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EXECUTIVE SUMMARY

This report examines the extent to which managed care organizations (MCOs) that serve Medicaid beneficiaries are promoting effective management, control and prevention of sexually transmitted diseases (STDs) among their enrollees—and whether these organizations’ policies correspond with the actual practices of the primary care providers in their networks.

In 1996 alone, 15.3 million new STD cases were reported in the United States, and the prevalence of these infections is even higher due to the accumulation of viral non-treatable STD cases. Beyond the suffering caused directly by a particular disease, STDs can lead to infertility, pregnancy complications, cancer, and a greater susceptibility to HIV infection, among other complications. The advent and dramatic growth of Medicaid managed care plans increases the importance of MCOs’ policies and programs to combat STDs, particularly since the Medicaid population of mostly low-income women and children includes a large proportion of individuals who are considered at higher risk for STDs.

For this report, we focused on MCOs that serve Medicaid beneficiaries in metropolitan areas with a high prevalence of STDs, and looked at the extent to which STD practice guidelines are promoted by MCOs and by their contracted medical groups (CMGs) and used by the CMGs’ affiliated primary care providers (PCPs). We employed a systematic sampling method to select MCOs in seven large U.S. cities that had both high rates of reported STD cases and large percentages of Medicaid beneficiaries enrolled in managed care. These cities included: Baltimore, MD; Charlotte, NC; Dayton, OH; Louisville, KY; Memphis, TN; Norfolk, VA; and Oklahoma City, OK. Interviews were conducted with 21 MCO medical directors, 33 CMG medical directors, and 50 PCPs.

The following guidelines and practice protocols, drafted by the research team and reviewed by an expert advisory panel formed for this study, were used to measure the performance of MCOs, CMGs, and PCPs in the delivery of STD care to the Medicaid managed care population:

- Take a sexual history on all new patients during first non-emergent visit.
- Provide preventive counseling while taking the sexual history.
- Make condoms available without charge for patients in the provider’s office.
- Screen sexually active adolescents annually.
- Presumptively treat chlamydia in the presence of gonorrhea.
- Use single-dose therapies (azithromycin) for chlamydia
- Treat minors without parental/guardian consent.
- Advise infected patients to notify partners and urge testing.
- Alert the public health department to notify partners.
- Test and treat partners regardless of membership or reimbursement.

We also examined whether MCOs and CMGs provided, promoted and monitored adherence to STD treatment guidelines and provided PCP training; and whether MCOs established reimbursement relationships with outside providers and collaborated with the local health department on STD control efforts—all of which are components of effective STD control.

FINDINGS

Clinical Policies of MCOs, CMGs, and PCPs

- Fifty-three percent of MCOs and 73% of CMGs recommended that primary care providers take routine sexual histories on new patients; 68% of PCPs reported doing so. Nearly all (98%) PCPs reported providing preventive counseling while taking sexual histories—a practice actively recommended by 82% of CMGs and 57% of MCOs.
- Only 14% of MCOs and 39% of CMGs recommended that free condom samples be made available in the provider’s office – a practice followed by 56% of PCPs.
- Fifteen percent of MCOs and 42% of CMGs recommended chlamydia screening for sexually active adolescents—and only 55% of primary care providers reported annual screening of sexually active adolescent patients.
- Despite the recognized co-morbidity between chlamydia and gonorrhea, only 15% of MCOs recommended presumptive chlamydia treatment in the presence of gonorrhea. By contrast, 75% of CMGs actively recommended the procedure to their providers, and 94% of PCPs said they routinely treated gonorrhea-infected patients for chlamydia.
- MCOs were less likely than CMGs to recommend use of single-dose therapy by primary care providers, 37% vs. 69%. The percentage of PCPs who reported using single-dose therapy (76%) was higher than the percentages of MCOs and CMGs that recommended it.
- More MCOs than CMGs recommended protecting the confidentiality of minors (80% vs. 70%). More than three-fourths (78%) of primary care providers said they treated minors for chlamydia or gonorrhea without parental/guardian knowledge.
- Only one-third of MCOs formally recommended that PCPs encourage STD-infected patients to urge their partners to get tested. Far more CMGs recommended the procedure as official policy (91%), and nearly all PCPs said they encouraged patients to notify partners. About half (52%) of the surveyed MCOs and 77% of the CMGs recommended that PCPs contact the local health department for partner notification – a practice followed routinely by 64% of PCPs.
- Only 10% of MCOs but 55% of CMGs recommended that testing and treatment be offered to infected partners of patients not enrolled in the MCO.

STD Guideline and Training Development

- Thirty-five percent of MCOs and 81% of CMGs had developed or adapted clinical guidelines covering STD management. Among MCOs and CMGs that provided guidelines for STD treatment, 15% of MCOs and 36% of CMGs monitored practitioners’

adherence to them. Only 10% of MCOs and 48% of CMGs said they offered primary care providers continuing medical education on STD topics. Overall, 62% of MCOs had neither STD guidelines nor training for PCPs.

Collaborations Between MCOs and Other Organizations

- Sixty-two percent of MCOs reimbursed out-of-plan providers who saw their Medicaid patients for STD services.
- Less than half of MCOs shared patient information (38%) or epidemiological data (42%) with the local health department.

Consistency in PCPs' Practices Within MCOs and CMGs

- Only three out of the 10 clinical practice guidelines and protocols were consistently followed by PCPs within MCOs and CMGs.
- Consistency in PCP-conducted STD clinical practices within an MCO was greatest when the MCO recommended: provision of preventive counseling during the taking of sexual histories, advising infected patients to notify partners and have them get tested, screening sexually active adolescents, and using single-dose therapies for chlamydia.
- Compliance with the MCO recommendations was less consistent for: presumptive treatment of chlamydia, treatment of minors without parental consent, and notifying the public health department to do partner notification.
- The association between CMG recommendation and PCP compliance was greater than that observed within MCOs and PCPs, with larger proportions of CMGs recommending various practices and larger proportions of affiliated PCPs complying. The consistency in CMG recommendation and PCP-conducted STD clinical practice was greatest for taking sexual history of new patients and for providing preventive counseling during the taking of sexual histories.

CONCLUSIONS AND POLICY RECOMMENDATIONS

MCOs' and CMGs' reasons for not recommending clinical practices or developing treatment guidelines included economics, legal liabilities and conflicts, religious persuasion and beliefs, PCP autonomy, and organizational priorities. Low organizational priority seems to be the biggest culprit. MCOs may not perceive STD care as a high-cost service, particularly since Medicaid enrollees are likely to have a high turnover rate and MCOs may not reap the benefits of prevention and early treatment.

MCOs are reluctant to reimburse STD care delivered elsewhere because their ability to control utilization is severely reduced. Simultaneously, lack of incentives to share information and expertise with local health departments may be the underlying reason for the underdeveloped collaborative relationships.

The inconsistencies in PCP practices are a barrier to providing uniform high-quality care to Medicaid managed care patients. In the absence of monitoring, increased PCP compliance can be achieved through other mechanisms. To ensure adequate and consistent STD care for their

Medicaid patients, MCOs must be more actively involved in providing resources and guidance to their PCPs.

Delivery of STD care to Medicaid managed care patients can be promoted and improved at the MCO and state levels as highlighted by the following recommendations:

Recommendations for MCOs

- Adopt clinical protocols/guidelines to standardize STD care. Communicate these guidelines to CMGs and PCPs through training programs and monitoring of their proper application.
- Reimburse STD practices such as routine screenings for sexually active adolescents and other high-risk groups, single-dose therapy for chlamydia, and testing and treatment of non-plan partners. The costs of providing these services should be carefully weighed against the expense of treating re-infections and complications resulting from the continued presence of the disease. Stability in the Medicaid managed care market will increase the length of enrollment and the incentives to promote early and effective treatment.
- Establish reimbursement relationships with out-of-plan STD service providers. Denial of payment to outside providers can additionally restrict access to STD care and reduce the opportunity for early treatment. Refusing payment to these providers can lead to much higher costs to the MCO, as sicker patients will require more advanced and costly care.
- Establish feedback mechanisms for CMGs and PCPs to share their STD expertise and insight with MCOs and their peers.

Recommendations for State Health Departments and Medicaid Programs

- Consider legally binding initiatives to promote desirable standards of STD care. Certain STD practices (ensuring minor patient confidentiality, reporting STD cases to the local health department) are required by some states and have proven to be an effective incentive for MCO compliance.
- Mandate that standards of STD management and care be explicitly stated in contractual agreements with Medicaid MCOs. Provide an adequate capitation rate to cover the additional costs of providing care required by such standards.

INTRODUCTION

Sexually transmitted diseases (STDs) are among the most common infectious diseases in the United States, though most Americans do not realize the extent of the epidemic. In 1996 alone, 15.3 million new STD cases were reported in the United States, including 5.5 million cases of human papilloma virus (HPV), 5 million of trichomoniasis, 3 million of chlamydia, 1 million of herpes, 650,000 of gonorrhea, and 70,000 of syphilis. But the prevalence of these infections is even higher due to the accumulation of viral non-treatable STD cases (Alexander, Cates, Herndon, and Ratcliffe, 1998). Moreover, the degree of human suffering from STDs is not limited to the disease alone, but also includes complications such as infertility, pregnancy complications, cancer, and a greater susceptibility to HIV infection (Cates, Joesoef and Goldman, 1993; Koutsky et al., 1992; Marchbanks, Annegers, Coulam, Strathy and Kurland, 1988; Wasserheit, 1992; Westrom, Joesoef, Reynolds, Hagdu and Thompson, 1992). The need for an increasing awareness of the widespread and severe consequences of untreated non-HIV sexually transmitted diseases (including chlamydia and gonorrhea) was highlighted in the landmark 1997 Institute of Medicine report *The Hidden Epidemic: Confronting Sexually Transmitted Diseases*.

