- The HEDIS Value Set by the National Committee for Quality Assurance used procedure codes (CPT and HCPCS), revenue codes (UBREV), place of service codes (POS), and Systematized Nomenclature of Medicine-Clinical Terms (SNOMED CT) to define value sets that measure performance in health care. For example, the HEDIS value set "ED" is a combination of procedure codes that describe emergency department services and revenue codes specifying that services were provided in the emergency room.
- DHCS Paid Claims and Encounters Standard 35C File (DHCS 35C File) provided specifications to managed care plans on how claims must be submitted and contained detailed information about claims variables and their meaning and utility, such as vendor codes describing the location of services and taxonomy codes describing the type of provider and their specializations.
- The American Medical Association's Current Procedure Terminology (CPT) Codebook contained a list of all current procedural terminology (CPT) codes and descriptions that are used by providers to bill for services.
- The National Uniform Claim Committee's (NUCC's) Health Care Provider Taxonomy code set identified provider types such as Allopathic and Osteopathic Physician and medical specialties such as Addiction Medicine defined by taxonomy codes.

UCLA also used other resources to address gaps in definitions. For example, hospice codes that were used in claims submitted before 2016 were not included in the Medi-Cal provider manual, but UCLA collected the pre-2016 hospice codes from other DHCS guidelines.

Methods

UCLA constructed eighteen mutually exclusive categories of service (Exhibit 142). Available data did not include claims for dental services, IHSS, DDS Waiver Program/DSS Personal Care Program, TCM, EPSDT, DDS/DMH, Short-Doyle, and FPACT because they were not anticipated to change due to PRIME. Some categories were defined using complementary definitions from more than one source.

UCLA assigned claims to only one of the eighteen service categories to avoid duplication when calculating total estimated PRIME payments. UCLA assigned claims to the first service category a claim meets the criteria for as ordered in Exhibit 142. All services, apart from primary care visits, provided on the day of an ED visit were grouped as part of the ED visit to represent the total cost of the visit. For example, patients may have received transportation to an emergency department and laboratory tests during the emergency department visit, and these services were included in the ED category rather than the transportation or laboratory services categories. This approach may have included lab or transportation services in the ED category that were not part of the ED visit, and may have undercounted lab and transportation in their respective categories. However, this was necessary because claims data lacked information on the specific time of day when services were rendered. Similarly, all claims for services received during a hospitalization were counted as part of the same stay and were excluded from other categories of service, except for primary care visits on the day of admission. Other categories were identified solely by the procedure code or place of service and were not bundled with other services occurring on the same day, such as long-term care, home health/ home and community-based services, community-based adult services, FQHC services, labs, imaging, outpatient pharmacy, transportation, and urgent care.

Some claims lacked the information necessary to be categorized and were classified under an "Other Services" category. These frequently included physician claims without a defined provider taxonomy and durable medical equipment codes that were billed separately and could not be associated with an existing category.

Exhibit 142: Description of Mutually Exclusive Categories of Service

Order	Service category	Definition source	Description
1	Emergency Department Visits (ED)	HEDIS	Place of service is hospital emergency room and procedure code is emergency service
2	Hospitalizations	DHCS 35C File	Place of service is inpatient and admission and discharge dates are present and are on different days

Order	Service category	Definition source	Description
3	Hospice Care	DHCS 35C File, HEDIS, and DHCS Medi-Cal Provider Manuals	Provider is hospice or procedure code is hospice service
4	Long-Term Care (LTC) Stays	DHCS 35C File	Claim is identified as LTC or provider is LTC organization; stays one day apart are counted as one visit, stays two or more days apart are separate stays
5	Home Health and Home and Community-Based Services (HH/HCBS)	DHCS 35C File and DHCS Medi-Cal Provider Manuals	Provider is a home health agency or home and community-based service waiver provider, procedure is home health or home and community-based service
6	Community-Based Adult Services (CBAS)	DHCS 35C File and DHCS Medi-Cal Provider Manuals	Provider is adult day health care center or procedure code is community-based adult service, which are health, therapeutic and social services in a community-based day health care program
7	Federally Qualified (FQHC) and Rural Health Center (RHC) Services	DHCS 35C File	Provider is an FQHC or RHC
8	Laboratory Services	DHCS 35C File	Claim is identified as clinical laboratory, laboratory & pathology services, or laboratory tests
9	Imaging Services	DHCS 35C File	Claim is identified as portable x-ray services or imaging/ nuclear medicine services
10	Outpatient Pharmacy	DHCS 35C File	Claim is identified as pharmacy
11	Transportation Services	DHCS 35C File	Claim is identified as medically required transportation

Order	Service category	Definition source	Description
12	Primary Care Services	National Uniform Claim Committee	Provider is allopathic and osteopathic physician (with specialization in adult medicine, adolescent medicine, or geriatric medicine, family medicine, internal medicine, pediatrics, or general practice), or physician assistant or nurse practitioner (with specialization in medical, adult health, family, pediatrics, or primary care)
13	Specialty Care Services	National Uniform Claim Committee	Provider is allopathic and osteopathic physician or physician assistant or nurse practitioner (with all specializations not captured in the Primary Care Services category)
14	Outpatient Facility Services	DHCS 35C File	Claim is identified as outpatient facility
15	Dialysis Services	DHCS 35C File and CPT Codebook	Provider is a dialysis center and procedure is dialysis
16	Therapy Services	DHCS Medi-Cal Provider Manual	Procedure code is occupational, physical, speech, or respiratory therapy
17	Urgent Care Services	National Uniform Claim Committee	Provider is ambulatory urgent care facility
18	Other Services	N/A	Provider, procedure, or place of service is not captured above

Source: UCLA Methodology.

Attributing Payments to Specific Services

To attribute payments to each category of service, UCLA developed methods to calculate an estimated payment for each category based on available data. Exhibit 143 displays the categories of service and what is included in the calculation of estimated payments for each category.

Exhibit 143: Category of Service and Payment Descriptions

Category of Service	Calculation of Estimated Payment
Emergency Department Visits (ED)	Payments for all services taking place in the emergency department of a hospital, including services on the same day of the ED visit, excluding services by PCPs and FQHCs and RHCs. Includes payment for emergency department visits that resulted in a hospitalization, but not payment for the resulting hospitalization.
Hospitalizations	Payments for all services that take place during a hospitalization, excluding visits with primary care providers on the first or last day of the stay, or FQHC visits on the first or last day of the stay
Hospice Care	Payments for hospice services in an LTC facility or Home Health setting, excluding hospice services rendered during a hospitalization
Long-Term Care (LTC) Stays	Institutional fees billed by LTC facilities; the per diem rate includes supplies, drugs, equipment, and services such as therapy
Home Health and Home and Community-Based Services (HH/HCBS)	Payments for services provided by a home health agency (HHA) and services provided through the home and community-based services (HCBS) waiver
Community-Based Adult Services /(CBAS)	Payments for community-based adult services and for services rendered at an adult day health care center
Federally Qualified (FQHC) and Rural Health Center (RHC) Services	Payments for all services provided in an FQHC or RHC
Laboratory Services	Payments for laboratory services, except those provided during a hospitalization or ED visit

Category of Service	Calculation of Estimated Payment
Imaging Services	Payment for imaging services, except those provided during a hospitalization, ED visit, or LTC stay
Outpatient Pharmacy	Payments for outpatient drug claims, excluding prescriptions filled on the same day as an ED visit or on the day of discharge from a hospitalization
Transportation Services	Payments for medically required transportation, excluding transportation on the same day as an inpatient admission or an emergency department visit
Primary Care Services	Payments for services provided by a primary care physician
Specialty Care Services	Payments for services provided by a specialist, excluding services provided during an inpatient stay or an emergency department visit, and excluding facility fees
Outpatient Facility Services	Facility fees paid to hospital outpatient departments and ambulatory surgical centers
Dialysis Services	Payments for dialysis services rendered in a dialysis center
Therapy Services	Payments for occupational, speech, physical, and respiratory therapy services
Urgent Care Services	Payments for services provided in an urgent care setting
Other Services	Payments for services not captured above

Source: UCLA Methodology.

UCLA used all available Medi-Cal fee schedules and supplemented this data with other data sources as needed. Payment data sources, brief descriptions, and the related categories of services they were attributed to are provided in Exhibit 144.

Exhibit 144: Payment Data Sources

Source	Description	Applicable Service Categories
Medi-Cal Physician Fee Schedule Annual files 2013 to 2020 inflated/ deflated to 2019	Contains rates set by DHCS for all Level I procedure codes that are reimbursable by Medi-Cal for services and procedures rendered by physicians and other providers	ED, Hospitalizations, Hospice, LTC, HH/HCBS, CBAS, Imaging, Transportation, Primary Care, Specialty Care, Dialysis, Urgent Care, and Other
Durable Medical Equipment (DME) Fee Schedule Annual files 2017 to 2020 inflated/ deflated to 2019	Contains rates set by CMS for Level II procedure codes for durable medical equipment such as hospital beds and accessories, oxygen and related respiratory equipment, and wheelchairs	ED, Hospitalizations, Hospice, LTC, HH/HCBS, CBAS, Transportation, Primary Care, Specialty Care, Dialysis, Urgent Care, and Other
Medical Supplies Fee Schedules October 2019	Contains rates set by DHCS for supplies such as needles, bandages, and diabetic test strips	ED, Hospitalizations, Hospice, LTC, HH/HCBS, CBAS, Transportation, Primary Care, Specialty Care, Dialysis, Urgent Care, and Other
Average Sales Price Data (ASP) for Medicare Part B Drugs Annual files 2014 to 2020 inflated/ deflated to 2019	Contains rates set by CMS for procedure codes for physician-administered drugs covered by Medicare Part B	ED, Hospitalizations, Hospice, LTC, Primary Care, Specialty Care, and Other
CMS MS-DRG grouping software,	Contains Diagnostic Related Grouping (DRG) codes used for	Hospitalizations, LTC

Source	Description	Applicable Service Categories
DHCS's APR-DRG Pricing Calculator 12/1/2019	hospitalizations (CMS), base rate per DRG (DHCS) and DRG weights (CMS)	
FQHC and RHC Rates 12/19/2018 inflated to 2019	Contains rates set by DHCS for services provided by FQHCs and RHCs	FQHC and RHC
Hospice per diem rates 9/28/2020 deflated to 2019	Contains rates set by DHCS for hospice stays and services	Hospice
Nursing Facility Level A per diem rates 8/1/2019	Contains per diem rates set by DHCS per county for Freestanding Level A Nursing Facilities	LTC, Hospice
Distinct Part Nursing Facilities, Level B 8/1/2019	Contains per diem rates set by DHCS for nursing facilities that are distinct parts of acute care hospitals	LTC, Hospice
Home Health Services Rates 8/1/2020 deflated to 2019	Contains billing codes and reimbursement rates set by DHCS for procedure codes reimbursable by home health agencies	Home health
Home and Community-Based Services Rates 8/1/2020 deflated to 2019	Contains billing codes and reimbursement rates set by DHCS for the home and community-based services program	Home and community-based services
Community-Based Adult Services Rates 8/1/2020 deflated to 2019	Contains billing codes and reimbursement rates set by DHCS for community-based adult services	Community-based adult services

Source	Description	Applicable Service Categories
National Average Drug Acquisition Cost (NADAC) File 12/30/2019	Contains per unit prices for drugs dispensed through an outpatient pharmacy setting based on the approximate price paid by pharmacies, calculated by CMS	Outpatient pharmacy
Clinical Laboratory Fee Schedule 12/30/2019	Contains rates set by CMS for clinical lab services	Laboratory
Therapy Rates 8/1/2020 deflated to 2019	Contains billing codes and reimbursement rates set by DHCS for physical, occupational, speech, and respiratory therapy	Therapy
Ambulatory Surgical Center (ASC) Fee Schedule January 2019	Contains billing codes and reimbursement rates set by CMS for facility fees for ASCs	ED, Hospitalizations, Outpatient Facility
Outpatient Prospective Payment System (OPPS) File October 2019	Contains billing codes and reimbursement rates set by CMS for facility fees for hospital outpatient departments	ED, Hospitalizations, Outpatient Facility

Payments were attributed based on available service and procedures codes included in each claim. A specific visit may have included a physician claim from the providers for their medical services and a facility claim for use of the facility and resources (e.g., medical/ surgical supplies and devices) where service was provided.

The Medi-Cal Physician Fee Schedule contained monthly updated rates for all procedures that were reimbursable by Medi-Cal to providers and hospital outpatient departments. Each procedure code had multiple rates that varied based on provider type (e.g. physician, podiatrist, hospital outpatient department, ED, community clinic) and patient age. UCLA distinguished between these rates, but the paid amount for FFS still varied within the same procedure code, likely due to the directly negotiated rates between the providers and DHCS. For the purpose of PRIME evaluation, UCLA used the procedure code with the most expensive rate when adequate information was lacking.

UCLA also included a payment augmentation of 43.44% for claims for physician services provided in county and community hospital outpatient departments following DHCS guidelines. UCLA did not include any other reductions or augmentations that may have been applied by Medi-Cal due to limited information in claims data. Some procedures such as those performed by a qualified physical therapist in the home health or hospice setting did not have a fee in the Medi-Cal physician fee schedule but had fees in the Medi-Cal Provider Manual and UCLA used these fees when applicable.

CMS's Durable Medical Equipment (DME) Fee Schedule included billing codes that are reimbursable by Medi-Cal for DMEs such as hospital beds and accessories, oxygen and related respiratory equipment, and wheelchairs. Rates for other medical supplies such as needles, bandages, and diabetic test strips were found in DHCS's Medical Supplies Fee Schedules.

FQHCs and RHCs consist of a parent organization with one or more clinic sites and are paid a bundled rate for all services during a visit. DHCS publishes FQHC and RHC Rates for each clinic within the parent organization.

Payments for outpatient pharmacy claims were calculated using the national drug acquisition cost (NADAC), which contains unit prices for drugs. UCLA calculated the drug cost by multiplying the unit price by the number of units seen on the claim. Drugs administered by physicians were priced using CMS's Average Sales Price Data (ASP) for Medicare Part B drugs.

Facility fees were priced based on the ambulatory surgical center (ASC) fee schedule or the outpatient prospective payment system (OPPS) depending on whether the billing facility was an ASC or an outpatient department.

Medi-Cal paid most LTC institutions such as nursing and intermediate care facilities for the developmentally disabled on a per-diem rate, while long-term care hospital stays were reimbursed via diagnosis related group (DRG) payments. Per diem rates for LTC facilities were obtained directly from DHCS's long-term care reimbursement webpage, and these rates varied by type of facility. Rates for hospice services were based on DHCS's hospice care site and hospice room and board rates were based on the Nursing Facility/ Intermediate Care facility fee schedule. UCLA lacked some variables in claims data that were needed to calculate some LTC and hospice payments, such as accommodation code which specifies different rates for each nursing facility depending on the type of program including the "nursing facility level B special treatment program for the mentally disordered" or "nursing facility level B rural swing bed program". In these cases, UCLA used the rates associated with accommodation code 1: "nursing facility level B regular", which were higher than other accommodation code rates.

Hospitalizations are paid based on diagnosis related groups (DRGs), a bundled prospective payment methodology that is inclusive of all services provided during a hospitalization, except for physician services. Identification and pricing of DRGs varies by payers such as Medi-Cal and

Medicare. In California, DHCS uses 3M's proprietary APR-DRG Core Grouping Software to assign DRGs and 3M's APR-DRG Pricing Calculator to calculate prices for Medi-Cal DRG hospitals. APR-DRGs have more specific DRGs for Medicaid populations such as pediatric patients and services such as labor and delivery, and incorporate four levels of illness severity.

However, UCLA did not have access to this software and used 3M's publicly available CMS MS-DRG grouping software for the Medicare population, which includes Medicare-Severity DRGs (MS-DRGs) and their corresponding weights. MS-DRGs only include two levels of severity of illness, with complications or without complications. UCLA used this software to assign a DRG to each hospitalization based on procedure code, diagnosis, length of stay, payer type, patient discharge status, and patient age and gender. Although CMS uses the Inpatient Prospective Payment System to assign hospital prices based on the MS-DRGs, UCLA used available data and publicly available prices for DHCS's APR-DRG Pricing Calculator to calculate payments for each DRG. DHCS's APR-DRG Pricing Calculator used multiple hospital and patient-level variables to calculate the final payment for hospitals, and UCLA incorporated some of these variables into the estimated payment (such as patient age and hospital status of rural vs. urban) but could not incorporate other modifiers due to data limitations (such as other health coverage and whether or not the hospital was an NICU facility).

UCLA calculated the estimated payment by starting with the base rate from DHCS's APR-DRG Calculator, which was $12,832 for rural hospitals and $6,507 for urban hospitals. This base rate was multiplied by the weight assigned to each MS-DRG, which modified the base rate to account for resources needs for a given DRG. For example, more severe hospitalizations such as "Heart Transplant or Implant of Heart Assist System with major complications" had a high weight of 25.4241 but "Poisoning and Toxic Effects of Drugs without major complication" had a lower weight of 0.7502. This rate was further modified by one available policy adjuster, which increased the payment amount by patient age and was higher for those under 21 (1.25) than those 21 and older (1). Overall payment for a hospitalization was calculated by adding the estimated payments for physician specialist services that occurred during the hospitalization.

When no fees were found for procedure codes in any payment data sources, UCLA used the most frequent paid amount seen in fee-for-service claims for the procedure code. These included procedures such as tattooing/ intradermal introduction of pigment to correct color defects of skin and excision of excessive skin. When outlying units of service were found on the claim, UCLA used the 90th percentile value of units for the procedure code rather than the observed units. All claims were included in a category of service and were assigned a price.

For dual beneficiaries, Medi-Cal is the secondary payer (payer of last resort) and covers a portion of the costs of the service. However, UCLA lacked information on percentage of services paid for by Medi-Cal for dual managed care beneficiaries. Therefore, UCLA used Medi-Cal claims data to calculate payments for these dual beneficiaries using the same methodology as non-dual managed care beneficiaries. Dual beneficiaries made up 15% of the managed care population and 14% of the FFS population in 2019.

For the purpose of evaluation, all payments were calculated using the 2019 fee schedules when available. In the absence of 2019 data, UCLA inflated or deflated payment amounts using the paid amounts for similar FFS claims in available data. Using the 2019 fees removed the impact of inflation and pricing changes in subsequent analyses.

Comparison of Estimated Payments with Medi-Cal Paid Amounts

UCLA examined the potential bias based on the methodology used to estimate payments using claims data, compared to Medi-Cal paid amounts. The reasons for differences between estimated payments and paid amounts are described in the limitations section below.

First, UCLA examined the proportion of claims in 2019 from fee-for-services (FFS) and managed care (MC), distribution of types of claims by service category, and difference between FFS paid amounts in the Medi-Cal data and those estimated by UCLA. Of all claims in 2019 included in this analysis, 21% were FFS and the remaining were managed care. Exhibit 145 shows differences in claims for each group by service category. FQHC or RHC claims can only be reimbursed through FFS and represent over half of FFS claims in 2019. Of the remaining FFS claims, the data showed a slightly higher proportion of claims in the hospitalizations category in FFS than MC claims but the opposite pattern for all other categories. The differences were greater for ED visits and several outpatient service categories. FQHC/RHC services were only included in FFS claims. These differences likely reflected variations in demographics and subsequent utilization patterns of FFS and MC beneficiaries.

Exhibit 145: Proportion of Fee-for Service (FFS) and Managed Care (MC) Claims by Category of Service in 2019

Category of Service	% of Total MC Claims in 2019	% of Total FFS Claims in 2019
Emergency Department Visits	9.00%	3.97%
Hospitalizations	2.22%	2.26%
Hospice Care	0.08%	0.07%
Long-Term Care (LTC) Stays	0.33%	0.30%
Home Health and Home and Community-Based Services (HH/HCBS)	0.35%	0.17%
Community-Based Adult Services/(CBAS)	0.05%	0.00%
Federally Qualified (FQHC) and Rural Health Center (RHC) Services	0.00%	58.23%
Laboratory Services	14.81%	4.62%
Imaging Services	8.80%	2.56%
Outpatient Pharmacy	17.28%	12.02%
Transportation Services	1.54%	0.34%
Primary Care Services	13.24%	2.15%
Specialty Care Services	9.41%	2.64%
Outpatient Facility Services	7.38%	2.29%
Dialysis Services	0.01%	0.01%

Category of Service	% of Total MC Claims in 2019	% of Total FFS Claims in 2019
Therapy Services	3.02%	0.57%
Urgent Care Services	0.43%	0.02%
Other Services	12.05%	7.79%
Total	**100%**	**100%**

Source: UCLA analysis of Medi-Cal claims.
Notes: fee-for-services (FFS) and managed care (MC)

Further analysis showed that the UCLA estimated FFS payments per claim were 16% higher than paid amounts reported in FFS claims data. Additional comparisons indicated larger differences for some service categories such as PCP and specialty services. Medi-Cal data lacked a valid paid amount for MC claims and UCLA could not assess the magnitude of difference between estimated and paid amounts reliably. However, comparison of the average per claim MC estimated payments with FFS paid amounts indicated that the former was 26% lower than the latter.

Limitations

There were three types of limitations associated with UCLA's cost analysis including the availability of needed variables in the claims data and access to fee schedules and other pricing resources. The goal of the cost analysis was not to calculate exactly what DHCS paid for claims, but rather to calculate estimated payments and measure the impact of the PRIME program by comparing changes in estimated payments over time. The limitations below describe why UCLA results may be different from DHCS reimbursements for certain services and categories.

The first limitation was related to estimating payments for hospitalizations. First, the MS-DRG relative weights reflected Medicare payments, which were higher than Medi-Cal. This likely led to higher estimated payments for hospitalization. Second, MS-DRG only identified those levels of severity, with and without complication, but APR-DRG includes four severity levels. Third, DHCS uses multiple criteria to adjust hospital payments but UCLA was only able to adjust for urban and rural rates.

A second limitation was related to availability of fee schedules for accurate pricing. PRIME evaluation required analysis of multiple years of claims data and UCLA used all available fee schedules to price procedures, supplies, and facilities from multiple years and inflated prices to 2019 dollars whenever necessary. UCLA always used the most recent rate for a procedure. The inflation rates used were based on medical care Consumer Price Index provided by US Bureau of Labor Statistics without adjusting for regional-specific inflation rates. Not all procedures that appeared in the claims data had corresponding rates in all the available fee schedules. Procedures that required Treatment Authorization Requests (TARs) lacked a fee-schedule and are frequently more expensive than covered services. Some specific procedures had no fees in the Medi-Cal fee-schedule. When fee schedules were missing, UCLA attributed the most

frequently observed price from the paid amount for a similar FFS claim. If the procedure did not appear in any FFS claims, UCLA assigned the median allowed amount from all managed care claims for the given procedure code.

A third limitation was related to outlier values for service units, some of which were extremely high. UCLA attributed the 95th percentile value instead of the original value in the claim, potentially underestimating payments for some claims.

Appendix E: Quality Improvement Activities and PRIME Topic-Specific Learning Collaboratives in DY14-DY 15

Quality Improvement Structure

PRIME included a learning collaborative component in order to promote peer-to-peer learning and system transformation. DHCS contracted with Aurrera Health Group (formerly Harbage Consulting) to host annual PRIME conferences and topic-specific learning collaboratives (TLCs) to support participating hospitals as they implemented PRIME projects. TLCs were convened to focus on implementation of specific PRIME projects. PRIME hospitals also received technical assistance from the Safety Net Institute (SNI), the California Association of Public Hospitals (CAPH), and the California Maternal Quality Care Collaborative (CMQCC). Examples of TA from these organizations include participation and leadership in TLCs, monthly webinars and office hours for PRIME programmatic updates, reviewing reporting manual changes, and supporting peer sharing around data validation. Additionally, CAPH hosted webinars about implementing required projects starting in late 2016 (DY 12).

In the interim survey, 5 hospitals noted participating in external learning collaboratives and these included California Smokers Helpline Learning Collaborative, America's Essential Hospitals Population Health Learning Network, Institute for Health Improvement Team Collaborative, and the Institute for High-Quality Care.

PRIME Learning Collaborative (PRIMEd) Conferences

Annual PRIME Learning Collaborative (PRIMEd) conferences were held from DY 11 to DY 15.

The first conference, the PRIME Reporting DY 11 Data Summit, was co-hosted by DHCS, SNI, and DHLF on October 18, 2016. The conference included representatives from all 54 PRIME entities. The conference focused on a discussion of strategies, successes, and lessons gained from PRIME implementation in DY11, as well as data-related strategies for approaching the shift from pay-for-reporting to pay-for-performance.

There were regional convenings in DY 12 (April 2017 in Sacramento, CA and June 2017 in Riverside, CA). Topics included PRIME implementation, such as engaging providers and leadership, data governance, patient perceptions of changes in utilization, and EHR systems. There were also break-out sessions focused on specific PRIME projects.

The second annual conference, held November 14-15, 2017 in DY 12, welcomed representatives from all 54 PRIME entities as well as hospital associations. The conference focused on topics around patient-centered health care and integration of care. The majority of speakers were part of PRIME entities (80%) and addressed the conference topics, while 20% of the conference time was allocated to speakers from DHCS providing insights on provider and community engagement in health care.

The third annual conference was held October 29-30, 2018 in DY 13. Around 70% of the conference time was allocated to QI topics, and the other 30% covered patient engagement, performance data presentation, and lessons learned from DSRIP. The majority of speakers (75%) were not part of PRIME hospitals. DHCS representatives gave talks on QI strategies in health disparities, medication-assisted treatment (MAT), data presentation, and communication, while other speakers complemented the information on QI strategies and lessons PRIME could learn from DSRIP implementation.

In May 2019 in DY 13, the PRIMEd Learning Collaboratives held a Semi-Annual Meeting in Sacramento, California to provide entities with an additional optional opportunity to convene in-person and meet within topic-specific learning collaborative groups. The focuses for these groups included single- or multi-project specific topics such as care transitions, tobacco cessation, and behavioral health. In Aurrera Health Group's analysis of the evaluation feedback received about the 2019 PRIMEd Semi-Annual Meeting, the overall rating was a 3.2 out of 4; a plenary focused on The Newsom Administration's priorities for health care was the highest-rated session overall with a rating of 3.5 out of 4.

The fourth annual conference was held October 29-30, 2019 in DY 14. Time was split about evenly between speakers from PRIME entities and speakers from DHCS. The conference included presentations related to PRIME projects such as tobacco cessation, behavioral health integration, and the use of telehealth to meet PRIME goals, as well as presentations from DHCS representatives reflecting on PRIME and looking toward future initiatives such as CalAIM and QIP. In Aurrera Health's analysis of the evaluation feedback about the 2019 PRIMEd Annual Conference, the overall rating was 4.5 out of 5; the highest-rated breakout sessions were about chronic pain management and innovative approaches to addressing challenges in reporting and performance in PRIME (4.7/5), and the highest-rated plenary session was about behavioral health integration (4.7/5).

The fifth and final annual conference was held virtually on October 26-28, 2020 in DY 15. Major topics of the conference were COVID-19 related health and health care issues, as well as a review and outlook on PRIME and the time after PRIME. The majority of speakers were not part of PRIME entities (67%). Presentations specifically focused on ways to navigate through COVID-19, ways to address COVID-19 related health disparities, and stress. In other presentations, speakers reflected on their experiences with PRIME and the lessons learned, provided tips for sustaining QI efforts developed during PRIME and for the next steps regarding

the transition into the QIP Program. In Aurrera Health Group's analysis of the evaluation feedback about the 2020 PRIMEd Annual Conference, the overall rating was 4.5 out of 5; the highest- rated breakout sessions were about Practical Tips for Sustaining PRIME Quality Improvement Efforts (4.7/5) and the second-highest scores pertained to the presentations about COVID-19 (4.6/5: Addressing COVID-19-Related Health and Health Care Disparities; and Leveraging Telehealth and Maintaining Performance During COVID-19).

Topic Specific Learning Collaboratives

Topic-specific learning collaboratives (TLC) were formed to address topics related to PRIME projects. The TLCs were designed to support PRIME entities in undertaking quality improvement projects through active, team-based learning and dissemination of best practices to address common challenges. Meetings began in April 2018 (DY 13) with 12 TLCs meeting regularly through December 2018. In DY 14 and DY 15, 2 were combined (Mental Health and Substance Use Disorders-Pain Management were combined and renamed Behavioral Health) and 1 (Patient Engagement) was integrated into all continuing TLCs. The following 4 TLCs were discontinued during PRIME: Cancer Screening, Diabetes Management, Patient Safety and Obesity Prevention and Healthier Foods Initiatives. The remaining 6 TLCs (Exhibit 146) met through DY 15 and continued meeting regularly through the end of 2020 and after the conclusion of PRIME.

