MASSACHUSETTS COMMISSION ON FALLS PREVENTION

Phase 3 Report: Improving Integration of Falls Risk Assessment and Referral in Health Care Practices

Massachusetts Department of Public Health

2020 Biennial Legislative Report

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To our readers:

We the members of the Massachusetts Commission on Falls Prevention would like to dedicate this report to the countless number of medical providers who day in and day out across every corner of our Commonwealth make extraordinary sacrifices in the face of COVID-19.

We hope that the recommendations proposed in this report, which were drafted prior to the pandemic, make sense to clinicians, who are essential to the prevention of falls, fall-related injuries, and so many other conditions within the older adult population in our state.

We see you; we appreciate you; and we thank you for your service and dedication.
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Introduction

The Massachusetts Commission on Falls Prevention (the Commission) is pleased to present its Phase 3 report for preventing unintentional falls among older adults, defined in this report as those aged 65 and older, and associated health care costs in the state. This report builds on findings presented in its 2013 Phase 1 Report: The Current Landscape and 2015 Phase 2 Report: Recommendations of the Massachusetts Commission on Falls Prevention.

In the five years since the Phase 2 Report, the age-friendly movement has energized and focused efforts to improve the quality of life and safety of older adults in Massachusetts. The Massachusetts Healthy Aging Collaborative has grown in its mission to promote development of age- and dementia-friendly communities throughout the Commonwealth and has helped pave the way for Governor Charles Baker’s executive order establishing the Governor’s Council to Address Aging in Massachusetts in April 2017. That council released a report in December 2018 that includes aging-related recommendations and action steps.

In another important advancement since the Commission’s Phase 2 Report, older adult falls and ways to prevent them have become a national focus. In October 2019, the United States Senate Special Committee on Aging held a hearing in Washington and released Falls Prevention: National, State, and Local Solutions to Better Support Seniors, which recommends that health care providers improve rates of falls screening and assessment of their older adult patients, and proposes federal reforms to help them do so.

Falls prevention is critical to the well-being and safety of older adults. Still, specific gaps related to older adult falls prevention, such as clinician knowledge of how to screen for falls risk and where to refer patients at risk for a fall, merit attention. The Commission, in its charge to develop recommendations to prevent older adult falls and related health care costs, has narrowed the scope of the Phase 3 Report to concentrate on persistent gaps in falls prevention that are not specifically addressed by the healthy aging movement. That focus includes the role of health care practitioners and the integration of health care systems with community-based falls prevention activities.

The Burden of Older Adult Falls

In Massachusetts (and in the nation), unintentional falls are the leading cause of nonfatal injuries as well as injury-related deaths within the older adult population. In Fiscal Year (FY) 2015, running from October 1, 2013 until September 30, 2015, approximately 900 older adults visited Massachusetts emergency departments because of falls-related events each week. An additional 300 were admitted for hospitalization. In FY15, this amounted to a total of 16,463 hospital stays and 51,322 emergency department visits (CHIA).

In 2017, 725 older adults died from falls-related injuries in Massachusetts (Registry of Vital Records and Statistics, MDPH 2017). Nationally, the estimated death rate due to falls nearly tripled between 2000 and 2016 among people over the age of 75 (Cameron 2019). If this trend continues, it is possible that by 2030 seven older adults in the United States will die every hour as a result of a falls-related injury (Cameron 2019).

Falls that appear in health care data are only the tip of the iceberg; in the 2018 Massachusetts Behavioral Risk Factor Surveillance System (BRFSS) survey, 25% of older adult respondents self-reported...
that they had fallen in the past 12 months, and 8% reported they had been injured from a fall (CDC, BRFSS 2018).

Although not all falls cause bodily harm, at least one in five results in serious injuries, including broken bones and traumatic brain injuries. When falls do cause harm that results in hospitalization, approximately 12% of older adults are subsequently discharged to a rehabilitation unit and 65% to a skilled nursing facility. As such, falls are extremely costly to the health care delivery system. For example, in 2015, the total medical costs associated with older adult falls were over $50 billion nationally—37.5 billion (75%) of which was covered by Medicare and Medicaid (CDC, Home and Recreation Safety 2017). In Massachusetts, associated costs, including emergency department visits, observation stays, and hospitalizations, totaled approximately $893 million that year (CDC’s WISQARS Cost Module). These figures are expected to double by 2030 (CDC, Home and Recreation Safety 2017).