While the risk of certain STDs is high for many Americans, adolescents, women, infants, and the poor are at higher risk for many STDs due to a combination of biological, social, behavioral, and financial factors. Complications of STDs are greater and more frequent among women than men (Wasserheit and Holmes, 1992). The efficiency of transmission from males to females, coupled with the asymptomatic nature of STDs in women, often results in delayed detection, diagnosis and treatment, which can lead to severe complications from STDs.

Compared with older adults, adolescents (10- to 19-year-olds) and young adults (20- to 24-year olds) are at higher risk for acquiring STDs for a number of reasons: they may be more likely to have multiple sexual partners rather than a single long-term relationship; they may be more likely to engage in unprotected intercourse; and they may select partners at higher risk for STDs. Numerous prevalence studies in different clinic populations have shown that sexually active adolescents have high rates of chlamydial infection (CDC, 1995). Approximately one in four sexually active adolescents will develop a sexually transmitted disease.

Surveillance data show higher rates of STDs among some minority racial/ethnic groups compared with rates of whites. Although there are no known biologic reasons to explain why racial or ethnic factors alone should alter STD risk, race and ethnicity in the United States serve as risk markers that correlate with other more fundamental determinants of health status, such as socioeconomic status and access to quality health care, as well as reflecting race-related reporting biases (CDC, 1995). African Americans and Hispanic Americans have higher reported rates of chlamydial infection, gonorrhea, and syphilis than do whites (IOM, 1997, p 37). In particular, the 44 million Americans who are uninsured, as well as the millions more who have reduced access to quality health care due to economic and other factors, are, as a result, more vulnerable to the spread of infectious diseases in general (IOM, 1997; Wasserheit and Aral, 1996), and STDs specifically (Anderson, McCormick and Fichtner, 1994; Rice, Roberts, Handsfield and Holmes, 1991).

Medicaid has a uniquely important opportunity to address the problem of STDs, since most Medicaid beneficiaries are low-income women and children (Lafferty, Kimball, Bolan and Handsfield, 1998). In fact, Medicaid is a major payer of periodic health screenings for youths (Gavin, Adams and Hertz, 1998) and the primary payer of prenatal care and family planning services for low-income women (Lafferty et al., 1998). All told, Medicaid pays for the health care for nearly 34 million low-income persons, including nearly 5 million children and millions of women of child-bearing age (HCFA, 1999).

The advent of Medicaid managed care plans, which have grown rapidly in the past decade, increases the potential for Medicaid to address the STD problem. Managed care has the potential to encourage an ongoing relationship between an individual and his or her health care provider, reducing the fragmentation and episodic care that are often characteristic with Medicaid coverage. In addition, managed care plans have opportunities to promote disease prevention by encouraging providers to adhere to professional and public health guidelines. But how well Medicaid managed care promotes STD services and the level of influence such promotion has on provider practice patterns remain unknown.

BACKGROUND

The number of Medicaid beneficiaries enrolled in managed care has grown dramatically, from 2.7 million in 1991 to 16.6 million in 1998—53.6% of all Medicaid beneficiaries (HCFA, 2000a). The number of health plans serving Medicaid patients more than tripled from 166 to 585 between 1993 and 1998; as of 1996, 36% of all U.S. commercial managed care organizations (MCOs) served Medicaid patients (Felt-Lisk and Yang, 1998; HCFA, 2000b).

The pre-payment for health services, a fundamental characteristic of managed care that distinguishes it from more traditional indemnity health insurance, was expected to create incentives for MCOs to focus on preventing disease among enrollees and to encourage a public health approach to disease prevention and health promotion (CDC 1995). In addition, the structure of managed care was believed to facilitate this disease-prevention/health-promotion emphasis because of MCOs' contract relationships with a broad, integrated network of providers, and MCOs' opportunities to use client-tracking technologies to promote improved coordination, better continuity of patient care, and quality of care. It was also assumed that MCOs serving large communities would be motivated to invest in population-based preventive approaches using outreach, education and screening (Delblanco and Smith, 1995). Finally, the contracts between MCOs and government programs and large employers were believed to offer opportunities to hold MCOs accountable for specific performance standards. All of these factors would bode well for focused and effective provision of STD services to the Medicaid population by MCOs that contract with state Medicaid programs.

On the other hand, commercial MCOs have limited experience with the types of patients who constitute the Medicaid population. Compared to MCOs' typical commercial enrollees, Medicaid beneficiaries' younger ages and other characteristics contribute to a higher risk of contracting STDs. MCOs are increasingly believed to give low priority to the management of STDs because STDs are not typically considered a significant problem for MCOs' commercial enrollees (IOM 1997; Gonen, 1999; Cates, Alexander and Cates, 1998).

At the same time, Medicaid beneficiaries are at risk of losing their eligibility due to fluctuations in income, often associated with periods of unemployment. Frequent and often long periods of being uninsured as well as limited access to care in the Medicaid program are believed to generate a substantial amount of pent-up demand for health services. By contrast, the typical commercial managed care enrollee has been a middle-income working individual or family member, with fewer health problems and a more consistent level of access to care.

Due to limited duration of eligibility for many Medicaid beneficiaries, managed care plans experience high turnover rates among their Medicaid managed care enrollees. Just over one-third (38%) of new Medicaid beneficiaries remain covered by Medicaid for one year or longer (Carrasquillo, Himmelstein, Woolhandler and Bor, 1998). Services such as routine screening and health education for short-term enrollees may be under-provided due to lack of an economic incentive to invest in prevention (IOM, 1997). Moreover, effective outreach to enrollees takes focused efforts, which are all the more difficult when enrollees are in a plan for a shorter period of time. Cost-conscious organizations may also elect to use less expensive first-generation tests and treatments for STDs—tests and treatments that, while clinically effective, often result in lower levels of patient compliance because they can be intrusive, uncomfortable, or require lengthy medication regimens (Cates et al., 1998; Burstein et al., 1998; Marrazzo et al., 1997; Shafer et al., 1993; Reitmeijer et al., 1997; Augenbraum et al., 1998; Hillis et al., 1998).

In addition to limited experience with Medicaid enrollees, low levels of concern with STDs in this population, and constrained incentives for plans to invest in STD control, most MCOs are seen as having limited ability to enforce effective STD practice policies among contracted providers. Historically, managed care plans were group- or staff-model HMOs: large organizations with well developed and close relationships with physicians and other providers who were employed by or contracted with their organizations. However, the now-dominant MCO model—the independent practice association, in which a health plan contracts with loosely associated networks of independent physicians—has more constrained organizational ability to positively influence the STD practices of its multiple contracted medical groups (CMGs) and the CMGs' affiliated primary care providers (PCPs) (Eng, 1999, p. 62-63). Variations in the contractual relationships of PCPs with their affiliated medical groups and MCOs result in differences in the level of physician accountability and MCOs' influence over the PCPs' practice patterns. This difficulty may be partly attributable to protocols of CMGs that supersede any directives from contracting MCOs. An overriding STD policy within their contracted medical group would be likely to encourage primary care physicians not to adhere to MCO guidelines, which may be different and even contradictory from one MCO to the next.

While there has been much speculation about the adequacy of STD services for Medicaid managed care enrollees, there has been little research in this area. One study provided some evidence of MCOs' use of STD screening, primary care access, and availability of STD treatment guidelines (Greene, Eng, Mattingly, and Cleary, 1997), and another preliminary study examined the extent to which local health departments and MCOs collaborated on STD issues (Brown and Steinberg, 1997). But no previous studies have determined whether MCOs are promoting more recommended practice guidelines, such as the use of single-dose therapy for chlamydia. And no study has examined the level of congruence among stated MCO policies, CMG policies, and PCP practices.

OBJECTIVES OF THE STUDY

The effectiveness of STD control can be studied by identifying STD management policies and practices of managed care organizations (MCOs), contracted medical groups (CMGs), and primary care practitioners (PCPs), as well as the level of consistency in PCPs' practices within the same MCOs and CMGs. In this report, we will explore the strengths and weaknesses of the evolving Medicaid managed care system in the delivery of STD-related health services. A better understanding of the level of involvement of MCOs in promoting STD prevention and treatment is a crucial first step in developing effective programs to address this persistent epidemic. This study of the provision of STD prevention and control services by Medicaid MCOs had two objectives:

- Determine the extent to which managed care organizations that serve Medicaid beneficiaries are concerned with and are promoting effective management, control and prevention of STDs among their enrollees; and
- Assess whether managed care organizations' policies correspond with the actual practices of the primary care providers in their networks.