Exhibit 146: PRIME Topic-Specific Learning Collaboratives in DY14-DY 15

TLC Name	PRIME Project	Number of Entities (Varies by Year)	Meeting Topics
Behavioral Health[1]	1.1 (and others)	26-30 13 DPH; 13 DMPH (11 members were in the original mental health TLC)	• TLC goals, objectives and resources • Integrating mental health and primary care • Depression screening and treatment • Tobacco use, substance use screening and • Treatment • PRIME improvement efforts: ○ How to improve communications between PCPs and BH providers. How to break down the cultural barriers between primary care, mental health delivery systems, and practitioners ○ How to implement policies designed to effectively coordinate physical and mental health care. Strategies recommended for combining preventive efforts and coordinated care (e.g. psych-consulting, team-care approach, peer providers, enhanced linkages to community and BH settings) ○ How to improve BH screening in primary care ○ Suicide prevention care and recommendations ○ Adopting a suicide assessment risk tool and how to use the resources provided to clinicians ○ Screening tools and brief intervention techniques for early detection of SMIs and SUDs ○ Improving screening and follow up for depression ○ Battling the opioid crisis during COVID-19 ○ Innovative practices for operational recovery and budget recovery during COVID-19 ○ Understanding the psychological aspects of chronic disease management. Screening

TLC Name	PRIME Project	Number of Entities (Varies by Year)	Meeting Topics
			tools for addressing emotional and behavioral factors that often coincide with chronic conditions. ○ Addressing the link between smoking cessation and BH.
Health Disparities	1.2	13-19	• PRIME entities' performance data • PRIME entities' challenges and best practices • SOGI Data Collection: Rationale and Strategies • Reduce Disparities in Diabetes and Transforming Diabetes Health Care • Million Hearts Initiative - Preventing Heart Attacks and Strokes • Social Determinants of Health: Use and Impact of Protocol for Responding to and Assessing Patient Assets, Risks, and Experiences (PRAPARE) in California • Adverse Childhood Experiences (ACEs) and Health Disparities; Cultivating Resilience and Mindfulness • Addressing Challenges in Colorectal Cancer Screening Among Disparate Vulnerable Population • Epidemiology of and Disparities Associated with COVID-19 Infection in California

TLC Name	PRIME Project	Number of Entities (Varies by Year)	Meeting Topics
Maternal and Infant Health[2]	2.1	12-23	• TLC goals • Future TLC meeting topics • C-section reduction • Donor breastmilk • Prenatal and postpartum care • Exclusive breastfeeding • Addressing disparities in maternal mortality • PRIME entities' quality improvement efforts • Performance data • ACOG opinion on postpartum visits and alignment with PRIME. • CMQCC guest speaker: Federal Medicaid quality efforts, and PRIME data • Guest speaker: Perinatal medication assisted treatment
Care Transitions[3]	2.2	21-28	• TLC goals • Future TLC meeting topics • Performance data • HCAHPS • PRIME speaker • Ensuring a positive and seamless patient • experience • Communicating with outpatient providers • CMS National Care Transitions Awareness day summit debrief • QI efforts • PRIME entity presentation: data dashboard

TLC Name	PRIME Project	Number of Entities (Varies by Year)	Meeting Topics
Health Homes for Foster Children	2.4	4	• Oral health • Comprehensive Medical Evaluations for Children in Foster Care • Depression screening • State-level foster care reform efforts • TLC 2019 goals, objectives, performance data • Funding for Trauma and Developmental Screenings • Vaping and Foster Youth • Neonatal Abstinence Syndrome and Opioid Epidemic's Impact on Foster Care • California's ACE's Aware Initiative & CalAIM Foster Care Workgroup • On-sight tour of PRIME entity's outpatient clinic exclusively serving Foster Youth • TLC 2020 goals, objectives, performance data • Approaches for ACEs in Foster Children

TLC Name	PRIME Project	Number of Entities (Varies by Year)	Meeting Topics
Tobacco Cessation	Multiple	24	• Welcome & CA Quits Introduction • California Smokers' Helpline presentation by Guest Speaker- Training Manager at CA Smokers' Helpline • Workflow models within the Health Professional Team by Guest Speaker- Nurse Program Manager at UC Davis Comprehensive Cancer Center • Health System's Integrating Tobacco Assessment and Counseling • Tobacco Treatment and Mental Health • Workflows within EMR systems • Educational Material Design Consideration by Guest Speaker- Communication & Education Coordinator at CA Quits • Tobacco Metrics and Quality Improvement Objectives • CA Smokers' Helpline- Overview of Services by Guest Presenter- Project Manager at CSH • Vaping Myths and Misconceptions by Guest Presenter- MD, Pediatrician at Zuckerberg San Francisco General Hospital, UCSF • Workflow Workshop • Tobacco Quality Efforts Moving Forward by Guest Presenter- Health Program Specialist at Department of Health Care Services • Medi-Cal Managed Care Plans: Health Net by Guest Presenter- Health Promotion Consultant at Health Net • Patient Education & Outreach Materials by Guest Speaker- Communication & Education Coordinator at CA Quits • Addressing Tobacco Use Among Special Populations • Health System Highlights and Wrap-ups

TLC Name	PRIME Project	Number of Entities (Varies by Year)	Meeting Topics
			• Setting the Foundation: Policies & Workflows • Overview of Services: California Smokers' Helpline by Guest Presenters- Project Manager & Health Systems Outreach Coordinator at CSH • Smoking/Vaping & COVID-19 by Guest Presenter- Associate Professor of Medicine, UC Davis Health, CA Quits Project Director

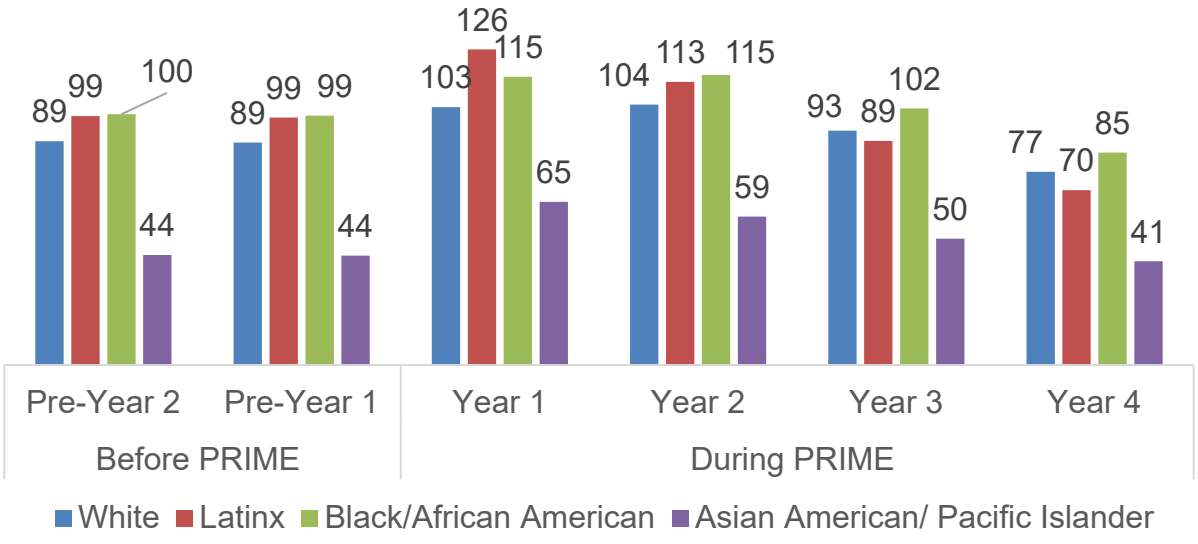
Source: TLC meeting notes, data obtained in April 2021. Data validated by Aurrera Health Group.
Notes: The TLCs operate on a calendar year versus demonstration year basis. Some TLC meetings were cancelled in 2020 due to the COVID-19 pandemic.
Individuals are provided an opportunity to join, continue or discontinue participation in TLCs each calendar year.
[1]: The Mental Health and Substance Use Disorders-Pain Management TLCs were combined in calendar year 2019 to form the Behavioral Health TLC.
[2]: In calendar year 2019, this TLC began meeting bi-monthly.
[3]: In calendar year 2020, this TLC began meeting bi-monthly.

Appendix F. Emergency Department and Hospitalization Utilization Trends by Race/Ethnicity

UCLA analyzed Medi-Cal data for trends in the number of ED visits and hospitalizations by race/ethnicity to assess the potential impact of PRIME on promoting equity in outcomes. Measure definitions are described in Exhibit 124. This analysis does not provide a definitive assessment of the contribution of PRIME to reducing disparities by REAL because it is based on DD models that were not specifically developed to measure REAL disparities.

The analysis showed that the number of ED visits and hospitalizations significantly decreased for all four racial/ethnic groups from before to during PRIME (Exhibit 147 and Exhibit 148). The DD analyses (not shown) indicated that the decline for each PRIME racial/ethnic group was significantly greater than the comparison racial/ethnic group. Further comparison analyses (DD of differences) indicated that the Latinx group experienced a greater decline than all other groups examined.

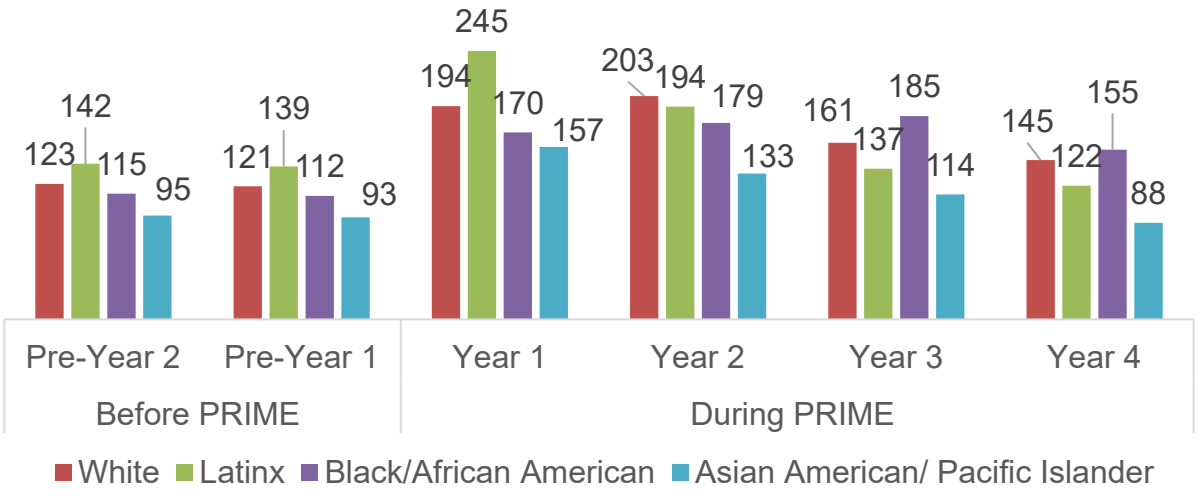
Exhibit 147: DPH Number of ED Visits per 1,000 Beneficiaries per Year, Before and During PRIME for PRIME Patients by Race/Ethnicity (Goal: Decrease)



Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes
White	-0.52*	-8.57*	-8.06*
Latinx	-0.57*	-18.66*	-18.09*
Black/African American	-0.58*	-10.07*	-9.49*
Asian American/ Pacific Islander	-0.25*	-7.89*	-7.63*

Source: UCLA analysis of Medi-Cal data, July 2014 to June 2020.
*Notes: * Denotes p≤0.05, a statistically significant difference. Average Annual Change Before PRIME is calculated as: (Pre-Year 1 – Pre-Year 2). Average Annual Change During PRIME is calculated as: (Year 4 – Year 1) /3. Difference between changes is calculated as: (Average Annual Change During PRIME – Average Annual Change Before PRIME). Values in the graph are rounded for ease of presentation and may differ from exact values in the table. The analyses exclude patients with a COVID-19 diagnosis.*

Exhibit 148: DPH Number of Hospitalizations per 1,000 Beneficiaries per Year, Before and During PRIME for PRIME Patients by Race/Ethnicity (Goal: Decrease)



Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes
White	-2.17*	-16.38*	-14.21*

Patients	Average Annual Change Before PRIME	Average Annual Change During PRIME	Difference Between Changes
Latinx	-2.49*	-40.92*	-38.43*
Black/African American	-2.01*	-5.26*	-3.24*
Asian American/ Pacific Islander	-1.66*	-23.02*	-21.35*

Source: UCLA analysis of Medi-Cal data, July 2014 to June 2020.
*Notes: * Denotes p≤0.05, a statistically significant difference. Average Annual Change Before PRIME is calculated as: (Pre-Year 1 – Pre-Year 2). Average Annual Change During PRIME is calculated as: (Year 4 – Year 1) /3. Difference between changes is calculated as: (Average Annual Change During PRIME – Average Annual Change Before PRIME). Values in the graph are rounded for ease of presentation and may differ from exact values in the table. The analyses exclude patients with a COVID-19 diagnosis.*

Appendix G. Project-Specific Trends in Metric Performance

Project 1.1 – Integration of Behavioral Health & Primary Care

Project Overview and Summary of Key Findings

Project 1.1 was designed to promote behavioral health and primary care integration in order to improve outcomes of care for patients with behavioral health conditions. Main goals of the project included: 1) early identification of behavioral health conditions; 2) comprehensive and appropriate treatment of behavioral health conditions; and 3) improvement of outcomes for patients with chronic medical and behavioral health conditions (Attachment Q). Specific objectives can be found in Attachment Q.

By the end of DY 15, a total of 22 hospitals continued to participate and report metric performance for Project 1.1. This project was required for all 17 DPHs, and was an optional project for DMPHs, of which 6 participated in DY 15 (during PRIME 2 dropped out of participation in DY 12 and 1 DMPH joined in DY 14. Detailed information on DPH and DPMH participation can be found in Appendix B. Project Selection.

The following analyses are restricted to assessment of changes in metric values through DY 14 due to disruptions in care delivery and utilization caused by the COVID-19 pandemic in DY 15. DY 15 metrics values are provided but are not directly comparable with previous years.

Performance of hospitals in Project 1.1 was measured by the following 7 metrics, two of which had sub-rates.

Exhibit 149: PRIME Project 1.1 Metric Details

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care
Alcohol and Drug Misuse. Sub-rate #1: Brief Annual Screen (began in DY 14)	1.1.1.a@	Increase	Process

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care
Alcohol and Drug Misuse Sub-rate #2: Full Screen, Brief Intervention, and Referral to Treatment (SBIRT)	1.1.1.a@	Increase	Process
Care Coordinator Assignment (retired after DY 12)	1.1.2*	Increase	Process
Comprehensive Diabetes Care: HbA1c Poor Control (>9.0%)	1.1.3.d	Decrease	Outcome
Depression Remission at 12 Months (retired after DY 12)	1.1.4	Increase	Outcome
Screening for Clinical Depression and Follow-Up	1.1.5.f	Increase	Process
Preventative Care and Screening: Tobacco Use – Screening and Cessation Intervention	1.1.6.t	Increase	Process
Depression Remission or Response for Adolescents and Adults (DRR): Follow-Up (began in DY 13)	1.1.7	Increase	Process
Depression Remission or Response for Adolescents and Adults (DRR): Depression (began in DY 13)	1.1.7	Increase	Outcome
Depression Remission or Response for Adolescents and Adults (DRR): Depression (began in DY 13)	1.1.7	Increase	Outcome

Source: PRIME Metrics Specs, DY 15YE
*Notes: SBIRT: screening, brief intervention, and referral to treatment. * Denotes innovative metric. @ A sub-rate was added to Metric 1.1.1.a; a "reverse" trending break was issued and Rate #1 in DY14 non-comparable to DY13 (PPL 19-004).*

Both DPHs and DMPHs showed an overall improvement over time in 4 metrics (1.1.1.a, 1.1.5.f, 1.1.6.t, and 1.1.7) from DY 11 or DY 12 respectively, to DY 14. DPHs reported mixed results in DY 11 and DY 12 for the retired metrics, Metrics 1.1.2 improved and 1.1.4 did not. DMPHs did not show improvement for Metric 1.1.3.d. DMPH reporting for retired 2 metrics (1.1.2, 1.1.4) did not have a trend, as the metrics were only reported for a year.

Metric 1.1.1.a – Alcohol and Drug Misuse Screening, Brief Intervention, and Referral to Treatment (SBIRT)

Metric 1.1.1.a measured the rates of screening for alcohol or drug misuse and appropriate intervention and referral to treatment. Hospitals were intended to decrease future risks and complications by improving the detection of alcohol-related disorders and intervention. The original SBIRT metric became sub-rate #2 (full screening), thus the change over time could be calculated and the metric was P4P in DY 14. The new sub-rate #1 is for a brief annual screening and was P4R in DY 14. The denominator includes individuals in the PRIME Project 1.1 Target Population ages 12 years or older who had a qualifying outpatient service. SBIRT rates increased as intended for all hospital types (Exhibit 150).

Exhibit 150: PRIME Hospital-Reported Alcohol and Drug Misuse Screening, Brief Intervention, and Referral to Treatment (SBIRT) Rates for Metric 1.1.1.a (Sub-rate #2)

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4R	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Total	3.29%	2.59%	5.24%	9.45%	6.16%	Yes	11.94%
UC	2.31%	1.44%	2.20%	6.88%	4.57%	Yes	8.74%
County	4.16%	3.71%	7.95%	11.80%	7.64%	Yes	14.82%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4R**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Total	---	6.67%	11.90%	19.04%	12.37%	Yes	15.33%
Non-CAH	---	0.50%	0.97%	2.61%	2.11%	Yes	5.18%
CAH	---	14.23%	22.24%	41.81%	27.57%	Yes	28.70%

Source and notes below.

Exhibit 151: PRIME Hospital-Reported Alcohol and Drug Misuse Brief Screening Rates for Metric 1.1.1.a (Sub-rate #1)

DPH	DY 14 P4R	DY 15
Total	39.12%	60.76%
UC	22.58%	74.48%
County	54.22%	45.46%
DMPH	**DY 14 P4R**	**DY 15**
Total	58.11%	33.74%
Non-CAH	66.45%	61.66%
CAH	46.56%	13.80%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting.

Metric 1.1.2 – Care Coordinator Assignment

Metric 1.1.2 measured the percentage of clients with an assigned care coordinator. Hospitals were intended to leverage care coordinators to more reliably ensure appropriate and timely delivery of care while also improving patient experience. This metric was retired after DY 12, so no data was reported for DY 13 or DY 14 and results for this metric are available in the Interim Report. Rates increased for DPHs and a trend was not measured for DMPHs because there was only a year of data.

Metric 1.1.3.d – Comprehensive Diabetes Care: HbA1c Poor Control (>9.0%)

Metric 1.1.3.d measured the rate of poor control (>9.0), missing, or incomplete HbA1c tests among diabetic patients (NQF 0059). Hospitals were intended to reduce the risk of microvascular complications, such as eye, kidney, and nerve diseases by maintaining control of HbA1c blood levels for individuals 18-75 years old. These rates decreased as intended for all hospital types except Non-CAH DMPHs (Exhibit 152).

Exhibit 152: PRIME Hospital-Reported Comprehensive Diabetes Care: HbA1c Poor Control (>9.0%) Rates for Metric 1.1.3.d

DPH	DY 11 P4R	DY 12 P4P	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Decreased as Intended	DY 15
Total	28.52%	26.41%	25.12%	24.80%	-3.71%	Yes	28.39%
UC	19.52%	19.51%	20.47%	17.39%	-2.13%	Yes	19.67%
County	31.04%	27.76%	26.07%	26.99%	-4.05%	Yes	30.70%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Decreased as Intended**	**DY 15**
Total	---	13.83%	18.54%	25.29%	11.46%	No	37.82%
Non-CAH	---	10.34%	15.55%	24.48%	14.14%	No	41.80%
CAH	---	35.34%	29.09%	27.55%	-7.79%	Yes	26.91%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance.

Metric 1.1.4 – Depression Remission at 12 Months

Metric 1.1.4 measured the rate of adult patients with major depression or dysthymia and an initial PHQ-9 score > 9 who demonstrated remission at 12 months (NQF 0710). Data is not reported because this metric was replaced by Metric 1.1.7. Results for Metric 1.1.4 are available in the Interim Report. Rates increased for DPHs and a trend was not assessed for DMPHs because they reported only a year of data.

Metric 1.1.5.f – Screening for Clinical Depression and Follow-Up Plan: Age 18 and Older

Metric 1.1.5.f measured the rate of adults ages 18 and older who received a standardized clinical depression screening, and if positive, received a follow-up plan (NQF 0418). Hospitals were intended to combat depression by improving proactive measures and ensuring patients received a thorough diagnosis and follow-up plan. Screening and follow-up rates increased as intended for all hospital types (Exhibit 153).

Exhibit 153: PRIME Hospital-Reported Screening for Clinical Depression and Follow-Up Rates for Metric 1.1.5

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Total	17.77%	34.66%	54.81%	73.07%	55.30%	Yes	72.19%
UC	14.71%	15.14%	38.92%	70.05%	55.35%	Yes	68.95%
County	20.37%	48.44%	65.02%	75.14%	54.77%	Yes	74.52%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Total	---	35.10%	63.05%	77.27%	42.17%	Yes	75.36%
Non-CAH	---	51.00%	91.61%	87.35%	36.35%	Yes	85.06%
CAH	---	17.79%	27.48%	58.12%	40.33%	Yes	55.21%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance. ---: DMPHs did not report data in DY 11.

Metric 1.1.6.t – Preventative Care and Screening: Tobacco Use – Screening and Cessation Intervention

Metric 1.1.6.t measured the rate at which patients aged 18 years and older were screened for tobacco use and received cessation intervention if identified as a tobacco user. Hospitals were intended to promote screening and intervention for tobacco users. There is good evidence to suggest such actions are successful in helping tobacco users quit. Tobacco Use – Screening and Cessation Intervention was revised with additional instructions in DY 14 to include 3 criteria, of which entities reported the 3rd (patients who were screened for tobacco use, and if identified as a tobacco user received tobacco cessation intervention, or identified as a tobacco non-user, Exhibit 154). Tobacco use screening and cessation intervention rates increased as intended for all hospital types.

Exhibit 154: PRIME Hospital-Reported Tobacco Assessment and Counseling Rates for Metric 1.1.6.t

DPH	DY 11 P4R	DY 12 P4P	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Total	81.64%	93.20%	95.94%	97.07%	15.43%	Yes	97.52%
UC	92.58%	96.39%	96.87%	97.50%	4.92%	Yes	97.38%
County	74.53%	90.63%	95.19%	96.74%	22.21%	Yes	97.65%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Total	---	44.89%	83.74%	89.88%	44.99%	Yes	91.53%
Non-CAH	---	52.88%	86.52%	91.88%	39.00%	Yes	91.85%
CAH	---	31.66%	79.64%	87.01%	55.35%	Yes	91.07%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital,

UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance.

Metric 1.1.7 – Depression Remission or Response for Adolescents and Adults (DRR)

Metric 1.1.7 measured the number of patients aged 12 years and older who had an initial elevated PHQ-9 score who received a follow-up screening (Exhibit 155) that demonstrated depression response (Exhibit 156) or remission (Exhibit 157) within 4 to 8 months. Hospitals were intended to improve care for patients with depression by thorough diagnosis and comprehensive treatment. This replaced Metric 1.1.4 in DY 13. Follow-up, remission or response rates increased as intended for all hospital types.

Exhibit 155: PRIME Hospital-Reported Depression Follow-Up Screening Rates for Metric 1.1.7

DPH	DY 13 P4R	DY 14 P4P	Change from DY 13 to DY 14	Increased as Intended	DY 15
Total	24.42%	32.84%	8.43%	Yes	36.57%
UC	25.14%	36.76%	11.61%	Yes	38.91%
County	24.11%	30.44%	6.33%	Yes	34.47%
DMPH	**DY 13 P4R**	**DY 14 P4P**	**Change from DY 13 to DY 14**	**Increased as Intended**	**DY 15**
Total	41.80%	59.79%	17.99%	Yes	61.34%
Non-CAH	43.61%	55.98%	12.37%	Yes	61.31%
CAH	34.91%	67.93%	33.02%	Yes	61.41%

Source and notes below

Exhibit 156: PRIME Hospital-Reported Depression Response Rates for Metric 1.1.7

DPH	DY 13 P4R	DY 14 P4P	Change from DY 13 to DY 14	Increased as Intended	DY 15
Total	7.36%	10.90%	3.54%	Yes	12.74%
UC	8.49%	13.84%	5.35%	Yes	14.63%
County	6.89%	9.10%	2.21%	Yes	11.04%

DPH	DY 13 P4R	DY 14 P4P	Change from DY 13 to DY 14	Increased as Intended	DY 15
DMPH	**DY 13 P4R**	**DY 14 P4P**	**Change from DY 13 to DY 14**	**Increased as Intended**	**DY 15**
Total	5.55%	25.30%	19.75%	Yes	25.58%
Non-CAH	3.89%	29.52%	25.62%	Yes	31.10%
CAH	11.83%	16.30%	4.47%	Yes	15.10%

Source and notes below

Exhibit 157: PRIME Hospital-Reported Depression Remission for Metric 1.1.7

DPH	DY 13 P4R	DY 14 P4P	Change from DY 13 to DY 14	Increased as Intended	DY 15
Total	4.09%	6.39%	2.30%	Yes	7.96%
UC	5.18%	8.89%	3.70%	Yes	10.23%
County	3.63%	4.86%	1.23%	Yes	5.93%
DMPH	**DY 13 P4R**	**DY 14 P4P**	**Change from DY 13 to DY 14**	**Increased as Intended**	**DY 15**
Total	4.07%	23.57%	19.50%	Yes	15.86%
Non-CAH	3.12%	30.53%	27.42%	Yes	19.79%
CAH	7.69%	8.70%	1.00%	Yes	8.39%

Source: UCLA analysis of the hospital-reported data, February to June 2021.

Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance. This metric was added and designated as P4R in DY 13.

Project 1.2 – Ambulatory Care Redesign: Primary Care

Project Overview and Summary of Key Findings

Project 1.2 focused on promoting system integration and improving efficiency in primary care delivery to ultimately improve access to care. These goals were to be achieved by transforming primary care practice into the PCMH care delivery model. Hospitals were encouraged to implement the PCMH principles including team-based care, care coordination across settings, population health management using EHR technologies and other approaches, promoting evidence-based care delivery including monitoring of provider performance, and promoting access through open-access scheduling. Specific objectives can be found in Attachment Q.

By the end of DY 15, a total of 23 hospitals continued to participate and report metric performance for Project 1.2. This project was required for all 17 DPHs and was an optional project for DMPHs, of which 6 participated through DY 15 and 1 dropped out of participation in DY 12. Detailed information on DPH and DMPH participation can be found in Appendix B. Project Selection.

The following analyses are restricted to assessment of changes in metric values through DY 14 due to disruptions in care delivery and utilization caused by the COVID-19 pandemic in DY 15. DY 15 metrics values are provided but are not directly comparable with previous years.

Performance of hospitals in Project 1.2 was measured by the following 14 metrics (Exhibit 158). Detailed Race/Ethnicity/and Preferred Language (REAL) and Sexual Orientation/Gender Identity (SO/GI) data were collected and reported in 5 metrics, which are presented together for this analysis. Metrics pertaining to REAL and SO/GI were organized so that 2 were reported only in DY 12 (1.2.6 and 1.2.9), another began in DY 12 (1.2.13), and another began in DY 13 (1.2.10). Metrics related to REAL and SO/GI are presented together.

Exhibit 158: PRIME Project 1.2 Metric Details

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care
Alcohol and Drug Misuse	1.2.1.a@	Increase	Process

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care
Sub-rate #1: Brief Annual Screen (began in DY 14)			
Alcohol and Drug Misuse Sub-rate #2: Full Screen, Brief Intervention, and Referral to Treatment (SBIRT)	1.2.1.a@	Increase	Process
CG-CAHPS: Provider Rating	1.2.2	Increase	Outcome
Colorectal Cancer Screening	1.2.3.c	Increase	Process
Comprehensive Diabetes Care: HbA1c Poor Control (>9.0%)	1.2.4.d	Decrease	Outcome
Controlling Blood Pressure	1.2.5.b@	Increase	Outcome
Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antithrombotic	1.2.7.i@	Increase	Process
Prevention Quality Overall Composite (PQI) #90	1.2.8	Decrease	Outcome
Screening for Clinical Depression and Follow-Up	1.2.12.f	Increase	Process
Preventative Care and Screening: Tobacco Use – Screening and Cessation Intervention	1.2.14.t	Increase	Process
REAL and SO/GI Metrics			
Documented REAL and/or SOGI Disparity Reduction Plan (DY 12 only)	1.2.6*	Increase	Process

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care
Primary Care Redesign Metrics Stratified by REAL Categories and SOGI (DY 12 only)	1.2.9*	Increase	Process
REAL and/or SO/GI Disparity Reduction (began in DY 13)	1.2.10*	Depended on selection	Outcome
REAL Data Completeness	1.2.11*	Increase	Process
SO/GI Data Completeness (began in DY 12)	1.2.13*	Increase	Process

Source: PRIME Metrics Specs, DY 15YE

*Notes: REAL: Race, Ethnicity, and Language, SO/GI: Sexual Orientation/ Gender Identity, * Innovative metric. @ A sub-rate was added to Metric 1.2.1.a; and a trending break was issued. Rate 1 in DY14 non-comparable to DY13 (PPL 19-004). Metric 1.2.5.b had a trending break in DY 14 (PPL 19—002). Metric 1.2.7.i had trending-break notice in DY 12 (PPL 17-007).*

Both DPHs and DMPHs showed overall improvement over time in 10 metrics (1.2.1.a Rate #2, 1.2.2, 1.2.3.c, 1.2.4.d, 1.2.5.b, 1.2.8, 1.2.12.f, 1.2.13, and 1.2.14.t). Metrics 1.2.1.a Rate #1, 1.2.6, and,1.2.9 did not have a trend, as they were only in effect for a year. Metric 1.2.7.i had a trending break issued in DY 12, and Metric 1.2.5.b had a trending break issued in DY 14, so trends were only calculated for years where there were common specifications. DPHs improved in both metrics and DMPHs improved in 1.2.5.b. Of note, many of these metrics were stratified by demographics and hospitals selected specific populations for disparities reductions (Metric 1.2.10- direction of improvement depended on hospital selected metrics). In DY 15 the metric performance thresholds were changed due to the COVID-19 pandemic.

Metric 1.2.1.a – Alcohol and Drug Misuse Screening, Brief Intervention, and Referral to Treatment (SBIRT)

Metric 1.2.1.a measured the rates of screening for alcohol or drug misuse and appropriate intervention and referral to treatment. Hospitals were intended to provide accurate diagnosis and comprehensive treatment procedures to support patients with

alcohol or drug misuse. Hospitals were intended to decrease future risks and complications by improving the detection of alcohol-related disorders and intervention. The original SBIRT metric became sub-rate #2 (full screening), thus the change over time could be calculated and the metric was P4P in DY 14. The new sub-rate #1 is for a brief annual screening, was P4R in DY 14, and a trend was not calculated because there was a trending break (Exhibit 160). The denominator includes individuals in the PRIME Project 1.2 Target Population ages 12 years or older who had a qualifying outpatient service. SBIRT rates increased as intended for all hospital types (Exhibit 159).

Exhibit 159: PRIME Hospital-Reported Alcohol and Drug Misuse Screening, Brief Intervention, and Referral to Treatment (SBIRT) Rates for Metric 1.2.1.a (Sub-rate #2 Full Screening)

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4R	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Total	3.29%	2.59%	5.24%	9.45%	6.16%	Yes	11.94%
UC	2.31%	1.44%	2.20%	6.88%	4.57%	Yes	8.74%
County	4.16%	3.71%	7.95%	11.80%	7.64%	Yes	14.82%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4R**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Total	---	0.81%	15.33%	8.66%	7.85%	Yes	13.01%
Non-CAH	---	0.86%	15.80%	9.34%	8.48%	Yes	13.15%
CAH	---	0.31%	12.32%	2.69%	2.39%	Yes	11.89%

Source: UCLA analysis of the hospital-reported data, February to June 2021.

Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance, ---: DMPHs did not report data in DY 11.

Exhibit 160: PRIME Hospital-Reported Alcohol and Drug Misuse Brief Annual Screening Rates for Metric 1.2.1.a (Sub-rate #1)

DPH	DY 14 P4R	DY 15
Total	39.12%	55.55%
UC	22.58%	60.90%
County	54.22%	50.75%
DMPH	**DY 14 P4R**	**DY 15**
Total	60.59%	71.34%
Non-CAH	58.30%	70.40%
CAH	80.71%	79.21%

Source: UCLA analysis of the hospital-reported data, February to June 2021.

Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting. A separate brief annual screening metric came into effect for DY 14 and was applicable for the remainder of PRIME.

Metric 1.2.2 – CG-CAHPS: Provider Rating

Metric 1.2.2 measured the number of individuals that rated their provider as 9 or 10, with 10 indicating “Best Provider Possible” (NQF 0005 AHRQ). Hospitals were intended to assess and surpass patient expectations by ensuring providers were cognizant, accurate, and empathetic. The PRIME Eligible Population and Project Target Population do not apply to the denominator for this metric. Instead, the target populations for the surveys are patients who have had at least one visit to the selected provider in the target time frame and hospitals report only primary care CG CAHPS results. Rates increased as intended for all hospital types (Exhibit 161).

Exhibit 161: PRIME Hospital-Reported Provider Rating Rates for Metric 1.2.2

DPH	DY 11 P4R	DY 12 P4P	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Total	78.07%	80.84%	80.61%	82.71%	4.64%	Yes	83.34%
UC	83.11%	84.73%	85.89%	87.19%	4.08%	Yes	88.28%
County	71.90%	77.75%	77.24%	77.56%	5.66%	Yes	79.15%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Total	---	74.55%	67.13%	82.51%	7.96%	Yes	90.80%
Non-CAH	---	74.53%	72.17%	82.77%	8.24%	Yes	91.07%
CAH	---	75.00%	33.99%	80.44%	5.44%	Yes	83.46%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance, ---: DMPHs did not report data in DY 11.

