



A Coalition to Make Massachusetts the National Leader in Health and Wellness

Annual Report Card

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The Boston Foundation, Greater Boston's community foundation, is one of the largest community foundations in the nation, with net assets of about \$900 million. Founded in 1915, the Foundation is approaching its 100th Anniversary. In 2013, the Foundation and its donors made nearly \$98 million in grants to nonprofit organizations and received gifts of \$130 million. The Foundation is a partner in philanthropy, with some 1,000 separate charitable funds established by donors either for the general benefit of the community or for special purposes. The Boston Foundation also serves as a major civic leader, provider of information, convener and sponsor of special initiatives that address the region's most pressing challenges. The Philanthropic Initiative (TPI), an operating unit of the Foundation, designs and implements customized philanthropic strategies for families, foundations and corporations around the globe. Through its consulting and field-advancing efforts, TPI has influenced billions of dollars in giving worldwide. For more information about the Boston Foundation and TPI, visit www.tbf.org, follow us on Twitter at @bostonfdn, like us on Facebook at thebostonfoundation, or call 617-338-1700.

About NEHI

NEHI (Network for Excellence in Health Innovation) is a national health policy institute focused on enabling innovation to improve health care quality and lower health care costs. In partnership with members from all across the health care system, NEHI conducts evidence-based research and stimulates policy change to improve the quality and the value of health care. Together with this unparalleled network of committed health care leaders, NEHI brings an objective, collaborative and fresh voice to health policy. For more information, visit www.nehi.net. Follow us on Twitter at @NEHI_News and like us on Facebook at NEHINews.

The Healthy People/Healthy Economy Coalition

In 2007 the Boston Foundation partnered with NEHI to release a comprehensive report, *The Boston Paradox:* Lots of Health Care, Not Enough Health. The report acknowledged that despite the city's reputation as a world-class medical community, it was not immune to the rising tide of preventable chronic diseases brought on by an epidemic of overweight and obesity.

Two years later, a second report, *Healthy People in a Healthy Economy*, set forth a plan to combat the problem, which required intense and coordinated action across multiple sectors including schools, communities and workplaces. In addition, it involved working in areas not typically associated with health, such as transportation, urban planning and smart growth.

In 2010 the Boston Foundation and NEHI launched a powerful coalition, called Healthy People/Healthy Economy, with the goal of shifting our state's focus from "health care" to "health" and making Massachusetts the national leader in health and wellness. In 2011, the coalition released the first of its annual report cards tracking the policies, programs and practices designed to improve the health of Massachusetts residents.

Acknowledgments

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Preface

About This Year's Report Card

Since its founding in 2011, the Healthy People/Healthy Economy Coalition has been advocating for state policies and laws that would promote healthy eating and active living, with a long-term goal of reducing preventable chronic disease in Massachusetts. *The Healthy People/Healthy Economy Annual Report Card* has been a key tool in the effort to influence public policy, and for the past three years it has focused on four key areas: physical activity, access to healthy food, investments in health, and citizen engagement and education. While these remain important, we decided this year to bring new topics to the forefront and highlight current efforts in disease prevention, health promotion and wellness. To this end, we have restructured the 2014 report around Early Childhood, Schools, Food, Healthy Living by Design, and Public Health and Health Care.

We are particularly interested in bringing public attention to the role that early childhood education and care plays in good health and have made it a prominent new indicator in this report. Good health begins in the first few years of life, when babies and toddlers are developing taste preferences, learning to walk and play, and eagerly mimicking their caregivers in healthy and unhealthy behaviors alike. For many children, those caregivers are adults other than their parents: it's estimated that 75 percent of American children spend time in child care, for an average of 35 hours per week. Poor nutrition and low-quality care can increase the chances that a child will be obese later on, so providers of child care and early education have a crucial role to play in lifelong good health.

We are concerned, too, with our elders and offer healthy aging as an issue to watch. Policies and support systems that make it easier for seniors to age in place safely can reduce the need for acute health care services.

The implementation of the Affordable Care Act has brought greater attention to the role of hospitals in community health. Nonprofit hospitals that wish to keep their tax-exempt status must now conduct regular community needs assessments and create health improvement plans for the communities they serve. This greater clinical-community connection is another issue to watch that will have a significant impact on health outcomes.

Some of last year's indicators have been merged into new sections, and at least one, Trans Fat Policy, has been dropped completely. While still a vital public-health issue, there is no movement statewide to restrict trans fats and none is predicted.

We have held steady on many indicators and by many measures we are improving, but challenges remain in the area of youth physical activity, policies around sugar-sweetened beverages, and funding for prevention and public health. We must continue efforts in these areas as we strive to make Massachusetts the preeminent state for health and wellness.

Introduction

Healthy People: The Key to Health care Sustainability

This fourth annual *Healthy People/Healthy Economy Report Card* makes the case once again that health and wellness are essential to the future of the Commonwealth. This Report Card outlines more than a dozen complementary policies and practices to improve health and prevent disease, and it is critical that we adopt them.

This year, the Report Card intensifies its

focus on health at both ends of the lifespan—young children and seniors. Equally important, it stresses the urgent need for action to improve health at the neighborhood and community level in order to enhance lives and meet the Commonwealth's new goals for controlling health care costs.

Massachusetts is now focused squarely on the difficult task of controlling its health care

The Spending Mismatch: Health Determinants vs. Health Expenditures



Source: NEHI analysis, 2013.

spending. With the enactment of Chapter 224 in 2012, the Commonwealth became the third U.S. state, following Maryland and Vermont, to assert control over all public and private health care spending. Under Chapter 224, the Commonwealth aims to keep the rate of increase in total health care spending equal to or less than the state's economic growth rate. This ambitious goal builds upon the state's achievement of the highest rate of health insurance in the country, with about 96 percent of residents covered.1 While people who live in Massachusetts are already among the healthiest in the United States, there are many areas for improvement, and making those improvements is key to controlling future costs.