METHODS

One objective was to assess the extent of MCOs' focus on STD control and their promotion of effective guidelines and practices by their contract provider groups and practitioners. To meet this objective, this study focused on MCOs that serve Medicaid beneficiaries in metropolitan areas with high prevalence of STDs. Neither the cities nor the MCOs are necessarily representative of the nation or Medicaid MCOs. Rather, we selected MCOs that reflect the variety of such organizations within their cities.

The second objective was to assess the extent to which MCOs have influence over medical groups that contract with them to provide services, and whether physicians and other practitioners who are employed or contracted by the medical group report practices that are consistent with policies of the MCO and the medical group. To meet this objective, we interviewed the medical directors (or surrogates) of medical groups that contract with the MCO, and practitioners who are employed or contracted by the medical groups. These medical groups were also selected to reflect the variety of such organizations; depending on the MCO and the city, they may or may not be representative of medical groups available to Medicaid managed care enrollees.

Data Source and Sample

We selected MCOs in seven large U.S. cities that had both high rates of reported STD cases and large percentages of Medicaid beneficiaries enrolled in managed care. These cities included: Baltimore, MD; Charlotte, NC; Dayton, OH; Louisville, KY; Memphis, TN; Norfolk, VA; and Oklahoma City, OK (Exhibit 1).

Exhibit 1: Medicaid Managed Care Penetration and Rankings of Common Reportable STDs in Cities Selected for the Study

City	Medicaid Managed Care Penetration	Syphilis Ranking	Gonorrhea Ranking	Chlamydia Ranking
Baltimore	90%	1	2	5
Charlotte	57%	12	24	35
Dayton	90%	7	35	61
Louisville	80%	25	25	38
Memphis	100%	2	11	14
Norfolk	70%	4	10	29
Oklahoma	80%	11	14	15

Note: Medicaid managed care penetration rates were obtained from state Medicaid programs. Ranking of STDs was based on rates in selected cities with more than 200,000 population from the *CDC STD Surveillance Guide*, 1996.

We employed a systematic sampling method to reflect the variation among MCOs serving this population. State Medicaid officials provided a list of MCOs serving Medicaid patients in each city. When possible, we selected a 100% Medicaid MCO and a non-100% Medicaid MCO to capture diversity of MCO types. We also considered whether an MCO was affiliated with a university medical center/hospital, the number of years it had served the target area, its size (more than 2,000 Medicaid enrollees vs. less), and whether it was for profit or not for profit.

A total of 24 MCOs were selected for participation across the seven cities—one to three MCOs per city. Each MCO was treated as a three-tier case study, including MCO, CMG, and PCP. Inclusion of an MCO as a case required an interview with the medical director or designated alternate. Interviews were successfully conducted with 21 MCO medical directors while medical directors of three MCOs refused to participate, a participation rate of 88% (21/24). Following the interview with the MCO medical director, interviews were conducted with the medical directors (or their surrogates) in 33 selected CMGs that contract with the MCOs, and with 50 randomly selected PCPs contracted or employed by those CMGs.

Among the MCOs, nearly half enrolled Medicaid recipients exclusively, all were network models, and about three in four contracted with multiple medical groups. Among the CMGs, Medicaid recipients constituted about 32% of enrolled patients. The average CMG contracted with 2.6 MCOs and 16 PCPs. The PCPs reported that about two in five of their patients were Medicaid recipients; PCPs were affiliated with an average of 2.7 MCOs. (A detailed explanation of the study methods is presented in Appendix I.)

STD Management Policies of MCOs, CMGs, and PCPs

One of the main interests of this study was the extent to which STD practice guidelines are promoted by MCOs and used by CMGs and PCPs. Practice guidelines are issued by an

authoritative agency or organization as formal recommendations of the most effective clinical practice or procedure. While MCOs, CMGs, and PCPs have been criticized for not enforcing STD guidelines, they are hampered by the absence of a single “gold standard” for evaluating STD control practices.

We developed a relatively comprehensive list of guidelines and practice protocols as a tool to measure the performance of MCOs, CMGs, and PCPs in the delivery of STD care to the Medicaid managed care population, drawing on the work of the U.S. Preventive Services Task Force of the Centers for Disease Control and Prevention (CDC) and the Institute of Medicine (IOM). These organizations have developed a number of clinical practice protocols aimed at improving STD care and control, ranging from routine assessment and screening to treatment of the patient and management of the patient’s partners. These practice protocols are complemented with specific treatment and provider training guidelines. Additional recommendations are included for MCOs to establish collaborative relationships with other providers of STD services to ensure access for enrollees who use out-of-plan services. Also, collaboration with local health departments is recommended for complete reporting of STD cases and more effective disease control.

The research team developed a draft set of guidelines, which were reviewed by an expert advisory panel formed for this study. (The Technical Advisory Committee is listed in Appendix I.) Respondents were asked about their compliance with guidelines recommended.

Guidelines for Clinical Practice

1. **Take a sexual history on all new patients during first non-emergent visit.** Sexual history taking—an assessment of a patient’s risk factors—provides an excellent opportunity for preventive counseling and prompts further clinical action, such as testing. Recommended sexual history topics include recent sexual activities, history of past STD infections, use of condoms or other barriers, and recreational drug use (U.S. Preventive Services Task Force, 1996).
2. **Provide preventive counseling while taking the sexual history.** Preventive counseling can promote behavioral change that could reduce the risk of future infection. Recommended practices include educating the patient and helping him or her identify high-risk behaviors (e.g., unprotected sex) and develop risk-reducing strategies (e.g., use of barriers) (U.S. Preventive Services Task Force, 1996).
3. **Make condoms available without charge for patients in the provider’s office.** Condoms are an effective barrier method that, when used consistently, can prevent many STDs (CDC, 1998b). Ideally, access to condoms should be as easy and as stigma-free as possible: The patient should be able to obtain condoms free of cost and where STD-related services are provided rather than at an outside pharmacy. The CDC is currently developing sample purchasing specifications for MCOs serving Medicaid patients; these specifications recommend that condoms be made available on demand (George Washington University, 1998).

4. **Screen sexually active adolescents annually.** Screening “allows for the detection of infected persons who would otherwise remain undetected, develop complications of STDs, and transmit the infection to their sex partners” (IOM, 1997, p. 15). Screening is a powerful tool in STD early intervention and involves routine, periodic testing of groups pre-determined by epidemiological research to be at high risk for STDs. Adolescents are a significant high-risk group for STDs because, compared to older adults, “they are more likely to engage in unprotected intercourse, have multiple sex partners, and select partners at higher risk” (CDC, 1998a, p. 45). The U.S. Preventive Services Task Force (1996) recommends routine screenings for chlamydia of all asymptomatic sexually active female adolescents (under 20 years old) and chlamydia screenings for sexually active young males in clinical settings where asymptomatic infection is highly prevalent (e.g., urban adolescent clinics).
5. **Presumptively treat chlamydia in the presence of gonorrhea.** Presumptive treatment helps reduce the need for repeat visits to the provider (Cates et al., 1998), which is particularly important for Medicaid patients, who often have transportation and communication difficulties (Landon, Tobias and Epstein, 1998). Also, presumptive treatment is more cost effective because chlamydia treatment is less expensive than chlamydia testing (CDC, 1998b). The CDC (1998b) therefore recommends that patients treated for gonorrhea also be routinely treated presumptively for chlamydia due to the high prevalence of co-morbidity among these STDs.
6. **Use single-dose therapies (azithromycin) for chlamydia.** Studies suggest that some patients infected with chlamydia have difficulty completing a week-long regimen of a standard course of doxycycline (Augenbraun et al., 1998; Hillis et al., 1998; Katz, Zwickl, Caine, and Jones, 1992). Reasons for discontinuation include uncomfortable side effects from the regimen and persistence of symptoms (Brookoff, 1994). Administration of a single dose of azithromycin can be easily observed by a health staff to ensure compliance (IOM, 1997, p. 293). However, azithromycin can be several times more expensive than doxycycline (Handsefield and Stamm, 1997), a significant problem for MCOs aiming to reduce the cost of prescription medications. Nevertheless, the Institute of Medicine (1997) recommends that “single-dose therapy for bacterial and other curable STDs should be available and reimbursable in all clinical settings where STD clinical care is routinely provided to populations in which treatment compliance or follow-up are problems.”
7. **Treat minors without parental/guardian consent.** The fear of parental notification is a major barrier for adolescents seeking STD care, increasing the likelihood of an infected adolescent developing complications and infecting others. The Institute of Medicine (1997) recommends that all health plans and providers implement policies that “ensure confidentiality of STD and family-planning services provided to adolescents and other individuals” (p. 266).
8. **Advise infected patients to notify partners and urge testing.** Strategies aimed at promoting partner testing and treatment include encouraging patients to notify their sex partners and urge them to get tested, and ensuring that health plans reimburse the provider for testing and treatment of non-member sex partners if needed. The Institute of

Medicine (1997) states that “notifying partners of potential exposure to an STD should be a major responsibility of those persons who are infected” (p. 295), and suggests that providers encourage patients to self-disclose to partners when feasible.

9. **Alert the public health department to notify partners.** For various reasons (such as shame or fear of relationship discord), patients may need assistance in notifying their partners (IOM, 1997). When a patient is diagnosed with an STD, the provider should consider notifying the local public health department to conduct partner notification and testing (IOM, 1997).
10. **Test and treat partners regardless of membership or reimbursement.** Because so many adolescents and low-income adults have no health insurance coverage, sex partners of an infected person may go untreated if they cannot readily obtain free treatment. The IOM (1997) therefore recommends that “all health plans and clinicians should take responsibility for partner treatment and provide STD diagnosis and treatment to sex partners of plan members or others under their care as part of standard clinical practice,” even if a partner is not a plan member and/or cannot pay for the services (p. 297).