Metric 1.2.3.c – Colorectal Cancer Screening

Metric 1.2.3.c measured the number of patients 50 to 75 years old in the Project 1.2 Target Population that received an appropriate screening for colorectal cancer (NQF 0034, QPP #113 spec). Hospitals were intended to increase screenings for colorectal cancer in order to catch the disease in its earliest stages and increase 5-year survival rate. Rates increased as intended for all hospital types (Exhibit 162).

Exhibit 162: PRIME Hospital-Reported Colorectal Cancer Screening Rates for Metric 1.2.3.c

DPH	DY 11 P4R	DY 12 P4P	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Total	58.52%	64.61%	67.39%	69.79%	11.27%	Yes	67.03%
UC	62.62%	66.53%	69.19%	71.22%	8.60%	Yes	71.33%
County	55.98%	63.35%	66.23%	68.82%	12.84%	Yes	63.40%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Total	---	19.38%	34.23%	44.99%	25.61%	Yes	48.14%
Non-CAH	---	18.67%	33.63%	45.77%	27.09%	Yes	48.60%
CAH	---	23.12%	37.29%	40.73%	17.61%	Yes	45.70%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance, ---: DMPHs did not report data in DY 11.

Metric 1.2.4.d – Comprehensive Diabetes Care: HbA1c Poor Control (>9.0%)

Metric 1.2.4.d measured the number of individuals with Type 1 diabetes or Type 2 diabetes aged 18-75 years old who had hemoglobin A1c in poor control (>9.0) or was missing a result (NQF 0059). Hospitals were intended to reduce microvascular complications in patients with diabetes through improving management of hemoglobin A1c levels. Rates decreased as intended for all hospital types (Exhibit 163).

Exhibit 163: PRIME Hospital-Reported Diabetes Poor Control (>9.0) Rates for Metric 1.2.4.d

DPH	DY 11 P4R	DY 12 P4P	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Decreased as Intended	DY 15
Total	28.52%	26.46%	25.11%	24.80%	-3.71%	Yes	27.81%
UC	19.52%	19.51%	20.47%	17.39%	-2.13%	Yes	19.67%
County	31.04%	27.82%	26.04%	26.99%	-4.05%	Yes	30.22%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Decreased as Intended**	**DY 15**
Total	---	38.42%	34.21%	28.10%	-10.32%	Yes	24.60%
Non-CAH	---	38.46%	32.39%	28.62%	-9.85%	Yes	24.56%
CAH	---	37.58%	49.25%	23.04%	-14.54%	Yes	25.00%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance, ---: DMPHs did not report data in DY 11.

Metric 1.2.5.b – Controlling Blood Pressure

Metric 1.2.5.b measured the proportion of patients between the ages of 18 and 85 that had at least 1 outpatient encounter with a diagnosis of hypertension and had their blood pressure (BP) adequately controlled. For all patients aged 18 to 59, and patients aged 60 to 85 with a diagnosis of diabetes, adequately controlled BP was defined as <140/90 mmHg. For patients between the ages of 60 and 85 without a diagnosis of diabetes, adequately controlled BP was <150/90 mmHg. In DY 14, the metric specification for adequate control was changed to be the same for all groups (<140/90), and hospitals reported DY 14 rates using both the original and new specifications (a trending break was issued, PPL 19—002). Thus, a trend was calculated for DY 11 through DY 14 per the original specification. In DY 11 through DY 14, rates increased as intended for all hospital types (Exhibit 164). DY 14 and DY 15 rates are also reported per the new specification (Exhibit 165). However, the change between these two years is confounded by the COVID-19 pandemic. Hospitals were intended to increase early detection of hypertension so that patients could start interventions earlier.

Exhibit 164: PRIME Hospital-Reported Blood Pressure Control Rates for Metric 1.2.5.b, DY 11 to DY 14 Using DY 11-DY 13 Metric Specifications

DPH	DY 11 P4R	DY 12 P4P	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended
Total	66.78%	71.54%	73.59%	75.20%	8.42%	Yes
UC	69.81%	74.51%	74.71%	76.66%	6.85%	Yes
County	64.90%	69.77%	72.90%	74.37%	9.47%	Yes
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**
Total	---	61.93%	63.84%	70.35%	8.42%	Yes
Non-CAH	---	63.11%	68.44%	70.25%	7.14%	Yes
CAH	---	53.85%	46.75%	70.63%	16.78%	Yes

Source and notes below.

Exhibit 165: PRIME Hospital-Reported Blood Pressure Control Rates for Metric 1.2.5.b, DY 14 and DY 15 Using DY 14 - DY 15 Metric Specifications

DPH	DY 14 P4P	DY 15
Total	69.45%	66.05%
UC	69.16%	65.87%
County	69.61%	66.14%
DMPH	**DY 14 P4P**	**DY 15**
Total	68.82%	70.10%
Non-CAH	69.13%	71.70%
CAH	67.03%	60.55%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance. ---: DMPHs did not report data in DY 11. Metric 1.2.5.b had a trending break in DY 14 (PPL 19—002).

Metric 1.2.7.i – Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antithrombotic

Metric 1.2.7.i measured the number of patients who had an active medication of aspirin or another antiplatelet among patients in the Project 1.2 Target Population aged 18 and over with a visit during the measurement period who had an acute myocardial infarction (AMI), coronary artery bypass grafting (CABG) or percutaneous coronary intervention (PCI) during the 12 months prior to the measurement period or who had a diagnosis of IVD overlapping the measurement period. Hospitals were intended to reduce the risk of serious vascular events, such as myocardial infarction or stroke, by tracking the proportion of patients with an active antiplatelet medication. Note that a trend-break notice was issued for this metric in DY 12 (PPL-17-007) to clarify that the numerator includes active medications for patients and to add details to the time periods for events in the denominator inclusion criteria. Hospitals reported DY 12 rates for both the original and new specifications. Thus, a trend was calculated for DY 11 to DY 12 per the original specification (Exhibit 166), and a separate trend was calculated for DY 12 to DY 14 per the new specification (Exhibit 167). DY 15 rates per the new specification were also reported.

Exhibit 166: PRIME Hospital-Reported Ischemic Vascular Disease -Aspirin or Another Antithrombotic Use Rates for Metric 1.2.7.i, DY 11 to DY 12 Using DY 11 Metric Specifications

DPH	DY 11 P4R	DY 12 P4P	Change from DY 11 to DY 12	Increased as Intended
Total	79.41%	84.80%	5.39%	Yes
UC	82.57%	84.78%	2.21%	Yes
County	76.45%	84.82%	8.37%	Yes

Source and notes below.

Exhibit 167: PRIME Hospital-Reported Ischemic Vascular Disease -Aspirin or Another Antithrombotic Use Rates for Metric 1.2.7.i, DY 12 to DY 15 Using DY 12 – DY 15 Metric Specifications

DPH	DY 12 P4P	DY 13 P4P	DY 14 P4P	Change from DY 12 to DY 14	Increased as Intended	DY 15
Total	84.97%	88.94%	87.03%	2.07%	Yes	84.91%

DPH	DY 12 P4P	DY 13 P4P	DY 14 P4P	Change from DY 12 to DY 14	Increased as Intended	DY 15
UC	86.64%	88.41%	82.95%	-3.69%	No	80.06%
County	83.91%	89.30%	91.59%	7.67%	Yes	90.43%
DMPH	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Total	88.06%	75.00%	85.62%	-2.44%	No	85.09%
Non-CAH	88.99%	82.26%	87.41%	-1.58%	No	85.84%
CAH	75.68%	49.30%	75.27%	-0.41%	No	81.36%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance. A trend-break notice was issued for this metric in DY 12 (PPL-17-007) to clarify that the numerator includes active medications for patients and added details to the time periods for events in the denominator inclusion criteria.

Metric 1.2.8 – AHRQ Prevention Quality Indicators (PQI #90)

Metric 1.2.8 measured the proportion of patients 18 years of age or older who were discharged and met the inclusion and exclusion rules for the numerator PQIs (Exhibit 168). Rates decreased as intended for all hospital types (Exhibit 169).

Exhibit 168: PRIME Prevention Quality Indicators (PQI)

Number	Description
1	Diabetes Short-Term Complications Admission Rate
3	Diabetes Long-Term Complications Admission Rate
5	Chronic Obstructive Pulmonary Disease (COPD) or Asthma in Older Adults Admission Rate
7	Hypertension Admission Rate
8	Heart Failure Admission Rate
10	Dehydration Admission Rate
11	Community-Acquired Pneumonia Admission Rate
12	Urinary Tract Infection Admission Rate
14	Uncontrolled Diabetes Admission Rate
15	Asthma in Younger Adults Admission Rate
16	Lower-Extremity Amputation among Patients with Diabetes Rate

Source: PRIME Metrics Specs.

Exhibit 169: PRIME Hospital-Reported Prevention Quality Indicator- Overall Composite Rates for Metric 1.2.8

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4R	DY 14 P4P	Change from DY 11 to DY 14	Decreased as Intended	DY 15
Total	1.64%	2.31%	0.90%	0.93%	-0.72%	Yes	0.85%
UC	1.44%	1.26%	0.84%	0.75%	-0.69%	Yes	0.65%
County	1.72%	2.73%	0.92%	1.01%	-0.71%	Yes	0.93%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4R**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Decreased as Intended**	**DY 15**
Total	---	3.33%	3.09%	2.17%	-1.16%	Yes	3.31%
Non-CAH	---	3.14%	3.04%	2.06%	-1.08%	Yes	3.34%
CAH	---	7.93%	4.14%	4.63%	-3.29%	Yes	2.59%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance, ---: DMPHs did not report data in DY

11. PQI is an overall composite score in which a lower rate indicates better performance.

Metric 1.2.12.f – Screening for Clinical Depression and Follow-Up

Metric 1.2.12.f measured the number of patients age 18 or older who were screened for clinical depression in an eligible encounter and, if applicable, provided a follow-up plan. Hospitals were intended to identify and treat depression in its early stages in order to reduce risks of the negative outcomes associated with depression by increasing routine screenings for depression as a part of primary care. Rates increased as intended for all hospital types (Exhibit 170).

Exhibit 170: PRIME Hospital-Reported Clinical Depression Screening and Follow-Up Rates for Metric 1.2.12.f

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Total	17.77%	35.74%	54.81%	73.07%	55.30%	Yes	72.19%
UC	14.70%	15.14%	38.92%	70.05%	55.35%	Yes	68.95%
County	20.37%	49.67%	65.02%	75.14%	54.77%	Yes	74.52%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Total	---	17.95%	52.73%	69.86%	51.91%	Yes	67.42%
Non-CAH	---	18.37%	57.07%	70.73%	52.36%	Yes	69.32%
CAH	---	10.86%	27.52%	64.50%	53.64%	Yes	52.85%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance, ---: DMPHs did not report data in DY 11.

Metric 1.2.14.t – Preventative Care and Screening: Tobacco Use – Screening and Cessation Intervention

Metric 1.2.14.t measured the number of who patients received tobacco screening and, if identified as a tobacco user, received tobacco cessation intervention. Hospitals were intended to promote screening and intervention for tobacco users. There is good evidence to suggest such actions are successful in helping users quit. Tobacco Use – Screening and Cessation Intervention was revised with additional instructions in DY 14 to include 3 criteria, of which entities reported the 3rd (patients who were screened for tobacco use, and if identified as a tobacco user received tobacco cessation intervention, or identified as a tobacco non-user). Tobacco use screening and cessation intervention rates increased as intended for all hospital types (Exhibit 171).

Exhibit 171: PRIME Hospital-Reported Preventative Care and Screening: Tobacco Use – Screening and Cessation Intervention Rates for Metric 1.2.14.t

DPH	DY 11 P4R	DY 12 P4P	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Total	81.64%	93.20%	95.94%	97.07%	15.43%	Yes	97.52%
UC	92.58%	96.39%	96.88%	97.50%	4.92%	Yes	97.38%
County	74.53%	90.63%	95.19%	96.74%	22.21%	Yes	97.65%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Total	---	52.08%	81.22%	83.84%	31.76%	Yes	78.98%
Non-CAH	---	51.01%	82.26%	83.84%	32.82%	Yes	78.56%
CAH	---	65.91%	75.59%	83.90%	17.99%	Yes	82.08%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance, ---: DMPHs did not report data in DY 11.

Metric 1.2.6 – Documented REAL and/or SO/GI Disparity Reduction Plan

Metric 1.2.6 measured the number of hospitals that attested to completing a race, ethnicity, language, (REAL) and/or sexual orientation or gender identity (SO/GI) disparity reduction plan targeting 1 or more disparities. Hospitals were intended to reduce primary care health disparities that exist on the lines of REAL and SO/GI to provide equal opportunity and fair treatment to all. This was reported in DY 12 and the analysis can be found in the Interim Report.

Metric 1.2.9 – Primary Care Redesign Metrics Stratified by REAL Categories and SO/GI

Metric 1.2.9 measured the number of metrics stratified by the following sub-populations of the PRIME Eligible Population: Ethnicity Group (Detailed Ethnicity); Race Category; Detailed Race; Preferred Language; Sexual Orientation; Gender Identity. This was reported only in DY 12 and the analysis can be found in the Interim Report.

Metric 1.2.10 – REAL and/or SO/GI Disparity Reduction

Metric 1.2.10 measured the number of PRIME Primary Care Redesign project metrics targeted for disparity reduction in the PRIME hospital's DY 12 REAL and/or SO/GI Disparity Reduction Plan. Hospitals were intended to decrease disparities in health, health outcomes, or health care delivery amongst sub-populations of the PRIME Eligible Population (Exhibit 172).

Five hospitals selected Metric 1.2.3.c Colorectal Cancer Screening (CRC), six hospitals selected Metric 1.2.4.d Comprehensive Diabetes Care: HbA1c Poor Control (>9.0%), 10 hospitals selected Metric 1.2.5.b Controlling Blood Pressure (Hypertension), one hospital selected Metric 1.2.7.i Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antithrombotic, and one hospital selected Metric 1.2.14.t Tobacco Assessment and Counseling (Exhibit 172). Analysis was conducted for the two most common disparity metric and populations (Exhibit 173), rates increased as intended from DY 13 to DY 14.

Exhibit 172: Targeted Disparities Using REAL/SOGI Data for Metric 1.2.10

Selected metric for disparity reduction	DPH (n=17)	DMPH (n=6)	Direction of improvement
1.2.3.c Colorectal Cancer Screening (CRC)	Hispanic/Latino (2, one focused on men),	Hispanic/Latino men (1)	Increase

Selected metric for disparity reduction	DPH (n=17)	DMPH (n=6)	Direction of improvement
	English language (1), African Americans (1)		
1.2.4.d Comprehensive Diabetes Care: HbA1c Poor Control (>9.0%)	African Americans (2), Spanish-language/ Hispanic /Latino (2)	Women PEP (1), Hispanic Women (1)	Decrease
1.2.5.b Controlling Blood Pressure (Hypertension)	African Americans (6) Hispanic/Latino (1)	English-language (1), Hispanic/ Latino (2)	Increase
1.2.7.i Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antithrombotic	Spanish-language (1)	Not selected	Increase
1.2.14.t Tobacco Assessment and Counseling	African Americans (1)	Not selected	Increase

Source: Hospital reports to DHCS for DY15.

Exhibit 173: PRIME Hospital-Reported Disparity Reduction Rates for Metric 1.2.10*

Selected disparities and population sub-analysis	DY 13	DY 14	Change from DY 13 to DY 14	Increased as Intended	DY 15
1.2.3.c **Colorectal Cancer Screening for Hispanic/Latinos (n=3)**	47.40%	57.17%	9.77%	Yes	53.16%
1.2.5.b **Controlling Blood Pressure for African Americans (n=6)**	68.04%	70.26%	2.22%	Yes	59.31%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
*Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4P: pay-for-performance. * Denotes innovative metric. Metric 1.2.10 came into effect for DY 13 and was applicable for the remainder of PRIME. DPH and DMPH achievement rates are combined for this analysis.*

Metric 1.2.11 – REAL Data Completeness

Metric 1.2.11 measured the number of patients who have complete race, ethnicity, and preferred language (REAL) data available on file. Hospitals were intended to improve and maintain data completeness to support cohesive patient care and reduce health disparities by race, ethnicity, and language. Rates increased as intended for the majority of hospital types (Exhibit 174).

Exhibit 174: PRIME Hospital-Reported Race, Ethnicity, and Preferred Language (REAL) Data Completeness Rates for Metric 1.2.11

DPH	DY 11 P4R	DY 12 P4P	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Total	35.77%	57.71%	78.04%	80.74%	44.97%	Yes	81.20%
UC	64.38%	39.37%	57.79%	58.64%	-5.75%	No	62.75%
County	18.70%	68.76%	90.27%	93.98%	75.28%	Yes	93.15%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Total	---	21.90%	82.74%	92.90%	71.00%	Yes	91.13%
Non-CAH	---	21.23%	84.20%	92.45%	71.22%	Yes	90.62%
CAH	---	34.55%	65.44%	98.61%	64.05%	Yes	98.24%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance, ---: DMPHs did not report data in DY 11.

Metric 1.2.13 – SO/GI Data Completeness

Metric 1.2.13 measured the number of patients with both sexual orientation and gender identity (SO/GI) available on file. Hospitals were intended to reduce primary care health disparities that exist on the lines of sexual orientation or gender identity. This metric began in DY 12. Rates increased as intended for all hospital types (Exhibit 175).

Exhibit 175: PRIME Hospital-Reported Sexual Orientation and Gender Identity (SO/GI) Data Completeness Rates for Metric 1.2.13

DPH	DY 12 P4R	DY 13 P4P	DY 14 P4P	Change from DY 12 to DY 14	Increased as Intended	DY 15
Total	8.89%	43.54%	66.18%	57.28%	Yes	70.55%
UC	1.28%	14.88%	38.79%	37.52%	Yes	38.79%
County	14.10%	63.48%	85.17%	71.07%	Yes	85.17%
DMPH	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Total	21.91%	57.91%	66.19%	44.28%	Yes	69.10%
Non-CAH	23.29%	56.49%	65.88%	42.59%	Yes	67.51%
CAH	0.00%	72.47%	70.16%	70.16%	Yes	88.07%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance. This metric was implemented starting in DY 12.

Project 1.3 – Ambulatory Care Redesign: Specialty Care

Project Overview and Summary of Key Findings

Project 1.3 was designed to integrate specialty and primary care and thus improve timely access to high quality and effective specialty care by transformation of specialty care practice, including mental health and substance abuse treatment. This goal was to be achieved by establishing needed infrastructure such as specialty care support tools for primary care providers (PCPs) and implementing processes that promote delivery of integrated care including team-based care, technology-assisted expanded access to specialty care, and improved management of patients. Specific objectives can be found in Attachment Q.

Project 1.3 was required for all 17 DPHs. Additionally, 2 DMPHs participated in this project. By the end of DY 15, a total of 19 hospitals participated and reported metric performance for Project 1.3. Detailed information on DPH and DPMH participation can be found in Appendix B. Project Selection.

The following analyses are restricted to assessment of changes in metric values through DY 14 due to disruptions in care delivery and utilization caused by the COVID-19 pandemic in DY 15. DY 15 metrics values are provided but are not directly comparable with previous years.

Performance of the hospitals in Project 1.3 was measured by the following 7 metrics (Exhibit 176).

Exhibit 176: PRIME Project 1.3 Metric Details

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care
Closing the Referral Loop: Receipt of Specialist Report	1.3.1	Increase	Process
DHCS All-Cause Readmissions (DY 11-DY 13); CMS Plan All-Cause Readmissions(DY 14 and DY 15)	1.3.2@	Decrease	Outcome
Influenza Immunization	1.3.3	Increase	Process
Post Procedure ED Visits (retired DY 13)	1.3.4*	Decrease	Outcome

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care
Request for Specialty Care Expertise Turnaround Time	1.3.5*	Increase	Process
Specialty Care Touches: Specialty Expertise Requests Managed via Non-Face to Face Specialty Encounters	1.3.6*	Increase	Process
Tobacco Use: Screening and Cessation Intervention	1.3.7	Increase	Process

Source: PRIME Metrics Specs, DY 15YE

*Notes: SBIRT: screening, brief intervention, and referral to treatment. * Denotes innovative metric. @ Metric 1.3.2 CMS Plan All Cause Readmission had a trending break in DY 14, so rates cannot be compared to DY 13 (information in PPL 19-002, PPL 19—003, and PPL 19-004)*

Overall, DPH and DMPH hospitals showed improved performance over time in 5 metrics (1.3.1, 1.3.3, 1.3.5, 1.3.6, 1.3.7) from DY 11 or DY 12 respectively, to DY 14. Trending breaks were issued for two metrics (1.3.2 and 1.3.4), DPHs had mixed results in those metrics from DY 11 to DY 13. In DY 15 the metric performance thresholds were changed due to the COVID-19 pandemic.

Metric 1.3.1 – Closing the Referral Loop: Receipt of Specialist Report

Metric 1.3.1 measured the proportion of all patients regardless of age, for which the provider both gave a referral and received a report back from the specialty care provider to whom the patient was referred. Hospitals were intended to close the loop on the receipt of referrals, since physicians did not always receive a report from specialists. Rates of closing the specialist referral loop increased as intended for all hospital types (Exhibit 177).

Exhibit 177: PRIME Hospital-Reported Rate of Closing the Specialist Referral Loop for Metric 1.3.1

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Total	67.42%	70.57%	81.29%	84.48%	17.06%	Yes	91.12%
UC	49.64%	80.70%	85.91%	85.30%	35.66%	Yes	87.57%
County	75.84%	64.09%	78.32%	83.97%	8.13%	Yes	94.88%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Non-CAH	---	53.11%	52.13%	57.15%	4.05%	Yes	76.39%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance. ---: DMPHs did not report data in DY 11.

Metric 1.3.2 – DHCS All-Cause Readmissions – Statewide Collaborative QIP Measure; Plan All Cause Readmission

From DY 11 to DY 13, Metric 1.3.2 measured the proportion of patients that were readmitted within 30 days of the Index Hospital Stays (IHS) for individuals 21 years of age and older from the Project 1.3 Target Population. Hospitals were intended to reduce readmissions as a result of improved transition of patients to post-hospital care (Exhibit 178).

In DY 14 and DY 15, PRIME replaced the measure with the CMS Plan All-Cause Readmission measure. Changes to the PRIME Encountered Population changed from "under the accountability of the PRIME Entity 120 days" to "under the accountability of the PRIME Entity 360 days"; age criteria changed from ≥21, to 18-64; Continuous Assignment changed from "120 days prior to…", to "365 days prior to…" ; and allowable gaps in enrollment were added.

Exhibit 178: PRIME Hospital-Reported DHCS All-Cause Readmission Rates for Metric 1.3.2

DPH	DY 11 P4R	DY 12 P4P	DY 13 P4P	Change from DY 11 to DY 13	Decreased as Intended
Total	13.94%	13.40%	13.40%	-0.54%	Yes
UC	14.43%	15.11%	13.71%	-0.72%	Yes
County	13.52%	11.98%	13.20%	-0.32%	Yes
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4P**	**Change from DY 12 to DY 13**	**Decreased as Intended**
Non-CAH	---	5.52%	13.10%	7.58%	No

Source and notes below.

Exhibit 179: PRIME Hospital-Reported CMS All-Cause Readmission Rates for Metric 1.3.2

DPH	DY 14 P4P	DY 15
Total	13.54%	13.97%
UC	13.68%	13.92%
County	13.45%	14.00%
DMPH	**DY 14 P4P**	**DY 15**
Non-CAH	16.27%	11.54%

Source: UCLA analysis of the hospital-reported data, February to June 2021.

Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance. ---: DMPHs did not report data in DY 11. Due to the metric modifications and trending-break, DY 14 and DY 15 are CMS All Cause Readmissions (information in PPL 19-004).

Metric 1.3.3 – NQF #0041 Influenza Immunization

Metric 1.3.3 measured the proportion of patients who received an influenza immunization or had a previous receipt of an influenza immunization in the Project 1.3 Target Population aged 6 months and older. Hospitals were intended to promote influenza vaccinations to reduce contraction rates and risks of disease. Influenza immunization rates increased as intended for all hospital types (Exhibit 180).

Exhibit 180: PRIME Hospital-Reported Influenza Immunization Rates for Metric 1.3.3

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Total	49.49%	55.48%	68.47%	75.83%	26.34%	Yes	78.34%
UC	55.58%	51.35%	67.75%	73.23%	17.64%	Yes	77.09%
County	45.20%	60.32%	69.22%	79.08%	33.88%	Yes	79.98%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Non-CAH	---	16.18%	25.63%	40.96%	24.78%	Yes	47.81%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance. ---: DMPHs did not report data in DY 11. The Target Population are those in the PRIME Eligible Population who had an in-person PRIME Entity Specialty Care visit at least once during the Measurement Period.

Metric 1.3.4 – Post Procedure Emergency Department (ED) Visits

Metric 1.3.4 determined the proportion of PRIME hospital ED visits that occurred within 7 calendar days of the denominator outpatient specialty care encounters during surgeries and procedures being completed on the same individuals; all ages were included in this metric. Hospitals were intended to reduce unplanned admissions to emergency rooms for outpatient procedures and surgeries in order to lower the development of adverse events associated with these procedures. No data was reported for DY 14 or DY 15 because this metric was retired after DY 13; DPH rates decreased and DMPH rates increased from DY 11 to DY 13. Results for this metric are available in the Interim Report.

Metric 1.3.5 – Request for Specialty Care Expertise Turnaround Time

Metric 1.3.5 measured the proportion of requests in which an individualized response was returned to the requester within 5 calendar days over the total number of requests sent to the PRIME Hospital specialists. The rationale of this metric was to promote timely responses from the specialists to ultimately provide the well-informed, best care possible to patients. Specialty care request rates increased as intended for all participating hospital types, except Non-CAH DMPH's (Exhibit 181).

Exhibit 181: PRIME Hospital-Reported Specialty Care Request Rates for Metric 1.3.5*

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4R	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Total	33.23%	51.37%	59.93%	66.67%	33.44%	Yes	73.21%
UC	23.55%	45.27%	62.62%	62.87%	39.32%	Yes	70.73%
County	47.46%	57.63%	57.67%	69.93%	22.47%	Yes	75.77%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4R**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Non-CAH	---	35.99%	41.88%	81.87%	45.88%	Yes	67.55%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
*Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance. ---: DMPHs did not report data in DY 11. * Denotes innovative metric.*

Metric 1.3.6 – Specialty Care Touches: Specialty Expertise Requests Managed via Non-Face to Face Specialty Encounters

Metric 1.3.6 measured the rate of outpatient specialty care requests that were managed via non-in person face to face encounters within 6 months of the date of request for specialty care expertise. Hospitals were intended to increase the number of specialist requests that could be managed via telephone, email, or video encounters for electronic correspondence without the need for patients to be admitted to a hospital. These rates increased as intended for all hospital types (Exhibit 182).

Exhibit 182: PRIME Hospital-Reported Specialty Care Touches: Specialty Expertise Requests Managed via Non-Face to Face Specialty Encounters Rates for Metric 1.3.6*

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4R	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Total	6.02%	5.27%	6.81%	13.93%	7.91%	Yes	22.93%
UC	0.72%	1.36%	1.74%	13.69%	12.97%	Yes	26.97%
County	10.04%	8.81%	11.03%	14.25%	4.21%	Yes	17.87%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4R**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Non-CAH	---	0.00%	8.02%	4.31%	4.31%	Yes	3.30%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
*Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance. ---: DMPHs did not report data in DY 11. * Denotes innovative metric.*

Metric 1.3.7 – Preventative Care and Screening: Tobacco Use – Screening and Cessation Intervention

Metric 1.3.7 measured the proportion of adults (ages 18 and over) who were screened for tobacco use at an in-person specialty care visit and who received cessation counseling intervention if identified as a tobacco user. Hospitals were intended to promote screening and intervention for tobacco users. There is good evidence to suggest such actions are successful in helping tobacco users quit. Tobacco Use – Screening and Cessation Intervention was revised with additional instructions in DY 14 to include 3 criteria, of which entities reported the 3rd (Exhibit 183). Tobacco use screening and cessation intervention rates increased as intended for all hospital types.

Exhibit 183: PRIME Hospital-Reported Preventative Care and Screening: Tobacco Use – Screening and Cessation Intervention Rates for Metric 1.3.7

DPH	DY 11 P4R	DY 12 P4P	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Total	83.47%	94.57%	97.14%	97.76%	14.29%	Yes	98.05%
UC	93.65%	97.41%	97.87%	98.44%	4.79%	Yes	98.53%
County	76.73%	91.85%	96.41%	97.14%	20.41%	Yes	97.60%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Non-CAH	---	73.39%	86.09%	91.33%	17.94%	Yes	93.19%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance. ---: DMPHs did not report data in DY 11.

Project 1.4 – Patient Safety in the Ambulatory Setting

Project Overview and Summary of Key Findings

Project 1.4 was designed to improve quality of care in the outpatient setting by reducing medication errors and delays in delivery of preventive services, particularly for patients with chronic conditions who may be at risk for adverse events related to missed diagnoses, medication side-effects, or other potential problems related to chronic disease management. The goals were to be achieved by examining the existing infrastructure and care delivery processes such as gap analyses, establishing infrastructure such as data systems, and improving processes such as insuring abnormal results follow-up for common laboratory tests and monitoring patients on persistent medications (Attachment Q).

By the end of DY 15, a total of 10 hospitals (5 DPHs and 5 DMPHs) continued to participate and report metric performance for Project 1.4. Detailed information on DPH and DPMH participation can be found in Appendix B. Project Selection.

The following analyses are restricted to assessment of changes in metric values through DY 14 due to disruptions in care delivery and utilization caused by the COVID-19 pandemic in DY 15. DY 15 metrics values are provided but are not directly comparable with previous years. Performance in Project 1.4 was measured by the following 3 metrics (Exhibit 184). Metric 1.4.1 consisted of 3 sub-rates including abnormal BIRADS follow-up, abnormal INR follow-up, and abnormal potassium follow-up.

Exhibit 184: PRIME Project 1.4 Metric Details

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care
Abnormal Results Follow-Up: Abnormal Potassium Follow-up	1.4.1*	Increase	Process
Abnormal Results Follow-Up: Abnormal INR Follow-Up	1.4.1*	Increase	Process
Abnormal Results Follow-Up: Abnormal BIRADS Follow-Up	1.4.1*	Increase	Process
Annual Monitoring for Patients on Persistent Medications	1.4.2	Increase	Process
INR Monitoring for Individuals on Warfarin	1.4.3	Increase	Process

Source: PRIME Metrics Specs, DY 15YE

*Notes: * Denotes innovative metric.*

Both DPHs and DMPHs improved in 2 of the sub-rates for metric 1.4.1, Abnormal Potassium Follow-Up and Abnormal International Normalized Ratio (INR) Follow-Up from DY 11 or DY 12 respectively, to DY 14. DPHs improved in the Abnormal BIRADS Follow-Up sub-rate. Both DPHs and DMPHs showed improvement in Metrics 1.4.2 and 1.4.3 over time. In DY 15 the metric performance thresholds were changed due to the COVID-19 pandemic.

Metric 1.4.1 – Abnormal Results Follow-Up: Potassium Follow-Up

Metric 1.4.1 measured the percentage of ambulatory care serum potassium tests performed on patients 18 years of age and older who received at least 180 treatment days of angiotensin converting enzyme (ACE), angiotensin receptor blockers (ARB), or diuretic therapy, at least 1 potassium monitoring event, and follow-up appropriate to the results Hospitals were intended to increase the number of appropriate results and timely documentation. All hospitals reported an increase in abnormal potassium follow-up rates as intended (Exhibit 185).