Let's look at the record.

Massachusetts ranks high among the states on most health indicators. One well-regarded national report, *America's Health Rankings*, rates Massachusetts as the 4th-healthiest state in the country. Yet measures like these mask important and costly problems.

For example, even though the Commonwealth is among the states with the lowest levels of overweight, obesity and illnesses related to unhealthy weight, including Type 2 diabetes, the overall national trend has been consistently negative. In Massachusetts:

- The percentage of obese people has doubled since 1990, from approximately 10 percent to more than 20 percent.²
- The number of cases of diabetes skyrocketed 80 percent between 1995 and 2010.³
- The cost impact of diabetes, which is estimated to be more than \$6 billion per year,⁴ will escalate unless the current trend is reversed.
- Equity issues remain, as African Americans are more likely to report that they are in fair or poor health compared to whites

- (about 18 percent vs. 12.5 percent), and Hispanics are much more likely to report poor health status (27 percent).⁵
- Low-income residents are much more likely to characterize their health as fair or poor (29 percent of residents earning less than \$25,000, compared to 4.7 percent of residents earning more than \$75,000 per year).6
- People who have completed high school or college are much more likely to report their health as good compared to those who have not finished school (Only 6 percent of college graduates characterized their health as fair or poor, compared to nearly 35 percent among those who did not finish high school).

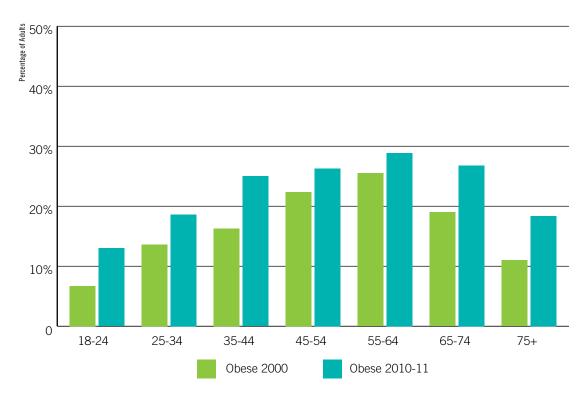
Improving Health Where We Live

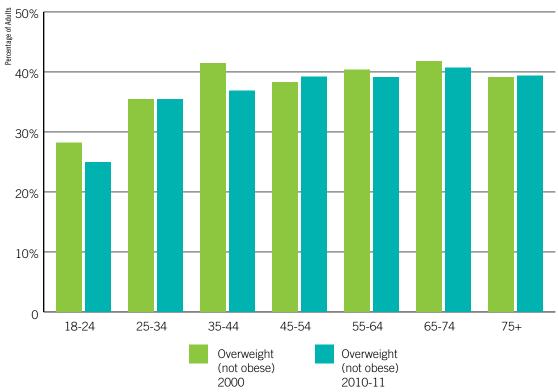
Living a healthy life is not just about willpower. When it comes to each person's health, "the choices you make are shaped by the choices you have," as researchers for the MacArthur Foundation noted in 2008.8

These choices are often deeply defined by place. Health disparities take root at the local level; some neighborhoods, cities and towns are healthier than others, and housing patterns are related to income, race and ethnicity. For example: the state's new Health Policy Commission has found that Fall River has the state's highest concentration of diabetes cases. Fall River is one of many "gateway" cities that struggle to meet the needs of a largely lowincome and immigrant population, including the need to raise educational achievement.9 Other cities are at similar risk, including Springfield, Chicopee, Holyoke, Fitchburg/ Leominster, Lawrence, New Bedford and some neighborhoods of Boston.¹⁰

The local environment clearly matters. The neighborhood or larger community

Adult Overweight and Obesity in Massachusetts by Age Cohort





Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System.

may impose direct health risks such as air pollution or toxic exposures. The availability of markets with fresh produce makes it easier for residents to make healthy choices, which is particularly important because individual decisions about diet and fitness account for 40-50 percent of the likelihood that a person will live to age 75 or beyond. (See *Spending Mismatch* on p. 3).

Education Matters

Research has consistently shown that education may be the single most important determinant of a person's lifelong health. It stands to reason, then, that strengthening the Commonwealth's investment in public education will pay dividends in better health and less health care spending in the future.

More recent studies suggest that early childhood education is the single most profound influence on a person's health, well-being and even lifelong earnings.¹¹

For this reason, this year's Report Card introduces a new indicator to track the Commonwealth's progress toward universal, high-quality early child care and education in Massachusetts. This indicator joins a dozen others tracking policies and practices that—if implemented—will improve the local environment for healthy living.

What Can Be Done Now?

Early education and healthy local environments will influence lifelong health and thus reduce health care spending over time. But what can be done now?

To judge this fairly, it is important to put the factors driving up health care costs into perspective. The most recent national statistics indicate that Massachusetts spends the most, per capita, on health care of all 50 states (\$9,278 in 2009), 36 percent above the national average. ¹² Several factors explain this.

Compared to other states, Massachusetts has a high level of wealth, which is strongly associated with health care spending. The Commonwealth ranks second in the nation for per-capita personal income.¹³

Health care spending is also closely associated with the cost structure and payment incentives in the provider and insurance sectors and with patient-utilization rates, particularly for expensive hospital and nursing-home services. The new Massachusetts Health Policy Commission, which has turned its attention to the relatively high prices commanded by major hospital systems, estimates that nearly 75 percent of the difference in per-capita health spending between Massachusetts and the nation as a whole is tied to the cost of hospital care, long-term care and home-health expenditures.¹⁴

Clinical-Community Partnerships, which integrate medical monitoring and care with supportive services such as nutrition and lifestyle counseling, can improve health and cut costs. Several states are making a serious bet that this can improve health and cut costs.