Beyond the cost of health care, caring for someone who may never recover from a fall can place tremendous stress on the person’s family members, who often become caregivers. The consequences of a fall, even if the injuries are minimal, can diminish the quality of older adults’ lives, including loss of independence and livelihood.

Not every older adult is at equal risk for experiencing a fall. While risk starts to increase at age 65, it is far greater among people who are older than 75. Additionally, certain chronic conditions, such as hypertension, arthritis, diabetes, vision impairment, Parkinson’s disease, and depression, and the medications used to treat them, are known to put older adults at higher risk for falls. According to the 2015 Massachusetts Healthy Aging Data Report, nearly two in three older adults have four or more chronic conditions (UMass Gerontology Institute, 2015).

Despite these alarming statistics, prevailing research indicates that when certain evidence-based interventions are applied, older adult falls are mostly preventable. With the growing population of older adults in Massachusetts, it is imperative that people—and their health care providers—understand the causes of falls and how to prevent them.

The Key Role of Primary Care Providers in the Prevention of Older Adult Falls

A sizable number of studies have concluded that risk identification and targeted interventions can reduce falls among older adults (Kulinski et al. 2017). The literature indicates that Primary Care Providers (PCPs) and other clinical partners (including but not limited to occupational therapists (OTs), physical therapists (PTs), certain nursing staff members, pharmacists, etc.) have an essential role in containing this burgeoning medical threat so that the surging number of older people in our society can continue to live active and purposeful lives. In this report, when we refer to Primary Care Providers (PCPs), we are applying how the federal government defines this term: “a physician (M.D. Medical Doctor or D.O. Doctor of Osteopathic Medicine), nurse practitioner, clinical nurse specialist or physician assistant as allowed under state law, who provides, coordinates, or helps patients access a range of health care services.” (U.S. Centers for Medicare & Medicaid)

One injurious fall can greatly diminish an older adult’s health and quality of life, but the sooner risk factors are detected by a clinician, the faster specific interventions can be deployed to greatly decrease the chance of a fall. Research indicates that older adults respect the information and advice they receive from their health care providers and are likely to embrace falls prevention strategies from them (Stevens
et al. 2018; Lee and Moreland 2019). At least 90% of older adults see a health care provider each year, making a PCP the logical person to screen for falls risks and give advice and referrals for interventions to prevent them (Cameron 2019).

Of older adults who do fall, only 50% are likely to talk to their provider about it (Phelan 2015), and only 33% seek medical care after falling. This may be in part due to the embarrassment and stigma associated with falling (i.e., being viewed as frail), and legitimate concerns about losing independence if their physician or family members find out.

Therefore, while PCPs are in an excellent position to influence older patients, they must discuss falls in a way that does not instill fear or evoke shame. They must also convey accurate information about prevention—including that falls are not inevitable and that staying active is the best way to prevent them—and follow-up care and services.

Yet many providers do not feel prepared to do this. Data suggest that PCPs assess fewer than 33% of their patients for falls risk factors, which could be a result of that sense of ill preparation (Cameron 2019). In 2017, on behalf of the Commission, Dr. Jonathan Howland and his team from the Boston Medical Center Injury Prevention Center conducted a convenience sample survey with Massachusetts PCPs from two accountable care organizations. The survey gauged providers’ knowledge, beliefs, and attitudes about risk assessment of and falls prevention practices for older adult patients. Although the sample was small (n=97), the findings demonstrate that while the majority of providers understood the deleterious effects of experiencing a fall and how frequently they occur among older adults, they lacked knowledge about screening and prevention strategies. Only 52% of survey respondents believed that they had the expertise to conduct falls risk assessments, even though 68% believed that assessing older adult patients for falls risk was the prevailing standard of practice. Further, only 15% were acquainted with a popular and broadly disseminated falls-related evidence-based program to help older adults control a fear of falling (which is itself a falls risk factor), known as A Matter of Balance.