Exhibit 185: PRIME Hospital-Reported Abnormal Potassium Follow-Up Rates for Metric 1.4.1*

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4R	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Total	90.76%	93.22%	93.58%	93.73%	2.97%	Yes	95.26%
UC	92.63%	92.05%	92.07%	92.81%	0.19%	Yes	96.29%
County	90.12%	94.09%	94.54%	94.44%	4.32%	Yes	94.28%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4R**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Total	---	84.79%	90.75%	92.44%	7.65%	Yes	94.20%
Non-CAH	---	84.58%	89.59%	91.83%	7.25%	Yes	93.95%
CAH	---	86.00%	96.06%	95.52%	9.52%	Yes	95.76%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance. ---: DMPHs did not report data in DY 11.

Metric 1.4.1 – Abnormal Results Follow-Up: Abnormal INR Follow-Up

Metric 1.4.1 measured the percentage of ambulatory care International Normalized Ratio Tests (INR) performed on patients 18 years of age and older who received warfarin therapy for at least 56 days, at least 1 INR monitoring test during each 56-day interval with active warfarin therapy, and follow-up appropriate to the results. Hospitals were intended to increase the number of appropriate results and timely documentation. All hospital types reported an increasing trend in abnormal INR follow-up rates as intended (Exhibit 186).

Exhibit 186: PRIME Hospital-Reported Abnormal INR Follow-Up Rates for Metric 1.4.1*

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4R	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Total	92.67%	93.48%	94.43%	94.66%	1.98%	Yes	93.92%
UC	91.05%	93.06%	94.98%	95.73%	4.68%	Yes	95.26%
County	93.46%	93.75%	94.20%	94.12%	0.66%	Yes	93.33%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4R**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Total	---	84.66%	90.48%	96.27%	11.61%	Yes	92.36%
Non-CAH	---	84.87%	89.59%	96.44%	11.57%	Yes	92.55%
CAH	---	81.77%	94.64%	94.37%	12.60%	Yes	87.72%

Source: UCLA analysis of the hospital-reported data, February to June 2021.

Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance. ---: DMPHs did not report data in DY 11.

Metric 1.4.1 – Abnormal Results Follow-Up: Abnormal BIRADS Follow-Up

Metric 1.4.1 measured the percentage of ambulatory care Breast Imaging Reporting and Data System (BIRADS) performed on patients of any age with a mammogram and received follow-up appropriate to the resultant BIRADS assessment). County DPHs and CAH DMPHs reported an increasing trend in abnormal BIRADS follow-up as intended (Exhibit 187).

Exhibit 187: PRIME Hospital-Reported BIRADS Follow-Up Rates for Metric 1.4.1*

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4R	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Total	60.74%	62.82%	60.84%	65.67%	4.93%	Yes	64.68%
UC	77.67%	73.74%	71.03%	71.86%	-5.81%	No	75.99%
County	53.33%	56.05%	55.79%	62.81%	9.48%	Yes	60.75%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4R**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Total	---	85.80%	84.68%	84.07%	-1.73%	No	84.94%
Non-CAH	---	88.93%	84.79%	84.02%	-4.91%	No	84.67%
CAH	---	47.60%	83.39%	84.79%	37.19%	Yes	88.37%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance. ---: DMPHs did not report data in DY 11.

Metric 1.4.2 – Annual Monitoring for Patients on Persistent Medications

Metric 1.4.2 measured the percentage of individuals 18 years of age and older who received at least 180 treatment days of ambulatory medication therapy for a select therapeutic agent and at least 1 therapeutic monitoring agent in the measurement period Hospitals were intended to improve the annual monitoring for patients on ACE, ARB, digoxin, or diuretics. All hospital types reported an increasing trend in annual monitoring for patients on persistent medications as intended (Exhibit 188).

Exhibit 188: PRIME Hospital-Reported Annual Monitoring for Patients on Persistent Medication Rates for Metric 1.4.2

DPH	DY 11 P4R	DY 12 P4P	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Total	84.89%	91.14%	91.80%	92.76%	7.88%	Yes	90.07%
UC	88.23%	89.34%	89.49%	91.69%	3.46%	Yes	89.80%
County	83.50%	92.20%	93.13%	93.56%	10.06%	Yes	90.26%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Total	---	57.78%	84.38%	90.56%	32.78%	Yes	81.36%
Non-CAH	---	55.56%	84.15%	90.15%	34.59%	Yes	79.69%
CAH	---	79.13%	86.12%	94.53%	15.40%	Yes	94.36%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance. ---: DMPHs did not report data in DY 11.

Metric 1.4.3 – INR Monitoring for Individuals on Warfarin

Metric 1.4.3 measured the percentage of individuals 18 years of age and older with at least 56 days of warfarin therapy who receive an International Normalized Ratio (INR) test during each 56-day interval with active warfarin therapy Hospitals were intended to improve the monitoring for patients who receive an INR test during each 56-day interval with warfarin. All hospital types reported an increasing trend in INR monitoring for individuals on warfarin as intended (Exhibit 189).

Exhibit 189: PRIME Hospital-Reported INR Monitoring for Individuals on Warfarin Rates for Metric 1.4.3

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Total	55.85%	67.70%	79.51%	81.54%	25.68%	Yes	75.60%
UC	45.51%	49.43%	69.95%	66.73%	21.23%	Yes	59.98%
County	66.60%	84.94%	87.85%	90.24%	23.64%	Yes	83.41%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Total	---	69.11%	77.00%	80.42%	11.30%	Yes	74.77%
Non-CAH	---	53.68%	76.12%	79.69%	26.02%	Yes	74.61%
CAH	---	80.10%	82.93%	85.23%	5.12%	Yes	76.92%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance. ---: DMPHs did not report data in DY 11.

Project 1.5 – Million Hearts Initiative

Project Overview and Summary of Key Findings

Project 1.5 was designed to support implementation of the Million Hearts® initiative, a national program promoting evidence-based practices for the prevention and treatment of cardiovascular disease and empowering patients to make healthy choices. These activities were expected to reduce disparities in receipt of preventive services and reduce variations in performance. These goals were to be achieved by developing needed infrastructure such as registries and protocols for delivery of guideline-concordant care, as well as implementing changes in care delivery processes such as assessment of existing disparities and clinical management of patients. Specific objectives can be found in Attachment Q).

By the end of DY 15, a total of 15 hospitals (7 DPHs and 8 DMPHs) participated and reported metric performance for Project 1.5. Among the 7 DPHs, 1 was added in DY 12. Among the 8 DMPHs, 2 joined later (DY 12 and DY 15). During PRIME, 4 DMPHs dropped out of participation the project. Detailed information on DPH and DMPH participation can be found in Appendix B. Project Selection.

The following analyses are restricted to assessment of changes in metric values through DY 14 due to disruptions in care delivery and utilization caused by the COVID-19 pandemic in DY 15. DY 15 metrics values are provided but are not directly comparable with previous years. Performance of hospitals in Project 1.5 was measured by the following 4 metrics (Exhibit 190).

Exhibit 190: PRIME Project 1.5 Metric Details

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care
Controlling Blood Pressure	1.5.1.b@	Increase	Outcome
Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antithrombotic	1.5.2.i @	Increase	Process
PQRS # 317 Preventative Care and Screening: Screening for High Blood Pressure and Follow-Up Documented	1.5.3	Increase	Process

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care
Preventative Care and Screening: Tobacco Use – Screening and Cessation Intervention	1.5.4.t	Increase	Process

Source: PRIME Metrics Specs, DY 15YE
Notes: PQRS: Physician Quality Reporting System. @ Metric 1.5.2.i had a trending-break notice in DY 12 (PPL-17-007).

Both DPHs and DMPHs reported increased rates as intended across all metrics. Metric 1.5.1b had a trending break in DY 14 and Metric 1.5.2 had a trending break in DY 12, so trends were only calculated for years where there were common specifications. In DY 15 the metric performance thresholds were changed due to the COVID-19 pandemic.

Metric 1.5.1.b – NQF 0018: Controlling Blood Pressure (HEDIS 2019)

Metric 1.5.1.b measured the proportion of patients between the ages of 18 and 85 that had at least 1 outpatient encounter with a diagnosis of hypertension and had their blood pressure (BP) adequately controlled. For all patients aged 18 to 59, and patients aged 60 to 85 with a diagnosis of diabetes, adequately controlled BP was defined as <140/90 mmHg. Before, for patients between the ages of 60 and 85 without a diagnosis of diabetes, adequately controlled BP was <150/90 mmHg. In DY14, the metric specification for adequate control was changed to be the same for all groups (<140/90), and hospitals reported DY 14 rates using both the original and new specifications. Thus, a trend was calculated for DY 11 through DY 14 per the original specification. The DY 14 and DY 15 rates are also reported per the new specification. However, the change between these two years is confounded by the COVID-19 pandemic. Hospitals were intended to increase early detection of hypertension so that patients could start interventions earlier. Blood pressure control rates increased as intended for all hospital types in DY 11- DY 14 in the original metric definition (Exhibit 191).

Exhibit 191: PRIME Hospital-Reported Blood Pressure Control Rates for Metric 1.5.1.b, DY 11 to DY 14 Using DY 11-DY 13 Metric Specifications

DPH	DY 11 P4R	DY 12 P4P	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended
Total	69.91%	74.80%	76.41%	78.14%	8.23%	Yes
UC	70.30%	78.38%	79.26%	80.73%	10.44%	Yes
County	69.31%	71.30%	74.10%	76.08%	6.77%	Yes
DMPH	**DY 11 P4R**	**DY 12 P4R***	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**
Total	---	13.11%	60.49%	58.23%	45.12%	Yes
Non-CAH	---	13.14%	59.61%	57.59%	44.45%	Yes
CAH	---	12.98%	71.99%	68.53%	55.54%	Yes

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance, ---: DMPHs did not report data in DY 11.

Exhibit 192: PRIME Hospital-Reported Blood Pressure Control Rates for Metric 1.5.1.b Using DY 14 and DY 15 Metric Specifications

DPH	DY 14 P4P	DY 15
Total	78.14%	67.52%
UC	82.00%	68.57%
County	74.54%	66.83%
DMPH	**DY 14 P4P**	**DY 15**
Total	58.23%	58.38%
Non-CAH	68.52%	58.24%
CAH	57.59%	60.69%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, UC: University of California, DMPH: district and municipal public hospital, CAH: critical access hospital, DY: demonstration year, P4P: pay-for-performance.

Metric 1.5.2.i –Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antithrombotic (QPP spec, eCQM spec)

Metric 1.5.2.i measured the number of patients who had an active medication of aspirin or another antiplatelet among patients in the Project 1.5 Target Population aged 18 and over with a visit during the measurement period who had an acute myocardial infarction (AMI), coronary artery bypass grafting (CABG) or percutaneous coronary intervention (PCI) during the 12 months prior to the measurement period or who had a diagnosis of IVD overlapping the measurement period. Hospitals were intended to reduce the risk of serious vascular events, such as myocardial infarction or stroke, by tracking the proportion of patients with an active antiplatelet medication.

Note that a trend-break notice was issued for this metric (PPL-17-007, DY 12) to clarify that the numerator includes active medications for patients and to add details to the time periods for events in the denominator inclusion criteria. Hospitals reported DY 12 rates for both the original and new specifications. Thus, a trend was calculated for DY 11 to DY 12 per the original specification (Exhibit 193), and a separate trend was calculated for DY 12 to DY 14 per the new specification (Exhibit 194). DY 15 rates per the new specification were also reported.

Exhibit 193: PRIME Hospital-Reported Ischemic Vascular Disease -Aspirin or Another Antithrombotic Use Rates for Metric 1.5.2.i in DY 11 and DY 12

DPH	DY 11 P4R	DY 12 P4P	Change from DY 11 to DY 12	Increased as Intended
County	83.72%	87.92%	4.20%	Yes

Source and notes below.

Exhibit 194: PRIME Hospital-Reported Ischemic Vascular Disease -Aspirin or Another Antithrombotic Use Rates for Metric 1.5.2.i in DY 12 to DY 15.

DPH	DY 12 P4P	DY 13 P4P	DY 14 P4P	Change from DY 12 to DY 14	Increased as Intended	DY 15
Total	87.80%	92.21%	92.40%	4.60%	Yes	90.47%
UC	89.58%	92.90%	92.36%	2.78%	Yes	90.14%
County	85.50%	91.29%	92.48%	6.98%	Yes	91.03%

DMPH	DY 12 P4P	DY 13 P4P	DY 14 P4P	Change from DY 12 to DY 14	Increased as Intended	DY 15
Total	77.20%	80.97%	84.03%	6.83%	Yes	91.60%
Non-CAH	77.50%	81.19%	83.85%	6.35%	Yes	91.79%
CAH	69.57%	78.87%	87.00%	17.43%	Yes	89.31%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, UC: University of California, DMPH: district and municipal public hospital, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance. A trend- break was issued for this metric in DY 12; a higher rate indicates better performance.

Metric 1.5.3 –QPP #317 Preventative Care and Screening: Screening for High Blood Pressure and Follow-Up Documented (QPP spec, eCQM spec)

Metric 1.5.3 measured the proportion of patients who were screened for high blood pressure *and* had a recommended follow-up plan if the blood pressure is pre-hypertensive or hypertensive among the Project 1.5 Target Population aged 18 and over (PQRS # 317). Hospitals were intended to increase follow-up protocols after blood pressure measurement to prevent the progression of hypertension and the development of heart disease. These rates increased as intended for all hospital types (Exhibit 195).

Exhibit 195: PRIME Hospital-Reported Screening for High Blood Pressure and Follow-Up Documented Rates for Metric 1.5.3

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4P	DY 14 P4P	Change from DY 12 to DY 14	Increased as Intended	DY 15
Total	42.46%	68.81%	76.90%	83.92%	41.46%	Yes	87.38%
UC	50.70%	71.83%	81.84%	86.16%	35.47%	Yes	84.67%
County	31.08%	66.04%	73.15%	82.42%	51.34%	Yes	90.15%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Total	---	38.90%	64.80%	72.04%	33.13%	Yes	84.74%
Non-CAH	---	40.80%	67.26%	72.31%	31.52%	Yes	85.78%
CAH	---	3.99%	40.40%	66.30%	62.31%	Yes	67.75%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, UC: University of California, DMPH: district and municipal public hospital, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance. ---: Most DMPHs did not report data in DY 11.

Metric 1.5.4.t – *Preventative Care and Screening: Tobacco Use – Screening and Cessation Intervention*

Metric 1.5.4.t measured the proportion of patients in the Project 1.5 Target Population aged 18 and over seen for at least 2 visits or at least 1 preventive visit who received tobacco screening and, if identified as a tobacco user, received tobacco cessation intervention. Hospitals were intended to promote screening and intervention for tobacco users. There is good evidence to suggest such actions are successful in helping tobacco users quit. Tobacco Use – Screening and Cessation Intervention was revised with additional instructions in DY 14 to include 3 criteria, of which entities reported the 3rd (all patients aged 13 years old who were screened for tobacco use, and if identified as a tobacco user received tobacco cessation intervention, or identified as a tobacco non-user). Tobacco use screening and cessation intervention rates increased as intended for all hospital types (Exhibit 196).

Exhibit 196: PRIME Hospital-Reported Tobacco Use – Screening and Cessation Intervention Rates for Metric 1.5.4.t

DPH	DY 11 P4R	DY 12 P4P	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Total	80.60%	95.06%	97.35%	97.90%	17.30%	Yes	98.37%
UC	90.84%	96.70%	97.86%	98.22%	7.39%	Yes	98.28%
County	70.43%	93.48%	96.93%	97.65%	27.22%	Yes	98.48%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Total	---	79.51%	90.55%	96.24%	16.74%	Yes	96.62%
Non-CAH	---	83.71%	95.69%	96.30%	12.59%	Yes	96.81%
CAH	---	62.98%	55.47%	95.50%	32.51%	Yes	94.78%

Source: UCLA analysis of the hospital-reported data, February to June 2021.

Notes: DPH: designated public hospital, UC: University of California, DMPH: district and municipal public hospital, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance. ---: Most DMPHs did not report data in DY 11.

Project 1.6 – Cancer Screening and Follow-Up

Project Overview and Summary of Key Findings

Project 1.6 was designed to improve early diagnosis and timely treatment of cancer by promoting evidence-based and coordinated processes for prevention, screening, and follow-up. These goals were to be achieved by developing needed infrastructure such as development of health information technology and data, a multidisciplinary taskforce, and protocols for guideline concordant care delivery; as well as following processes such as addressing disparities and linking patients to community-based services (Attachment Q).

By the end of DY 15, a total of 11 hospitals continued to participate and report metric performance for Project 1.6, which was not required for DPHs. Project 1.6 was selected by 6 DPHs and 9 DMPHs, of which 5 DPHs and 6 DMPHs continued through DY 15. Detailed information on DPH and DMPH participation can be found in Appendix B. Project Selection.

The following analyses are restricted to assessment of changes in metric values through DY 14 due to disruptions in care delivery and utilization caused by the COVID-19 pandemic in DY 15. DY 15 metrics values are provided but are not directly comparable with previous years.

Performance of hospitals in Project 1.6 was measured by the following 5 metrics (Exhibit 197).

Exhibit 197: PRIME Project 1.6 Metric Details

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care
BIRADS to Biopsy	1.6.1*	Increase	Process
Breast Cancer Screening	1.6.2@	Increase	Process
Cervical Cancer Screening	1.6.3	Increase	Process
Colorectal Cancer Screening	1.6.4.c	Increase	Process

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care
Receipt of Appropriate Follow-Up for Abnormal CRC Screening	1.6.5*	Increase	Process

Source: PRIME Metrics Specs, DY 15YE.
*Notes: * Denotes innovative metric. @ Trending break was issued for Metric 1.6.2 in DY 14 (19—002)*

Both DPH and DMPHs showed progress over time in all metrics from DY 11 and DY 12 respectively, to DY 14. DMPHs had fewer than the 30-patient minimum denominator in some metrics, and analysis was not conducted for CAH DMPHs for 2 metrics (1.6.1 and 1.6.5) and Non-CAH DMPHs for 1 metric (1.6.5). In DY 15 the metric performance thresholds were changed due to the COVID-19 pandemic.

Metric 1.6.1 – BIRADS to Biopsy

Metric 1.6.1 measured the proportion of individuals for whom a breast biopsy was performed or outsourced within 14 business days in the Project 1.6 Target Population who received either a screening or diagnostic mammogram by the PRIME Hospital during the measurement period that was assessed as BIRADs 4 or 5. Hospitals were intended to encourage timely follow up procedures for individuals that tested as suspicious or suggestive for malignancies in order to diagnose and treat patients as early as possible. Biopsy rates increased as intended for all hospital types (Exhibit 198).

Exhibit 198: PRIME Hospital-Reported BIRADS to Biopsy Rates for Metric 1.6.1*

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4R	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Total	44.52%	50.16%	47.27%	57.06%	12.54%	Yes	63.59%
UC	40.87%	60.27%	52.09%	62.39%	21.52%	Yes	70.31%
County	45.16%	48.01%	45.88%	56.51%	11.35%	Yes	62.68%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4R**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Total	---	84.15%	82.61%	88.29%	4.14%	Yes	93.50%
Non-CAH	---	85.53%	85.54%	90.38%	4.86%	Yes	93.04%
CAH	---	N/A	N/A	N/A	N/A	N/A	

Source: UCLA analysis of the hospital-reported data, February to June 2021.
*Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance, ---: DMPHs did not report data in DY 11, N/A: analyses not conducted due to a denominator less than 30, *: denotes innovative metric.*

Metric 1.6.2 – Breast Cancer Screening

Metric 1.6.2 measured the proportion of women who had a mammogram to screen for breast cancer in the Project 1.6 Target Population ages 50 to 74. Hospitals were intended to diagnose and treat breast cancer early, especially as it ranks as the second leading cause of cancer-related mortality in women. In this metric, a trending break occurred at DY 14. Therefore, a trend was calculated for DY 11 through DY 14 per the original specification. The DY 14 and DY 15 rates were also reported per the new specification (Exhibit 200). However, the change between these two years is confounded by the COVID-19 pandemic. Breast cancer screening rates increased as intended for all hospital types except UC DPHs (Exhibit 199).

Exhibit 199: PRIME Hospital-Reported Breast Cancer Screening Rates for Metric 1.6.2, DY 11 to DY 14 Using DY 11-DY 13 Metric Specifications

DPH	DY 11 P4R	DY 12 P4P	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended
Total	64.10%	70.55%	72.79%	76.66%	12.56%	Yes
UC	80.61%	81.14%	79.01%	78.62%	-1.99%	No
County	62.52%	69.34%	72.06%	76.42%	13.91%	Yes
Total	---	38.47%	53.18%	64.62%	26.15%	Yes
Non-CAH	---	44.81%	62.28%	66.20%	21.39%	Yes
CAH	---	29.51%	40.52%	59.98%	30.47%	Yes

Source and notes below

Exhibit 200: PRIME Hospital-Reported Breast Cancer Screening Rates for Metric 1.6.2, DY 14 and DY 15 Using DY 14 - DY 15 Metric Specifications

DPH	DY 14 P4P	DY 15
Total	76.64%	74.62%
UC	78.63%	74.84%
County	76.39%	74.59%
DMPH	**DY 14 P4P**	**DY 15**
Total	66.04%	62.29%
Non-CAH	66.20%	62.95%
CAH	65.58%	59.98%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance. ---: DMPHs did not report data in DY 11.

Metric 1.6.3 – Cervical Cancer Screening

Metric 1.6.3 measured the proportion of women who were screened for cervical cancer either through cervical cytology or human papillomavirus co-testing in the Project 1.6 Target Population ages 24 to 64 (NQF 2372, HEDIS, eQCM). Hospitals were intended to diagnose and treat women with cervical cancer early; if pre-cancerous lesions are detected early, the likelihood of survival is nearly 100 percent. Cervical cancer screening rates increased as intended for all hospital types (Exhibit 201).

Exhibit 201: PRIME Hospital-Reported Cervical Cancer Screening Rates for Metric 1.6.3

DPH	DY 11 P4R	DY 12 P4P	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Total	40.89%	53.73%	56.99%	59.44%	18.55%	Yes	57.99%
UC	72.98%	75.49%	76.24%	75.34%	2.36%	Yes	75.35%
County	38.37%	51.29%	54.98%	57.77%	19.39%	Yes	56.04%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Total	---	20.89%	45.48%	59.12%	38.23%	Yes	55.74%
Non-CAH	---	22.68%	55.89%	61.62%	38.94%	Yes	55.11%
CAH	---	16.72%	26.66%	49.71%	32.99%	Yes	58.68%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance, ---: DMPHs did not report data in DY 11.

Metric 1.6.4.c – Colorectal Cancer Screening

Metric 1.6.4.c measured the number of patients 50 to 75 years old in the Project 1.6 Target Population that received an appropriate screening for colorectal cancer (NQF 0034, QPP spec, eCQM). Hospitals were intended to increase screenings for colorectal cancer in order to catch the disease in its earliest stages and increase 5-year survival rate. Colorectal cancer screening rates increased as intended for all hospital types (Exhibit 202).

Exhibit 202: PRIME Hospital-Reported Colorectal Cancer Screening Rates for Metric 1.6.4.c

DPH	DY 11 P4R	DY 12 P4P	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Total	61.82%	67.19%	70.59%	73.16%	11.34%	Yes	66.57%
UC	76.07%	76.18%	76.78%	76.24%	0.17%	Yes	74.69%
County	60.07%	65.87%	69.66%	72.67%	12.60%	Yes	65.18%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Total	---	22.57%	39.18%	50.89%	28.31%	Yes	56.32%
Non-CAH	---	19.99%	40.49%	50.29%	30.30%	Yes	58.13%
CAH	---	25.82%	38.11%	52.52%	26.69%	Yes	49.56%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, CAH: critical access hospital, P4R: pay-for-reporting, P4P: pay-for-performance, ---: DMPHs did not report data in DY 11.

Metric 1.6.5 – Receipt of Appropriate Follow-Up for Abnormal CRC Screening

Metric 1.6.5 measured the number of patients receiving a colonoscopy within 6 months of the date of the positive stool test among patients in the Project 1.6 Target Population ages 51 to 75 with a positive FIT/FOBT during the first 6 months of the measurement period. Critical to a FIT screening strategy is colonoscopy completion after an abnormal screening test. Organized approaches between primary care practice, gastroenterology, and patients are needed to improve care coordination. Colonoscopy follow-up rates increased as intended for all hospital types (Exhibit 203).

Exhibit 203: PRIME Hospital-Reported Abnormal Colorectal Cancer Screening Follow-Up Rates for Metric 1.6.5*

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4R	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Total	37.86%	19.37%	19.61%	48.45%	10.59%	Yes	48.48%
UC	48.94%	36.11%	40.43%	53.57%	4.63%	Yes	43.66%
County	37.57%	19.20%	19.38%	48.30%	10.73%	Yes	48.65%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4R**	**DY 14 P4P**	**Change from DY 12 to DY 13**	**Increased as Intended**	**DY 15**
Total	---	5.26%	25.00%	N/A	19.74%	Yes	41.18%
Non-CAH	---	N/A	N/A	N/A	N/A	N/A	N/A
CAH	---	3.33%	N/A	N/A	N/A	N/A	N/A

Source: UCLA analysis of the hospital-reported data, February to June 2021.
*Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, CAH: critical access hospital, P4R: pay-for-reporting, P4P: pay-for-performance, ---: DMPHs did not report data in DY 11, N/A: analysis not conducted due to a denominator less than 30, * Denotes innovative metric.*

Project 1.7 – Obesity Prevention and Healthier Foods Initiative

Project Overview and Summary of Key Findings

Project 1.7 was designed to reduce obesity by using evidence-based approaches to guide systematic delivery of related services by providers and promoting the availability of healthier foods in public settings such as hospitals. These goals were to be achieved by developing the needed infrastructure such as availability of data and development of protocols for obesity screening, referral, and treatment; as well as following care processes that promote population health such as providing healthier food options at hospital facilities and linking patients to community-based resources (Attachment Q).

Project 1.7 was not a required project for DPHs, and 2 DPHs continued participation through DY 15. A total of 8 DMPHs reported in DY 15, including 6 that participated in the project for the duration, and 2 which joined in DY 13 and DY 15. Detailed information on DPH and DMPH participation can be found in Appendix B. Project Selection.

The following analyses are restricted to assessment of changes in metric values through DY 14 due to disruptions in care delivery and utilization caused by the COVID-19 pandemic in DY 15. DY 15 metrics values are provided but are not directly comparable with previous years.

Performance of hospitals in Project 1.7 was measured by the following 3 metrics (Exhibit 204).

Exhibit 204: PRIME Project 1.7 Metric Details

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care
Body Mass Index (BMI) Screening and Follow-Up	1.7.1@	Increase	Process
Partnership for a Healthier America's Hospital Health Food Initiative External Food Service Verification	1.7.2	Increase	Process
Weight Assessment & Counseling for Nutrition and	1.7.3	Increase	Process

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care
Physical Activity for Children & Adolescents			

Source: PRIME Metrics Specs, DY 15YE
Notes: @: A trend-break notice was issued for Metric 1.7.1 in DY 12 (PPL-17-007) to expand the time period for the numerator.

Overall, hospitals made significant progress in implementing Project 1.7, as both DPHs and DMPHs improved their performance in the 2 metrics where a trend was calculated. Metric 1.7.1 had a trending break issued in DY 12, so trends were only calculated for years where there were common specifications. Some CAH DMPH rates were not calculated due to denominators under 30. In DY 15 the metric performance thresholds were changed due to the COVID-19 pandemic.

Metric 1.7.1 – Body Mass Index (BMI) Screening and Follow-Up

Metric 1.7.1 measured the number of patients in the Project 1.7 Target Population aged 18 years and older with a documented BMI and a documented follow-up if BMI was outside the normal parameter. The normal parameter for patients aged 18 years and older was a BMI between 18.5 and 25 kg/m2. Hospitals were intended to increase earlier detection of chronic disease and other health complications, particularly for patients who are obese or underweight. Note that a trend-break notice was issued for this metric in DY 12 (PPL-17-007) to expand the time period for the numerator. Hospitals reported DY 12 rates for both the original and new specifications. Thus, a trend was calculated for DY 11 to DY 12 per the original specification, and a separate trend was calculated for DY 12 to DY 14 per the new specification. DY 15 rates per the new specification were also reported.

Exhibit 205: PRIME Hospital-Reported BMI Screening and Follow-Up Rates for Metric 1.7.1, DY 11 to DY 12 Using DY 11 Metric Specifications

DPH	DY 11 P4R	DY 12 P4P	Change from DY 11 to DY 12	Increased as Intended
County	32.48%	52.64%	20.16%	Yes

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital. DMPHs did not report data in DY 11; the CAH joined the project later and began reporting for DY 13. A trend-break notice was issued for this metric in DY 12 (PPL-17-007 DY 12) to expand the time period for the numerator.

Exhibit 206: PRIME Hospital-Reported BMI Screening and Follow-Up Rates for Metric 1.7.1, DY 12 to DY 15 Using DY 12 – DY 15 Metric Specifications

DPH	DY 12 P4P	DY 13 P4P	DY 14 P4P	Change from DY 12 to DY 14	Increased as Intended	DY 15
County	56.90%	88.10%	89.80%	32.91%	Yes	88.36%
DMPH	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY**	**Increased as Intended**	**DY 15**

				12 to DY 14		
Total	30.49%	29.04%	68.40%	37.91%	Yes	72.85%
Non-CAH	30.49%	29.05%	68.41%	37.92%	Yes	72.85%
CAH	---	N/A	N/A	N/A	N/A	N/A

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, CAH: critical access hospital, P4R: pay-for-reporting, P4P: pay-for-performance, DY: demonstration year. --: the CAH joined the project later and began reporting for DY 13 but had fewer than 30 in the denominator (N/A). A trend-break notice was issued for this metric in DY 12 (PPL-17-007) to expand the time period for the numerator.

Metric 1.7.2 – Partnership for a Healthier America's Hospital health Food Initiative External Food Service Verification

Metric 1.7.2 measured the number of Hospital Healthier Food Initiative Criteria met by hospital cafeterias. Hospitals were intended to promote full-service healthier hospital food operations. The numerator for Metric 1.7.2 was the total number of criteria that each hospital met relative to the denominator of 8 total criteria per facility. For example, a hospital with 1 facility that implemented 5 of the criteria would be 5/8. Some hospitals had more than 1 facility in their system, so the denominator was calculated as the total number of criteria (8) times the total number of hospitals in that system. For example, Los Angeles reported for 5 facilities, resulting in a denominator of 40 (8 metrics*5 facilities). UCLA created a weighted average of the numerators and denominators. Rates increased as intended for all hospital types (Exhibit 207).

Exhibit 207: PRIME Hospital-Reported Partnership for a Healthier America's Hospital Health Food Initiative Rates for Metric 1.7.2

DPH	DY 11 P4R	DY 12 P4P	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
County	43.75%	66.67%	85.42%	100.00%	56.25%	Yes	100.00%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Total	---	28.57%	57.81%	95.31%	66.74%	Yes	95.83%
Non-CAH	---	28.57%	57.14%	94.64%	66.07%	Yes	95.31%
CAH	---	---	N/A	N/A	N/A	N/A	N/A

Source: UCLA analysis of the hospital-reported data, February to June 2021.

Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, CAH: critical access hospital, P4R: pay-for-reporting, P4P: pay-for-performance, DY: demonstration year. DMPHs did not report data in DY 11; the CAH joined the project later and began reporting for DY 13, but had fewer than 30 in the denominator (N/A).

Metric 1.7.3 – Weight Assessment & Counseling for Nutrition and Physical Activity for Children & Adolescents

Metric 1.7.3 measured the proportion of patients in the Project 1.7 Target Population between the ages of 3 and 17 who had received counseling for nutrition or physical activity or had their height, weight, and BMI recorded during the measurement period. Hospitals were intended to track BMI monitoring and counseling rates among pediatric patients.

Rates increased as intended for all hospital types (Exhibit 208). The increase from the first to second year of data reporting was frequently noted as a result of data quality improvements, for example Los Angeles County reported in their hospital-reported data that "our quality improvement efforts focused on two areas: improving data extraction and optimizing workflow for documentation." Likewise, Arrowhead reported "our challenge with this metric is appropriate and consistent documentation in the medical record. In our Pediatric Clinic our Information Management department has built templates in the EHR…; this data is then easily mined from the system with programming...we have been working closely with our RN Care Manager to ensure that staff and providers are trained on the importance of completing these fields."

Exhibit 208: PRIME Hospital-Reported Weight Assessment & Counseling for Nutrition and Physical Activity Rates for Metric 1.7.3

DPH (County)	DY 11 P4R	DY 12 P4P	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Counseling for Nutrition	5.45%	68.27%	80.53%	81.68%	76.22%	Yes	76.88%
Counseling for Physical Activity	8.24%	66.35%	76.71%	80.46%	72.22%	Yes	74.62%
Weight Assessment (BMI)	45.98%	95.70%	94.46%	95.60%	49.62%	Yes	70.95%

DMPH (Non-CAH)	DY 11 P4R	DY 12 P4R	DY 13 P4P	DY 14 P4P	Change from DY 12 to DY 14	Increased as Intended	DY 15
Counseling for Nutrition	---	35.55%	46.45%	69.06%	33.51%	Yes	63.79%
Counseling for Physical Activity	---	35.30%	45.19%	69.03%	33.73%	Yes	63.13%
Weight Assessment (BMI)	---	97.90%	97.69%	98.27%	0.37%	Yes	97.30%

Source: UCLA analysis of the hospital-reported data, February to June 2021.

Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, CAH: critical access hospital, P4R: pay-for-reporting, P4P: pay-for-performance, DY: demonstration year. Only County and Non-CAH hospitals reported data for this metric, ---: DMPHs did not report data in DY 11.

Project 2.1 – Improved Perinatal Care

Project Overview and Summary of Key Findings

Project 2.1 was designed to promote quality improvement and use of best practices to deliver safe, efficient, and equitable care and subsequently improve maternal and child health. These goals were to be achieved by participating in statewide and national initiatives focused on improved perinatal and postpartum care, including care coordination to address co-morbidities, decreased unnecessary cesarean section (C-section) rates, reduced morbidity and mortality associated with maternal hemorrhage, and increased breastfeeding rates. Specific objectives can be found in Attachment Q.

By the end of DY 15, a total of 21 hospitals continued to participate and report metric performance for Project 2.1. This project was required for all 17 DPHs; however, 16 DPHs implemented this project given that one DPH does not offer maternity services. It was optional for DMPHs, of which 4 participated in this project through DY 15 and 1 added in DY 15. Detailed information on DPH and DPMH participation can be found in Appendix B. Project Selection.

The following analyses are restricted to assessment of changes in metric values through DY 14 due to disruptions in care delivery and utilization caused by the COVID-19 pandemic in DY 15. DY 15 metrics values are provided but are not directly comparable with previous years.

Performance of hospitals in Project 2.1 was measured by the following 9 metrics, including Metric 2.1.6 which had two sub-rates (Exhibit 209).

Exhibit 209: PRIME Project 2.1 Metric Details

Metric Name	Metric ID Number	Achievement by Increase or Decrease	Care Delivery Process vs. Outcome of Care
Baby-Friendly Hospital Designation	2.1.1	Increase	Process
Exclusive Breast Milk Feeding	2.1.2	Increase	Process
Obstetric (OB) Hemorrhage: Massive Transfusion	2.1.3	Decrease	Outcome

Metric Name	Metric ID Number	Achievement by Increase or Decrease	Care Delivery Process vs. Outcome of Care
Obstetric (OB) Hemorrhage: Total Products Transfused (discontinued after DY 14)	2.1.4	Decrease	Outcome
Cesarean Birth	2.1.5	Decrease	Outcome
Prenatal Care	2.1.6	Increase	Process
Postpartum Care	2.1.6	Increase	Process
Severe Maternal Morbidity (SMM) per 100 Women with Obstetric Hemorrhage	2.1.7	Decrease	Outcome
Unexpected Newborn Complications	2.1.8	Decrease: Balancing ^	Outcome
OB Hemorrhage Safety Bundle	2.1.9	Increase	Process

Source: PRIME Metrics Specs, DY 15 YE
Notes: The target population for 2.1.1 and 2.1.9 are the PRIME Entity hospital(s).
^Metric 2.1.8 was a balancing measure, with the rationale that a low chance of unexpected newborn complications would be valued more than low-medium rates of Cesarean Birth.

DPHs made progress in the intended direction in 8 of the metrics (2.1.1-2.1.6, 2.1.8 and 2.1.9). DMPHs made progress in 4 metrics (2.1.6-2.1.9). In Metric 2.1.9, all 4 DMPHs reported implementation of the Post-Event Debriefs in DY 13, however, in DY 14 only 3 DMPHs reported implementation. DMPHs reported an increase in number of hospitals implementing 3 OB safety drills each quarter from DY 13 to DY 14.

Overall, DPHs generally had improvement in the majority of metrics, however, DMPHs had varying levels of success in the metrics for this project. In DY 15 the metric performance thresholds were changed due to the COVID-19 pandemic.

Metric 2.1.1 – Baby-Friendly Hospital Designation

Metric 2.1.1 measured the total number of hospitals that met the criteria of the Baby-Friendly Hospital Designation (BFUSA). Hospitals were intended to promote infant and mother bonding, breastfeeding, and beginnings of life without breastmilk substitutes or breastfeeding barriers. In DY 14 1 County, 2 UCs, and 1 Non-CAH DMPH did not have this designation; 2 County DPHs added it, and 1 non-CAH did not sustain it from DY 13 to DY 14. Baby-friendly hospital designation rates increased as intended for DPHs, and did not increase for DMPHs. Changes in average achievement rates during PRIME are shown in Exhibit 210.

Exhibit 210: PRIME Hospital-Reported Certification Phase Completion for Baby-Friendly Hospital Designation Rates for Metric 2.1.1

DPH	DY 11 P4R	DY 12 P4P	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Total	56.25%	56.25%	68.75%	81.25%	25.00%	Yes	93.75%
UC	20.00%	20.00%	60.00%	60.00%	40.00%	Yes	80.00%
County	72.73%	72.73%	72.73%	90.91%	18.18%	Yes	100.00%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Non-CAH	---	75.00%	75.00%	50.00%	-25.00%	No	60.00%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance. ---: DMPHs did not report data in DY 11.

Metric 2.1.2 – Exclusive Breast Milk Feeding

Metric 2.1.2 measured the number of single term newborns that were discharged alive from the hospital who had only been fed breast milk since birth. Hospitals were intended to increase the prevalence of exclusive breastfeeding during a newborn's entire hospitalization. These rates increased as intended for DPHs, and did not increase for DMPHs. Changes in average achievement rates during PRIME are shown in Exhibit 211.

Exhibit 211: PRIME Hospital-Reported Exclusive Breast Milk Feeding Rates for Metric 2.1.2

DPH	DY 11 P4R	DY 12 P4P	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Total	59.29%	65.01%	67.17%	71.62%	12.32%	Yes	73.85%
UC	70.91%	70.66%	70.83%	75.56%	4.65%	Yes	81.54%
County	55.33%	62.00%	65.33%	69.54%	14.21%	Yes	69.35%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Non-CAH	---	58.91%	57.18%	58.80%	-0.12%	No	60.51%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, UC: University of California, DMPH: district and municipal public hospital, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance. ---: DMPHs did not report data in DY 11.

Metric 2.1.3 – Obstetric (OB) Hemorrhage: Massive Transfusion

Metric 2.1.3 measured the proportion of maternal cases during which the patient received ≥4 units of Packed Red Blood Cells. Hospitals were intended to promote healthier pregnancies and deliveries and to reduce maternal mortality and morbidity. These rates decreased as intended for DPHs, and did not decrease for DMPHs. Changes in average achievement rates during PRIME are shown in Exhibit 212.

Exhibit 212: PRIME Hospital-Reported Obstetric (OB) Hemorrhage: Massive Transfusion Rates for Metric 2.1.3

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4R	DY 14 P4R	Change from DY 11 to DY 14	Decreased as Intended	DY 15
Total	0.37%	0.46%	0.28%	0.28%	-0.09%	Yes	0.39%
UC	0.41%	0.49%	0.40%	0.40%	-0.01%	Yes	0.45%
County	0.35%	0.44%	0.21%	0.20%	-0.15%	Yes	0.35%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4R**	**DY 14 P4R**	**Change from DY 12 to DY 14**	**Decreased as Intended**	**DY 15**
Non-CAH	---	0.18%	0.16%	0.20%	0.02%	No	0.28%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, UC: University of California, DMPH: district and municipal public hospital, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting. Achievement was measured by a decrease in rates. ---: DMPHs did not report data in DY 11.

Metric 2.1.4 – Obstetric (OB) Hemorrhage: Total Products Transfused

Metric 2.1.4 measured the proportion of maternal cases during which packed Red Blood Cells (PRBC) and Fresh Frozen Plasma (FFP) units transfused. Hospitals were intended to promote healthier pregnancies and deliveries and to reduce mortality and morbidity. These rates decreased as intended for DPHs, and did not decrease for DMPHs. In DY 11 though DY 14, DPH rates ranged from 7.91% to 7.42% and DMPH rates ranges from 3.45% to 3.65%. This metric was discontinued after DY 14, so detailed results are available in the Preliminary Summative Evaluation Report.

Metric 2.1.5 – Cesarean Section

Metric 2.1.5 measured the proportion of nulliparous patients who delivered a live term singleton newborn in vertex presentation that were cesarean births. Hospitals were intended to reduce the prevalence of unnecessary cesarean birth among nulliparous patients. These rates decreased as intended for DPHs, and did not decrease for DMPHs. Changes in average achievement rates during PRIME are shown in Exhibit 213.

Exhibit 213: PRIME Hospital-Reported Cesarean Section Rates for Metric 2.1.5

DPH	DY 11 P4R	DY 12 P4P	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Decreased as Intended	DY 15
Total	22.62%	22.14%	21.11%	20.97%	-1.64%	Yes	20.38%
UC	23.71%	22.31%	21.87%	22.66%	-1.05%	Yes	20.94%
County	21.38%	22.01%	20.40%	19.45%	-1.93%	Yes	19.83%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Decreased as Intended**	**DY 15**
Non-CAH	---	22.75%	25.32%	25.13%	2.37%	No	23.11%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, UC: University of California, DMPH: district and municipal public hospital, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance. ---: DMPHs did not report data in DY 11.

Metric 2.1.6 – Prenatal Care

Metric 2.1.6 measured the proportion of live births that had a prenatal visit during the first trimester or within 42 days of enrollment or continuous accountability out of all live births. Hospitals were intended to increase prenatal care visits for pregnant women to improve maternal and infant health. These rates increased as intended for all hospital types. Changes in average achievement rates during PRIME are shown in Exhibit 214.

Exhibit 214: PRIME Hospital-Reported Prenatal Care Rates for Metric 2.1.6

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Total	68.49%	81.11%	90.10%	92.52%	24.03%	Yes	92.76%
UC	75.32%	88.51%	95.33%	94.91%	19.59%	Yes	95.81%
County	62.25%	74.28%	85.91%	90.56%	28.31%	Yes	89.85%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Non-CAH	---	19.90%	27.09%	23.69%	3.79%	Yes	46.95%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, UC: University of California, DMPH: district and municipal public hospital, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance. ---: DMPHs did not report data in DY 11.

Metric 2.1.6 – Postpartum Care

Metric 2.1.6 measured the proportion of women who received postpartum visits for a pelvic exam or postpartum care on or between 21 and 56 days after delivery out of all women who gave birth. Hospitals were intended to increase postpartum care visits for mothers to improve maternal and infant health. These rates increased as intended for all hospital types. Changes in average achievement rates during PRIME are shown in Exhibit 215.

Exhibit 215: PRIME Hospital-Reported Postpartum Care Rates for Metric 2.1.6

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Total	61.69%	66.43%	72.74%	76.28%	14.59%	Yes	74.43%
UC	71.45%	70.75%	74.37%	78.80%	7.35%	Yes	74.48%
County	53.22%	62.44%	71.43%	74.20%	20.98%	Yes	74.38%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Non-CAH	---	20.24%	28.68%	28.48%	8.24%	Yes	52.63%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, UC: University of California, DMPH: district and municipal public hospital, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance. ---: DMPHs did not report data in DY 11.

Metric 2.1.7 – Severe Maternal Morbidity (SMM) per 100 Women with Obstetric (OB) Hemorrhage

Metric 2.1.7 measured the proportion of women who experienced severe maternal morbidity out of all women with a birth admission (>20 weeks of gestation) and who were discharged with an obstetric hemorrhage diagnosis. Hospitals were intended to lower the incidence of morbidity (i.e., severe injury, including but not limited to death) among women who experience obstetric hemorrhage. These rates decreased as intended for DPMHs, and did not decrease for DPHs. Changes in average achievement rates during PRIME are shown in Exhibit 216.

Exhibit 216: Hospital Self-Reported Severe Maternal Morbidity (SMM) per 100 Women with Obstetric (OB) Hemorrhage Rates for Metric 2.1.7

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4R	DY 14 P4R	Change from DY 11 to DY 14	Decreased as Intended	DY 15
Total	20.96%	24.77%	22.07%	25.38%	4.41%	No	30.63%
UC	18.09%	22.03%	22.30%	27.43%	9.34%	No	32.96%
County	23.35%	26.64%	21.90%	23.86%	0.51%	No	28.87%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4R**	**DY 14 P4R**	**Change from DY 12 to DY 14**	**Decreased as Intended**	**DY 15**
Non-CAH	---	26.16%	32.30%	24.87%	-1.29%	Yes	22.04%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, UC: University of California, DMPH: district and municipal public hospital, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting. ---: DMPHs did not report data in DY 11.

Metric 2.1.8 – Unexpected Newborn Complications

Metric 2.1.8 measured the proportion of newborns with severe or moderate complications out of all singleton, live-born babies without preexisting conditions, who are normally grown and were not exposed to maternal drug use. Hospitals were intended to decrease the prevalence of babies with unexpected newborn complications. These rates decreased as intended for all hospital types. Changes in average achievement rates during PRIME are shown in Exhibit 217.

Exhibit 217: PRIME Hospital-Reported Unexpected Newborn Complications Rates for Metric 2.1.8

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4R	DY 14 P4R	Change from DY 11 to DY 14	Decreased as Intended	DY 15
Total	6.28%	6.39%	4.82%	4.71%	-1.57%	Yes	4.28%
UC	5.79%	5.49%	4.61%	4.70%	-1.08%	Yes	4.11%
County	6.64%	6.88%	4.95%	4.71%	-1.93%	Yes	4.41%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 12 P4R**	**DY 14 P4R**	**Change from DY 12 to DY 14**	**Decreased as Intended**	**DY 15**
Non-CAH	---	5.82%	3.72%	3.99%	-1.83%	Yes	3.51%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, UC: University of California, DMPH: district and municipal public hospital, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting. ---: DMPHs did not report data in DY 11.

Metric 2.1.9 – Obstetric (OB) Hemorrhage Safety Bundle

Metric 2.1.9 measured the number of required CMQCC OB Hemorrhage Safety Bundle components (out of 16) that hospitals adopted to reduce childbirth-related hemorrhages. It is reported at the facility level. Rates increased as intended for all hospital types. Changes in achievement rates during PRIME are shown in Exhibit 218 and Exhibit 219.

Exhibit 218: PRIME Hospital-Reported Obstetric (OB) Hemorrhage Safety Bundle Implementation for Metric 2.1.9; Proportion of the 16 Elements that Were Met

DPH	DY 11 P4R	DY 12 P4P	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Total	63.44%	72.81%	100.00%	100.00%	36.56%	Yes	100.00%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Non-CAH	---	70.00%	100.00%	100.00%	30.00%	Yes	98.96%

Source and notes below.

Exhibit 219: Number of PRIME Hospitals that Reported Obstetric (OB) Hemorrhage Safety Bundle Implementation for Metric 2.1.9 Quarterly Activities

DPH Number of hospitals=16	DY 13	DY 14	Change from DY 13 to DY 14	Increased as Intended	DY 15
10 Post-Event Debriefs Each Quarter (fewer if less than 10 cases)	15	16	1	Yes	14
3 OB Safety Drills Each Quarter	14	16	2	Yes	13

DPH Number of hospitals=16	DY 13	DY 14	Change from DY 13 to DY 14	Increased as Intended	DY 15
DMPH Number of hospitals=4	**DY 13**	**DY 14**	**Change from DY 13 to DY 14**	**Increased as Intended**	**DY 15**
10 Post-Event Debriefs Each Quarter (fewer if less than 10 cases)	4	3	-1	No	3
3 OB Safety Drills Each Quarter	2	3	1	Yes	3

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, DY: Demonstration Year, The metric is calculated per Entity. Quarterly activities were reported in DY 13 onward.

Project 2.2 - Care Transitions: Integration of Post-Acute Care

Project Overview and Summary of Key Findings

Project 2.2 was designed to reduce avoidable readmissions by linking patients to ambulatory care following inpatient discharge. Successful transition to outpatient settings post-discharge is of particular relevance for public hospitals that have a higher-than-average readmission rate, potentially because they provide care to patients who are high-risk and have chronic conditions, behavioral health conditions, and unstable housing. This goal was achieved by 1) developing the needed infrastructure for successful care transition including using evidence-based models; 2) identifying high-risk patients; 3) developing standardized workflows and protocols; 4) establishing care transition activities including training staff, teaching patients' self-care, use of multidisciplinary teams, warm handoffs, and monitoring provider performance. Specific objectives can be found in Attachment Q.

By the end of DY 15, a total of 31 hospitals continued to participate and report metric performance data for Project 2.2, including all 17 DPHs as required by PRIME, along with 14 DMPHs. Detailed information on DPH and DPMH participation can be found in Appendix B. Project Selection.

The following analyses are restricted to assessment of changes in metric values through DY 14 due to disruptions in care delivery and utilization caused by the COVID-19 pandemic in DY 15. DY 15 metrics values are provided but are not directly comparable with previous years.

Performance of the hospitals in Project 2.2 was measured by the following 5 metrics (Exhibit 221).

Exhibit 220: PRIME Project 2.2 Metric Details

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcomes of Care
DHCS All-Cause Readmissions; Plan All-Cause Readmissions	2.2.1@	Decrease	Outcome
H-CAHPS-Care Transition Metrics	2.2.2	Increase	Outcome

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcomes of Care
Medication Reconciliation Post Discharge– 30 Days	2.2.3	Increase	Process
Reconciled Medication List Received by Discharged Patients	2.2.4	Increase	Process
Timely Transmission of Transition Record	2.2.5	Increase	Process

Source: PRIME Metrics Specs, DY 15YE
Notes: Hospital Consumer Assessment of Healthcare Providers and Systems (H-CAHPS). @ Metric 2.2.1 CMS Plan All Cause Readmission had a trending break (PPL 19-004)

Overall, DMPHs improved in all metrics from DY 12 to DY 14. DPHs improved in 4 of the 5 metrics (2.2.1, 2.2.3-2.2.5) from DY 11 to DY 14. In DY 15 the metric performance thresholds were changed due to the COVID-19 pandemic.

Metric 2.2.1 – DHCS All-Cause Readmissions – Statewide Collaborative QIP Measure; CMS Plan All-Cause Readmission

From DY 11 to DY 13, Metric 2.2.1 measured the proportion of patients that were readmitted within 30 days of the Index Hospital Stays (IHS) for individuals 21 years of age and older from DY 11 to DY 13. Hospitals were intended to reduce readmissions as a result of improved transition of patients to post-hospital care. All-cause 30-day readmission rates did not decline as intended for all hospital types except CAHs between DY 11 to DY 13.

In DY 14 and DY15, PRIME replaced the measure with the CMS Plan All-Cause Readmission measure. Changes to the PRIME Encountered Population changed from "under the accountability of the PRIME Entity 120 days" to "under the accountability of the PRIME Entity 360 days"; age criteria changed from ≥21, to 18-64; Continuous Assignment changed from "120 days prior to…", to "365 days prior to…" ; and allowable gaps in enrollment were added. Changes in average achievement rates during PRIME are shown in Exhibit 221.

Exhibit 221: PRIME Hospital-Reported DHCS All-Cause Readmission Rates for Metric 2.2.1

DPH	DY 11 P4R	DY 12 P4P	DY 13 P4P	Change from DY 11 to DY 13	Decreased as Intended
Total	13.64%	12.91%	13.03%	-0.61%	No
UC	14.47%	14.84%	13.47%	-1.00%	No
County	12.86%	11.45%	12.78%	-0.08%	No
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4P**	**Change from DY 12 to DY 13**	**Decreased as Intended**
Total	---	12.07%	10.45%	-1.62%	No
Non-CAH	---	12.10%	10.45%	-1.65%	No
CAH	---	8.03%	10.40%	2.37%	Yes

Notes and source below.

Exhibit 222: PRIME Hospital-Reported CMS All-Cause Readmission Rates for Metric 2.2.1

DPH	DY 14 P4P	DY 15
Total	13.35%	13.58%
UC	13.69%	13.83%
County	13.17%	13.49%
DMPH	**DY 14 P4P**	**DY 15**
Total	10.83%	12.76%
Non-CAH	10.87%	12.78%
CAH	4.69%	0.00%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, UC: University of California, DMPH: district and municipal public hospital, CAH: critical access hospital, P4R: pay-for-reporting, P4P: pay-for-performance. ---: DMPHs did not report data in DY 11. Due to the metric modifications and trending-break, DY 14 and DY 15 are CMS All Cause Readmissions (information in PPL 19-004).

Metric 2.2.2 – H-CAHPS: Care Transition Metrics

Based on H-CAHPS, Metric 2.2.2 measured patients' assessment of whether hospital staff addressed their health care needs and if patients clearly understood how to manage their health after leaving the hospital. Hospitals were intended to be responsive to patients' needs during hospitalization and to improve their understanding of how to manage their care after discharge. H-CAHPS rates increased as intended for DMPHs and County DPHs. Changes in average achievement rates during PRIME are shown in Exhibit 223.

Exhibit 223: PRIME Hospital-Reported Care Transition (H-CAHPS) Rates for Metric 2.2.2

DPH	DY 11 P4R	DY 12 P4P	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Total	54.21%	54.20%	51.86%	53.61%	-0.60%	No	53.77%
UC	67.73%	67.07%	60.40%	61.59%	-6.14%	No	62.27%
County	47.31%	48.34%	46.76%	49.34%	2.03%	Yes	49.09%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Total	---	44.59%	49.79%	48.82%	4.23%	Yes	50.24%
Non-CAH	---	48.75%	50.62%	50.46%	1.71%	Yes	49.83%
CAH	---	25.81%	45.58%	39.00%	13.19%	Yes	53.00%

Source: UCLA analysis of the hospital-reported data, February to June 2021.

Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, P4R: pay-for-reporting, P4P: pay-for-performance. PRIME Eligible Population and Project Target Population do not apply to this metric, so achievement rates for this metric were the averages of the hospital-wide rates.

Metric 2.2.3 – Medication Reconciliation Post Discharge– 30 Days

Metric 2.2.3 measured whether discharge medication reconciliation was conducted in an outpatient visit following an inpatient stay. The denominator for this measure is all discharges from any PRIME inpatient facility (e.g. hospital, skilled nursing facility, or rehabilitation facility) for patients 18 years of age and older in the PRIME Project 2.2 Target Population seen within 30 days following discharge in the office. Patients may appear in the denominator more than once if there was more than one discharge followed by an office visit in the performance period. Hospitals were intended to improve continuity between inpatient and ongoing care, since medications are often changed while a patient is hospitalized. All hospital types reported an increasing trend in medication reconciliation rates as intended. Changes in average achievement rates during PRIME are shown in Exhibit 224.

Exhibit 224: PRIME Hospital-Reported Medication Reconciliation Rates for Metric 2.2.3

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Total	71.89%	71.02%	80.46%	91.22%	19.33%	Yes	93.52%
UC	81.98%	84.24%	90.21%	96.14%	14.16%	Yes	97.82%
County	60.79%	64.65%	74.28%	88.41%	27.62%	Yes	91.04%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Total	---	14.66%	65.09%	73.04%	58.38%	Yes	54.08%
Non-CAH	---	12.10%	64.40%	72.54%	60.44%	Yes	53.89%
CAH	---	66.34%	100.00%	93.59%	27.25%	Yes	84.44%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, P4R: pay-for-reporting, P4P: pay-for-performance, ---: DMPHs did not report data in DY 11. The denominator is based on discharges with a timely office visit, not patients. Patients may appear in the denominator more than once if there was more than one discharge followed by an office visit in the performance period.

Metric 2.2.4 – Reconciled Medication List Received by Discharged Patients

Metric 2.2.4 measured the proportion of patients, regardless of age, discharged from inpatient care who received a reconciled medication list at the time of discharge. Hospitals were intended to ensure that prescriptions are explained in a clear and structured manner during times of transition for patients. All hospital types reported an increasing trend in medication list reconciliation as intended. Changes in average achievement rates during PRIME are shown in Exhibit 225.

Exhibit 225: PRIME Hospital-Reported Reconciled Medication List Rates for Metric 2.2.4

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Total	55.91%	82.70%	90.38%	96.41%	40.50%	Yes	96.80%
UC	74.25%	93.32%	97.40%	98.47%	24.22%	Yes	98.43%
County	42.15%	72.94%	83.66%	92.03%	49.88%	Yes	95.20%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Total	---	67.70%	88.58%	92.65%	24.95%	Yes	95.22%
Non-CAH	---	67.98%	88.76%	92.79%	24.81%	Yes	95.31%
CAH	---	19.72%	49.60%	60.32%	40.60%	Yes	51.52%

Source: UCLA analysis of the hospital-reported data, February to June 2021.

Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, P4R: pay-for-reporting, P4P: pay-for-performance, ---: DMPHs did not report data in DY 11.

Metric 2.2.5 – Timely Transmission of Transition Record

Metric 2.2.5 measured the proportion of discharges from inpatient care to home care for which a transition record was transmitted to the facility or primary physician or healthcare professional designated for follow-up within 24 hours of discharge. Hospitals were intended to improve the continuity of care and decrease the risk of re-hospitalization by providing vital information to outpatient providers about their patients' recent hospital admissions. All hospital types reported an increasing trend in timely transition record rates as intended. Changes in average achievement rates during PRIME are shown in Exhibit 226.

Exhibit 226: PRIME Hospital-Reported Care Timely Transition Record Rates for Metric 2.2.5

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Total	51.18%	56.80%	76.01%	86.60%	35.42%	Yes	86.79%
UC	92.58%	93.80%	94.55%	97.44%	4.86%	Yes	95.70%
County	20.79%	32.75%	65.65%	80.17%	59.38%	Yes	81.75%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Total	---	39.02%	46.64%	66.55%	27.53%	Yes	65.41%
Non-CAH	---	38.88%	46.50%	66.44%	27.56%	Yes	65.33%
CAH	---	71.13%	98.06%	99.01%	27.88%	Yes	100.00%

Source: UCLA analysis of the hospital-reported data, February to June 2021.

Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, P4R: pay-for-reporting, P4P: pay-for-performance, ---: DMPHs did not report data in DY 11.

Project 2.3 – Complex Care Management for High Risk Medical Populations

Project Overview and Summary of Key Findings

Project 2.3 was designed to improve the health of patients with complex conditions and reduce use of preventable ED visits by improving care coordination for better management of complex and high-risk patients. These goals were achieved by 1) using guideline concordant frameworks and staffing models; 2) training care teams on managing complex patients; and 3) systematic identification and coordination for these patients. The framework and staffing models are described in the Interim Report; for example, care models included: the Geriatric Resources for Assessment and Care of Elders (GRACE) Team Care Model, Embedded Care Manager Model, Complex Care Management Program, Chronic Care Model, and Camden Coalition Care Management Model. Staffing model examples included having a care coordinator embedded in the primary care teams or having a centralized care coordination team. Care team members included a mix of clinical support staff, care manager, care coordinator, primary care provider, patient navigator, mental health professional, nutritionist, intensivist, and substance use treatment provider. Common criteria that hospitals utilized to identify the target population for complex care management using criteria such as the number of high-risk medical conditions, ED or inpatient stays, and lack of support. The project's goals were to be achieved by managing the care of complex patients using established protocols and delivery of needed care. Specific objectives can be found in Attachment Q.

By the end of DY 15, 26 hospitals participated and reported metric performance data. All DPHs participated in this project as required by PRIME. Additionally, 9 DMPHs participated in this project. Detailed information on DPH and DPMH participation can be found in Appendix B. Project Selection.

The following analyses are restricted to assessment of changes in metric values through DY 14 due to disruptions in care delivery and utilization caused by the COVID-19 pandemic in DY 15. DY 15 metrics values are provided but are not directly comparable with previous years.

Performance of hospitals in Project 2.3 was measured by the following 4 metrics (Exhibit 227).

Exhibit 227: PRIME Project 2.3 Metric Details

Metric Name and Years Reported	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care
Care Coordinator Assignment (retired after DY 12)	2.3.1*	Increase	Process
Medication Reconciliation – 30 Days (All years)	2.3.2	Increase	Process
Prevention Quality Overall Composite #90 (retired after DY 13)	2.3.3	Decrease	Outcome
Timely Transmission of Transition Record (All years)	2.3.4	Increase	Process

Source: PRIME Metrics Specs, DY 15YE
*Notes: DY: demonstration year. * Denotes innovative metric.*

Overall, hospitals made progress in implementing Project 2.3, as both DPHs and DMPHs improved in metrics that were in place through DY 14 (2.3.2, 2.3.4). Metric 2.3.1 was discontinued after DY 12; DPHs showed an improvement, and no trend was assessed for DMPHs, since the metric was only in effect for 1 demonstration year for those hospitals. Metric 2.3.3 was discontinued after DY 13; hospitals showed improvement up to that time. In DY 15 the metric performance thresholds were changed due to the COVID-19 pandemic.

Metric 2.3.1 – Care Coordinator Assignment

Metric 2.3.1 measured the percentage of clients with an assigned care coordinator. Hospitals were intended to leverage care coordinators to more reliably ensure appropriate and timely delivery of care while also improving patient experience. This metric was retired after DY 12, so no data was reported for DY 13 or DY 14 and results for this metric are available in the Interim Report. The rate increased for DPHs and a rate was not measured for DMPHs, as they reported only a year of data.

