Older Californians At Risk for Avoidable Falls

Steven P. Wallace, Nadereh Pourat, Eva Durazo and Rosana Leos

More than a half million older Californians (565,000) fell more than once in 2007—about 100,000 more seniors with repeated falls than in 2003. Falls are the leading cause of injury among older adults. Over 1,400 California seniors died due to injuries from falls in 2007; over 67,000 more were hospitalized; and almost 200,000 emergency department visits were due to falls by Californians of all ages. National guidelines by the American Geriatrics Society (AGS) and a recent synthesis of the scientific literature recommend reducing the risk of falling by older adults with a history of falls through an evaluation by a health professional with counseling on how to reduce falls, a review of medications, home modifications, exercise or physical therapy, and using a cane or walker if needed. New data from the 2007 California Health Interview Survey show that fewer than half of seniors with multiple falls obtained medical care for those falls, thereby missing a timely assessment of how to best prevent future falls. Enhanced focus on policy and practice is essential to prevent falls, increase the quality of life, and reduce avoidable health care spending.

Who Falls?

Older adults who fall more than once are at high risk of future falls. In 2007, 14.5% of Californians age 65 or older fell to the ground more than once (Exhibit 1). The rates are significantly higher for those ages 85 or older—21.3% reported multiple falls. Subgroups of older adults with even higher

Exhibit 1

Percent of California Seniors with More than One Fall, 2007

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age 65 or Older</td>
<td>14.5%</td>
</tr>
<tr>
<td>Age 85 or Older</td>
<td>21.3%</td>
</tr>
<tr>
<td>Age 65+ Female</td>
<td>15.7%</td>
</tr>
<tr>
<td>Age 65+ Low-Income*</td>
<td>15.7%</td>
</tr>
<tr>
<td>Age 65+ Disabled</td>
<td>23.2%</td>
</tr>
<tr>
<td>Age 65+ with Diabetes</td>
<td>20.8%</td>
</tr>
</tbody>
</table>

* Low-income is family income below 200% of the federal poverty line in the previous year, $26,400 for a couple in 2006.
Source: 2007 California Health Interview Survey
rates of multiple falls include women (15.7% versus 12.9% for men), those with low incomes (15.7% for those under 200% FPL versus 13.2% for those over 300% FPL), those with a disability that limits basic physical activities (23.2% versus 9.6% for those without a disability), and those with chronic conditions such as diabetes (20.8% versus 13.1% for those without diabetes; Exhibit 1).

Among all older Californians who fall, about one in five (21.4%) has Medi-Cal health insurance in addition to Medicare, meaning that the economic costs of falls impact both state as well as federal programs.

Reducing Falls Among the Elderly
A vast majority of California seniors (91%) report having seen a doctor in the past year. Yet a fall is rarely the reason seniors seek medical care. In fact, just under half of those seniors who have fallen more than once (46.6%) report a fall as the reason for a doctor’s appointment (Exhibit 2). Overall, 70% of all older adults with multiple falls report doing one or more of six recommended follow-up preventive activities shown (other than seek medical care). But only about half did two or more. Recommended post-fall activities varied from 39.9% who talked with a health professional about how to prevent future falls, to 26.6% who changed their daily routines in some way.

Identifying Seniors Who Need to Take Action to Reduce Future Falls
Many older Californians with more than one fall do not engage in any of the six recommended fall-prevention activities. These seniors can be divided into two groups: those who report obtaining medical care for falls and those who do not. Those who seek medical care are likely to have had serious consequences of the fall, such as injuries.
The vast majority of older Californians who obtain medical care because of their repeated falls report one or more follow-up activities to prevent additional falls (90.2%). The most common follow-up activity for this group is talking with a health professional about how to reduce falls (56.1%). Discussing falls prevention should occur at every visit where the presenting complaint is a fall. The second most common follow-up activity by this group is starting to use a cane or walker (54.2%). The most effective approach to falls prevention involves addressing multiple risks with multiple interventions. Three-quarters of seniors (73.1%) who received medical care because of their falls completed two or more activities (Exhibit 3).

In contrast to those who get medical care for a fall, those with multiple falls who do not obtain medical care for their falls are substantially less likely to undertake any actions to prevent future falls. Only half of those who did not seek medical care (52.6%) report any of the six follow-up activities to reduce the risk of falls. The most common follow-up activity for those who did not receive medical care for their falls was talking with a health professional about falls prevention, but at a comparatively low rate (25.7%). A similar proportion (24.7%) started to use a cane or walker. Less than one-third (30.9%) did two or more of the activities (Exhibit 3).