There are several tools to help PCPs integrate falls risk screening and referrals into their practices. In 2012, the Centers for Disease Control and Prevention (CDC) began promoting use of its evidence-based Stopping Elderly Accidents, Deaths and Injuries (STEADI) initiative and algorithm. Based on a 2010 clinical practice guideline issued by the American and British Geriatrics Societies, it offers an array of materials and trainings to help clinicians implement falls prevention activities. The CDC continues to refresh the STEADI toolkit to encourage greater buy-in from PCPs and suggests ways that other members of a medical practice team can contribute to falls prevention. Results from Howland’s 2017 Massachusetts survey found that only 14% of respondents were aware of STEADI.

In January 2019, the Commission spoke with Dr. Asif Merchant, chair of the Massachusetts Medical Society’s (MMS) Committee on Geriatric Medicine. Dr. Merchant acknowledged the findings of the Howland study and described efforts to inform MMS gerontologists of the STEADI toolkit in 2013, which subsequently ended in 2015. To help fill the knowledge gap in Massachusetts on how to screen for and prevent falls among older adult patients, the Commission believes MMS through this committee should consider initiating an ongoing plan for promoting the STEADI toolkit and integrating falls risk assessment into gerontology and primary care practices.

In addition, another way to ensure that PCPs are adequately informed about performance of fall risk assessment and prevention of falls is for certain boards of registration that license physicians, nurse practitioners, and physician assistants to explore requiring continuing education on this topic as a condition for licensure, at least for those serving older adults in their patient caseloads.
The Commission does not dismiss the challenges of implementing routine falls screenings and assessments within the primary care practice. Demands on time, competing priorities, and confusion about reimbursement opportunities can all hinder best laid plans for conducting falls risk assessments and referrals. However, given the efficacy and availability of toolkits like STEADI, we feel that the medical community needs to take action to mitigate this critical public health issue.

**Integrating the Medical and Community-Based Sectors as a Falls Prevention Strategy**

Screening on its own will not stem the tide of rising injuries and fatalities from falls. A strong component of reducing the occurrence of falls and related injuries is older adult participation in evidence-based interventions that focus on modifiable falls risk factors such as improving balance, increasing muscle strength, and managing a fear of falling. Some examples of these programs include:

- Stay Active and Independent for Life (SAIL)
- A Matter of Balance (MOB)
- The Stanford Chronic Disease Self-Management Program (CDSMP)
- Tai Ji Quan: Moving for Better Balance (TJQ:MBB)

Many of these programs promote self-efficacy and provide social interaction. They also generate a positive return on investment by averting medical costs of falls injuries and improving health status (Carande-Kulis 2015; Stevens et al. 2015; United States Congress 2019).

According to “Exercise for Preventing Falls in Older People Living in the Community”, a 2019 analysis from the Cochrane Review, there is strong evidence that exercise programs, especially those featuring balance and functional training to improve stability and coordination, reduce the rate of falls by 23% and the number of people experiencing one or more falls by 15%. It also found that the practice of tai chi may possibly reduce the rate of falls by as much as 19% (Sherrington 2019).

Massachusetts has a vast network of organizations that offer such services, and older adults should be referred to them. They include:

- The Massachusetts Executive Office of Elder Affairs (EOEA)
- Area agencies on aging (AAAs)
- Aging services access points (ASAPs)
- Aging and disabilities resource centers (ADRCs)
- Councils on aging/senior centers (COAs)

Falls prevention activities are also offered at a variety of other community-based organizations and settings such as YMCAs, multi-cultural centers, faith-based organizations, elder housing complexes, and assisted living facilities.

For the most part, the cost of participation in these programs is relatively low and, in some cases is free, depending on the funding (e.g., a federal programming grant). Given increasing understanding that falls prevention programing reduces health care costs, some third-party payers, including Medicare Advantage and Senior Care Options plans under MassHealth, are beginning to offer limited benefit coverage for these interventions. One noteworthy program is the Elder Services of Merrimack Valley and the North Shore’s (ESMVNS) Healthy Living Center of Excellence (HLCE), which includes a state-wide
network of more than 90 community-based partner organizations, and since 2014, has helped over 16,000 older adults participate in programming to achieve better health outcomes. The HLCE maintains www.healthyliving4me.org, a website with information on leader/coach program training opportunities and healthy aging/falls prevention programs offered by network partners. ESMVNS/HLCE has received attention from the National Council on Aging and other relevant entities for sustaining programming in Massachusetts by developing creative funding arrangements between medical and community-based organizations.