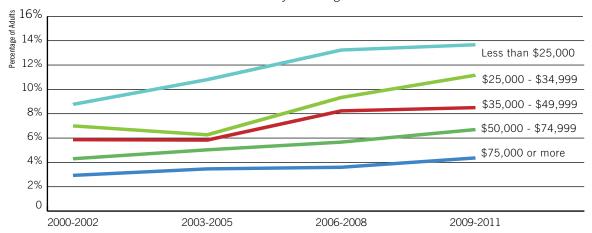
In Vermont, the state's "Blueprint for Health" initiative cut medical spending for commercially insured patients by 11 percent in 2012 and for Medicaid patients by 7 percent, despite the cost of community services. ¹⁵ Vermont utilizes a model known as the Patient-Centered Medical Home (PCMH) in which a diverse team of care providers meets the majority of each patient's needs.

Massachusetts is embracing the PCMH model, and many organizations in the state, including the Commonwealth Care Alliance, continue to demonstrate strong results in improved quality of life for patients and lower overall medical spending. ¹⁶ For this reason, the Report Card includes Clinical-Community Partnerships as an issue to watch.

The opportunity to take action goes well

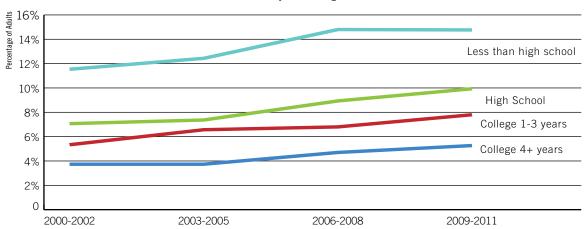
Massachusetts Adults with Diabetes by Income

Three-year averages



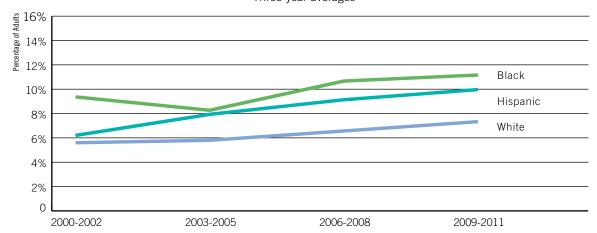
Massachusetts Adults with Diabetes by Education

Three-year averages



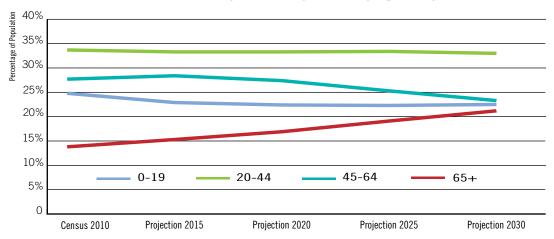
Massachusetts Adults with Diabetes by Race/Ethnicity

Three-year averages



Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System.

Massachusetts Population Projections, by Age Group



Source: UMass Donohue Institute

beyond focusing on the Commonwealth's high-risk "hot spots," however. The aging of the state's residents means that Massachusetts needs to take stronger action to support healthy living for older residents, no matter where they live.

Healthy Elders/Aging in Place

The population of Massachusetts is slightly older than the national average (15 percent of residents are over age 65 compared to 14 percent nationally). The number of seniors will increase by 44 percent by 2025. Meanwhile, the number of residents ages 55 to 64—the tail end of the Baby Boom and a major element of the Commonwealth's workforce—will grow by more than 20 percent by 2025. 17

The number of older people in a population influences health care spending. On average, this spending for people over 65 is 3.5 times higher than for people ages 25-44 and 1.7 times greater than for people ages 45-64. 18 Because Massachusetts has an older-than-average workforce, keeping people healthy will reduce the insurance costs borne by all insured people in the Commonwealth and by the employers who pay some of the premiums

for about 70 percent of them. It will also slow down the rate of overall health care spending.

An analysis by the Massachusetts
Health Policy Commission found that the
Commonwealth's spending on hospital
services, nursing homes and home health
is particularly high. Enabling healthy and
independent living by older people in their own
homes, or "aging in place," has been identified
by the Tufts Health Plan Foundation and
others as a major emerging goal. As a result,
this year's Report Card includes aging in place
as an issue to watch.

Looking Ahead

In many ways Massachusetts has never been better positioned to take bold and innovative action to improve health at the local level and avert unnecessary spending in the future.

During the past decade, Massachusetts became one of the first states to strongly embrace "healthy transportation planning," a movement that encourages physical activity by opening up the state's roads and bridges to biking and walking.

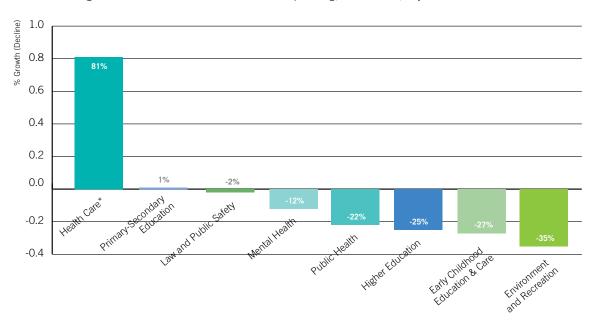
- The Mass in Motion campaign is now active in over 50 communities that are planning healthy living strategies at the ground level.
- The new state Prevention and Wellness Trust, authorized under Chapter 224, is providing funds via a competitive process in which cities and towns are challenged to link community services to health goals, and to the objectives of improving specific health outcomes and averting health- care spending.

But if Massachusetts is to make progress, it must extricate itself from a vicious cycle in which increasing demands for health care spending diminish our ability to make the investments that will keep us healthy and reverse the fiscal crowd-out that shortchanges education, public health and other vital government services.