Guidelines for Medical Group and MCO Action

1. **Provide, promote and monitor adherence to guidelines for STD treatment.** MCOs and contracted medical groups can support and provide guidance to their primary care physicians to use effective STD control practices. Guidelines may include similar topics to those discussed in clinical practice such as screening, presumptive chlamydia treatment in the presence of gonorrhea, use of single-dose therapies and partner management strategies. MCOs can develop treatment guidelines by using existing, nationally recognized sources such as the Centers for Disease Control and Prevention’s *1998 Guidelines for Treatment of Sexually Transmitted Diseases* and the U.S. Preventive Services Task Force’s (UPSTF) *Guide to Clinical Preventive Services, 2nd Edition* (1996). The effectiveness of guidelines can be ensured by appropriate promotion and monitoring of PCP adherence to them. Adherence can be monitored through chart audits, administrative record review, or other methods.
2. **Provide PCP training.** Existing STD training for managed care-affiliated providers on counseling, diagnosis, and treatment is considered inadequate by some analysts (Cates, Alexander and Cates, 1998) and may promote a general tendency of clinicians to underestimate the significance of STDs (IOM, 1997, p. 288). Provider training should include risk assessment, diagnosis, patient counseling, patient communication skills and treatment of sex partners (IOM, 1997, pp. 288-289). Development of treatment guidelines should be accompanied by provider training in effective management of STDs (IOM, 1997, p. 288).

Development of Beneficial Collaborations Between MCOs and Other Organizations

1. **MCOs should establish reimbursement relationships with outside providers.** Many persons, especially adolescents, prefer to use family planning clinics, community health clinics and local health department clinics rather than their usual providers of general

medical care because they have concerns about confidentiality, competence to treat STDs, or for reasons related to convenience (Celum et al., 1997). However, such providers often face difficulty receiving reimbursement from MCOs for treating these Medicaid enrollees because they are not part of the plan's provider network. As a consequence, these safety net providers often face financial hardships when they treat Medicaid managed care enrollees and some have instituted policies denying care to these patients (Rosenbaum, Shin, Mauskopf, and Zuevekas, 1997). Reimbursement relationships between MCOs and outside providers widen the provider network for Medicaid patients and promote higher utilization. The Institute of Medicine (1997) therefore recommends that MCOs provide payments "for STD services provided to plan enrollees by public sector providers" (p. 287).

- 2. MCOs should collaborate with the local health department on STD control efforts.** MCOs and the local health department can assist each other by sharing epidemiological data to inform STD surveillance—and discreetly sharing patient information in cases in which an MCO Medicaid enrollee seeks STD services out of plan at a health department clinic. The local health department can offer technical assistance or training to MCOs on STD control. The IOM (1997) recommends that MCOs collaborate with local health departments to promote and implement effective STD control and prevention programs.

Consistency in PCPs' Practices Within MCOs and CMGs

Consistent adherence to effective STD management policies by the PCPs within an organization is crucial to the success of STD control efforts. There are several reasons why formal policies of a managed care plan may not be reflected in the practices of a PCP. First, an MCO may formally adopt and report having a policy but do little or nothing to promote it among CMGs or PCPs. For example, a practice may be recommended by the MCO but may cost more than one that is not recommended, and the MCO may not pay the provider for the difference in the cost. Second, PCPs may experience conflicting pressures from different MCOs and CMGs with which they have contracts. A single PCP may have contracts with multiple MCOs, each of which may have different policies, some of which may conflict with one another. Thus, recommended guidelines of one organization may be at odds with contractual agreements of another organization. Some MCO policies and recommended practices may be contrary to a PCP's personal values, or they may present a perceived financial risk.

To understand the degree of consistency of PCP practices in Medicaid managed care, we collected and analyzed data from 15 MCOs, 33 CMGs that contracted with those MCOs, and 50 PCPs who in turn contracted with those CMGs. We examined the extent to which policies of MCOs were consistent with those of CMGs and with practices of PCPs. We focused particular attention on six MCOs with at least three PCPs in our sample, and on eight CMGs with at least three PCPs in our sample. For these MCOs and CMGs, we were able to examine the extent to which PCPs followed the recommended clinical practices and how that was affected by whether the organization recommended those practice guidelines.

FINDINGS

STD MANAGEMENT POLICIES OF MCOs, CMGs, AND PCPs

Clinical Practices

We sought to determine the proportion of MCOs that recommend particular clinical practices, along with the proportion of CMGs that recommend these practices to their PCPs, and the proportion of PCPs that implement them.

About half of MCOs (53%) recommended that primary care providers take routine sexual histories on new patients (Exhibit 2). Respondent CMGs made such a recommendation more frequently (73%), and more than two-thirds of PCPs (68%) reported doing so.

Exhibit 2: Taking a Sexual History on All New Patients During First Non-Emergent Visit

	Yes	No
MCO recommends	53% (10)	47% (9)
CMG recommends	73% (27)	27% (6)
PCP does	68% (34)	32% (16)

A few PCP respondents who did not routinely take sexual histories on all new patients explained why:

“Usually for women, but not for men. There’s a GYN prompt on my assessment form about taking a sexual history.”

“It depends if it is age appropriate or the person is coming in with an STD problem. I don’t do a sexual history on a ‘granny’ who is coming in with a sore throat on her first visit.”

CMGs were more likely than MCOs to actively recommend concurrent preventive counseling (82% vs. 57%; Exhibit 3). Almost all PCPs (98%) reported providing preventive counseling while taking sexual histories.

Exhibit 3: Providing Preventive Counseling While Taking the Sexual History

	Yes	No
MCO recommends	57% (12)	43% (9)
CMG recommends	82% (27)	18% (6)
PCP does	98% (49)	2% (1)

MCOs and CMGs were less willing to recommend free condom sample distribution out of PCPs' offices. Only 14% of MCOs and 39% of CMGs recommended that free condom samples be made available without a prescription (Exhibit 4). These low endorsement rates may have contributed to lower-than-expected rates (56%) of PCP respondents who said they actually distributed condoms out of their offices, an issue to which we will return shortly.

Exhibit 4: Having Free Condoms for Patients in the Provider's Office

	Yes	No
MCO recommends	14% (3)	86% (18)
CMG recommends	39% (13)	61% (20)
PCP does	56% (28)	44% (21)

A number of MCO and CMG respondents chose to elaborate further on this issue. Two MCO respondents stated that enrollees could obtain condoms, but only by receiving a doctor's prescription and presenting it at a pharmacy. "We don't give condoms to physicians to stockpile in their office," explained one MCO medical director. "Members can obtain a script that they can take to a pharmacy for condoms."

Some CMG respondents said their organization's religious policy forbade condom distribution:

"We are a Catholic organization and do not provide free condom samples at PCP offices."

"No, this is a Catholic health center so we don't give out birth control or condoms. According to the Catholic religion, sex is only appropriate for procreation purposes and there is no need for contraception."

By contrast, the director of a family planning clinic acting as a CMG stated: "We have [condoms] in the physicians' offices, the waiting room, the bathrooms, lobby. We have them everywhere."

Chlamydia screening for sexually active adolescents was recommended by only 15% of all MCOs. As with other clinical practices, CMGs were more likely than MCOs to recommend routine screening, though less than half did so (42%; Exhibit 5). Only 55% of primary care providers reported annual screening of adolescent patients.

Exhibit 5: Screening Sexually Active Adolescents Annually for Chlamydia

	Yes	No
MCO recommends	15% (3)	85% (17)
CMG recommends	42% (14)	58% (19)
PCP does	55% (26)	45% (21)

The respondents' comments indicated financial restrictions and provider discretion as reasons for not routinely screening sexually active adolescents. One CMG medical director said: "I would like to do more regular screenings. It's pretty expensive to do screenings – I think the chlamydia and gonorrhea tests are about \$30 apiece ... If there was, like, a \$2 urine test, we could do the screenings regularly." One PCP noted: "We can only provide screenings within our budget constraints so we cannot screen everybody."

Other PCPs noted that MCO financial restrictions prevented them from conducting more routine screenings:

"I've had problems with some insurance companies who don't want to pay for it because they don't see it as a required procedure."

"The managed care organizations won't cover routine testing like chlamydia screening unless the patient is pregnant. We can't usually do screenings normally unless the patient is exhibiting specific symptoms."

On the other hand, some respondents indicated the decision to screen for chlamydia was up to the individual provider. One CMG director said: "I have trouble getting physicians to take screenings for STDs seriously. When an STD is present, sometimes they won't screen for all the STDs." A PCP respondent noted: "I guess I should be screening more universally. I only screen, sometimes, the patients I think are at high risk based on their sexual behaviors."

Only 15% of MCOs recommended presumptive chlamydia treatment (Exhibit 6). By contrast, three-fourths (75%) of CMGs actively recommended the procedure to their providers. Encouragingly, 94% of all PCPs surveyed said they routinely treated patients for chlamydia when they were infected with gonorrhea—reflecting a high awareness of the co-morbidity between the two STDs.