Given the positive effects that participation in falls prevention and risk management programs can have on older adults, Massachusetts should strive to provide “on demand” access and availability to those interested and those who have been referred by PCPs. Every four years ESEA, as the State Unit on Aging, conducts a statewide assessment of the service and program needs of diverse older adult populations. The State Unit on Aging is the state agency responsible for developing and administering a multi-year state plan that advocates and provides for assistance to elders. The Commission recommends that ESEA include information on community-based falls prevention programming in future needs assessments to let state policymakers know the services that are available and where they are lacking.

The Commission also believes that to increase older adult participation in evidence-based programs and other community-based falls interventions, the medical community—particularly PCPs—and the community-based organizations that offer these vital interventions must be better integrated. Considering the demands and limits on PCPs’ time, this will require that primary care practices designate staff members to be responsible for identifying, linking, and referring patients to these important community-based resources. Community-based organizations could also screen for falls risk and provide reverse referrals to medical practices to support integration.

**Conclusion and Recommendations**

In summary, the Massachusetts Commission on Falls Prevention recommends the following actions to prevent older adult falls and related health care costs:

1. As part of standard practice, PCPs (or a member of their medical team) should use the CDC STEADI toolkit to screen for falls and conduct falls risk assessments at least annually with older adult patients.

2. PCPs (or a member of their medical team) who have older adult patients should increase their knowledge and familiarity with the elder service delivery network and community-based interventions that help older adults prevent falls.

3. As a routine best practice, PCPs (or a member of their medical team, including but not limited to OTs, PTs, etc.) should refer older adult patients who are identified as at risk for falls to community-based falls prevention programs and services.

4. Massachusetts health care licensing boards (such as the Board of Registration in Medicine, the Board of Registration in Nursing, the Board of Registration of Physicians Assistants) should explore requiring continuing education on the topic of older adult falls prevention and risk assessment as a condition for licensure for those serving older adults within their patient caseloads.
5. The Massachusetts Executive Office of Elder Affairs, should add falls prevention programming to its statewide needs assessment to improve our understanding of the landscape of services, especially those that cater to culturally diverse and disabled older adult populations.

6. The Massachusetts Medical Society, through its Committee on Geriatric Medicine, should consider developing an ongoing plan to encourage gerontology and PCPs to conduct falls risk assessment with older adult patients, at least annually.

The Commission believes that by adopting these recommendations, the occurrence of falls and the health care costs associated with fall-related injuries will be reduced. Further, the quality of life for the state’s ever-expanding population of older adults, their loved ones and caretakers will be enhanced.
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APPENDIX A: Members of the Massachusetts Commission on Falls Prevention

<table>
<thead>
<tr>
<th>Name/Title</th>
<th>Organization Representing</th>
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<tbody>
<tr>
<td><strong>Rebekah Thomas (Commission Chair)</strong> Director, Injuries Prevention and</td>
<td>MA Department of Public Health (DPH)</td>
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<tr>
<td>Control Program (Division of Injury Prevention and Control-Bureau of</td>
<td>(state agency)</td>
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<td>Community Health and Prevention)</td>
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<tr>
<td><strong>Almas Dossa</strong>, Director, Home and Community-Based Fee-For-Service</td>
<td>MassHealth (state agency)</td>
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<td>Programs, MassHealth Office of Long Term Care Services &amp; Supports</td>
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<tr>
<td><strong>Annette Peele</strong>, Director of Community Programs</td>
<td>MA Exec. Office of Elder Affairs (EOEA) (state agency)</td>
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<tr>
<td><strong>Colleen Bayard</strong>, Director of Regulatory and Clinical Affairs</td>
<td>Home Care Alliance of MA</td>
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<tr>
<td><strong>Ish Gupta</strong>, Assistant Professor of Internal Medicine, University of MA</td>
<td>MA Medical Society</td>
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<td>Medical School</td>
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<td><strong>Melissa Jones</strong>, Practicing PT</td>
<td>American Physical Therapy Assn. of MA</td>
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<td><strong>Jennifer Kaldenberg</strong>, Clinical Asst. Professor, Boston Univ., College</td>
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<td>of Health and Rehab. Sciences: Sargent College</td>
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<tr>
<td><strong>Helen Magliozzi</strong>, Director of Regulatory Affairs</td>
<td>MA Senior Care Assn.</td>
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<tr>
<td><strong>Joanne Moore</strong>, Director, Duxbury Senior Center</td>
<td>MA Assn. of Councils on Aging</td>
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<tr>
<td><strong>Emily Shea</strong>, Commissioner, Commission on Affairs of the Elderly</td>
<td>Mass Home Care</td>
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<tr>
<td>(City of Boston)</td>
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<tr>
<td><strong>Mary Sullivan</strong>, Pharmacy Manager, Senior Whole Health</td>
<td>MA Pharmacists Assn. Foundation</td>
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<tr>
<td><strong>Deborah Washington</strong>, Director of Diversity, Patient Care Services,</td>
<td>American Assn. of Retired Persons (AARP)-MA Chapter</td>
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<td>MA General Hospital</td>
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<td><strong>Vacancy</strong>: candidate appointment pending (Brian Doherty)</td>
<td>MA Assisted Living Assn. (Mass-ALA)</td>
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Appendix B: Legislative Mandate