From 2001 through 2013, as state budget spending (adjusted for inflation) grew by less than 18 percent, spending on health care (Medicaid, state employee health care, other direct health care programs) ballooned by 80 percent. Meanwhile investments in other priorities that are critical to long-term public health shrank dramatically, including early childhood education, primary and secondary education, public higher education, mental health, public health programs, law enforcement and public safety, and environmental protection and recreation (See *Spending Crowd-Out* below).

The 2014 Healthy People/Healthy Economy Report Card presents a snapshot of the progress that we in Massachusetts are making toward what must be our goal: making our health care system sustainable by making ourselves healthier.

Health Care Spending Crowds Out Investments in Key Determinants of Health Change in Massachusetts State Government Spending, FY01-FY14, adjusted for inflation (CPI)



^{*} Health Care expenditure is Group Insurance Commission spending plus MassHealth (Medicaid)

Source: Massachusetts Budget and Policy Center Budget Browser.

Issues to Watch

Issue to Watch: Aging in Place

It is well-established that seniors consume more health care services than younger people, and Massachusetts residents are aging. One way to keep older people healthy and out of the hospital is to make it possible for them to live safely and independently in their own homes and neighborhoods, where they have social ties and support. Policies that facilitate aging in place not only help contain health care spending, they are a vital part of a larger effort to make neighborhoods healthier and more sustainable for all ages.

The movement to support aging in place takes many forms, including initiatives to make homes and neighborhoods more amenable to active, healthy lifestyles. This movement is an extension of the healthy-living-by-design efforts described later in this report. Homeand community-based care can enhance the quality of life for older residents while reducing the need for expensive nursing homes.

Why Is This Important? As the Baby Boomer generation moves into retirement (ages 60+), the demographics of Massachusetts are shifting, creating greater demand for expensive health care services. Policies that promote healthy aging and prevent or avert the need for acute medical services alleviate this demand.

When compared to other states,
Massachusetts has more nursing-home
placements and higher corresponding costs.
Nursing-home placements are 46 percent
higher than the national average, and the
resulting costs and related home medical care
account for about 73 percent of the difference
between the Commonwealth's per capita
Medicaid spending and the U.S. average.¹

New Bedford, Springfield, Fall River, Worcester, Lowell, and South Boston are six Massachusetts communities that currently face the most pressing healthy aging challenges.²

What Promising Models Are Emerging? A broad spectrum of policies can support healthy aging in communities, from housing and urban redesign to an expansion of social services. The Massachusetts Health Policy Forum released a comprehensive overview of aging in place policies in 2009.³

Several Massachusetts-based organizations are pioneers in the design of new housing developments that support senior health, including Hebrew SeniorLife. Addressing aging in place in existing neighborhoods is more of a challenge. Aging Well at Home, a program in North Brookline, is a successful and innovative example. It aims to increase seniors' awareness of and access to community resources, and to facilitate connections between local organizations. Aging Well at Home has served as a catalyst for a town-wide initiative, the Brookline Community Aging Network.4 AgeWell West Roxbury is another notable model that promotes the development of an age-friendly community.

The Policy Landscape The Massachusetts Healthy Aging Collaborative is a network of more than 150 agencies throughout the Commonwealth united in the promotion of a wide range of policies that support healthy aging.⁵

Several ongoing state-government initiatives target healthy living in communities to ensure that aging in place remains an option for elderly residents.

Direct state spending on elder services beyond those available through Medicaid has remained flat over the last 15 years, including spending on expansion of supportive housing and enhanced home health care.⁶

Looking Ahead

Massachusetts is laying the groundwork for healthy aging in place through innovative local programs and through investments in healthy transportation, smart growth, and related policies that support healthy living by design. However, aging in place needs to become a more explicit goal of health policy in the years ahead.

Issue to Watch: Clinical-Community Partnerships

Rising rates of preventable chronic diseases and associated costs underscore the fact that many of our health problems are driven by non-medical factors, including a lack of exercise, poor nutrition, and the impact of poverty.⁷

As a result, there is a new impetus to forge direct links between health care providers and resources in the community to coordinate care across settings and create a healthier environment that supports healthy living.

Why Is This Important? Social needs are "health care's blind side." It may be impossible to improve health and restrain exploding health care spending without reinforcing the positive determinants of health. Slashing the number of hospital readmissions offers the biggest potential cost savings—\$700 million each year. Yet a recent study suggests that nearly 60 percent in the variation in hospital readmission rates is due to the characteristics of the surrounding community.9

Massachusetts is home to pioneering efforts in care coordination, including Commonwealth Care Alliance and Health Leads. The Commonwealth Care Alliance model has achieved substantially lower rates of health care spending and utilization among high-risk and high-cost patient populations.¹⁰

Elsewhere, similar models are targeting the needs of those who frequently rotate in and out of the hospital—the so-called "superutilizers." In Oregon, teams that include community health workers have reduced visits to emergency departments by 13 percent and readmission rates by 8 percent. 12,13

The new Massachusetts Prevention and Wellness Trust has funded nine communities to begin experiments in improving the overall local environment for health.¹⁴

The Policy Landscape The federal Affordable Care Act requires nonprofit hospitals to conduct Community Needs Assessments every three years and develop strategies to respond. Chapter 224, the state's pioneering cost-control legislation, makes tighter coordination between health care providers and community resources a priority for future improvement. The Department of Public Health's Mass in Motion campaign continues to support community-level health planning and programming in more than 50 cities and towns.

The Health Policy Commission has also made clear that addressing the needs of high risk/high-cost patients (super-utilizers) will be a priority.¹⁶

Looking Ahead Massachusetts is already home to innovative clinical-community partnerships. A stronger, focused effort is needed to create measurable results and ultimately a sustainable reimbursement model for these initiatives.