Exhibit 6: Presumptively Treating Chlamydia in the Presence of Gonorrhea

	Yes	No
MCO recommends	15% (3)	85% (17)
CMG recommends	75% (24)	25% (8)
PCP does	94% (47)	6% (3)

The CMGs that did not actively recommend presumptive treatment noted that their organizations were not necessarily opposed to the procedure, but said they felt such clinical decisions were best left to the individual provider's judgment. One medical group manager noted: "We assume that our providers are providing a high standard of care. We feel no need for organizational policies for STD management."

MCOs were less likely than CMGs to recommend use of single-dose therapy by primary care providers (37% vs. 69%; Exhibit 7). The percentage of PCPs who reported using single-dose therapy (76%) was higher than the percentages of MCOs and CMGs that recommended it.

Exhibit 7: Using Single-Dose Therapies (Azithromycin) for Chlamydia

	Yes	No
MCO recommends	37% (7)	63% (12)
CMG recommends	69% (22)	31% (10)
PCP does	76% (38)	24% (11)

The 10 MCO and 12 CMG respondents that did not recommend single-dose therapy for chlamydia were asked why. The most commonly mentioned reason was “provider autonomy.” One MCO medical director said: “The practice of medicine is best left up to PCPs. It is inappropriate to tell the PCP how to practice medicine.” Another MCO medical director noted: “At the MCO level, you wouldn’t be making those decisions. Those would be made at the delivery site.”

By contrast, six of the 11 PCPs who did not use single-dose therapies mentioned restrictions on formularies by the health plan:

“We are part of a [name of MCO] program. We follow a Medicaid formulary that does not cover single-dose therapy.”

“I have problems with the MCOs not paying for azithromycin. I mean, we know these single doses are useful in promoting compliance. But these MCOs won’t cover them because of cost.”

One MCO respondent mentioned concern for the cost of single-dose therapy: “We choose the product with the best effectiveness at the cheapest price. As far as I know, single-dose therapies are more expensive than the current regimens.”

More MCOs than CMGs recommended protecting the confidentiality of minors (80% vs. 70%; Exhibit 8). Some MCO respondents noted that state law required the protection of minor confidentiality, which may help explain the high rates of MCO endorsement of the practice. More than three-fourths (78%) of primary care providers said they treated minors for chlamydia or gonorrhea without parental/guardian knowledge.

Exhibit 8: Treating Minors Without Parental/Guardian Consent

	Yes	No	Don’t Know
MCO recommends	80% (16)	20% (4)	--
CMG recommends	70% (21)	30% (9)	--
PCP does	78% (35)	18% (8)	4% (2)

Some PCPs, however, said that certain MCO billing systems prevented them from always treating in confidence. One provider remarked:

“I won’t notify the parents myself, but some plans the patients belong to will send a bill to the parent and that’s how they would be notified.”

Only one-third of MCOs formally recommended that PCPs encourage STD-infected patients to urge their partners to get tested (Exhibit 9). Far more CMGs recommended the procedure as official policy (91%), and nearly all PCPs said they encouraged patients to notify partners.

Exhibit 9: Advising Infected Patients to Notify Partners and Urge Testing

	Yes	No
MCO recommends	33% (7)	67% (14)
CMG recommends	91% (30)	9% (3)
PCP does	98% (49)	2% (1)

About half (52%) of the surveyed MCOs recommended that PCPs notify the local health department for partner notification (Exhibit 10).

Exhibit 10: Notifying Public Health Department to Do Partner Notification

	Yes	No
MCO recommends	52% (11)	48% (10)
CMG recommends	77% (24)	23% (7)
PCP does	64% (32)	34% (17)

Some MCO respondents said they were required by state law to do so:

“[We are]...obligated by law to notify local health department to do partner notification.”

“Notifying the local health department is mandatory in North Carolina.”

More CMGs than MCOs recommended notifying the public health department (77% vs. 52%; Exhibit 10). Contrary to the preceding clinical practices evaluated, a lower percentage of PCPs (64%) than CMGs indicated they actually notified the local health department on a routine basis. This discrepancy may be due to the extra responsibility and inconvenience of calling the local health department and filling out a reporting form.

Only 10% of MCOs but 55% of CMGs recommended that testing and treatment be offered to infected partners of patients not enrolled in the MCO (Exhibit 11).

Exhibit 11: Testing and Treating Partner Regardless of Membership or Reimbursement

	Yes	No
MCO recommends	10% (2)	90% (19)
CMG recommends	55% (18)	45% (15)
PCP does	62% (31)	38% (19)

Some respondents said legal liability was the reason for not treating non-plan partners:

“... don’t want to face the legal responsibility/liability of treating someone not in the plan,” an MCO respondent said.

A CMG respondent noted: “This has become a big issue for me and some of my partners ... Even though offering treatment is probably the right thing to do, doing so presents a medical-legal problem. Giving the infected patient an extra set of medications for their partner or partners can cause domestic violence, and in other cases allergic reactions to the medication.”

About two-thirds of PCPs (62%) reported that they do see non-plan partners of patients. Some PCPs intimated that they treated non-plan partners despite lack of an official policy from their group:

“Well, sometimes I just give the patient an extra dosage and tell him to give it to their partner.”

“I personally do. It’s a bit risky, but it’s better than having the patient coming in after being re-infected. I think it’s riskier to have a re-infection.”

STD Guideline and Training Development

Both MCOs and CMGs can help promote the most effective STD control practices by primary care practitioners by adopting and promoting practice guidelines, providing training, and monitoring adherence by practitioners.

Only one-third of MCOs had developed or adapted clinical guidelines covering STD management. As with almost all of the clinical practice recommendations, CMGs were far more active than MCOs (81% versus 35%) in developing clinical guidelines for their PCPs (Exhibit 12).

Exhibit 12: Providing and Promoting Guidelines for STD Treatment

	Yes	No
MCO has STD guidelines or protocols	35% (7)	65% (13)
CMG has STD guidelines or protocols	81% (26)	19% (6)

The top three reasons given by both MCOs and CMGs that had no guidelines were: the MCO (or CMG) was new or new to Medicaid and had not gotten around to it; STDs were a low priority in the MCO/CMG; and the MCO/CMG wanted the provider to have autonomy. As is clear from some of the medical directors' statements below, explanations offered may in fact reflect more than one reason:

“We’re a fairly new organization and we haven’t gotten to STDs yet. We have already developed other guidelines regarding conditions that affect more patients such as diabetes and tuberculosis.”

“We haven’t gotten to develop guidelines for STD problems, yet. It is not an important priority for the organization in terms of how much it costs to treat. We are addressing guideline development in the order of costs—like now we’re looking at guidelines for cancer and diabetes.”

“The PCP decides upon STD treatment.”

“It is up to the physicians’ discretion.”

“Treatment decisions are made by primary care providers, not the health plan.”

“It is inappropriate to tell PCPs how to practice medicine ... We do not designate specific ‘clinical pathways’ for our PCPs to follow when treating patients.”

“This organization is an insurance company; we do not tell PCPs how to practice medicine.”

“We’re, in essence, an insurance company. The more we do in terms of policies, the more invasive we become to the providers.”

Among MCOs and CMGs that do have and provide guidelines for STD treatment, 15% of MCOs and 36% of CMGs monitor practitioners’ adherence to them (Exhibit 13).

Exhibit 13: Monitoring Adherence to Guidelines for STD Treatment

	Yes	No
MCO has STD guidelines or protocols AND monitors their use by its primary care providers through chart audits, administrative record review, or some other method	15% (3)	85% (17)
CMG has STD guidelines or protocols AND monitors their use by its primary care providers through chart audits, administrative record review, or some other method	36% (11)	64% (20)

Only 10% of MCOs and about half (48%) of CMG respondents said they offered primary care providers continuing medical education (CME) on STD topics (Exhibit 14). One MCO respondent felt training was unnecessary: “We believe the providers, through their practices, are well sensitized to STD issues.” A CMG respondent said that staff should find their own sources of training. “Our PCPs are encouraged to do it on their own and they are given time off to do it.” Overall, 62% of MCOs had neither STD guidelines nor training for PCPs (data not shown).

Exhibit 14: Providing PCP Training

	Yes	No	Don’t Know
MCO does	10% (2)	90% (18)	--
CMG does	48% (27)	52% (6)	--
PCPs can receive	25% (12)	61% (30)	14% (7)

Only one-fourth of PCPs indicated that they were offered CMEs on STDs from the MCO with which they were affiliated (Exhibit 14); this corresponded to the low percentage of MCO respondents who said their organizations provided training. A notable 14% of PCPs did not know whether CMEs were available through an MCO. One PCP said she probably received notices on training opportunities, but added: “I receive so much mail, I don’t know...unless there’s a 32-cent stamp on the letter, I won’t even take a look at it.”

Development of Beneficial Collaborations Between MCOs and Other Organizations

Close to two-thirds of MCOs (62%) said they reimbursed out-of-plan providers who saw their Medicaid patients for STD services (Exhibit 15). Some MCOs that did not reimburse out-of-plan providers maintained that all STD services for Medicaid patients could be provided in house. Others noted that cost was a factor. One MCO director said: “Reimbursement to...agencies would probably have to be done on a fee-for-service basis, which gets costly.”