The following report is hereby issued pursuant to Section 224 of Chapter 111, Massachusetts General Laws.

Section 224 of Chapter 111 of the Massachusetts General Laws reads, in relevant part, as follows:

Commission on falls prevention; members; duties

Section 224. There shall be a commission on falls prevention within the department. The commission shall consist of the commissioner of public health or the commissioner's designee, who shall chair the commission; the secretary of elder affairs or the secretary's designee; the director of MassHealth or the director's designee; and 10 members to be appointed by the governor, 1 of whom shall be a member of the Home Care Alliance of Massachusetts, Inc., 1 of whom shall be a member of the AARP, 1 of whom shall be a member of the Massachusetts Senior Care Association, Inc., 1 of whom shall be a member of the Massachusetts Association of Councils on Aging, Inc., 1 of whom shall be a member of the Massachusetts Medical Society Alliance, Inc., 1 of whom shall be a member of the Massachusetts Assisted Living Facilities Association, 1 of whom shall be a member of Mass Home Care, 1 of whom shall be a member of the American Physical Therapy Association of Massachusetts, 1 of whom shall be a member of the Massachusetts Association for Occupational Therapy and 1 of whom shall be a member of the Massachusetts Pharmacists Association Foundation, Inc.

The commission on falls prevention shall make an investigation and comprehensive study of the effects of falls on older adults and the potential for reducing the number of falls by older adults. The commission shall monitor the effects of falls by older adults on health care costs, the potential for reducing the number of falls by older adults and the most effective strategies for reducing falls and health care costs associated with falls. The commission shall:

(1) consider strategies to improve data collection and analysis to identify fall risk, health care cost data and protective factors;

(2) consider strategies to improve the identification of older adults who have a high risk of falling;

(3) consider strategies to maximize the dissemination of proven, effective fall prevention interventions and identify barriers to those interventions;

(4) assess the risk and measure the incidence of falls occurring in various settings;

(5) identify evidence-based strategies used by long-term care providers to reduce the rate of falls among older adults and reduce the rate of hospitalizations related to such falls;

(6) identify evidence-based community programs designed to prevent falls among older adults;

(7) review falls prevention initiatives for community-based settings; and

(8) examine the components and key elements of the above falls prevention initiatives, consider their applicability in the Commonwealth and develop strategies for pilot testing, implementation and evaluation.

The Commission on Falls Prevention shall submit to the secretary of health and human services and the joint committee on health care financing, not later than September 22, biennially, a report that includes
findings from the commission's review along with recommendations and any suggested legislation to implement those recommendations. The report shall include recommendations for:

(1) intervention approaches, including physical activity, medication assessment and reduction of medication when possible, vision enhancement and home-modification strategies.

(2) strategies that promote collaboration between the medical community, including physicians, long-term care providers and pharmacists to reduce the rate of falls among their patients.

(3) programs that are targeted to fall victims who are at a high risk for second falls and that are designed to maximize independence and quality of life for older adults, particularly those older adults with functional limitations.

(4) programs that encourage partnerships to prevent falls among older adults and prevent or reduce injuries when falls occur.

(5) programs to encourage long-term care providers to implement falls-prevention strategies, which use specific interventions to help all patients avoid the risks for falling in an effort to reduce hospitalizations and prolong a high quality of life.