How to Read and Use the Report Card

This fourth annual *Healthy People/Healthy Economy Report Card* is designed to help Massachusetts residents and policy makers track progress in implementing policies and practices that promote health. This Report Card assigns grades to 12 policies and practices that are important elements of a comprehensive effort to improve health and wellness in Massachusetts. More precisely, it grades the progress of state and local government, the public and private sectors and state residents in bringing these measures to fruition.

Key to Report Card Grades

- A Positive Change Throughout the Commonwealth Appropriate policies, programs and practices are not only in place, they are also driving positive change in health in Massachusetts.
- **B** A Good Start Innovative or best practice policies and programs are now in place and could drive positive change in health in Massachusetts.
- **C** A Start Innovative or best practice policies and programs are under active and serious consideration or are part of promising demonstration projects, and could drive positive change in health in the future.
- **D Barely a Start** Appropriate policies or programs to address major health problems are only starting to receive active and serious consideration.
- **F** No Progress Appropriate policies and programs are not receiving active and serious consideration, despite advocacy.
- I **Incomplete** Policy or programmatic activity is at a very early or experimental stage.

Healthy People/Healthy Economy: Fourth Annual Report Card

At-a-Glance

Early Childhood

	2013 Grade	2014 Grade	Rationale
Quality Early Childhood Education	N/A	1	Massachusetts has disinvested in early childhood services—an important factor in future health—over the last 15 years, but policymakers have begun a focused effort to find ways to create universal pre-K in the Commonwealth.

Schools

	2013 Grade	2014 Grade	Rationale
Body Mass Index (BMI) Reporting	A -	A -	Despite controversy over the now-eliminated BMI letter from school to home, BMI data collection remains an important tool for policymakers in the overall effort to formulate effective obesity-prevention and health-improvement programs for vulnerable Massachusetts schoolchildren.
Healthy School Meals	В	В	Massachusetts is now striving to demonstrate measurable statewide results from the introduction of higher standards for school lunches and "competitive" foods sold in school vending machines.
Youth Physical Activity	С	D	Massachusetts has yet to join the 12 states that now implement evidence-based practices for physical activity in the schools. Pertinent legislation has been languishing at the State House for years with no legislative champions calling for change.

At-a-Glance

Food

	2013 Grade	2014 Grade	Rationale
Sugar-Sweetened Beverages	F	F F States that grant a tax preference for sweetened beverages, a known heal	
Food Access	B+ Farmers' Markets C+ Food Deserts	В-	The growth of farmers' markets has expanded access to healthy foods across the Commonwealth, and more comprehensive action is planned. While measures to expand healthy food retailing are still largely in the planning stage and are subject to debate at the State House, the policy landscape is promising.

Healthy Living by Design

	2013 Grade	2014 Grade	Rationale
Biking and Walking	В	В	The state has instituted many innovative policies to expand biking and walking opportunities, with the recently authorized transportation bond demonstrating the state's support for complete streets. While Boston does a good job of achieving high-quality active transport, other areas continue to lag behind. Equity remains a concern.
Smart Growth and Healthy Transportation Planning	B- B+		The Commonwealth's strong policies and sustainable funding are being used to implement healthy living by design through Smart Growth and healthy transportation planning.
Health Impact Assessments C+ B		Massachusetts has helped set a national standard for use by incorporating HIAs into its transportation planning process. A number of public agencies are now employing HIAs to inform an increasingly diverse array of public policy and project planning decisions.	

At-a-Glance

Public Health and Health Care

	2013 Grade	2014 Grade	Rationale
Primary Care B+		B+	The Commonwealth continues to score high marks for the quality of its primary care. It has made a major commitment to expansion of the Patient-Centered Medical Home (PCMH) model, which is expected to prevent more illnesses and minimize health risks through improved coordination of care and integration with community resources.
Employee Health Promotion	alth Promotion B B		Massachusetts continues to experiment with innovative approaches to bring health promotion benefits to employees, including employees of smaller firms. Historically, smaller firms have had limited access to employee health and wellness programs or the in-house expertise to launch them.
Public Health Funding	Public Health Funding D D		The creation of the Prevention and Wellness Trust Fund and the release of its first round of grants this year was a major step forward, but it is not enough to make up for cuts at the federal and state level. Public health spending in the Commonwealth and elsewhere remains near historic lows and there is little to no effort to increase it significantly.

Early Childhood



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QUALITY EARLY CHILDHOOD EDUCATION



Background

Research continues to show that high quality early childhood care and education not only prepare children for success in school, they create a foundation for good health over the course of a lifetime. Children who receive good care and education in their preschool years gain as much as a full year of development and educational growth compared to children entering school without the benefit of early services.¹

Recent research also suggests that investment in early childhood care and services can have a significant, long-term effect on the health of adults: people who enjoyed early childhood services are more likely to avoid health problems, including cardiovascular disease and metabolic problems such as diabetes.²

Where We Are Today

Massachusetts spends about \$200 million less today on early childhood education than it did in FY2001, a decrease of more than 16 percent over 14 years after adjusting for inflation.³ Investment in this sector has been crowded out of the state budget over the last decade as funding for other priorities—primarily health care—has increased.⁴ This fiscal crowd-out has been well documented in previous versions of this very report card.