**Exhibit 15: MCOs' Establishing Reimbursement Relationships
with Out-of-Plan Providers**

	Yes	No
MCO reimburses out-of-plan providers	62% (13)	38% (8)

Less than half of MCOs shared patient information (38%) or epidemiological data (42%) with the local health department (Exhibit 16).

**Exhibit 16: MCOs' Collaborating with the Local Health Department
on STD Control Efforts**

	Yes	No
MCO shares information from patient files	38 % (8)	62% (13)
MCO shares epidemiological data	42% (9)	58% (12)
MCO receives offer of training or technical assistance from local health department	48% (10)	52% (11)

Some MCO respondents said their organizations had communication problems with their local health department. One said: "One problem is poor communication. After we notify the health department to do partner notification, we receive no follow-up about whether it was actually conducted." Two respondents said their MCOs were getting inferior cooperation from the health department because their organizations—unlike other MCOs—did not have a formal service contract with the local health department.

CONSISTENCY OF PCPs' PRACTICES AND MCOs' AND CMGs' POLICIES

We examined consistency between MCO and CMG recommendations and PCP practice in two ways. First, we selected all MCOs (six) and CMGs (eight) with a minimum of three PCPs each and compared the association between each organizational recommendation and PCP practice. The results of this analysis are displayed in Exhibits 17-20. Next, we selected two MCOs, each affiliated with two CMGs and a minimum of three PCPs, to examine the association between both MCO and CMG recommendation, or absence of, on PCP practice. (The reader is urged to keep in mind that the PCPs are not necessarily representative of all PCPs in each MCO or CMG.) The results of this analysis are displayed in Exhibits 21 and 22.

In the first set of analyses, we found that the consistency in PCP-conducted STD clinical practices within an MCO was greatest when the MCO recommended provision of preventive counseling during the taking of sexual histories (all PCPs reported doing it in three out of three MCOs), advising infected patients to notify partners and have them get tested (all PCPs in both MCOs), screening sexually active adolescents (all PCPs in the one MCO), and using single-dose therapies for chlamydia (all PCPs in the one MCO; Exhibit 17). All PCPs within the MCOs that recommended these practices reported compliance.

Compliance with the MCO recommendations was less consistent with presumptive treatment of chlamydia (some PCPs in the one recommending MCO), treatment of minors without parental consent (all PCPs in one MCO and some PCPs in the remaining two MCOs), and notifying the public health department to do partner notification (some PCPs in three MCOs and all PCPs in one MCO).

Exhibit 17: PCP STD Clinical Practices by Whether Affiliated MCO Recommends Practice

	MCO Recommends				MCO Does Not Recommend			
	Number of MCOs	All PCPs Practice	Some PCPs Practice	No PCP Practices	Number of MCOs	All PCPs Practice	Some PCPs Practice	No PCP Practices
Take a sexual history on all new patients during first non-emergent visit	0/6				6/6	4/6	2/6	
Provide preventive counseling while taking the sexual history	3/6	3/3			3/6	3/3		
Have free condoms for patients in the provider's office	2/6	1/2	1/2		4/6	2/4		2/4
Screen sexually active adolescents annually	1/6	1/1			5/6		3/5	2/5
Presumptively treat chlamydia in the presence of gonorrhea	1/6		1/1		5/6	3/5	1/5	1/5
Use single-dose therapies (azithromycin) for chlamydia	1/6	1/1			5/6	2/5	3/5	
Treat minors without parental/guardian consent	3/6	1/3	2/3		3/6	1/3	2/3	
Advise infected patients to notify partners and urge testing	2/6	2/2			4/6	3/4	1/4	
Notify public health department to do partner notification	4/6		3/4	1/4	2/6	1/2	1/2	
Test and treat partner regardless of membership or reimbursement	1/6		1/6		5/6	2/5	3/5	

Note: Results are based on six MCOs, each with a minimum of three affiliated PCP respondents. Illustrative interpretation: three out of six MCOs recommended preventive counseling to their PCPs and all PCPs in the three MCOs reported this practice.

In the absence of MCO recommendations, complete PCP compliance was rare. The exception was the provision of preventive counseling. This practice did not seem to be

influenced by lack of MCO recommendation since all PCPs reported that they do so even though their MCO did not make such a recommendation—the same consistent pattern found among PCPs in MCOs that did recommend it. However, no other clinical practice demonstrated such consistency. All PCPs in three out of four MCOs reported advising patients to notify partners and urge testing although their MCO did not specifically recommend it, and in the fourth MCO, some PCPs did so. Patterns of PCP implementation of these effective STD clinical practices are clearly weak, although there appears to be a slightly greater lack of reported practice among PCPs in non-recommending MCOs than in MCOs that did recommend these practices.

Exhibit 18: PCP STD Clinical Practices by Whether Affiliated CMG Recommends Practice

	CMG Recommends				CMG Does Not Recommend			
	Number of CMGs	All PCPs Practice	Some PCPs Practice	No PCP Practices	Number of CMGs	All PCPs Practice	Some PCPs Practice	No PCP Practices
Take a sexual history on all new patients during first non-emergent visit	6/8	6/6			2/8		2/2	
Provide preventive counseling while taking the sexual history	6/8	6/6			2/8	2/2		
Have free condoms for patients in the provider’s office	4/8	3/4	1/4		4/8	1/4		3/4
Screen sexually active adolescents annually	4/8	1/4	3/4		4/8		1/4	3/4
Presumptively treat chlamydia in the presence of gonorrhea	6/8	5/6	1/6		2/8	1/2	1/2	
Use single-dose therapies (azithromycin) for chlamydia	6/8	4/6	2/6		2/8		2/2	
Treat minors without parental/guardian consent	5/8	3/5	2/5		3/8	1/3	2/3	
Advise infected patients to notify partners and urge testing	7/8	6/7	1/7		1/8	1/1		
Notify public health department to do partner notification	5/8	1/5	4/5	1/4	3/8	1/3	1/3	1/3
Test and treat partner regardless of membership or reimbursement	5/8	1/5	4/5		3/8	1/3	2/3	

Note: Results are based on eight CMGs, each with a minimum of three affiliated PCP respondents. Illustrative interpretation: six out of eight CMGs recommended presumptive chlamydia treatment to their PCPs and all PCPs in five (out of six) CMGs reported this practice. Some PCPs in one CMG reported this practice.

The association between CMG recommendation and PCP compliance was greater than that observed within MCOs and PCPs, where larger proportions of CMGs recommended various practices and larger proportions of affiliated PCPs complied (Exhibit 18). The consistency in CMG recommendation and PCP-conducted STD clinical practice was greatest for taking sexual history of new patients and for providing preventive counseling during the taking of sexual histories (all PCPs in the six CMGs that recommended it). In the CMGs that did not recommend a particular clinical practice, all interviewed PCPs reported that they provide preventive counseling despite the absence of CMG recommendation, but only some PCPs took a sexual history in the two CMGs that did not specifically recommend doing so. Except for notification of public health departments, no PCPs reported non-compliance with any of these clinical practices when the CMG recommended it. Overall, there appeared to be somewhat more compliance by the PCPs with these clinical practices when the CMG recommended them than when the CMG did not.

The consistencies and inconsistencies in STD clinical practices are summarized in Exhibits 19 and 20. Only three out of the 10 (30%) clinical practices were consistently followed by PCPs within MCOs and CMGs. Among all clinical practices, preventive counseling was practiced by all PCPs regardless of MCO or CMG recommendation. Yet, most other clinical practices seemed to vary with MCO or CMG recommendation, with a stronger association between CMG recommendation and PCP practice. The higher concordance between CMG recommendations and PCP practices suggests that PCPs are more likely to be influenced by CMGs because PCPs are typically contracted with or employed by only one CMG but contracted with multiple MCOs. In some instances, reimbursement for services is handled at the CMG level, which can exert a more direct influence on PCP practice.

**Exhibit 19: STD Clinical Practices Most Consistently Practiced
by PCPs in MCOs and CMGs**

Provide preventive counseling while taking the sexual history
Presumptively treat chlamydia in the presence of gonorrhea
Advise infected patients to notify partners and urge testing

**Exhibit 20: STD Clinical Practices Inconsistently Practiced
by PCPs in MCOs and CMGs**

Take a sexual history on all new patients during first non-emergent visit
Have free condoms for patients in the provider's office
Screen sexually active adolescents annually
Use single-dose therapies (azithromycin) for chlamydia
Notify public health department to do partner notification
Test and treat partner regardless of membership or reimbursement

The common element among practices followed by PCPs appears to be ease of administration. For example, it doesn't take much additional effort for the PCP to counsel patients on prevention of STDs or advising patients to tell their partners to get tested while collecting their sexual history. Similarly, presumptive treatment for chlamydia requires an additional prescription and very little time. By contrast, the other clinical practices require time and effort, may not be reimbursed, cost the organization more than alternative treatment practices, or may be unaffordable to the patient. Some practices, such as distribution of free condoms, may be incompatible with the PCP's or the organization's religious principles.

Examining the association between both MCO and CMG recommendation on PCP practice illustrates that easy-to-perform practices, such as advising patients to notify partners and urge testing, generally are done whether or not an MCO recommends it (see MCO #1, which does recommend it, in Exhibit 21; and MCO #2, which does not, in Exhibit 22).