Metric 2.3.2 – Medication Reconciliation Post Discharge – 30 Days

Metric 2.3.2 measured whether discharge medication reconciliation was conducted in an outpatient visit following an inpatient stay. The medical reconciliation must have been conducted by a prescribing practitioner, clinical pharmacist or registered nurse on or within 30 days of discharge. The denominator for this measure is all discharges from any PRIME inpatient facility (e.g. hospital, skilled nursing facility, or rehabilitation facility) for patients 18 years of age and older in the PRIME Project 2.3 Target Population seen within 30 days following discharge in the office. Patients may appear in the denominator more than once if there was more than one discharge followed by an office visit in the performance period. Hospitals were intended to improve continuity between inpatient and ongoing care, since medications are often changed while a patient is hospitalized. Medical reconciliation rates increased as intended for all hospital types (Exhibit 228).

Exhibit 228: PRIME Hospital-Reported Medical Reconciliation Rates for Metric 2.3.2

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Total	78.36%	72.14%	81.61%	91.39%	13.04%	Yes	92.28%
UC	91.89%	92.15%	94.21%	97.23%	5.34%	Yes	98.05%
County	59.00%	65.34%	74.60%	88.54%	29.53%	Yes	89.50%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Non-CAH	---	7.41%	51.39%	78.89%	71.47%	Yes	57.94%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance. ---: DMPHs did not report data in DY 11.

Metric 2.3.3 – Prevention Quality Overall Composite #90

Metric 2.3.3 measured the number of discharges that met the inclusion and exclusion rules for the numerator for the Prevention Quality Indicators (PQI). PQI is an overall composite score in which a lower rate indicates better performance. This metric was retired after DY 13, so no data were reported for DY 14 and results for this metric are available in the Interim Report. Rates decreased for DPHs and had minimal change for DMPHs.

Metric 2.3.4 – Timely Transmission of Transition Record

Metric 2.3.4 measured the percentage of discharges from inpatient care for which a transition record was transmitted to the facility, primary physician, or other health care professional designated for follow-up care within 24 hours of discharge. Hospitals were intended to improve the continuity of care and decrease the risk of re-hospitalization by providing vital information to outpatient providers about their patients' recent hospital admissions. The timely transmission of transition record rates increased as intended for all hospital types (Exhibit 229). This metric applies to the Project 2.3 Target Population age 18 and older. The denominator is all applicable discharges for qualifying patients, including if the same patient had multiple discharges during the reporting period. Changes in average achievement rates during PRIME are shown in Exhibit 229.

Exhibit 229: PRIME Hospital-Reported Timely Transmission of Transition Record Rates for Metric 2.3.4

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Total	51.30%	51.78%	77.00%	85.84%	34.53%	Yes	84.76%
UC	95.49%	96.21%	95.78%	96.34%	0.84%	Yes	92.88%
County	17.96%	26.70%	68.11%	80.13%	62.17%	Yes	80.83%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Non-CAH	---	2.93%	13.04%	36.29%	33.35%	Yes	71.39%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance. ---: DMPHs did not report data in DY 11.

Project 2.4 - Integrated Health Home for Foster Children

Project Overview and Summary of Key Findings

Project 2.4 was designed to implement integrated health homes for children in the foster system, providing foster children with a “one-stop-shop” for fully integrated health services including physical and behavioral health, as well as needed substance abuse and social services. Specific objectives included: improved patient adherence to their treatment regimen; improved communication and documentation of communication and coordination with child welfare services; reduced avoidable acute care utilization (ED, inpatient admissions); and improved patient experience. Specific objectives can be found in Attachment Q.

This project was not required for DPHs. By the end of DY 15, a total of 4 County DPHs participated and reported metric performance for Project 2.4. No DMPHs participated in Project 2.4. Detailed information on DPH and DMPH participation can be found in Appendix B. Project Selection.

The following analyses are restricted to assessment of changes in metric values through DY 14 due to disruptions in care delivery and utilization caused by the COVID-19 pandemic in DY 15. DY 15 metrics values are provided but are not directly comparable with previous years.

Performance of hospitals in Project 2.4 was measured by the following 8 metrics (Exhibit 230). The Project 2.4-Specific PRIME Target Population included: 1) Individuals with at least 1 encounter with the PRIME Entity Primary Care team during the first half of the measurement period) AND 2) Child, 0 to less than 18 years old, in out of home placement under the jurisdiction of the local children's dependency system (as identified by the PRIME entity) at any point during the measurement period and 3) If the child had more than one removal in the measurement period, for the purpose of the measures, use the earliest removal date that meets the Project 2.4 Tenure Criteria. Tenure Criteria: the child must continue to remain in protective custody under the jurisdiction of the local children’s dependency system for a minimum of 30 consecutive days after the date of removal.

Exhibit 230: PRIME Project 2.4 Metric Details

Metric Name and Reporting Period	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care
Adolescent Well-Care Visit	2.4.1	Increase	Process
Developmental Screening in the First Three Years of Life	2.4.2	Increase	Process
Documentation of Current Medications in the Medical Record (0-18 y.o.)	2.4.3	Increase	Process
Screening for Clinical Depression and Follow Up	2.4.4	Increase	Process
Preventative Care and Screening: Tobacco Use – Screening and Cessation Intervention (13 y.o. and older)	2.4.5	Increase	Process
Well Child Visits- First 15 months of Life (retired DY 12)	2.4.6	Increase	Process
Well Child Visits-Third, Fourth, Fifth, Sixth Years of Life	2.4.7	Increase	Process
Comprehensive Medical Evaluation Following Foster Youth Placement in Foster Care (began in DY 13)	2.4.8*	Increase	Process

Source: PRIME Metrics Specs, DY15YE

*Notes: y.o.: years old, DY: Demonstration Year, * Denotes innovative metric,*

Overall, DPHs reported an increase in rates between DY 11 and DY 14, denoting movement in the intended direction in all metrics. Metrics 2.4.1 and 2.4.7 both showed small increases in rates of less than 5%. Metrics 2.4.2, 2.4.3, 2.4.4, 2.4.5 reported the largest increases in rates of around 20% to 50% from DY 11 to DY 14. In DY 15 the metric performance thresholds were changed due to the COVID-19 pandemic.

Metric 2.4.1 – Adolescent Well-Care Visits (HEDIS)

Metric 2.4.1 measured the percentage of adolescents ages 12 to 18 who had at least 1 comprehensive well-care visit with a primary care physician (PCP) or an obstetric/gynecologic (OB/GYN) practitioner. Hospitals were intended to increase well child visits in order to assess physical, emotional, and social development. Adolescent well-care visit rates increased as intended for county hospitals (Exhibit 231).

Exhibit 231: PRIME Hospital-Reported Adolescent Well-Care Visit Rates for Metric 2.4.1

DPH	DY 11 P4R	DY 12 P4P	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
County	76.65%	83.84%	83.53%	80.34%	3.69%	Yes	74.92%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance.

Metric 2.4.2 – Developmental Screening in the First Three Years of Life (CMS Core Set)

Metric 2.4.2 measured the percentage of children screened for risk of developmental, behavioral, and social delays using a standardized screening tool in the 12 months preceding their first, second, or third birthday. Hospitals were intended to increase developmental surveillance as a component of every preventative care visit to identify concerns about a child's development and implement proper management when a child has a positive screening result for a developmental problem. Developmental screening rates increased as intended for county hospitals (Exhibit 232).

Exhibit 232: PRIME Hospital-Reported Developmental Screening Rates for Metric 2.4.2

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
County	15.38%	15.68%	36.58%	51.21%	35.83%	Yes	82.73%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance.

Metric 2.4.3 – Documentation of Current Medications in the Medical Record (0-18 y.o.)

Metric 2.4.3 measured the percentage of visits for patients aged 0 to less than 18 years old for which the eligible clinician attests to documenting a list of current medications using all immediate resources available on the date of the encounter. Hospitals were intended to increase accurate and complete medication lists in order to ensure patients are taking the correct medication regimen and decrease the likeliness of serious adverse drug events (ADE) occurring. Documentation of current medication rates increased as intended for county hospitals (Exhibit 233).

Exhibit 233: PRIME Hospital-Reported Documentation of Current Medication in the Medical Record Rates for Metric 2.4.3

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4R	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
County	68.89%	80.94%	85.36%	88.26%	19.38%	Yes	85.75%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance.

Metric 2.4.4 – Screening for Clinical Depression and Follow-Up

Metric 2.4.4 measured the percentage of individuals age 12 and older screened for clinical depression on the date of the encounter using an age-appropriate standardized depression screening tool, and if positive, a follow-up plan is documented on the date of the positive screen. Hospitals were intended to improve identification and treatment of depression in its early stages in order to reduce risks of the negative outcomes associated with depression by increasing routine screenings for depression as a part of primary care for those age 12 to 17. Depression screening rates increased as intended for County hospitals (Exhibit 234).

Exhibit 234: PRIME Hospital-Reported Clinical Depression Screening Rates for Metric 2.4.4

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
County	20.00%	26.86%	57.86%	71.43%	51.43%	Yes	63.64%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance.

Metric 2.4.5 – Preventative Care and Screening: Tobacco Use – Screening and Cessation Intervention (13 yo and older)

Metric 2.4.5 measured the percentage of patients aged 13 years and older who were screened for tobacco use 1 or more times within 24 months and who received cessation counseling intervention if identified as a tobacco user. Hospitals were intended to promote screening and cessation interventions for those who use tobacco products. There is good evidence to suggest such actions are successful in helping tobacco users quit. Metric 1.2.14.t was revised with additional instructions in DY 14 to include 3 criteria, of which entities reported the 3rd (all patients aged 13 years old who were screened for tobacco use, and if identified as a tobacco user received tobacco cessation intervention, or identified as a tobacco non-user). Tobacco assessment and counseling rates increased as intended (Exhibit 235).

Exhibit 235: PRIME Hospital-Reported Preventative Care and Screening: Tobacco Use – Screening and Cessation Intervention Rates for Metric 2.4.5

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
County	64.24%	88.46%	94.87%	96.51%	32.26%	Yes	94.38%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance.

Metric 2.4.6 – Well Child Visits – First 15 Months of Life

Metric 2.4.6 measured the percentage of children who turned 15 months old during the measurement year and had 6 or more well child visits with a primary care physician (PCP) during their first 15 months of life. Hospitals were intended to increase well child visits at age-appropriate times because early interventions increase overall wellness and reduce medical costs. This metric was removed after DY12 due to small population size. It was replaced by Metric 2.4.8 in the PRIME Project 2.4 measure set after and results for this metric are available in the Interim Report.

Metric 2.4.7 – Well Child Visits – Third, Fourth, Fifth, and Sixth Years of Life

Metric 2.4.7 measured the percentage of children ages 3 to 6 who had 1 or more well-child visits with a primary care physician (PCP) during the measurement period. Hospitals were intended to increase well child visits in order to assess physical, emotional, and social development There is evidence these actions would ultimately influence health and development as the child progresses towards adulthood. Well child visit rates increased as intended for county hospitals (Exhibit 236).

Exhibit 236: PRIME Hospital-Reported Well Child Visit Rates for Metric 2.4.7

DPH	DY 11 P4R	DY 12 P4P	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
County	88.37%	87.16%	92.74%	88.60%	0.23%	Yes	83.28%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance.

Metric 2.4.8 – Comprehensive Medical Evaluation Following Foster Youth Placement in Foster Care

Metric 2.4.8 measured the number of patients with an encounter with a primary care provider within 30 days of their Date of Removal. Hospitals were intended to increase the rate of medical evaluations for foster children to ensure foster children have timely access to appropriate medical care. This metric was added in DY 13 to replace Metric 2.4.6 in the PRIME Project 2.4 measure set. Changes in average achievement rates during PRIME are shown in Exhibit 237.

Exhibit 237: PRIME Hospital-Reported for Comprehensive Medical Evaluation Rates for Metric 2.4.8*

DPH	DY 13 P4R	DY 14 P4R	Change from DY 13 to DY 14	Increased as Intended	DY 15
County	68.95%	79.67%	10.72%	Yes	59.93%

Source: UCLA analysis of the hospital-reported data, February to June 2021.

*Notes: DPH: designated public hospital, DY: demonstration year, P4R: pay-for-reporting. * Denotes innovative metric.*

Project 2.5 – Transition to Integrated Care: Post Incarceration

Project Overview and Summary of Key Findings

Project 2.5 was designed to improve the transition of care for those recently incarcerated from the criminal justice system into the public health care system. The main goals of the project were to enroll post-incarcerated patients in health coverage; establish them with primary care; and coordinate their care between medical, behavioral health, and social services. Specific objectives can be found in Attachment Q.

This was an optional project for DPHs, of which 2 participated through DY 15; previously, 2 DMPHs ended participation in DY 12. Detailed information on DPH and DPMH participation can be found in Appendix B. Project Selection.

The following analyses are restricted to assessment of changes in metric values through DY 14 due to disruptions in care delivery and utilization caused by the COVID-19 pandemic in DY 15. DY 15 metrics values are provided but are not directly comparable with previous years.

Performance of hospitals in Project 2.5 was measured by the following 5 metrics, one of which had a sub-rate (Exhibit 238). The Target Population for Project 2.5 were those in the PRIME Eligible Population who were incarcerated in prison and/or jail that were soon-to-be released, or released during the 6 months prior to the start of the measurement period and had at least one chronic health condition or were greater than 50 years old.

Exhibit 238: PRIME Project 2.5 Metric Details

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care
Alcohol and Drug Misuse Sub-rate #1: Brief Annual Screen (began in DY 14)	2.5.1@	Increase	Process
Alcohol and Drug Misuse Screening, Brief Intervention, and Referral to Treatment (SBIRT) Sub-rate #2: Full Screen	2.5.1@	Increase	Process
Controlling Blood Pressure	2.5.2@	Increase	Outcome
Prevention Quality Overall Composite #90 (retired DY 13)	2.5.3	Decrease	Outcome
Screening for Clinical Depression and Follow-Up	2.5.4	Increase	Process

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care
Preventative Care and Screening: Tobacco Use – Screening and Cessation Intervention	2.5.5	Increase	Process

Source: PRIME Metrics Specs, DY 15YE
Notes: @ A sub-rate was added to Metric 2.5.1; a trending break was issued and Rate 1 in DY14 non-comparable to DY13. (PPL is 19-004). A trending break was issued for Metric 2.5.2 in DY 14 (PPL 19—002).

Overall, DPHs generally had improvements in the majority of metrics. DPHs reported continuous improved performance in 2 metrics (2.5.3, 2.5.4). Performance in Metric 2.5.5 improved, but inconsistently over time. Trending breaks limited analysis of improvement for Metrics 2.5.1 and 2.5.2. In DY 15 the metric performance thresholds were changed due to the COVID-19 pandemic.

Metric 2.5.1 – Alcohol and Drug Misuse Screening, Brief Intervention, and Referral to Treatment (SBIRT)

Metric 2.5.1 measured the rates of screening for alcohol or drug misuse and appropriate intervention and referral to treatment. Hospitals were intended to decrease future risks and complications by improving the detection of alcohol-related disorders and intervention. The original SBIRT metric became sub-rate #2 (full screening). The new sub-rate #1 is for a brief annual screening. The denominator includes individuals in the PRIME Project 2.5 Target Population ages 12 years or older who had a qualifying outpatient service. With the addition of the sub-rate, a trending break was issued and Rate #1 in DY14 is not comparable to DY13. (PPL is 19-004). Average achievement rates during PRIME are shown in Exhibit 239 and Exhibit 240.

Exhibit 239: PRIME Hospital-Reported Alcohol and Drug Misuse Screening, Brief Intervention, and Referral to Treatment (SBIRT) Rates for Metric 2.5.1 (Sub-rate #2 Full Screen)

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4R	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
County	21.10%	19.91%	41.82%	42.94%	21.84%	Yes	45.37%

Source and note below.

Exhibit 240: PRIME Hospital-Reported Alcohol and Drug Misuse Brief Annual Screening Rates for Metric 2.5.1 (Sub-rate #1)

DPH	DY 14 P4R	DY 15	Change from DY 14 to DY 15	Increased as Intended
County	72.14%	60.10%	-12.03%	No

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, P4R: pay-for-reporting, DY: demonstration year. A separate brief annual screening sub-rate came into effect for DY 14 and was applicable for the remainder of PRIME.

Metric 2.5.2 – Controlling Blood Pressure

Metric 2.5.2 measured the proportion of patients between the ages of 18 and 85 that had at least 1 outpatient encounter with a diagnosis of hypertension and had their blood pressure (BP) adequately controlled. For all patients aged 18 to 59, and patients aged 60 to 85 with a diagnosis of diabetes, adequately controlled BP was defined as <140/90 mmHg. For patients between the ages of 60 and 85 without a diagnosis of diabetes, adequately controlled BP was <150/90 mmHg. In DY 14, the definition metric specification of adequate control was changed to be the same for all groups (<140/90), and hospitals reported DY 14 rates using for both the original and new specifications. Thus, a trend was calculated for DY 11 through DY 14 per the original specification. The DY 14 and DY 15 rates are also reported per the new specification. However, the change between these two years is confounded by the COVID-19 pandemic. Hospitals were intended to increase early detection of hypertension so that patients could start interventions earlier. Overall, controlling blood pressure rates increased as intended for county hospitals (Exhibit 241) in DY 11 through DY 14.

Exhibit 241: PRIME Hospital-Reported Controlling Blood Pressure Rates for Metric 2.5.2 DY 11 to DY 14 Using DY 11-DY 13 Metric Specifications

DPH	DY 11 P4R	DY 12 P4P	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended
County	43.97%	63.24%	61.63%	74.42%	30.45%	Yes

Source and note below.

Exhibit 242: PRIME Hospital-Reported Blood Pressure Control Rates for Metric 1.2.5.b, DY 14 and DY 15 Using DY 14 - DY 15 Metric Specifications

DPH	DY 14 P4P	DY 15
County	60.51%	65.72%

Source: UCLA analysis of the hospital-reported data, February to June 2020.

Notes: DY: demonstration year, P4P: pay-for-performance.

Metric 2.5.3 – Prevention Quality Overall Composite #90

Metric 2.5.3 measured the proportion of patients 18 years of age or older who were discharged and met the inclusion and exclusion rules. PQI was also Metric 1.2.8 and 2.3.3. This metric was retired after DY 13, so results for this metric are available in the Interim Report.

Metric 2.5.4 – Screening for Clinical Depression and Follow-Up

Metric 2.5.4 measured the percentage of individuals age 18 and older screened for clinical depression in an eligible encounter using an age-appropriate standardized depression screening tool, and if positive, a follow-up plan is documented on the date of the positive screen. Hospitals were intended to improve identification and treatment of depression in its early stages in order to reduce risks of the negative outcomes associated with depression by increasing routine screenings for depression as a part of primary care. Overall, screening for clinical depression and follow-up rates increased as intended for county hospitals. Changes in average achievement rates during PRIME are shown in Exhibit 243.

Exhibit 243: PRIME Hospital-Reported Screening for Clinical Depression and Follow-Up Rates for Metric 2.5.4

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
County	14.32%	61.67%	65.02%	62.74%	48.42%	Yes	64.84%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, P4R: pay-for-reporting, P4P: pay-for-performance, DY: demonstration year.

Metric 2.5.5 – Preventative Care and Screening: Tobacco Use – Screening and Cessation Intervention

Metric 2.5.5 measured the proportion of patients 18 and older who were screened for tobacco use at least once within 24 months and who received tobacco cessation intervention if identified as a tobacco user. Hospitals were intended to promote screening and intervention for tobacco users. There is good evidence to suggest such actions are successful in helping tobacco users quit. Tobacco Use – Screening and Cessation Intervention was revised with additional instructions in DY 14 to include 3 criteria, of which entities reported the 3rd (all patients 18 years old who were screened for tobacco use, and if identified as a tobacco user received tobacco cessation intervention, or identified as a tobacco non-user). Tobacco use screening and cessation intervention rates increased as intended. Changes in average achievement rates during PRIME are shown in Exhibit 244.

Exhibit 244: PRIME Hospital-Reported Preventative Care and Screening: Tobacco Use – Screening and Cessation Intervention Rates for Metric 2.5.5

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
County	58.15%	81.19%	75.26%	91.74%	33.59%	Yes	92.92%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, P4R: pay-for-reporting, P4P: pay-for-performance, DY: demonstration year.

Project 2.6 – Chronic Non-Malignant Pain Management

Project Overview and Summary of Key Findings

Project 2.6 was intended to promote identification and management of chronic pain using evidence-based models that are designed to improve outcomes. These goals were achieved by developing infrastructure, such as developing protocols and training providers about multimodal approaches to pain, and implementation activities, including monitoring adherence to policies and utilizing screening tools. Specific objectives can be found in Attachment Q.

By the end of DY 15, a total of 15 hospitals continued to participate and report metric performance. This project was optional, and 9 DPHs participated and 6 DMPHs participated through DY 15, of which 1 added the project in DY 15. Detailed information on DPH and DPMH participation can be found in Appendix B. Project Selection.

The following analyses are restricted to assessment of changes in metric values through DY 14 due to disruptions in care delivery and utilization caused by the COVID-19 pandemic in DY 15. DY 15 metrics values are provided but are not directly comparable with previous years.

Performance of hospitals in Project 2.6 was measured by the following 5 metrics, including 2.6.1 which had two sub-rates (Exhibit 245). The Project 2.6 Target Population was the PRIME Eligible Population with a moderate to severe chronic pain diagnosis and without cancer nor enrolled in hospice.

Exhibit 245: PRIME Project 2.6 Metric Details

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care
Alcohol and Drug Misuse Sub-rate #1: Brief Annual Screen (began in DY 14)	2.6.1*@	Increase	Process
Alcohol and Drug Misuse	2.6.1*@	Increase	Process

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care
Sub-rate #2: Full Screen, Brief Intervention, and Referral to Treatment (SBIRT)			
Assessment and Management of Chronic Pain: Patients Diagnosed with Chronic Pain Who Are Prescribed an Opioid Who Have an Opioid Agreement Form and an Annual Urine Toxicology Screen	2.6.2	Increase	Process
Patients with Chronic Pain on Long Term Opioid Therapy Checked in PDMPs	2.6.3*	Increase	Process
Screening for Clinical Depression and Follow-Up	2.6.4	Increase	Process
Treatment of Chronic Non-Malignant Pain with Multi-Modal Therapy	2.6.5*	Increase	Process

Source: PRIME Metrics Specs, DY 15YE
*Notes: * Denotes innovative metric.* @ *A sub-rate was added to Metric 2.6.1; a trending break was issued and Rate 1 in DY14 non-comparable to DY13. (PPL is 19-004).*

Overall, DPHs and DMPHs showed progress in 5 metrics (2.6.2-2.6.5). A trending break limited analysis of improvement for Metrics 2.6.1, but there was improvement in Rate #2. In DY 15 the metric performance thresholds were changed due to the COVID-19 pandemic.

Metric 2.6.1 – Alcohol and Drug Misuse Screening, Brief Intervention, and Referral to Treatment (SBIRT)

Metric 2.6.1 measured the rates of screening for alcohol or drug misuse and appropriate intervention and referral to treatment. Hospitals were intended to decrease future risks and complications by improving the detection of alcohol-related disorders and intervention. The original SBIRT metric became sub-rate #2 (full screening). The new sub-rate #1 is for a brief annual screening. With the addition of the sub-rate, a "reverse" trending break was issued, so Rate #1 in DY14 is not comparable to DY13. (PPL is 19-004). SBIRT rates increased as intended for all hospital types (Exhibit 246).

Exhibit 246: PRIME Hospital-Reported Alcohol and Drug Misuse Screening, Brief Intervention, and Referral to Treatment (SBIRT) Rates for Metric 2.6.1 (Full screening, Sub-rate #2)

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4R	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Total	3.77%	3.17%	4.46%	8.22%	4.45%	Yes	10.81%
UC	0.15%	0.12%	1.74%	9.95%	9.80%	Yes	9.74%
County	4.18%	4.56%	5.37%	3.52%	3.52%	Yes	11.18%

DMPH	DY 11 P4R	DY 12 P4R	DY 13 P4R	DY 14 P4P	Change from DY 12 to DY 14	Increased as Intended	DY 15
Total	---	1.92%	15.92%	29.77%	27.85%	Yes	32.57%
Non-CAH	---	0.00%	47.97%	35.79%	35.79%	Yes	79.10%
CAH	---	2.09%	10.79%	28.08%	25.99%	Yes	16.81%

Source and notes below.

Exhibit 247: PRIME Hospital-Reported Alcohol and Drug Misuse Brief Screening Rates for Metric 2.6.1 (Brief Annual Screening, Sub-rate #1)

DPH	DY 14 P4R	DY 15
Total	54.57%	47.68%
UC	3.09%	2.51%
County	70.24%	62.82%
DMPH	**DY 14 P4R**	**DY 15**
Total	57.65%	71.87%
Non-CAH	58.99%	84.18%
CAH	57.27%	67.70%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, CAH: critical access hospital, P4R: pay-for-reporting. The *brief annual screening came into effect for DY 14 and was applicable for the remainder of PRIME. The denominator includes individuals in the PRIME Project 2.6 Target Population ages 12 years or older who had a qualifying outpatient service.*

Metric 2.6.2 – Assessment and Management of Chronic Pain: Patients Diagnosed with Chronic Pain Who Are Prescribed an Opioid Who Have an Opioid Agreement Form and an Annual Urine Toxicology Screen

Metric 2.6.2 measured the number of patients with documentation of patient provider agreement and toxicology testing at least once during the measurement period among the Project 2.6 Target Population on long-term opioid therapy (patients with active prescriptions of opioid-containing medication for greater than 90 consecutive days). Hospitals were intended to enhance appropriate opioid therapy management for patients with chronic pain. In DY 13, this metric was modified to be an innovative metric. This included the following changes: standardizing the definition of “toxicology testing,” and modifying criteria for Pain Agreement and Toxicology testing so that both include time criteria as specified by "at least once during the measurement period.” Additionally, the metric added that "urine drug testing is the preferred method for toxicology testing. However, there may be extenuating circumstances in which serum or salivary testing may be more appropriate and will qualify as numerator compliant.” Codes were updated to align with these changes. The denominator language was changed to match 2.6.3 and added: "Data for 'long-term opioid therapy' may be sourced from any of the following: Medication Lists in the medical chart, Pharmacy claims/fill data, and ICD-10 code: Z79.891." Denominator exclusion criteria removed “Patients with Migraines.” The definition specifies that "Opioid Therapy is Active' Prescription for Opioid therapy includes sufficient doses to last until or past the last day of the measurement period or dispensing of opioid therapy continues through the last day of the measurement period." All reported assessment and management of chronic pain rates increased as intended for all hospital types (Exhibit 248).

Exhibit 248: PRIME Hospital-Reported Assessment and Management of Chronic Pain Rates for Metric 2.6.2

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4R	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Total	28.54%	28.85%	36.25%	61.26%	32.72%	Yes	52.74%
UC	13.07%	23.91%	42.74%	61.63%	48.56%	Yes	56.67%

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4R	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
County	34.39%	30.76%	31.06%	60.73%	26.34%	Yes	44.97%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4R**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Total	---	22.85%	34.80%	69.16%	46.31%	Yes	65.64%
Non-CAH	---	11.11%	27.48%	63.27%	52.16%	Yes	63.35%
CAH	---	26.85%	38.31%	72.38%	45.53%	Yes	66.98%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance. DMPHs did not report data in DY 11.

Metric 2.6.3 – Patients with Chronic Pain on Long Term Opioid Therapy Checked in PDMPs

Metric 2.6.3 measured the proportion of patients on long-term opioid therapy who had annual checks for prescription drug monitoring programs (PDMPs) among the Project 2.6 Target Population (patients with active prescriptions opioid-containing medication for greater than 90 consecutive days). Hospitals were intended to minimize the risk of opioid prescribing by multiple prescribers. All prescription drug monitoring program (PDMP) review rates increased as intended for all hospital types (Exhibit 249).

Exhibit 249: PRIME Hospital-Reported Prescription Drug Monitoring Program (PDMP) Review Rates for Metric 2.6.3*

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4R	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Total	28.22%	28.65%	56.95%	92.48%	64.26%	Yes	93.39%
UC	15.56%	17.57%	65.75%	96.71%	81.15%	Yes	94.03%
County	29.49%	29.19%	49.87%	86.34%	56.85%	Yes	92.12%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4R**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Total	---	27.26%	41.81%	82.71%	55.45%	Yes	88.55%
Non-CAH	---	0.00%	31.53%	82.04%	82.04%	Yes	87.25%
CAH	---	37.33%	46.75%	83.07%	45.74%	Yes	89.30%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance. DMPHs did not report data in DY 11.
** Denotes innovative metric.*

Metric 2.6.4 – Screening for Clinical Depression and Follow-up

Metric 2.6.4 measured the percentage of individuals age 18 and older screened for clinical depression in an eligible encounter using an age-appropriate standardized depression screening tool, and if positive, a follow-up plan is documented on the date of the positive screen. Hospitals were intended to improve identification and treatment of depression in its early stages in order to reduce risks of the negative outcomes associated with depression by increasing routine screenings for depression as a part of primary care. All reported screening for clinical depression and follow-up rates increased as intended for all hospital types (Exhibit 250).

Exhibit 250: PRIME Hospital-Reported Screening for Clinical Depression and Follow-Up Rates for Metric 2.6.4

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Total	24.02%	31.45%	70.81%	81.42%	57.40%	Yes	83.37%
UC	2.95%	7.26%	63.60%	77.68%	74.73%	Yes	72.69%
County	34.26%	43.74%	72.69%	82.40%	48.14%	Yes	87.27%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Total	---	39.29%	56.66%	82.65%	43.36%	Yes	78.53%
Non-CAH	---	4.21%	72.46%	87.94%	83.73%	Yes	93.19%
CAH	---	44.09%	53.06%	81.13%	37.04%	Yes	73.19%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance. DMPHs did not report data in DY 11.

Metric 2.6.5 – Treatment of Chronic Non-Malignant Pain with Multi-Modal Therapy

Metric 2.6.5 measured the proportion of patients who received a recommendation, education about, prescription for, or referral to non-opioid pain management in the outpatient setting among the Project 2.6 Target Population. The hospitals were intended to track the possible overprescribing of opioids by healthcare providers. A multi-modal, multidisciplinary approach to pain management could help increase utilization of non-opioid treatment modalities. All reported treatment of chronic nonmalignant pain with multi-model therapy rates increased as intended for all hospital types (Exhibit 251).

Exhibit 251: PRIME Hospital-Reported Treatment of Chronic Non-Malignant Pain with Multi-Modal Therapy Rates for Metric 2.6.5*

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4R	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Total	82.44%	81.54%	85.12%	88.45%	6.01%	Yes	89.73%
UC	87.33%	88.21%	84.43%	87.49%	0.16%	Yes	85.57%
County	79.97%	79.08%	85.35%	88.72%	8.75%	Yes	91.19%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4R**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Total	---	58.65%	73.72%	88.61%	29.96%	Yes	90.77%
Non-CAH	---	0.00%	34.68%	80.69%	80.69%	Yes	87.70%
CAH	---	81.58%	93.78%	95.07%	13.49%	Yes	93.30%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
*Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance.-- DMPHs did not report data in DY 11. * Denotes innovative metric.*

Project 2.7 – Comprehensive Advanced Illness Planning and Care

Project Overview and Summary of Key Findings

Project 2.7 was designed to improve the quality of end of life care by ensuring access to comprehensive palliative care that is aligned with patient preferences in hospital and community settings. Hospitals were to accomplish these goals by establishing the infrastructure for delivering palliative care, such as multidisciplinary care teams that are located in outpatient and inpatient settings and are trained to deliver this care; as well as following appropriate care processes, such as providing the needed care and linking patients to community-based providers. Specific objectives include: increase timely access to ambulatory and inpatient palliative care services, introduce Primary and/or Specialty Palliative Care services at the time of diagnosis of serious illness, relieve pain and other distressing symptoms, improve quality of life for both the patient and the family, improve concordance between patient/family preference and provision of care, and reduce avoidable acute care utilization.