The need for early childhood care has grown significantly in the last few decades as workplace demands on families have increased.⁵ The need has been difficult to meet and quality early childhood education is lacking, especially for at-risk children in low-income families. Massachusetts has taken steps to address the issue of access:

- With the creation of the Massachusetts Department of Early Education and Care in 2005, the state launched an effort to bring universal pre-kindergarten (UPK) to all children ages 2 years and 9 months and above.
- Since the state UPK initiative began, Massachusetts has performed comparatively well in sustaining its investment in early childhood education, although this is largely because of rapid disinvestment by other states in the wake of the 2008 recession. In 2011-12, Massachusetts moved from 23rd in the nation to 16th in pre-K funding per child after increasing per-child funding by \$250.6
- According to the National Institute for Early Education Research, Massachusetts ranks about 27th for enrollment of 4-year-olds in early education and 16th among 26 states serving 3-year-olds.⁷
- About one-third of 3- and 4-year-olds in Massachusetts receive some form of publicly supported early childhood education, with the remainder either paying full price for private services or receiving no services. The federally supported Head Start program serves about 11,000 of the roughly 160,000 3- and 4-year olds in Massachusetts.
- The state is also trying to address the gap in kindergarten services. Right now, about 14 percent of the state's 5-year-olds do not have access to full-day kindergarten. In 2013, Massachusetts provided more than \$24 million in grants for schools extending their programs to the full day. In

- Survey results from the CLASP childcare research organization indicate that Massachusetts is one of only three states in which the average ratio of adult providers to children meets state standards for infant and toddler child care. The Massachusetts ratio is 3:1.11
- Nutrition and physical activity standards have been overlooked as areas for improvement and regulatory or policy change in child care and early childhood education, at least until recently. About 14 percent of Massachusetts children enter kindergarten overweight, and by first grade nearly 30 percent of them are overweight or obese.¹² These children are four times more likely to be obese by the 8th grade than children of normal weight.¹³



- Little is known about the nutritional quality of early childhood care outside of the federally regulated Child and Adult Care Food Program that provides subsidies for low-income children. Some research, however, suggests that the quality may be poor in these settings.¹⁴
- Massachusetts has not established any nutritional requirements for licensed early childhood care centers, as the standards have been more concerned with safety and supervision issues.

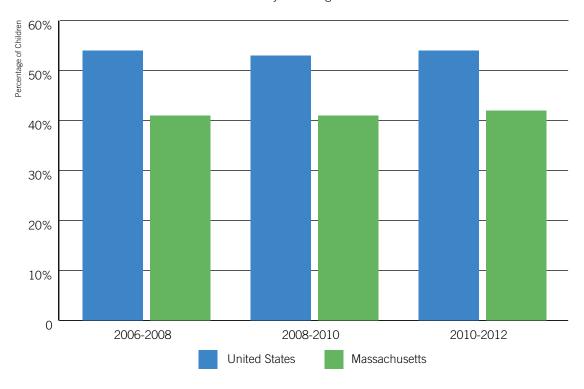
Best Practices

- The Harvard Center on the Developing Child conducted an analysis for the National Governors' Association Center for Best Practices and the National Conference of State Legislatures. The researchers incorporated findings from neuroscience and early childhood research to identify seven features of effective early care and education programs:
 - Qualified and well-compensated personnel
 - Small group sizes and high adult-child ratios
 - A language-rich environment
 - Developmentally appropriate curriculum
 - Safe physical settings
 - Warm and responsive adult-child interactions
 - High and consistent levels of child participation¹⁵
- In the United States, the state of Oklahoma has pioneered a statewide approach to universal pre-K for 4-year-olds. All 4-yearolds in the state are offered pre-K services, and districts offering full-day pre-K

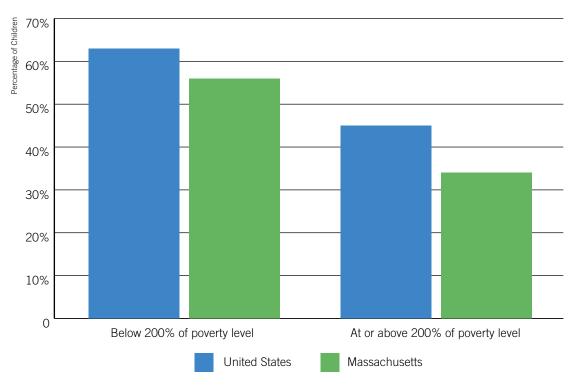
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Children Ages 3 and 4 Not Enrolled in Preschool

Three-year averages



Children Ages 3 and 4 Not Enrolled in Preschool, by Poverty Status 2009-2011 Three-year averages



Source: Annie E. Casey Foundation, http://datacenter.kidscount.org.

receive increased financial support. Pre-K teachers are paid salaries on par with K-12 teachers.¹⁶

- The Connecticut State Department of Education received a Team Nutrition grant from the U.S. Department of Agriculture (USDA) to develop a sustainable statewide initiative that encourages early childhood caregivers, food-service staff, and parents to model healthy eating and physical activity.¹⁷
- The Boston Public Schools K0-K1 program early education program is credited with achieving both academic and health gains sustained through early grades.¹⁸

Current Policy Landscape

- As of May 2014, current state budget proposals for Fiscal Year 2015 would essentially level fund early childhood education and care in Massachusetts. A 4.4 percent increase recommended by Governor Deval L. Patrick would allow for a modest increase in enrollment.
- The Massachusetts Budget and Policy Center has outlined three scenarios for long-term funding of universal Pre-K in Massachusetts that reflect potential mixes of public and private services and funding.¹⁹
- President Obama has proposed a \$75 billion federal investment over 10 years that would extend early childhood education to 4-year-olds, funded by an increase in federal cigarette taxes. The proposal is given little likelihood of passage.
- The Massachusetts Department of Early Education and Care continues to transition child care and education providers into its Quality Rating and Improvement System (QRIS), which sets measurable goals for high-quality performance.



■ The Massachusetts-based Bessie Tartt Wilson Initiative "Eating to Learn" project is a first-of-its-kind effort to evaluate policy options for improving access to healthy food for children in child care and early education.²⁰

GRADE: I

RATIONALE: Massachusetts has disinvested in early childhood services—an important factor in future health—the last 15 years, but policymakers have begun a focused effort to find ways to create true, universal pre-K in the Commonwealth. Since this a new indicator for the Report Card, the Coalition is delaying awarding it a grade until it learns how and if the recommendations below are implemented.