Exhibit 21: PCP Practice When MCO Recommends Advising Infected Partner to Notify Partner and Urge Testing, by MCO Recommendation and CMG Recommendation

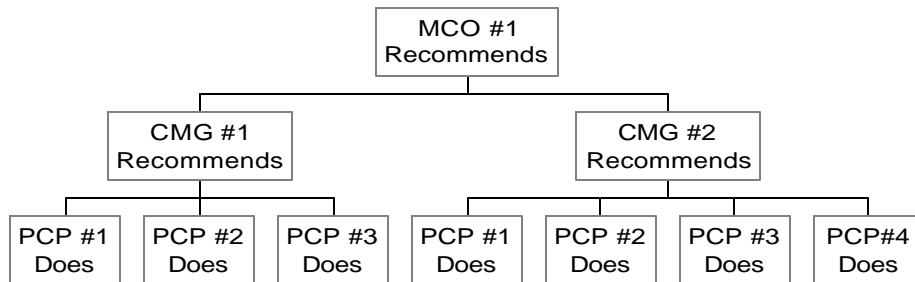
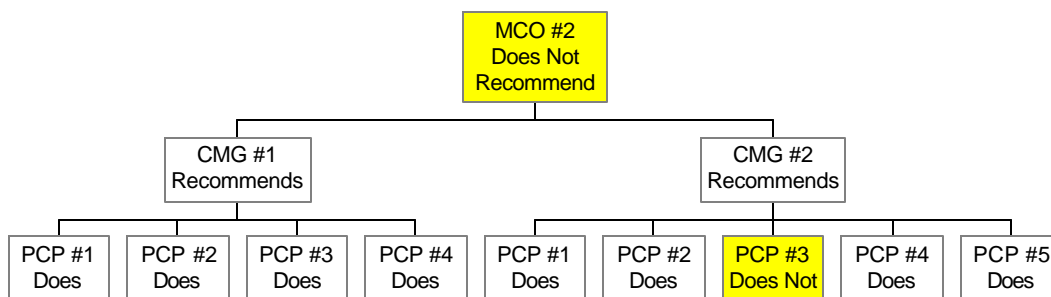


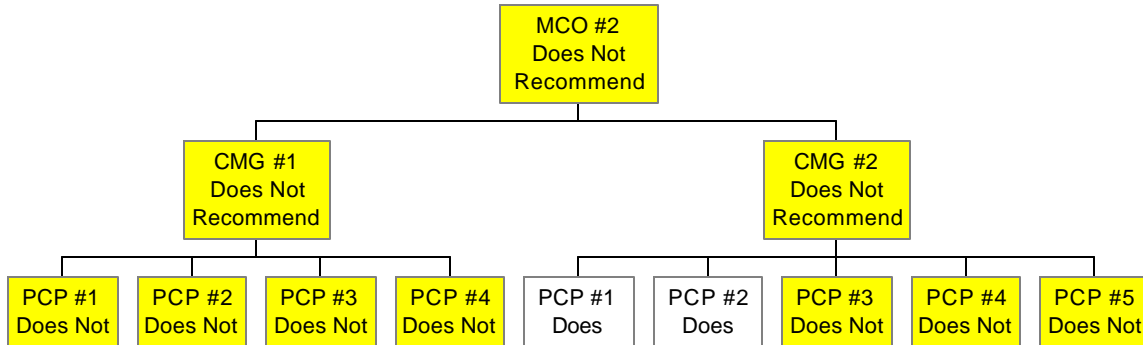
Exhibit 22: PCP Practice When MCO Does Not Recommend Advising Infected Partner to Notify Partner and Urge Testing, by MCO Recommendation and CMG Recommendation



Alternatively, practices that can lead to additional effort and higher costs—for example, more visits, sending reminders for annual checks, lab tests, and prescriptions—are not implemented, or are implemented less consistently, in the absence of recommendations. As is illustrated in Exhibit 23, when neither MCO #2 nor its affiliated CMGs recommend annually screening sexually active adolescents, seven out of nine PCPs do not implement this clinical

practice—perhaps because PCPs would incur additional costs for screening in their capitated practice or some PCPs may find this a difficult topic to discuss with adolescents.

Exhibit 23: PCP Practice When MCO and CMG Do Not Recommend Annual Screening of Sexually Active Adolescents, by MCO Recommendation and CMG Recommendation



The results presented in Exhibits 21, 22, and 23 emphasize the need for explicit STD clinical practices and enforcement of these practices by both MCOs and CMGs. However, neither strategy can be effective unless they are linked to positive incentives and adequate reimbursement to encourage PCP compliance.

CONCLUSIONS

WHAT THE DATA SUGGEST

STD Management Policies of MCOs, CMGs, and PCPs

MCOs' and CMGs' reasons for not recommending clinical practices or developing treatment guidelines included economics, legal liabilities and conflicts, religious persuasion and beliefs, PCP autonomy, and organizational priorities. MCOs' restrictions in distribution of condoms or exclusion of medications from formularies are rooted in economic concerns to limit costs and utilization. Legal concerns may also be added to economic considerations. For example, the uncertainty in receiving reimbursement from non-member partners is a financial consideration in the treatment of partners. However, legal liabilities in treating non-members or reporting of confidential information to health departments are also valid concerns. Similarly, religious beliefs cannot be dismissed. But if the number of organizations and PCPs who do not recommend or support certain clinical practices is few, then this is not a major barrier in the delivery of necessary STD care.

On the other hand, it is harder to defend not recommending clinical practices or treatment guidelines for reasons of PCP autonomy or lack of organizational priority; MCOs and CMGs who follow this reasoning are putting up major barriers to the delivery of needed STD care. PCP autonomy is hardly a consideration in the development and implementation of other MCO disease-management policies. Disease-management policies of specific high-cost diseases such as asthma, diabetes, cancer, and depression are often implemented by commercial and Medicaid MCOs without apparent concerns for physician autonomy. Similarly, exclusion of certain medications from formularies and not authorizing services severely restrict PCP autonomy.

Organizational priority is most likely the reason for lack of STD guidelines and PCP training. MCOs may not perceive STD care as a high-cost service, particularly since Medicaid enrollees are likely to have a high turnover rate and MCOs may not reap the benefits of prevention and early treatment. The costs of spreading STDs and the consequences of prolonged illness may not affect an individual MCO. The difficulties in persuading these organizations to place a higher priority on developing STD guidelines and training PCPs could be alleviated by providing financial incentives.

Lack of adherence to the third essential element in MCOs' effective management of STDs is partially rooted in cost considerations. MCOs are reluctant to reimburse STD care delivered elsewhere because their ability to control utilization is severely reduced. Simultaneously, lack of incentives to share information and expertise with local health departments may be the underlying reason for the underdeveloped collaborative relationships. Disincentives and legal considerations can be alleviated by development of formal relationships with local health departments.

Consistency of PCPs' Practices and MCOs' and CMGs' Policies

The inconsistencies in PCP practices are a barrier to providing uniform high-quality care to Medicaid managed care patients. Getting proper care should not depend mainly on the luck of choosing, or being assigned to, an informed and dedicated PCP in the organization. While STD guideline development was less than desirable, enforcement and monitoring of existing guidelines was also minimal. Increases in administrative costs and effort are likely barriers to monitoring of STD guideline implementation at the MCO level. In the absence of monitoring, increased PCP compliance can be achieved through other mechanisms. MCOs can attempt to eliminate conflicting rules such as recommending single-dose therapy and simultaneously restricting formularies. To ensure adequate and consistent STD care for their Medicaid patients, MCOs must be more actively involved in providing resources and guidance to their PCPs.

POLICY RECOMMENDATIONS

Delivery of STD care to Medicaid managed care patients can be promoted and improved at the MCO and state levels as highlighted by the recommendations listed below.

MCO Recommendations

- Adopt clinical protocols/guidelines to standardize STD care. Communicate these guidelines to CMGs and PCPs through training programs and monitoring of their proper application.

MCOs can develop or adopt explicit practice standards by using existing, publicly available resources such as the U.S. Preventive Services Task Force Guidelines' (USPSTF) *Guide to Clinical Preventive Services: Second Edition (1996)* and the CDC's *1998 Guidelines for Treatment of STDs (1998a)*. Further consultation and assistance can be sought through the CDC and local health departments. Since MCOs and CMGs may both have STD guidelines, efforts should be made to increase compatibility among these organizational policies.

- Reimburse STD practices such as routine screenings for sexually active adolescents and other high-risk groups, single-dose therapy for chlamydia, and testing and treatment of non-plan partners.

The costs of providing these services should be carefully weighed against the expense of treating re-infections and complications resulting from the continued presence of the disease. Stability in the Medicaid managed care market will increase the length of enrollment and the incentives to promote early and effective treatment.

- Establish reimbursement relationships with out-of-plan STD service providers.

Denial of payment to outside providers can additionally restrict access to STD care and reduce the opportunity for early treatment. Refusing payment to these providers can lead to much higher costs to the MCO, as sicker patients will require more advanced and costly care.

- Establish feedback mechanisms for CMGs and PCPs to share their STD expertise and insight with MCOs and their peers.

CMGs and PCPs can be a valuable asset to MCOs' efforts to manage STDs. They can participate in developing and implementing STD clinical guidelines. Interested PCPs can serve as "peer leaders" in their medical groups and as designated MCO trainers and authorities on STD issues.