By the end of DY 15, a total of 12 hospitals (5 DPHs participated in this optional project and 7 DMPHs) participated through DY 15. Detailed information on DPH and DPMH participation can be found in Appendix B. Project Selection.

The following analyses are restricted to assessment of changes in metric values through DY 14 due to disruptions in care delivery and utilization caused by the COVID-19 pandemic in DY 15. DY 15 metrics values are provided but are not directly comparable with previous years.

Performance of hospitals in Project 2.7 was measured by the following 6 metrics (Exhibit 252).

Exhibit 252: PRIME Project 2.7 Metric Details

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care
Advance Care Plan	2.7.1	Increase	Process
Ambulatory Palliative Team Established (DY 11-DY 13)	2.7.2*	Increase	Process
MWM #8 - Treatment Preferences (Inpatient)	2.7.3	Increase	Process

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care
MWM #8 - Treatment Preferences (Outpatient)	2.7.4*	Increase	Process
Palliative Care Service Offered to Patients with Serious Illness (DY 11-DY 14); Palliative Care Service Provided to Patients with Serious Illness (DY 15)	2.7.5*@	Increase	Process
Proportion Admitted to Hospice for Less than 3 Days	2.7.6	Decrease	Process

Source: PRIME Metrics Specs, DY 15YE
Notes: Denotes innovative metric. @ Trending break was issued for Metric 2.7.5 in DY 14 (19-005).*

Hospitals showed improvement in 5 metrics (2.7.1- 2.7.4, and 2.7.6) from DY 11 to DY 14. A trending break limited analysis of improvement for Metric 2.7.5. In DY 15 the metric performance thresholds were changed due to the COVID-19 pandemic.

Metric 2.7.1 – Advance Care Plan

Metric 2.7.1 measured the percentage of patients in the PRIME Project 2.7 target population, aged 65 years and older who have an advance care plan or surrogate decision maker documented in the medical record or documentation in the medical record that an advance care plan was discussed but the patient did not wish or was not able to name a surrogate decision maker or provide an advance care plan (NQF 0326, QPP). Hospitals were intended to better establish and clarify patient wishes regarding their medical treatment. All care plan rates increased as intended for all hospital types. Changes in average achievement rates during PRIME are shown in Exhibit 253.

Exhibit 253: PRIME Hospital-Reported Advance Care Plan Rates for Metric 2.7.1

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Total	42.96%	51.31%	59.17%	63.96%	21.00%	Yes	64.93%
UC	40.34%	38.11%	47.83%	55.20%	14.86%	Yes	55.44%
County	56.47%	96.89%	97.90%	97.07%	40.59%	Yes	98.75%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Non-CAH	---	36.45%	53.90%	85.49%	49.04%	Yes	88.31%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance. ---: DMPHs did not report data in DY 11.

Metric 2.7.2 – Ambulatory Palliative Team Established

Metric 2.7.2 was an innovative metric that determined whether PRIME entities had a multidisciplinary care team available, defined by the presence of an outpatient or home-based interdisciplinary palliative care service that includes care provided by a physician, nurse, social worker, and availability of a spiritual care professional, at least one of whom has evidence of training in palliative care. Metrics 2.7.2 and Metric 2.7.5 were linked, so if the hospital had a care team (reported "yes" to 2.7.2), then they reported data for 2.7.5. The data for this metric was primarily narrative. Metric 2.7.2 was retired following DY 13, so results for this metric are available in the Interim Report.

Metric 2.7.3 – Treatment Preferences (Inpatient)

Metric 2.7.3 measured the number of patients 18 years of age and older from the Project Target Population receiving specialty palliative care (except for those with exclusions) in an acute hospital setting in which the patient or responsible party was asked about preferences regarding use of life-sustaining treatments. Hospitals were intended to improve patient and family satisfaction outcomes by ensuring patients nearing the end of their life have an opportunity to express their preferences *that guide the use of life-sustaining forms of* treatment in the inpatient setting. All inpatient treatment preference rates increased as intended for all hospital types. Changes in average achievement rates during PRIME are shown in Exhibit 254.

Exhibit 254: PRIME Hospital-Reported Inpatient Treatment Preference Rates for Metric 2.7.3

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Total	52.76%	78.84%	89.52%	92.94%	40.17%	Yes	91.67%
UC	56.52%	80.46%	92.69%	95.65%	39.12%	Yes	95.29%
County	44.26%	74.59%	76.83%	85.16%	40.89%	Yes	84.41%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Non-CAH	---	53.13%	95.97%	86.29%	33.16%	Yes	97.12%

Source: UCLA analysis of the hospital-reported data, February to June 2021.

Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance. ---: DMPHs did not report data in DY 11.

Metric 2.7.4 – Treatment Preferences (Outpatient)

Metric 2.7.4 measured the number of patients 18 or older who are receiving specialty palliative care in an ambulatory setting with documented or confirmed preferences about life-sustaining treatments or hospitalization (MWM#8). Hospitals were intended to focus on appropriate care by explicitly integrating the outpatient palliative care patients' preferences for life-sustaining treatments. All hospital-reported outpatient treatment preferences rates increased as intended for all hospital types. Changes in average achievement rates during PRIME are shown in Exhibit 255.

Exhibit 255: PRIME Hospital-Reported Outpatient Treatment Preferences Rates for Metric 2.7.4*

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4R	DY 14 P4P	Change from DY 11 to DY 14+	Increased as Intended	DY 15
Total	78.43%	77.36%	87.87%	96.06%	17.63%	Yes	96.06%
UC	78.43%	80.41%	86.59%	96.48%	18.04%	Yes	96.95%
County	N/A	74.01%	91.67%	94.29%	20.27%+	Yes	93.39%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4R**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Non-CAH	---	17.68%	54.42%	78.21%	60.54%	Yes	82.64%

Source: UCLA analysis of the hospital-reported data, February to June 2021.

Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance. + Change was measured from DY 12 to DY 14 for County hospitals. N/A: analyses not conducted due to a denominator less than 30. Denotes innovative metric.*

Metric 2.7.5 – Palliative Care Service Offered to Patients with Serious Illness; Palliative care service provided to patients with serious illness

Metric 2.7.5 measured the rate of palliative care services provided to patients aged 21 and older with serious illness in DY 14 and DY 15. From DY 11 to DY 13 hospitals reported on the rate of palliative care services/referral offered to patients age 18 or older, with advanced illness. Hospitals were intended to increase palliative care services to patient who may benefit from them. Metrics 2.7.2 and Metric 2.7.5 were linked, so if the hospital had a palliative care team (reported "yes" to 2.7.2), then they reported data for Metric 2.7.5.

Hospitals reported increased rates as intended of palliative care services offered to patients with advanced illnesses. Changes in average achievement rates during PRIME are shown in Exhibit 256. A trending break limits analysis of change for this metric (PPL PPL 19-005), and DY14 is not comparable to DY13 (Exhibit 257).

Exhibit 256: PRIME Hospital-Reported Palliative Care Services Offered to Patients with Serious Illness Rates for Metric 2.7.5 (DY 11 to DY 13)*

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4R	Change from DY 11 to DY 13	Increased as Intended
Total	16.22%	14.09%	18.01%	1.79%	Yes
UC	14.62%	7.61%	15.45%	0.83%	Yes
County	19.20%	25.57%	21.59%	2.39%	Yes
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4R**	**Change from DY 12 to DY 13**	**Increased as Intended**
Non-CAH	---	8.98%	23.02%	14.04%	Yes

Source and notes below.

Exhibit 257: PRIME Hospital-Reported Palliative Care Services Offered to Patients with Serious Illness Rates for Metric 2.7.5 (DY 14 and DY 15)*

DPH	DY 14 P4R	DY 15
Total	5.85%	5.42%
UC	7.41%	6.90%
County	4.00%	3.74%
DMPH	**DY 14 P4R**	**DY 15**
Non-CAH	17.01%	18.59%

Source: UCLA analysis of the hospital-reported data, February to June 2021.

Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance. ---: DMPHs did not report data in DY 11. A trending break was issued for this measure in DY 14 (PPL 19-005).

Metric 2.7.6 – Proportion Admitted to Hospice for Less than 3 Days

Metric 2.7.6 measured the percentage of patients in the Project 2.7 Target Population who were admitted to hospice fewer than 3 days before they died; the denominator are all patients who died (NQF 0216). Hospitals were intended to ensure patients receive earlier referrals and admissions to hospice. All hospital types reported decreases in the intended direction for rates of hospice admission less than 3 days before death. Changes in average achievement rates during PRIME are shown in Exhibit 258.

Exhibit 258: PRIME Hospital-Reported Hospice Admission Less than 3 Days Rates for Metric 2.7.6

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Decreased as Intended	DY 15
Total	29.34%	13.93%	10.51%	9.89%	-19.45%	Yes	10.88%
UC	34.81%	11.42%	9.15%	10.65%	-24.15%	Yes	8.52%
County	16.67%	15.29%	13.48%	7.23%	-9.44%	Yes	17.04%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Decreased as Intended**	**DY 15**
Non-CAH	---	21.68%	19.78%	13.78%	-7.90%	Yes	24.55%

Source: UCLA analysis of the hospital-reported data, February to June 2021.

Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance. ---: DMPHs did not report data in DY 11.

Project 3.1 Antibiotic Stewardship

Project Overview and Summary of Key Findings

Project 3.1 was designed to reduce the resistance of infections to antimicrobials by implementing an antibiotic stewardship program that reduces antibiotic use for non-bacterial diseases and optimizes antibiotic use for bacterial infections. These goals were to be achieved by developing the necessary infrastructure such as a multidisciplinary team and clinical protocols for appropriate antibiotic use; as well as implementing the project broadly through stewardship rounds and monitoring provider performance. Specific objectives can be found in Attachment Q.

By the end of DY 15 a total of 13 hospitals continued to participate and reported metric performance data for Project 3.1, which was not required for DPHs. The total included 5 DPHs and 7 DMPHs, 1 DPMH dropped out of participation in DY 12. Detailed information on DPH and DPMH participation can be found in Appendix B. Project Selection.

The following analyses are restricted to assessment of changes in metric values through DY 14 due to disruptions in care delivery and utilization caused by the COVID-19 pandemic in DY 15. DY 15 metrics values are provided but are not directly comparable with previous years.

Performance of hospitals in Project 3.1 was measured by the following 5 metrics (Exhibit 259).

Exhibit 259: PRIME Project 3.1 Metric Details

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care
Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis	3.1.1@	Increase	Process
Avoidance of Antibiotic Treatment with Low Colony Urinary Cultures (retired after DY 11)	3.1.2*	Decrease	Process
National Healthcare Safety Network (NHSN) Antimicrobial Use Measure	3.1.3	Decrease	Process
Peri-Operative Prophylactic Antibiotics Administered After Surgical Closure	3.1.4	Decrease	Process
Reduction in Hospital Acquired Clostridium Difficile Infections	3.1.5	Decrease	Outcome

Source: PRIME Metrics Specs, DY 15YE
*Notes: @ A Trending break was issued for Metric 3.1.1 in DY 12 (17-007). * Denotes innovative metric.*

DPHs improved from DY 11 to DY 14 in all metrics where a trend could be calculated, except for 3.1.4, where a large increase in rates for UC DPHs led the overall DPH rates in the unintended direction. DMPHs improved in all metrics from DY 12 to DY 14. However, DMPH CAHs had issues with denominator size, which was a challenge to reporting performance, as hospitals did not meet the 30-patient denominator threshold for Metric 3.1.1 and Metric 3.1.4 until DY 15,. Metric 3.1.2 was retired, so a trend was not assessed. In DY 15 the metric performance thresholds were changed due to COVID.

Metric 3.1.1 – Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis

Metric 3.1.1 measured the proportion of patients age 18 – 64 years of age in the PRIME 3.1 Target Population with an outpatient or ED visit with a diagnosis of acute bronchitis who were not prescribed antibiotics (NQF 0058). Hospitals were intended to reduce misuse and overuse of antibiotics; this metric aimed to help raise awareness among healthcare providers about inappropriate antibiotic use.

DHCS issued a trend-break notice for this metric in DY 12 (PPL-17-007) because the Target Population was changed to those with a diagnosis of acute bronchitis who *were* prescribed antibiotics to instead be those who were *not* prescribed antibiotics. The metric in DY 11 was reported as "Patients who were dispensed antibiotic medication on or 3 days after the index episode start date, reported as an inverted rate (i.e. 1- numerator/ denominator) to reflect the number of people not dispensed an antibiotic. In DY 11 the average rates for DPH were 39.31% (UC 66.34%, County 32.67%). In DY 12, the metric changed "prescribed" to "not prescribed or dispensed" and removed the inverted rate. This analysis is presented in more detail in the PRIME Interim Report.

A trend was calculated for DY 12 to DY 14 per the new specification (those who were *not* prescribed antibiotics). DY 15 rates per the new specification were also reported, but were not included in the trend analysis due to the potential impact of the COVID 19 pandemic. DMPHs CAHs had issues with denominator size and no hospitals met the 30-patient denominator threshold.

The intended direction of Metric 3.1.1 was an increase in rates over time. Changes in average achievement rates during PRIME (from DY 12 to DY 14) are shown in Exhibit 260.

Exhibit 260: PRIME Hospital-Reported Avoidance of Antibiotic Treatment Rates for Acute Bronchitis for Metric 3.1.1

DPH	DY 12 P4R	DY 13 P4P	DY 14 P4P	Change from DY 12 to DY 14	Increased as Intended	DY 15
Total	46.59%	53.58%	53.66%	7.06%	Yes	56.06%
UC	53.35%	55.67%	54.90%	1.54%	Yes	54.49%
County	44.58%	53.03%	53.02%	8.45%	Yes	57.43%
DMPH	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Total	56.56%	79.23%	86.41%	29.85%	Yes	68.51%
Non-CAH	56.23%	79.23%	86.49%	30.26%	Yes	68.52%
CAH	N/A	N/A	N/A	N/A	N/A	N/A

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance, N/A: analysis not conducted due to a denominator less than 30.

Metric 3.1.2 – Avoidance of Antibiotic Treatment for Low Colony Urinary Cultures

Metric 3.1.2 measured the number of new systemic antibiotics administered to PRIME hospital patients with predetermined levels of colony counts of specified pathogens. Hospitals were intended to decrease unnecessary use of antibiotics by only treating patients who show bacterial levels consistent with infection (>100,000 colony forming units/ml). Only DY 11 data was reported; analysis can be found in the Interim Report.

Metric 3.1.3 – National Healthcare Safety Network Antimicrobial Use Measure

Metric 3.1.3 measured the proportion of aggregate sum of days for which any specific antimicrobial agent was administered to individual patients (NQF 2720). Hospitals were intended to evaluate their antimicrobial usage trends and determine and reduce unnecessary antimicrobial usage in order to decrease antibiotic resistance. County

DPHs and Non-CAH DMPHs reported a decreasing trend in unnecessary antimicrobial usage. Changes in average achievement rates during PRIME are shown in Exhibit 261.

Exhibit 261: PRIME Hospital-Reported Antimicrobial Use Rates for Metric 3.1.3

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4R	DY 14 P4P	Change from DY 11 to DY 14	Decreased as Intended	DY 15
Total	18.88%	21.99%	15.41%	15.59%	-3.29%	Yes	20.39%
UC	19.22%	30.21%	25.76%	26.05%	6.82%	No	39.71%
County	18.58%	17.73%	12.04%	10.51%	-8.07%	Yes	9.71%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4R**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Decreased as Intended**	**DY 15**
Total	---	25.55%	25.13%	21.34%	-4.21%	Yes	24.09%
Non-CAH	---	25.58%	25.14%	21.33%	-4.25%	Yes	24.08%
CAH	---	9.36%	10.07%	44.20%	34.84%	No	24.47%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting. ---: DMPHs did not report data in DY 11.

Metric 3.1.4 – Peri-Operative Prophylactic Antibiotics Administered After Surgical Closure

Metric 3.1.4 measured the number of surgical cases in which peri-operative antibiotics are administered after surgery unnecessarily. The rationale for this metric was to discourage providers from administering antimicrobial agent doses after the surgical incision is closed in the operating room. DMPH CAHs had issues with denominator size and no hospitals met the 30-patient denominator threshold until DY 15. County DPHs and Non-CAH DMPHs reported a decreasing trend for unnecessary peri-operative antibiotics. Changes in average achievement rates during PRIME are shown in Exhibit 262.

Exhibit 262: PRIME Hospital-Reported Peri-Operative Antibiotic Administration Rates for Metric 3.1.4

DPH							
Total	16.65%	53.42%	43.91%	25.51%	8.87%	No	25.34%
UC	15.95%	47.86%	38.55%	32.01%	16.06%	No	28.91%
County	19.87%	67.08%	58.46%	10.65%	-9.22%	Yes	4.92%
Total	---	38.81%	46.57%	23.68%	-15.13%	Yes	27.62%
Non-CAH	---	38.76%	46.58%	23.68%	-15.08%	Yes	28.01%
CAH	---	N/A	N/A	N/A	N/A	N/A	10.66%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, ---: DMPHs did not report data in DY 11, N/A: analysis not conducted due to a denominator less than 30.

Metric 3.1.5 – Reduction in Hospital Acquired Clostridium Difficile Infections (CDI)

Metric 3.1.5 measured the ratio of total number of observed hospital-onset CDI laboratory-identified events (LabID) over the total number of expected hospital- onset CDI LabID events. Hospitals were intended to reduce hospital-onset CDI LabID occurrences by improving hospital management of infection and sanitation. UC DPHs and Non-CAH DMPHs reported a decreasing trend in hospital-onset CDI LabID occurrences. Changes in achievement rates during PRIME are shown in Exhibit 262. One CAH added metric 3.1.5 in DY 14, and reported a rate for DY 15.

Exhibit 263: PRIME Hospital-Reported Observed to Expected Hospital-Onset Clostridium Difficile Event Ratios for Metric 3.1.5

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Decreased as Intended	DY 15
Total	0.91	0.84	0.58	0.69	-0.22	Yes	0.48
UC	1.27	0.92	0.65	0.70	-0.58	Yes	0.57
County	0.67	0.78	0.52	0.68	0.01	No	0.43
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Decreased as Intended**	**DY 15**
Total	---	1.01	0.90	0.60	-0.40	Yes	1.59
Non-CAH	---	1.01	0.90	0.60	-0.40	Yes	0.97
CAH	---	---	---	---	---	---	5.87

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance. ---: DMPHs did not report data in DY 11. The achievement rate was not a weighted average because the underlying data was reported as a standardized infection ratio (SIR), and hospitals used the CDC National Healthcare Safety Network (NHSN) website to calculate the expected cases data.

Project 3.2 Resource Stewardship: High-Cost Imaging

Project Overview and Summary of Key Findings

Project 3.2 was designed to reduce inappropriate utilization of high-cost imaging studies. This goal was to be achieved by developing evidence-based models and methods on the appropriate use of imaging; establishing processes and protocols, such as monitoring imaging use; and making decision support tools available to providers. Specific objectives can be found in Attachment Q.

By the end of DY 15, 8 hospitals (5 DPHs and 3 DMPHs) reported metric performance data for this optional project. Detailed information on DPH and DPMH participation can be found in Appendix B. Project Selection.

The following analyses are restricted to assessment of changes in metric values through DY 14 due to disruptions in care delivery and utilization caused by the COVID-19 pandemic in DY 15. DY 15 metrics values are provided but are not directly comparable with previous years.

Performance of hospitals in Project 3.2 was measured by 4 metrics (Exhibit 264).

Exhibit 264: PRIME Project 3.2 Metric Details

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care
Don't Do Imaging for Uncomplicated Headaches (Choosing Wisely) *(retired after DY 14)*	3.2.1*	Decrease	Process
Appropriate Emergency Department Utilization of CT for Pulmonary Embolism	3.2.2	Increase	Process
Use of Imaging Studies for Low Back Pain	3.2.3	Increase	Process
Appropriate Use of Imaging Studies for Low Back Pain (Anytime)	3.2.4*@	Increase	Process
Inappropriate Use of Imaging Studies for Low Back Pain (DY 12-DY 14)	3.2.4*@	Decrease	Process

Source: PRIME Metrics Specs, DY 15YE
*Notes: CT: Computed Tomography, * Denotes innovative metric.*

@ Trending break was issued for Metric 3.2.4 in DY 14 (PPL 19-002 19-003); this metric was reported differently in DY 11, which cannot be compared to DY 12.

Overall, DPHs had varying success in the metrics within Project 3.2, whereas DMPHs reported movement in the intended direction for all metrics. Metric performance for DPHs included progress in the intended direction for 2 metrics (3.2.2 and 3.2.4) from DY 11 to DY 14 and movement in the unintended direction for 2 metrics, but by a small percentage – less than 5% (3.2.1 and 3.2.3). DMPHs reported progress in the intended direction for all metrics. For metric 3.2.2, both DPHs and DMPHs reported a steady increase in rates in the intended direction, around 35% and 60% respectively. Metric 3.2.4 had 2 sub-rates (appropriate and inappropriate imaging) from DY 12 to DY 14, but had trending breaks and only appropriate imaging was reported in DY 15. From DY 12 to DY 14 DPHs showed an intended increase of 33% in appropriate imaging, and a matching intended 33% decrease in inappropriate imaging. Similarly, DMPHs showed an increase of 24% in appropriate imaging and a 24% decrease in inappropriate imaging. In DY 15 the metric performance thresholds were changed due to COVID.

Metric 3.2.1 – Don't Do Imaging for Uncomplicated Headaches

Metric 3.2.1 measured the proportion of patients in the Metric 3.1 population with an outpatient diagnosis of headache that received a Computed Tomography (CT) or Magnetic Resonance Imaging (MRI) related procedure within 30 days of the index case diagnosis. Hospitals were expected to apply the Choosing Wisely recommendations, developed by a national initiative of the American Board of Internal Medicine Foundation (ABIM) to reduce unnecessary and inappropriate ordering of tests. In DY 14 the metric was renamed to clarify that lower rates indicate potentially more appropriate treatment (*don't do* imaging for *uncomplicated* headaches). No data was reported for DY 15 because this metric was retired after DY 14. Previous results for this metric are available in the Preliminary Summative Report; trends did not decrease for DPHs and did decrease for DMPHs.

Metric 3.2.2 – Appropriate Emergency Department Utilization of CT for Pulmonary Embolism

Metric 3.2.2 measured the percentage of emergency department visits of patients with either 1) a CT pulmonary angiogram who had either moderate or high clinical probability for pulmonary embolism, or 2) a positive result or elevated D-dimer result. This metric was designed to promote appropriate ordering of CT pulmonary angiography based on pre-test conditions. The denominator includes patients in the Project 3.2 target population for all emergency department visits during which patients aged 18 or older had a CT pulmonary angiogram (CTPA) ordered by an emergency care provider, regardless of discharge disposition. All hospital types reported an increase in this rate as intended. Changes in average achievement rates during PRIME are shown in Exhibit 265.

Exhibit 265: PRIME Hospital-Reported Appropriate Emergency Department Utilization of CT for Pulmonary Embolism Rates for Metric 3.2.2

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Total	60.25%	71.98%	91.28%	95.84%	35.59%	Yes	94.30%
UC	96.76%	84.08%	93.01%	97.99%	1.22%	Yes	97.81%
County	40.42%	56.10%	88.98%	93.00%	52.58%	Yes	89.34%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Non-CAH	---	23.38%	55.50%	81.37%	57.99%	Yes	87.80%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance. ---: DMPHs did not report data in DY 11.

Metric 3.2.3 – Use of Imaging Studies for Low Back Pain

Metric 3.2.3 measured the proportion of patients in the Project 3.2 Target Population 18-50 years of age with a diagnosis of uncomplicated lower back pain during either an outpatient or emergency department visit that did not have an imaging study conducted within 28 days of the diagnosis. Hospitals were intended to reduce unnecessary imaging for lower back pain. This metric was reported as an inverted rate with higher rates indicating improved performance. Non-CAH DPMHs were the only hospital type to report an increase in rates as intended. Changes in average achievement rates during PRIME are shown in Exhibit 266.

Exhibit 266: PRIME Hospital-Reported Imaging Studies for Low Back Pain Rates for Metric 3.2.3

DPH	DY 11 P4R	DY 12 P4P	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
Total	86.63%	88.35%	90.32%	82.22%	-4.41%	No	74.86%
UC	88.72%	90.28%	87.93%	69.71%	-19.01%	No	71.81%
County	86.15%	87.81%	90.91%	84.66%	-1.49%	No	75.59%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Non-CAH	---	39.58%	75.45%	80.95%	41.37%	Yes	81.61%

Source: UCLA analysis of the hospital-reported data, February to June 2021.

Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance. ---: DMPHs did not report data in DY 11.

Metric 3.2.4 – Use of Imaging Studies for Low Back Pain (Anytime): Appropriate and Inappropriate Imaging

Metric 3.2.4 measured the proportion of patients who received an imaging study with a principal diagnosis of low back pain (LBP), either appropriately (with clinical red flags present at any time in the patient's medical history) or inappropriately (with no documentation of clinical red flags). Hospitals were intended to reduce inappropriate imaging and promote appropriate imaging for lower back pain by applying clinically appropriate indications for imaging. This is an innovative metric which includes a definition of "red flags" while 3.2.3 (a HEDIS metric) does not.

The metric definition changed during PRIME. In DY 11 the metric had 3 stratified levels which can be found in the Interim Report. From DY 12 to DY 14 the metric had 2 levels with the following sub-rates; Rate #1: Appropriate Imaging for LBP and Rate #2: Inappropriate Imaging for LBP. PRIME policy letters (PPL 19-002 and PPL-19-003) were issued regarding the trending-break. Results for inappropriate imaging for DY 12 to DY 14 can be seen in the Preliminary Summative Report.

In DY 15 the metric was changed to only measure appropriate use of imaging for patients with low back pain. Hospitals reported 3 rates for appropriate imaging; an overall metric which measured appropriate use of imaging for patients with low back pain, sub-metric #1 which measured appropriate use of plain x-ray for low back pain, and sub-metric #2 which measured appropriate use of advanced imaging for low back pain. Hospital-reported data for the sub-metrics was not consistently available to assess whether there were shifts in the rates, therefore only the overall rate was reported for DY 15. Changes in average achievement rates during PRIME are shown in Exhibit 267.

Exhibit 267: PRIME Hospital-Reported Appropriate Imaging for Low Back Pain Overall Rates for Metric 3.2.4*

DPH	DY 12 P4R	DY 13 P4R	DY 14 P4P	Change from DY 12 to DY 14	Increased as Intended	DY 15
Total	27.40%	56.27%	60.57%	33.17%	Yes	81.13%
UC	8.24%	53.92%	51.87%	43.63%	Yes	79.89%
County	43.05%	59.22%	68.46%	25.41%	Yes	82.46%
DMPH	**DY 12 P4R**	**DY 13 P4R**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Non-CAH	22.69%	20.21%	46.78%	24.09%	Yes	51.42%

Source: UCLA analysis of the hospital-reported data, February to June 2021.

Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance. Denotes innovative metric. This metric was analyzed using the DY 14 definition in which the denominator consisted of patients who received a diagnosis of lower back pain and received an imaging study.*

Project 3.3. Resource Stewardship: Therapies Involving High-Cost Pharmaceuticals

Project Overview and Summary of Key Findings

Project 3.3 was designed to promote resource stewardship to reduce costs and move toward efficient use of high-cost medications or moderate-cost medications with high prescribing volume. Participating PRIME hospitals strove to develop robust resource stewardship programs. This was to be accomplished through decision analysis and increased use of decision support mechanisms that provide the impact of high-cost pharmaceuticals on the hospital population in terms of both outcomes and efficient use of available resources to guide clinician use of targeted therapies involving high-cost medications. By establishing multidisciplinary teams of experts with committed time to monitor and contain pharmaceuticals costs and investing in resource stewardship, the project aimed at yielding significant savings. Specific objectives included increasing the appropriate use of high-cost pharmaceutical therapies, decreasing inappropriate use of high-cost pharmaceutical therapies, improving use of shared decision making with patients, driving down health-care costs through improved use of targeted mediations and prescribing behaviors, and optimizing 340B discounts, if eligible. Section 340B of the Public Health Service Act requires the discounted sale of outpatient drugs to specific types of health care organizations, such as HRSA-supported health centers and look-alikes, Medicare/Medicaid Disproportionate Share Hospitals, children's hospitals, and other safety net providers. Specific objectives can be found in Attachment Q.

By the end of DY 15, a total of 8 hospitals (7 DPHs and 1 DMPH) continued to participate and report metric performance. This project was not required. Detailed information on DPH and DPMH participation can be found in Appendix B. Project Selection.

The following analyses are restricted to assessment of changes in metric values through DY 14 due to disruptions in care delivery and utilization caused by the COVID-19 pandemic in DY 15. DY 15 metrics values are provided but are not directly comparable with previous years.

Performance of hospitals in Project 3.3 was measured by 4 metrics (Exhibit 268), although in DY 12, the metric that measured documentation of current medication in the medical record in DY 11 was replaced with a more specific metric that measured documentation of medication reconciliation. All metrics reported in DY 14 are innovative.

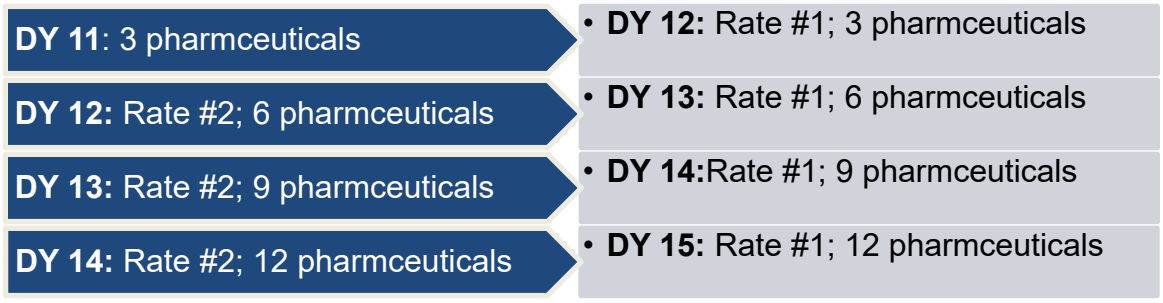
Exhibit 268: PRIME Metrics for Project 3.3

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcomes of Care
Adherence to Medications	3.3.1*	Increase	Process
Documentation of Current Medications in the Medical Record (retired after DY 11)	3.3.2	Increase	Process
High-Cost Pharmaceutical Ordering Protocols	3.3.3*	Increase	Process
Documentation of Medication Reconciliation in the Medical Record for Patients on High-Cost Pharmaceuticals (started in DY 12)	3.3.4*	Increase	Process

Source: PRIME Metrics Specs, DY 15YE
*Notes: NQF: National Quality Forum, SCVHS: Santa Clara Valley Health System, CMS: Centers for Medicare and Medicaid Services. * Denotes innovative metric.*

The metrics for Project 3.3 required hospitals to identify specific pharmaceuticals for tracking and management (Exhibit 269). Hospitals were required to target 3 or more new high-cost pharmaceuticals in each DY (DY 11: 3, DY 12: 6, DY 13: 9, DY 14: 12, and DY 15: 15). The DMPH was not required to select pharmaceuticals in DY 11, but thereafter was on the same ramp-up as the DPHs. At the end of DY 15, hospitals would be monitoring 15 of the top 20 of their high-cost pharmaceuticals. Results are presented by the number of pharmaceuticals that were tracked.