Raising the Grade

Research continues to show that investment in childhood health and education may be the single most significant effective way to reduce health problems over the course of a lifetime. Massachusetts now needs to move on more concrete plans to extend quality early childhood education to all 4-year-old children. Additionally, policies should be put in place that establish standards for nutrition, physical activity, and screen time for our youngest and most vulnerable population.

Schools

School-Based BMI Reporting

Healthy School Meals

Youth Physical Activity



SCHOOL-BASED BMI REPORTING



Background

The Body Mass Index (BMI) calculation is a measure of a person's body fat and therefore of weight-related health risk. BMI has proven useful as a simple and inexpensive way to screen individuals at a time when overweight and obesity—and related diseases such as diabetes—have grown enormously over several decades. While it is universally used, BMI has limitations. In some cases, people with high BMIs can still be extremely fit.

Over the last decade, BMI has been used to measure weight-related health risks among children and to provide data to shape childhood obesity prevention policy and programs. In 2009, Massachusetts began requiring public schools to calculate BMI for students in grades 1, 4, 7 and 10 as one means of tracking health in children and adolescents.

Where We Are Today

In Massachusetts:

- Nearly 60 percent of adults are overweight and 22 percent are obese, according to BMI data.¹ While the Commonwealth is the 3rd least obese state in the country, adult obesity rates have steadily increased over the years.²
- The state ranks 25th for obesity among 10to 17-year-olds (15 percent) and 37th of 43 states reporting for obesity among highschool students (10 percent).³
- More than 16 percent of children under age 5 in low-income households are obese, compared to the 14 percent national average.⁴

- The most recent BMI screening results (2011) show that 28 percent of 1st graders, 35 percent of 4th graders, 34 percent of 7th graders, and 32 percent of 10th graders are overweight or obese. This reflects a slight improvement from the 2009 BMI results (32 percent, 38 percent, 36 percent, and 31 percent respectively).
- Of 41 states reporting, Massachusetts has the 4th highest rate of obesity among 2- to 4-year-olds in low-income households. However, CDC data suggest that Massachusetts is one of 18 states in which obesity rates for low-income 2- to 4-yearolds declined between 2008 and 2011.⁷



Best Practices

- BMI screening of schoolchildren has been endorsed as a public health best practice by the American Academy of Pediatrics and by panels of the Institute of Medicine.⁸
- Arkansas became the first state to implement BMI reporting for all publicschool students in 2004. Since then, about 21 states have done so.⁹
- Massachusetts adopted its school-based BMI reporting policy in 2009.
 When the Department of Public Health did an initial analysis of BMI data for the school districts in five of the original Mass in Motion communities, it found a 2.4 percent decrease in the number of children classified as overweight or obese. In comparison, the decrease was 0.4 percent among a control group of other communities in the state.¹⁰

Current Policy Landscape

- Last year, after complaints from parents and legislators, the state Public Health Council voted to eliminate its requirement that schools report student BMI scores to parents via a letter from the school nurse. The Council cited an inability to safeguard students' privacy and protect them from bullying caused by the letters. The Council also noted difficulties in communicating the BMI scores to physicians caring for the students.¹¹
- Schools continue, however, to collect BMI data, a measure the state Department of Public Health feels is important because aggregate data can be used to tailor effective interventions. The promising early results in BMI reduction among Mass in Motion communities demonstrate the continued value of collecting BMI data.

A bill before the Legislature would prohibit the Department of Public Health from collecting data on BMI, height, and weight of schoolchildren (House Bill 2024), although no action is pending.

GRADE: A-

RATIONALE: Despite controversy over the now-eliminated BMI letter from school to home, BMI data collection remains an important tool for policymakers in the overall effort to formulate effective obesity-prevention and health-improvement programs for vulnerable Massachusetts schoolchildren.

Raising the Grade

The Commonwealth should maintain its commitment to BMI reporting as a valuable tool in the fight against obesity. Codifying the reporting into law would help to secure its use as well as maintain the commitment to the careful measurement of results (changes in BMI and in health risks) that can be attributed to BMI data collection and related programs.

HEALTHY SCHOOL MEALS



Background

Students who eat nutritious meals each day lead more active lives and are more likely to perform better in school. The need for healthy nutrition remains high: while Massachusetts middle- and high-school students have lowered their soda consumption, they have been drinking more energy drinks, also high in sugar. Many teens are still not eating the recommended five or more servings of fruits and vegetables each day. 12,13

Students have access to food at school in the cafeteria (school lunch and breakfast programs) and through so-called "competitive" sources (typically vending machines), as well as whatever they bring from home. School meal programs are governed by federal law and regulation through the National School Lunch program. Massachusetts adopted high standards for competitive food in 2012 but is now adapting them to the new federal standards.¹⁴

Where We Are Today

■ The Commonwealth's 2010 School Nutrition Act and the guidelines that resulted set new standards for competitive foods in the schools, banning sugary beverages and snacks. Early evaluation suggests that the result has been a substantial increase in healthy food options available to Massachusetts schoolchildren, including foods reformulated by manufacturers to meet the state standards.