State Health Department and Medicaid Program Recommendations

- Consider legally binding initiatives to promote desirable standards of STD care.

Certain STD practices (ensuring minor patient confidentiality, reporting STD cases to the local health department) are required by some states and have proven to be an effective incentive for MCO compliance. State Medicaid programs without these requirements should consider introducing such initiatives. Furthermore, states can address MCO and PCP liability concerns by sanctioning the testing and treating of non-member partners.

- Mandate that standards of STD management and care be explicitly stated in contractual agreements with Medicaid MCOs. Mandate the development of collaborative relationships with local health departments to share patient information and expertise. Provide an adequate capitation rate to cover the additional costs of providing care required by such standards.

Medicaid MCOs are generally heavily regulated, and additional mandates and requirements may create undue burden and result in discontinuation of care to Medicaid recipients by these organizations. Financial incentives along with mandates will encourage MCOs to adopt and implement STD guidelines and share information and resources with local public health departments. Cooperation and outreach by local health departments is also essential to the success of such mandates. The problem of available and appropriate contract language is currently being addressed by the CDC, which is developing sample contracts for state Medicaid programs.

Final Comments

We have identified a number of principal themes in STD services for managed Medicaid patients. However, the qualitative nature of this study precludes generalization of our findings to the entire Medicaid managed care system. Follow-up studies with larger representative samples can verify the accuracy of these findings. Alternative studies that corroborate self-reports through use of supporting documentation such as drug formularies and chart reviews will enhance the reliability of our findings.

This study was unique in its particular examination of STD management policies and practices by MCOs that serve Medicaid recipients. We see our findings as a starting point for an important dialogue among MCOs, state Medicaid programs, public health departments, advocacy groups, researchers, and patients. The ultimate goal of containing the STD epidemic and improving access of Medicaid managed care enrollees to STD services can be achieved only by raising awareness, increasing collaboration, and taking joint action.

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APPENDIX II. TECHNICAL NOTES

SAMPLING METHOD

Selecting Cities

We identified Medicaid MCOs in cities with both (1) high rates of common reportable STDs (*CDC STD Surveillance Guide*, 1996) and (2) more than 50% of the Medicaid population enrolled in a capitated managed care arrangement, based on information provided by the state Medicaid programs. The need for effective STD control by these MCOs was particularly important because they served large percentages of Medicaid populations in high STD-rate areas. We selected seven cities: Baltimore, MD; Charlotte, NC; Dayton, OH; Louisville, KY; Memphis, TN; Norfolk, VA; and Oklahoma City, OK (Exhibit 1).

Selecting MCOs, CMGs, and PCPs

State Medicaid officials provided a list of MCOs serving Medicaid patients in each city. We contacted each MCO to collect additional organizational information such as organizational structure, type, history, and Medicaid and non-Medicaid enrollment to help us select the MCOs to be included in the study. When possible, a 100% Medicaid MCO and a non-100% Medicaid MCO were selected to capture diversity of MCO types. The MCOs were also selected on the basis of affiliation with a university medical center/hospital, years of serving the target area, size (more than 2,000 Medicaid enrollees vs. less), and for-profit or not-for-profit status.

The number of MCOs serving the Medicaid population ranged from one to nine in each city, with a total of 32 MCOs in all seven cities. Only 24 were eligible for participation due to mergers (two eligible MCOs merged during the study period and one eligible MCO bought out another), eligible MCOs having too few Medicaid patients or discontinuing participation in Medicaid during the study period, or the researchers being unable to obtain basic information on listed MCOs. Interviews were conducted successfully with a total of 21 MCO medical directors or their designated key informants, yielding a response rate of 88% (21/24). Of the 21 responding MCOs, one to three MCOs per city were selected for a three-tier investigation in which interviews were conducted with the medical directors of CMGs and the PCPs contracted or employed by those CMGs. We used the provider directories of the MCOs selected for the three-tier investigation to choose at least three CMGs that were contracted with the MCO for primary care services. Selection criteria included (1) identification by the MCO as a significant Medicaid provider and/or (2) being a family planning clinic, women's health center, community clinic, or similar organization that was likely to serve populations at high risk for STDs.

A number of CMGs refused to participate in the study. We compensated for this loss by selecting additional MCOs. Of the 56 CMGs contacted, we successfully interviewed 33 (59% response rate), ranging from one to five per MCO.

We randomly selected at least three PCPs within each CMG, using the MCO or the CMG provider directories. Of the 110 PCPs contacted, 50 were interviewed—a 45% response rate. We compensated for the poor response rate of PCPs by interviewing more PCPs per CMG. Consequently, the number of PCPs per CMG varied from one to nine.

Data collection began in October 1998 and ended in June 1999.

MCO respondent characteristics. Of the 21 MCO respondents, 14 were medical directors, six were utilization or quality managers, and one was the Medicaid program manager (Exhibit A1). Thirty-eight percent were female, with a mean age of 48 years. The majority (68%) was white, 26% were African American, 7% categorized themselves as “other” and two respondents refused to answer. Years at the current MCO ranged from less than one year to 10 years, with a mean of three years. Between 16% and 100% of the MCOs’ enrollees were Medicaid recipients, with a mean of 67%. Ten out the 21 MCOs had 100% or near-100% Medicaid enrollees. Nearly three-fourths (73%) contracted with more than 10 CMGs.

CMG respondent characteristics. Of the 33 CMG respondents, 22 were medical directors, six were utilization or quality managers, and four had other titles. Fifty-eight percent were female, with a mean age of 42 years. Sixty-nine percent were white, 19% African American, 6% of mixed heritage, 3% Hispanic and 3% “other.” Years at the current CMG ranged from less than one year to 26 years, with a mean of 4.2 years. Between 2% and 98% of the CMGs’ enrollees were Medicaid recipients, with a mean of 32%. CMGs employed or contracted with between two and 50 PCPs, with a mean of 16 PCPs per CMG. CMGs averaged 2.6 contracts with MCOs, and 85% contracted with at least two MCOs.

PCP respondent demographics and caseload characteristics. Of the 50 PCP respondents, 35 were physicians, eight were nurse practitioners, one was a registered nurse, and five were physician assistants. Fifty-nine percent were female, with a mean age of 43. Sixty-seven percent were white, 12% Asian/Pacific Islander, 10% African American, 4% mixed heritage, 4% Latino and one respondent refused to answer. Years of post-degree practice ranged from one to 34, with a mean of 12 years. The PCPs’ Medicaid patient caseload varied from 1% to 99%, with a mean of 39%; 81% of PCPs were affiliated with at least two MCOs, with a mean of 2.7.

Exhibit A1: Managed Care Organization (MCO), Contracted Medical Group (CMG) Directors and Primary Care Provider Characteristics

Characteristics	MCO Directors	CMG Directors	PCPs
<i>Title/Position</i>			
Medical Director	67%	67%	-
Utilization Manager/Quality Manager	24%	18%	-
Medicaid Program Manager	5%	0%	-
Medical Doctor (MD)	-	-	70%
Nurse Practitioner	-	-	16%
Physician Assistant	-	-	10%
Registered Nurse	-	-	2%
Other	5%	15%	2%
<i>Ethnicity</i>			
African American	24%	18%	10%
Asian American and Pacific Islander	0%	0%	12%
Latino	0%	3%	4%
White	62%	67%	66%
Mixed Heritage	0%	6%	4%
Other	5%	3%	2%
Refused to answer	10%	3%	2%
<i>Gender</i>			
Female	38%	58%	58%
Male	62%	42%	42%
<i>Average Age (in years)</i>	48	42	42
<i>Number of Respondents</i>	21	33	50

INSTRUMENT DEVELOPMENT AND CONTENT

We developed separate survey instruments for MCOs, CMGs, and PCPs. The instruments included questions from Greene et al. (1997), CDC, and the existing literature. Expert consultants and a volunteer national advisory committee of STD and managed care experts evaluated the surveys for content and appropriateness. The advisory panel consisted of MCO medical directors, a state Medicaid director, a director of a large metropolitan public health department, and health policy faculty from universities. A number of members had been involved in the development of two nationally recognized guidelines related to STD management: the U.S. Preventive Services Task Force’s (USPSTF) *Guide to Clinical Preventive Services: Second Edition*

(1996), and the Centers for Disease Control and Prevention's *1998 Guidelines for Treatment of Sexually Transmitted Diseases* (1998b).

The survey instrument for MCO respondents included 11 content areas: (1) respondent/agency information; (2) Medicaid patient information; (3) STD assessment and sexual history taking; (4) testing and diagnosis; (5) treatment; (6) partner management; (7) access to services; (8) STD education/prevention; (9) staff training on STDs; (10) use of STD-related guidelines/procedures; and (11) relationships with the state Medicaid office, local public health department, and other outsider providers of STD services. The CMG and PCP instruments did not cover content area #11, but focused on CMG and PCP relationships with the affiliated MCOs (Appendix II).

The first drafts of the instruments were pilot tested on selected MCO medical directors and PCPs not included in the final study, but with interest in or knowledge of STD management issues. Critique and comments followed each pilot interview. We modified the instruments based on these comments and conducted a second round of pilot interviews for final refinements, using medical directors and PCPs from different parts of the United States.



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