Exhibit 269: PRIME Project 3.3 Reporting of Cumulative and Dual Pharmaceutical Performance Rates



Source: DY 15 PRIME Metrics

Metric 3.3.1 – Adherence to Medications

This metric was designed to measure the percentage of patients at least 18 years of age prescribed high-cost pharmaceuticals who had at least two drug claims or fills for the specified pharmaceuticals and had a Proportion of Days Covered (PDC) of at least 0.8 for the specified pharmaceuticals during the treatment period. Rate #1 was for medications targeted in the prior DY and Rate #2 was for all medications in the current DY. In DY 12, 3 medications were added for a total of 6, DY 13 included 9, DY 14 included 12, and DY 15 included 15. Metric 3.3.1 was P4R from DY 11- DY 13, then transitioned to P4P in DY 14. This was an innovative metric, noted with an asterisk below (Exhibit 270-Exhibit 273).

Exhibit 270: PRIME Hospital-Reported Rate of Patient Adherence to High-Cost Pharmaceuticals for Three Medications in DY 11 and DY 12 for Metric 3.3.1*

DPH	DY 11 P4R	DY 12 P4R Rate 1	Change from DY 11 to DY 12	Increased as Intended
Total	29.64%	75.68%	46.04%	Yes
UC	34.18%	65.26%	31.08%	Yes
County	28.65%	84.35%	55.69%	Yes
DMPH	**DY 11 P4R**	**DY 12 P4R Rate 1**	**Change from DY 11 to DY 12**	**Increased as Intended**
Non-CAH	---	67.86%	---	---

Source and notes below.

Exhibit 271: PRIME Hospital-Reported Rate of Patient Adherence to High-Cost Pharmaceuticals for Six Medications in DY 12 and DY 13 for Metric 3.3.1*

DPH	DY 12 P4R Rate 2	DY 13 P4R Rate 1	Change from DY 12 to DY 13	Increased as Intended
Total	69.21%	58.30%	-10.91%	No
UC	69.96%	66.60%	-3.35%	No
County	68.12%	55.66%	-12.45%	No
DMPH	**DY 12 P4R Rate 2**	**DY 13 P4R Rate 1**	**Change from DY 12 to DY 13**	**Increased as Intended**
Non-CAH	59.41%	31.82%	-27.59%	No

Source and notes below.

Exhibit 272: PRIME Hospital-Reported Rate of Patient Adherence to High-Cost Pharmaceuticals for Nine Medications in DY 13 and DY 14 for Metric 3.3.1*

DPH	DY 13 P4R Rate 2	DY 14 P4P Rate 1	Change from DY 13 to DY 14	Increased as Intended
Total	58.96%	61.58%	2.62%	Yes
UC	64.54%	75.79%	11.25%	Yes
County	54.26%	52.03%	-2.23%	No
DMPH	**DY 13 P4R Rate 2**	**DY 14 P4P Rate 1**	**Change from DY 13 to DY 14**	**Increased as Intended**
Non-CAH	32.63%	49.71%	17.08%	Yes

Source and notes below. DY 13 is P4R, DY 14 is P4P.

Exhibit 273: PRIME Hospital-Reported Rate of Patient Adherence to High-Cost Pharmaceuticals for Twelve Medications in DY 14 and DY 15 for Metric 3.3.1*

DPH	DY 14 P4P Rate 2	DY 15 P4P Rate 1
Total	63.55%	69.32%
UC	76.03%	79.56%
County	55.12%	61.05%
DMPH	**DY 14 P4P Rate 2**	**DY 15 P4P Rate 1**
Non-CAH	51.78%	62.90%

Source: UCLA analysis of the self-reported data, July 2019.
*Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY 11: Rate #1, DY 12: Rate #2, P4R: pay-for-reporting, P4P: pay-for-performance, *Denotes innovative metric.*

Metric 3.3.2 – Documentation of Current Medications in the Medical Record

This metric measured how frequently providers recorded all current medications and supplements, including names, dosages, frequency, and administration route, at each visit in the medical records of adult patients. This measure was intended to promote providers' monitoring of use of pharmaceuticals to reduce the risk of adverse drug events. No trend was observed because the metric was inactivated and replaced by Metric 3.3.4 following DY 11. Analysis can be found in the Interim Report.

Metric 3.3.3 – High-Cost Pharmaceutical Ordering Protocols

This metric measured and tracked the percent of newly prescribed pharmaceuticals in which a specified ordering protocol was used, relative to the number of newly prescribed targeted pharmaceuticals. Ordering protocols needed to list lower cost alternatives and appropriateness of therapy for identified/newly prescribed high-cost pharmaceuticals. Rate #1 was for medications targeted in the prior DY and Rate #2 was for all medications in the current DY. In DY 12, 3 medications were added for a total of 6, DY 13 included 9, DY 14 included 12, and DY 15 included 15. Metric 3.3.1 was P4R from DY 11- DY 13, then transitioned to P4P in DY 14. This metric was a variation on a NQF metric. This is an innovative metric, noted with an asterisk (Exhibit 274-Exhibit 277).

*Exhibit 274: PRIME Hospital-Reported High-Cost Pharmaceutical Ordering Protocols for Three Pharmaceuticals in DY 11 and DY 12 for Metric 3.3.3**

DPH	DY 11 P4R	DY 12 P4R Rate 1	Change from DY 11 to DY 12	Increased as Intended
Total	1.31%	33.55%	32.24%	Yes
UC	0.00%	1.81%	1.81%	Yes
County	2.54%	42.16%	39.62%	Yes
DMPH	**DY 11 P4R**	**DY 12 P4R Rate 1**	**Change from DY 11 to DY 12**	**Increased as Intended**
Non-CAH	---	0.00%	---	---

Source and notes below.

*Exhibit 275: PRIME Hospital-Reported High-Cost Pharmaceutical Ordering Protocols for Six Pharmaceuticals in DY 12 and DY 13 for Metric 3.3.3**

DPH	DY 12 P4R Rate 2	DY 13 P4R Rate 1	Change from DY 12 to DY 13	Increased as Intended
Total	16.23%	47.44%	31.21%	Yes
UC	0.53%	5.25%	4.72%	Yes
County	34.94%	52.32%	17.38%	Yes
DMPH	**DY 12 P4R Rate 2**	**DY 13 P4R Rate 1**	**Change from DY 12 to DY 13**	**Increased as Intended**
Non-CAH	0.00%	2.78%	2.78%	Yes

Source and notes below.

*Exhibit 276: PRIME Hospital-Reported High-Cost Pharmaceutical Ordering Protocols for Nine Pharmaceuticals in DY 13 and DY 14 for Metric 3.3.3**

DPH	DY 13 P4R Rate 2	DY 14 P4P Rate 1	Change from DY 13 to DY 14	Increased as Intended
Total	28.84%	52.68%	23.84%	Yes
UC	3.32%	16.53%	13.21%	Yes
County	37.58%	63.87%	26.29%	Yes
DMPH	DY 13 P4R Rate 2	DY 14 P4P Rate 1	Change from DY 13 to DY 14	Increased as Intended
Non-CAH	2.44%	74.24%	71.80%	Yes

Source and notes below. DY 13 is P4R and DY 14 is P4P

*Exhibit 277: PRIME Hospital-Reported High-Cost Pharmaceutical Ordering Protocols for Twelve Pharmaceuticals in DY 14 and DY15 for Metric 3.3.3**

DPH	DY 14 P4P Rate 2	DY 15 Rate 1
Total	50.68%	53.14%
UC	15.44%	21.43%
County	62.37%	62.68%
DMPH	DY 14 P4P Rate 2	DY 15 P4P Rate 1
Non-CAH	71.79%	94.94%

Source: UCLA analysis of the self-reported data, July 2020.
*Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DPH DY 12: Rate #1, DY 13: Rate #2, DY 11 data was not reported by DMPHs. P4R: pay-for-reporting, P4P: pay-for-performance, * Denotes innovative metric.*

Metric 3.3.4 – Documentation of Medication Reconciliation in the Medical Record for Patients on High-Cost Pharmaceuticals

Starting in DY 12, a new metric was used to measure the percentage of primary care and relevant specialty care visits that had an associated medication reconciliation documented in the medical record for patients 18 years of age or older who were prescribed high-cost pharmaceuticals and had at least two prescription drug claims or fills for specified high-cost pharmaceuticals. Hospitals were intended to increase efficiency of use of high-cost pharmaceuticals. This metric replaced Metric 3.3.2 in DY 12. It is P4R from DY 12 to DY 14. This is an innovative metric, noted with an asterisk (Exhibit 278-Exhibit 280).

*Exhibit 278: PRIME Hospital-Reported Documentation of Medication Reconciliation for Six Pharmaceuticals in DY 12 and DY 13 for Metric 3.3.4**

DPH	DY 12 P4R Rate 2	DY 13 P4R Rate 1	Change from DY 12 to DY 13	Increased as Intended
Total	69.59%	77.96%	8.37%	Yes
UC	80.54%	89.35%	8.81%	Yes
County	42.19%	70.07%	27.88%	Yes
DMPH	**DY 12 P4R Rate 2**	**DY 13 P4R Rate 1**	**Change from DY 12 to DY 13**	**Increased as Intended**
Non-CAH	0.00%	71.06%	71.06%	Yes

Source and notes below.

*Exhibit 279: PRIME Hospital-Reported Documentation of Medication Reconciliation for Nine Pharmaceuticals in DY 13 and DY 14 for Metric 3.3.4**

DPH	DY 13 P4R Rate 2	DY 14 P4R Rate 1	Change from DY 13 to DY 14	Increased as Intended
Total	82.29%	85.10%	2.81%	Yes
UC	90.36%	92.56%	2.20%	Yes
County	68.28%	75.34%	7.06%	Yes
DMPH	**DY 13 P4R Rate 2**	**DY 14 P4R Rate 1**	**Change from DY 13 to DY 14**	**Increased as Intended**
Non-CAH	71.33%	69.62%	-1.72%	No

Source and notes below.

*Exhibit 280: PRIME Hospital-Reported Documentation of Medication Reconciliation for Twelve Pharmaceuticals in DY 14 and DY 15 for Metric 3.3.4**

DPH	DY 14 P4R Rate 2	DY 15 P4R Rate 1
Total	83.42%	85.28%
UC	92.32%	96.20%
County	72.63%	75.25%
DMPH	**DY 14 P4R Rate 2**	**DY 15 P4R Rate 1**
Non-CAH	69.30%	76.96%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
*Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, UC: University of California, CAH: critical access hospital, DY: Demonstration Year. DY 12 to DY 14 are P4R. * Denotes innovative metric.*

Project 3.4 – Resource Stewardship: Blood Products

Project Overview and Summary of Key Findings

Project 3.4 was designed to promote efficiency in management of blood products and transfusion, which are common and costly procedures. This goal was to be achieved by using evidence-based guidelines and decision support tools, developing and streamlining clinical processes, and tracking clinical outcomes to better manage blood products. Further detail on objectives and suggested core components of this project can be found in Attachment Q.

By the end of DY 15, a total of 5 hospitals continued to participate and report metric performance for this optional project. Detailed information on DPH and DPMH participation can be found in Appendix B. Project Selection.

The following analyses are restricted to assessment of changes in metric values through DY 14 due to disruptions in care delivery and utilization caused by the COVID-19 pandemic in DY 15. DY 15 metrics values are provided but are not directly comparable with previous years. Performance of the hospitals in Project 3.4 was measured by the following 5 metrics (Exhibit 281). UCLA categorized 4 as process metrics and 1 as an outcome metric.

Exhibit 281: PRIME Project 3.4 Metric Details

Metric Name	Metric ID Number	Achievement Measured by Increase or Decrease	Care Delivery Process vs. Outcome of Care
ePBM-01 Pre-Op Anemia Screening, Selected Elective Surgical Patients	3.4.1	Increase	Process
ePBM-02 Pre-Op Hemoglobin Level, Selected Elective Surgical Patients (*Metric retired after DY 13)*	3.4.2^	Increase	Process
ePBM-03 Pre-Op Type and Cross-match, Type and Screen, Selected Elective Surgical Patients	3.4.3	Increase	Process
ePBM-04 Initial Transfusion Threshold	3.4.4^	Increase	Process
ePBM-05 Outcome of Patient Blood Management, Selected Elective Surgical Patients (*Metric retired after DY 13)*	3.4.5	Decrease	Outcome

Source: PRIME Metrics Specs, DY 15YE
Notes: ePBM: Electronic Patient Blood Management. ^ Metric included a stratification that was not available in the hospital-reported data analyzed by UCLA.

Overall, DPHs had improvements in the majority of metrics from DY 11 to DY 14, but DMPHs had limited success in the metrics for this project (measured from DY 12).

All hospitals were above 90% for 3.4.2 and 3.4.4; however, an improvement could not be assessed due to the absence of consistent stratified hospital-reported data and a large enough sample size. DPHs improved in 2 metrics (3.4.1, 3.4.3) and had mixed results in 3.4.5. DMPHs did not have an improvement in trends for Metrics 3.4.1, 3.4.3, and 3.4.5. The size of the denominator was a challenge to reporting performance, and multiple hospitals did not meet the 30-patient volume threshold for Metrics 3.4.2 and 3.4.5. In DY 15 the metric performance thresholds were changed due to COVID.

Metric 3.4.1 – Pre-Op Anemia Screening, Selected Elective Surgical Patients

Metric 3.4.1 measured the proportion of selected elective surgical patients in the Project 3.4 Target Population aged 18 years and over with documentation of preoperative anemia screening between 14-45 days before their surgery start date (ePBM-01). Hospitals were intended to increase earlier detection of anemia in order to intervene with effective blood resource management by applying the most appropriate transfusion-sparing strategy and avoid subsequent risks of potential postsurgical complications. DPHs increased their pre-op anemia screening rates as intended while DMPHs did not. Changes in average achievement rates during PRIME are shown in Exhibit 282.

Exhibit 282: PRIME Hospital-Reported Pre-Op Anemia Screening Rates for Metric 3.4.1

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
County	26.05%	25.88%	47.63%	53.55%	27.50%	Yes	47.45%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Non-CAH	---	33.33%	32.75%	28.49%	-4.85%	No	40.70%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance. ---: DMPHs did not report data in DY 11.

Metric 3.4.2 – Pre-Op Hemoglobin Level, Selected Elective Surgical Patients

Metric 3.4.2 measured the number of patients who received a preoperative hemoglobin level laboratory test within 45 days prior to the start of their elective surgical procedure among patients in the Project 3.4 Target Population aged 18 and over who received a whole blood or packed red blood cell transfusion (ePBM-02). Hospitals were intended to increase testing for hemoglobin levels to identify patients with suboptimal hemoglobin levels. Through early detection, hospitals could implement transfusion-sparing blood management strategies, and reduce blood transfusions and adverse surgical outcomes. Achievement in this metric would be measured by increasing the pre-operative testing,

decreasing the number of transfusions that fall outside of the hemoglobin level criteria, and shifting the stratified rates over time. However, hospital-reported data about the hemoglobin level stratification was not consistently available to assess whether there was a shift in the metric. Analysis of this metric can be found in the Interim Report.

Metric 3.4.3 – Pre-Op Type and Cross-match, Type and Screen, Selected Elective Surgical Patients

Metric 3.4.3 measured the proportion of selected elective surgical patients in the Project 3.4 Target Population aged 18 and over who received a preoperative blood type status screening or cross-match within 45 days prior to the start of their surgical procedure (ePBM-03). This metric was intended to encourage hospitals to improve protocols for earlier identification of patients' blood type and subsequently assure availability of safe blood products and reduce the likelihood of an adverse transfusion reaction. DPHs increased their blood type screening and cross-match rates as intended, while DMPHs did not (Exhibit 283).

Exhibit 283: PRIME Hospital-Reported Pre-Op Cross-match and Screening Rates for Metric 3.4.3

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4P	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
County	77.42%	82.44%	87.06%	88.77%	11.35%	Yes	90.20%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4P**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Non-CAH	---	70.73%	53.42%	31.26%	-39.46%	No	59.65%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance. ---: DMPHs did not report data in DY 11.

Metric 3.4.4 – Initial Transfusion Threshold

Metric 3.4.4 measured the proportion of patients in the Project 3.4 Target Population aged 18 and over receiving their first unit of a whole blood or packed red blood cell transfusion who also received a laboratory test that assessed preoperative hemoglobin levels within 45 days prior to the start of their blood transfusion during an inpatient encounter (ePBM-04). Hospitals were intended to administer transfusions after assessing proper hemoglobin levels in order to reduce transfusion-associated complications, including mortality and infection.

The purpose of this measure is to utilize initial transfusion hemoglobin thresholds to shift the proportion of initial units infused for patients with the higher hemoglobin values to those with lower hemoglobin values. Stratified results by hemoglobin level prior to the first transfusion were not available due to the small population size and limited number of hospitals that reported such data each year. All participating hospital types maintained their initial transfusion rates at 100% as intended (Exhibit 284).

Exhibit 284: PRIME Hospital-Reported Initial Transfusion Rates for Metric 3.4.4

DPH	DY 11 P4R	DY 12 P4R	DY 13 P4R	DY 14 P4P	Change from DY 11 to DY 14	Increased as Intended	DY 15
County	100.00%	99.59%	99.50%	100.00%	0.00%	Yes (maintained as intended)	99.47%
DMPH	**DY 11 P4R**	**DY 12 P4R**	**DY 13 P4R**	**DY 14 P4P**	**Change from DY 12 to DY 14**	**Increased as Intended**	**DY 15**
Non-CAH	---	100.00%	99.86%	100.00%	0.00%	Yes (maintained as intended)	99.78%

Source: UCLA analysis of the hospital-reported data, February to June 2021.
Notes: DPH: designated public hospital, DMPH: district and municipal public hospital, CAH: critical access hospital, DY: demonstration year, P4R: pay-for-reporting, P4P: pay-for-performance. ---: DMPHs did not report data in DY 11.

Metric 3.4.5 – Outcome of Patient Blood Management, Selected Elective Surgical Patients

Metric 3.4.5 was designed to determine which patients received a red blood cell transfusion among elective surgical patients in the Project 3.4 Target Population aged 18

years and older who had a preoperative anemia screening (ePBM-05). This metric was intended to encourage hospitals to reduce rates of transfusions of elective surgical patients receiving allogenic or directed donation red blood cell transfusions. No data was reported for DY 14 because this metric was retired after DY 13. Results for this metric are available in the Interim Report.

Appendix H: Abbreviations, References, and Acronyms

PRIME Hospital Abbreviations

PRIME participating hospitals include two major types of hospitals. DPHs include county-owned and operated hospital systems (DPH-county) and University of California hospital systems (DPH-UC; Exhibit 285).

Exhibit 285. Participating Designated Public Hospitals (DPHs)

Designated Public Hospitals	Abbreviated Name	Hospital Type
1. Alameda Health System	Alameda	County
2. Arrowhead Regional Medical Center (San Bernardino County)	Arrowhead	County
3. Contra Costa Health Services	Contra Costa	County
4. Kern Medical Center	Kern Medical	County
5. Los Angeles County Department of Health Services	Los Angeles	County
6. Natividad Medical Center (Monterey County)	Natividad	County
7. Riverside County Regional Medical Center	Riverside	County
8. San Francisco Health Network	San Francisco	County
9. San Joaquin General Hospital	San Joaquin	County
10. San Mateo Medical Center	San Mateo	County
11. Santa Clara Valley Medical Center	Santa Clara	County
12. University of California, Davis Medical Center	UC Davis	UC
13. University of California, Irvine Medical Center	UC Irvine	UC
14. University of California, Los Angeles Hospitals	UC Los Angeles	UC
15. University of California, San Diego Health Systems	UC San Diego	UC
16. University of California, San Francisco Medical Center	UC San Francisco	UC
17. Ventura County Medical Center	Ventura	County

Notes: This includes rehabilitation hospitals, although they may not be implementing PRIME-specific projects. UC: University of California. DPH: Designated Public Hospitals

The second group include the DMPHs, which consist of critical access hospitals (DMPH CAH) and other DMPHs (non-CAH; Exhibit 286). Coalinga, Sonoma West, and Tulare discontinued participation.

Exhibit 286. Participating District and Municipal Hospitals (DMPHs)

District and Municipal Public Hospitals	Abbreviated Name	Hospital Type
1. Bear Valley Community Hospital	Bear Valley	CAH
2. Eastern Plumas Health Care	Eastern Plumas	CAH
3. Healdsburg District Hospital	Healdsburg	CAH
4. Jerold Phelps Community Hospital	Jerold Phelps	CAH
5. John C. Fremont Healthcare District	John C. Fremont	CAH
6. Kern Valley Healthcare District	Kern Valley	CAH
7. Mammoth Hospital	Mammoth	CAH
8. Mayers Memorial Hospital District	Mayers	CAH
9. Mendocino Coast District Hospital	Mendocino	CAH
10. Modoc Medical Center	Modoc	CAH
11. Northern Inyo Hospital	Northern Inyo	CAH
12. Plumas District Hospital	Plumas	CAH
13. San Bernardino Mountains Community Hospital	San Bernardino	CAH
14. Seneca Healthcare District	Seneca	CAH
15. Southern Inyo Hospital	Southern Inyo	CAH
16. Tahoe Forest Hospital District	Tahoe	CAH
17. Trinity Hospital	Trinity	CAH
18. Antelope Valley Hospital	Antelope Valley	Non-CAH
19. Coalinga Regional Medical Center*	Coalinga	Non-CAH
20. El Camino Hospital	El Camino	Non-CAH
21. El Centro Regional Medical Center	El Centro	Non-CAH
22. Hazel Hawkins Memorial Hospital	Hazel Hawkins	Non-CAH
23. Kaweah Delta Health Care District (system)	Kaweah Delta	Non-CAH
24. Lompoc Valley Medical Center	Lompoc Valley	Non-CAH
25. Marin General Hospital	Marin	Non-CAH
26. Oak Valley Hospital District	Oak Valley	Non-CAH
27. Palo Verde Hospital	Palo Verde	Non-CAH
28. Palomar Medical Center (including Pomerado Hospital) (system)	Palomar	Non-CAH
29. Pioneers Memorial Healthcare District	Pioneers	Non-CAH
30. Salinas Valley Memorial Healthcare System	Salinas Valley	Non-CAH
31. San Gorgonio Memorial Hospital	San Gorgonio	Non-CAH
32. Sierra View District Hospital	Sierra View	Non-CAH
33. Sonoma Valley Hospital	Sonoma Valley	Non-CAH
34. Sonoma West Medical Center*	Sonoma West	Non-CAH
35. Tri-City Medical Center	Tri-City	Non-CAH
36. Tulare Regional Medical Center *	Tulare	Non-CAH
37. Washington Hospital Healthcare System	Washington	Non-CAH

*Notes: * indicates the hospital is no longer participating in PRIME due to closure.*

Exhibit 287 indicates the abbreviated project names utilized in this report.

Exhibit 287. PRIME Domains, Project Names, and Abbreviated Name

Domain:	Number	Full Name	Abbreviated Name	Required for DPHs
1: Outpatient Delivery System Transformation & Prevention	1.1	Integration of Behavioral Health & Primary Care	Behavioral Health Integration	Yes
	1.2	Ambulatory Care Redesign: Primary Care	Primary Care Redesign	Yes
	1.3	Ambulatory Care Redesign: Specialty Care	Specialty Care Redesign	Yes
	1.4	Patient Safety in the Ambulatory Setting	Patient Safety	No
	1.5	Million Hearts® Initiative	Million Hearts	No
	1.6	Cancer Screening & Follow-Up	Cancer Screening	No
	1.7	Obesity Prevention & Healthier Foods Initiative	Healthier Foods	No
2: Targeted High Risk Or High Cost Populations	2.1	Improvements in Perinatal Care	Perinatal Care	Yes
	2.2	Care Transitions: Integration of Post-Acute Care	Care Transitions	Yes
	2.3	Complete Care Management for	CCM for High Risk Populations	Yes

Domain:	Number	Full Name	Abbreviated Name	Required for DPHs
		High-Risk Medical Populations		
	2.4	Integrated Health Home for Foster Children	Foster Children	No
	2.5	Transition to Integrated Care: Post Incarceration	Post Incarceration	No
	2.6	Chronic Non-Malignant Pain Management	Pain Management	No
	2.7	Comprehensive Advanced Illness Planning & Care	Advance Care Planning	No
3: Resource Utilization Efficiencies	3.1	Antibiotic Stewardship	Antibiotic Stewardship	No
	3.2	Resource Stewardship: High-Cost Imaging	High Cost Imaging	No
	3.3	Resource Stewardship: Therapies Inv. High-Cost Pharmaceuticals	High Cost Pharmaceuticals	No
	3.4	Resource Stewardship: Blood Products	Blood Products	No

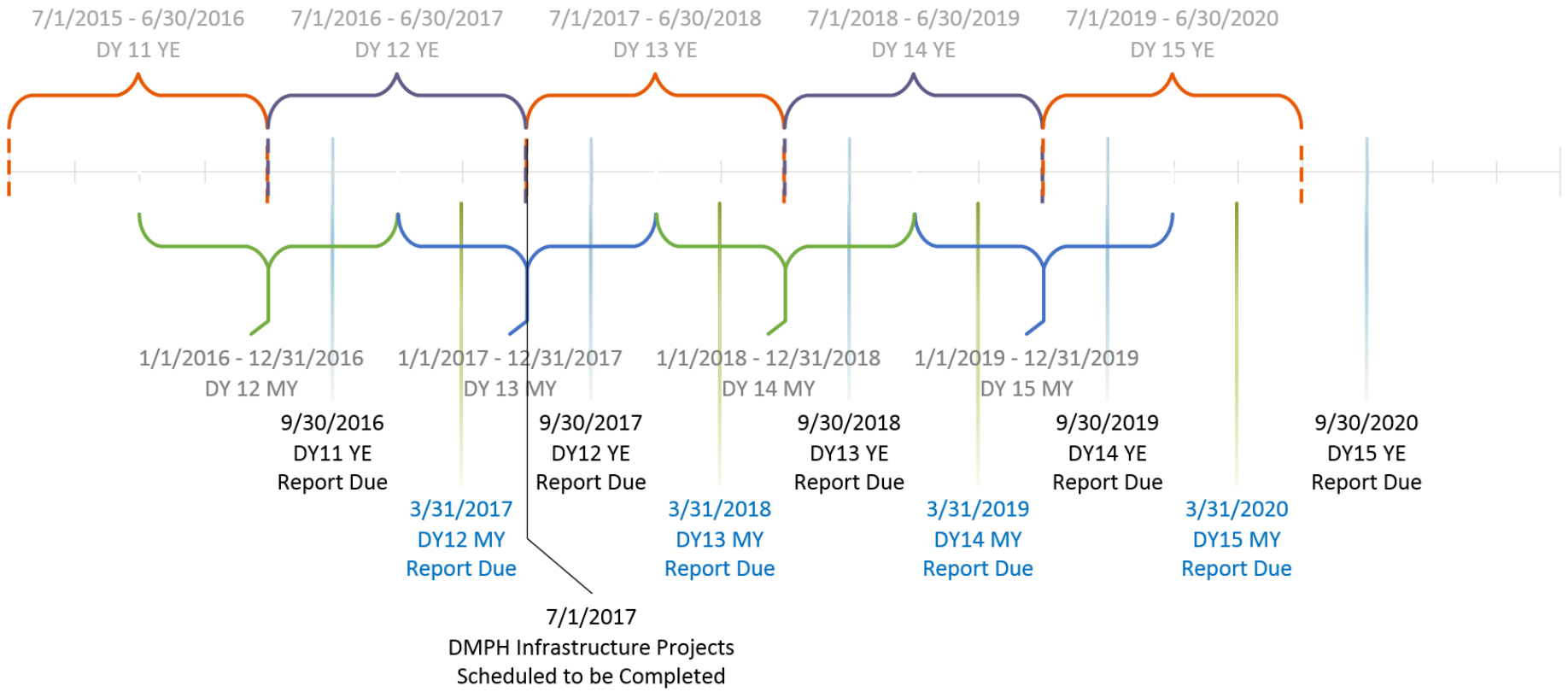
Glossary and Key Terms

Exhibit 288: Glossary and Key Terms

Term	Acronym
10th revision of the International Statistical Classification of Diseases and Related Health Problems	ICD-10
Achievement Value	AV
Agency for Healthcare Research and Quality	AHRQ
alternative payment models	APMs
Behavioral Health	BH
California Association of Public Hospitals and Health Systems	CAPH
California Health Care Safety Net Institute	SNI
California Maternal Quality Care Collaborative	CMQCC
California Office of Statewide Health Planning and Development	OSHPD
Centers for Medicare & Medicaid Services	CMS
Cesarean Birth	CB
Chronic Illness and Disability Payment System	CDPS
Complex Care Management	CCM
Consumer Assessment of Healthcare Providers and Systems (Provider Rating)	CAHPS or H-CAHPS
Critical Access Hospitals	CAH
Delivery System Reform Incentive Payment	DSRIP
Demonstration Year (See Exhibit 289 for schedule)	DY
Department of Health Care Services	DHCS
Designated Public Hospitals	DPHs
Difference-in-Difference	DD
District Hospital Leadership Forum	DHLF
District/Municipal Public Hospitals	DMPHs
Electronic health record	EHR
Emergency Department	ED
California Department of Health Care Access and Information (formerly OSHPD)	HCAI
Healthcare Effectiveness Data and Information Set	HEDIS
Managed care plans	MCP
Medi-Cal Management Information System/Decision Support System	MIS/DSS
National Committee for Quality Assurance	NCQA
Patient-Centered Medical Home	PCMH
Pay for Performance	P4P
Pay for Reporting	P4R
Prevention Quality Indicators	PQIs
PRIME Funding Mechanics	Attachment II

Term	Acronym
PRIME Policy Letter	PPL
PRIME Projects and Metrics Protocol	Attachment Q
Public Hospital Redesign and Incentives in Medi-Cal	PRIME
Quality improvement	QI
Screening, Brief Intervention and Referral to Treatment for Alcohol and Drug Misuse	SBIRT
Special Terms & Conditions	STC
UCLA Center for Health Policy Research	UCLA
University of California	UC

Exhibit 289. Timeline of Demonstration Years (DYs) and Hospital Reported Data



Notes. DY: demonstration year; MY: mid-year; YE: year end.

References

California Department of Health Care Services.

- Medi-Cal 2020 Waiver Special Terms & Conditions (STCs)
  - CMS Approval of PRIME Protocols
  - Attachment D - Participating PRIME Entities
  - Attachment Q - PRIME Projects and Metrics Protocol
  - COVID-19 Flexibilities for PRIME CMS Approval Letter
  - Attachment II - PRIME Program Funding and Mechanics Protocol (Amended due to COVID-19)

- PRIME 5-Year Project Plans
  - 5-Year Plan Prime Project Selections
  - Approved 5-Year Project Plans

- PRIME Evaluation Design
  - Cover Letter to CMS
  - Final Evaluation Design | CMS Approval Letter
  - PRIME Interim Evaluation Report
  - PRIME Preliminary Summative Evaluation

California Hospital Association. Critical Access Hospitals.

California Department of Health Care Access and Information (HCAI), formerly the Office of Statewide Health Planning and Development (Healthcare Utilization. Inpatient Discharges)

PRIME Reporting Manual: DY15 Year End Reporting (not publically available, links to SNI, which managed distribution).