The characteristics of those who have no follow-up preventive activities vary significantly between those with and without medical care for their falls. Those who obtained fall-related medical care were more likely to engage in preventive activities if they had higher incomes, were in an HMO, and visited the doctor more than five times per year for any reason. In contrast, among

---

**Exhibit 3**

Number of Follow-Up Activities to Prevent Additional Falls, Seniors with and without Medical Care for Falls

<table>
<thead>
<tr>
<th>With Medical Care for Falls: 1 or More Follow-Up Activity</th>
<th>With Medical Care for Falls: 2 or More Follow-Up Activities</th>
<th>Without Medical Care for Falls: 1 or More Follow-Up Activity</th>
<th>Without Medical Care for Falls: 2 or More Follow-Up Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>90.2%</td>
<td>73.1%</td>
<td>52.6%</td>
<td>30.9%</td>
</tr>
</tbody>
</table>

Source: 2007 California Health Interview Survey
those who did not obtain fall-related medical care, the rate of engaging in any follow-up preventive activities was the same regardless of income, HMO membership or frequency of doctor visits. Both seniors with and without medical care for their falls were more likely to engage in follow-up preventive activities if they were older, were in fair or poor health, were disabled or had diabetes.

**Policy and Practice Recommendations to Reduce Falls Among California’s Seniors**

The data presented in this brief indicate that inadequate falls-prevention measures are being taken by California seniors. There are many effective and feasible ways to prevent falls in both public policy and clinical practice arenas.

The American Geriatrics Society’s guidelines highlight the importance of a comprehensive medical evaluation for older adults who are injured during a fall or have a history of falls. One option to increase the rates of medical evaluation is to train first responders (e.g. Emergency Medical Services and paramedics) to encourage seniors to seek medical attention after a fall—even when there is no injury. In Nevada County, California, first responders have been provided an assessment and referral form for those who call 911 when they fall but then decline to be taken to the ER. This effort is designed to increase the rate of those who, after falling, subsequently seek an evaluation and undertake activities to prevent future falls.

To encourage effective management of the risk of falls by health professionals, additional training and continuing education of practitioners about evidence-based, falls-prevention strategies are needed. Health care professionals can be motivated to engage in evaluation and counseling of seniors who fall by increasing their awareness of relatively new billing codes (ICD-9 diagnosis code V15.88 and CPT-II treatment code 1100F) that can be used when a patient has more than two falls in a year or one fall with injuries. In addition, physicians who participate in Medicare’s Physician Quality Reporting Initiative can earn a 1.5% quality of care bonus if they report specified quality measures that include a falls screening.

Another strategy that targets health care professionals and insurance plans is to add a falls assessment as a quality of care indicator, as is done by the Veteran’s Administration health care system. California could follow the lead of these national initiatives by mandating the reporting of falls assessments, when appropriate, for state-licensed HMOs and Medi-Cal providers.

Community-based programs for seniors at risk of falls are another effective means to reduce falls. There are many evidence-based, falls-prevention programs that can be offered in community settings that include components such as exercise or tai-chi, home assessment and modifications, medication reviews, and education to reduce the fear of falling. Fostering broad-based community coalitions is the most effective way to raise awareness of the problem of senior falls and to advocate for policies to reduce risk of falls. In California, the Fall Prevention Center of Excellence (www.StopFalls.org) fosters the development of coalitions in counties around the state. Supporting and expanding these efforts can reduce the rates of falls among seniors, improving the quality of life of older adults in California while reducing medical care costs.
Data Source
The analysis and publication of this policy brief was funded by a grant from The California Wellness Foundation. The findings are based on the 2007 California Health Interview Survey (CHIS 2007). CHIS 2007 interviewed more than 14,500 adults age 65 or older from households in every county in California. Interviews were conducted in English, Spanish, Chinese (Mandarin and Cantonese), Vietnamese and Korean.

CHIS is conducted by the UCLA Center for Health Policy Research in collaboration with the California Department of Public Health, the Department of Health Care Services and the Public Health Institute. For more information on CHIS, visit www.chis.ucla.edu

Author Information
Steven P. Wallace, PhD, is associate director of the UCLA Center for Health Policy Research and a professor at the UCLA School of Public Health. Nadereh Pourat, PhD, is director of research planning at the UCLA Center for Health Policy Research and is an associate professor in the Department of Health Services. Eva Durazo, MPH, and Rosana Leos, MPH, are graduate student researchers at the UCLA Center for Health Policy Research.

Funder Information
The California Wellness Foundation (TCWF) supported the research and development of this brief and The Archstone Foundation supported the dissemination. The Falls Prevention Center of Excellence served as advisors to the project and assisted with dissemination.

Acknowledgements
The authors appreciate the valuable contributions of reviewers Roger Trent, PhD, and Larry Rubenstein, MD.

Suggested Citation

Endnotes
1 Deaths and hospitalizations from California Department of Public Health, EPIC Branch. http://www.applications.dhs.ca.gov/edicdata/content/st_vfall.htm
2 ED visits from the California Office of Statewide Health Planning and Development. http://www.oshp.d.ca.gov/HID/Products/EmerDeptData/TopEDCodes.pdf
See also, National Council on Aging, Center for Healthy Aging. Fall Prevention Resources. http://www.healthyagingprograms.org/content.asp?sectionid=69
The views expressed in this policy brief are those of the authors and do not necessarily represent the UCLA Center for Health Policy Research, the Regents of the University of California, or collaborating organizations or funders.

PB2010-3
Copyright © 2010 by the Regents of the University of California. All Rights Reserved.

Editor-in-Chief: E. Richard Brown, PhD

Phone: 310-794-0909
Fax: 310-794-2686
Email: chpr@ucla.edu
Web Site: www.healthpolicy.ucla.edu