- Massachusetts is now adapting its standards to align with new U.S. Department of Agriculture requirements that are taking effect this year. The new standards limit snack foods sold at schools to 200 calories or less, and beverages to 60 calories or less.
- Voluntary efforts by the U.S. beverage industry, which generally supports the new USDA standards, have removed about 90 percent of the calories previously available to students in vending machine drinks.
- New federal standards for school lunches, a result of the 2010 Healthy Hunger-free Kids Act, have led to increased fruit and vegetable consumption, according to a study by researchers at the Harvard School of Public Health. While consumption increased, levels of fruit and vegetable waste remained approximately the same, at high levels (60-75 percent of vegetables).¹⁵
- Recent evaluations of the food-service program in the Boston Public Schools revealed serious budget and management problems. These threaten what had been a series of innovative steps by the BPS to improve nutrition for students, including a 2013 initiative to offer free breakfast and lunch to all, thus destigmatizing access to school meals.¹⁶

Best Practices

The Commonwealth's 2010 School Nutrition Act continues to enable local school districts to buy fresh produce from Massachusetts farms without going through the normal bidding process if the purchase is below \$25,000.17 Recess before Lunch (RBL) is an effective low-cost strategy that has been implemented by some schools to improve children's food intake. When children go to recess before lunch, they tend to take more time eating and to eat more fruits (36%), vegetables (20%) and milk (45%).¹⁸

In Wilmington, Mass., 5th graders in a pilot RBS program ate more lunch, settled back into class more quickly, and were less likely to visit the nurse for minor ailments.¹⁹

Current Policy Landscape

Neither the new state nor federal standards on snack foods prohibits junk-food marketing that targets children in public schools, such as the use of fast- or junkfood logos. In January 2014, the Obama administration proposed guidelines for local school wellness policies that aim to ensure that in-school marketing is consistent with new snack-food standards. Current examples in California (Project LEAN) aim to make schools a "safe haven from unhealthy food and beverage messages."²⁰ Pending legislation in Massachusetts (House Bill 436) would require a new assessment of school breakfast programs, including an examination of links between student achievement and breakfast program participation.²¹

GRADE: B

RATIONALE: The Commonwealth is now striving to demonstrate measurable statewide results from the introduction of higher standards for both school lunches and competitive foods.

Raising the Grade

As attention moves away from introducing standards to full-scale implementation, Massachusetts needs to show broad and positive outcomes in both student health and academic achievement.



YOUTH PHYSICAL ACTIVITY



Background

In 2013, an Institute of Medicine panel reaffirmed the growing proof that regular physical activity improves the health of young people and supports learning as well.²² This evidence has found its way into guidance offered by the nation's physicians: the American Academy of Pediatrics now recommends daily recess breaks and physical education classes, calling them essential to children's health and learning.²³

The scientific findings about the benefits of exercise are prompting innovative thinking about how to help children be physically active, particularly during school. Experts know that physical activity can be introduced into the school day in many ways, not just through traditional gym classes but during recess and classroom physical activity breaks.^{24,25}

Where We Are Today

- Nationally, only about 25 percent of youth engage in the recommended moderateto-vigorous physical activity for at least 60 minutes daily.²⁶
- More students in Massachusetts attend physical education classes every week (56 percent) than in the country as a whole (52 percent), although attendance is far lower in Boston (32 percent) and other cities.
- Slightly more Massachusetts students play team sports (60 percent) than the U.S. average (58 percent), although participation in Boston (46 percent) and other cities is lower.²⁷

Massachusetts is one of the 41 states that do not require elementary schools to provide recess.

Best Practices

- Guidelines endorsed by the Institute of Medicine recommend at least 60 minutes of vigorous or moderate intensity physical activity for American youth—a standard that only about half of them actually meet.²⁸ Current best practices include incorporating physical activity into the regular school day.
- The national nonprofit Playworks continues to send full-time "coaches" to facilitate physical activity in 32 low-income Massachusetts schools serving more than 15,000 students.²⁹ Staff report a 98 percent increase in students involved in "healthy play" and a 90 percent increase in participation in academic activities.³⁰
- Almost 800 Massachusetts schools offer BOKS, a before-school program designed to stimulate kids' brains and prepare them for the school day.³¹
- ChildObesity180 is a recognized leader in developing and launching multiple evidence-based initiatives. Its Active Schools Acceleration Project identifies fun, innovative, and effective programs and is now in more than 1,000 schools nationwide. It will be moving its 100 Mile Club into Boston during the next two years.
- Michigan has implemented the Education Model Policy on Quality Physical Education and Physical Activity in Schools. All public schools are urged to offer daily opportunities for physical activity apart from gym class for

all students in grades K-12. Twenty minutes of moderate-to-vigorous physical activity must be provided for every three hours of school programming.^{32,33}

Current Policy Landscape

- Massachusetts schools are technically required to provide physical education classes, but there are no standards for the number of hours of instruction or the grade levels at which it is offered. An Act Relative to Healthy Kids,³⁴ which is before the Ways and Means Committee in the Massachusetts Senate, would reinstate stricter requirements for the time allotted to, and quality of, physical activity and education programs in public schools.
- Pending legislation sponsored by the Healthy People/Healthy Economy Coalition (An Act to Reduce Childhood Obesity³⁵) would introduce a daily 30-minute requirement for physical activity in public K-8 schools and help fund more comprehensive physical education

programs through an elimination of the current sales-tax exemption for sugary beverages and candy.

GRADE: D

RATIONALE: Massachusetts has yet to join the 12 states that now implement evidence-based practices for physical activity in the schools. Pertinent legislation has been languishing at the State House for years with no legislative champions calling for change.

Raising the Grade

Growing evidence links student physical activity to improved health outcomes and greater academic achievement. Massachusetts should step forward and make physical activity a mandatory part of the school day.

Pupils walk to the Brooks Elementary School in New Bedford as part of a MassRides/Safe Routes to School Bike/Walk day in May 2013. Photo courtesy of Mass in Motion New Bedford.



Food

Sugar-Sweetened Beverages

Food Access



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SUGAR-SWEETENED BEVERAGES



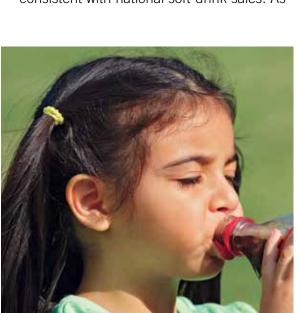
Background

Sales of carbonated sodas declined in the United States for the third year in a row in 2013, a drop that industry analysts attribute in part to increased public concern over obesity. Recent research suggests that heavy consumption of sugary beverages elevates the risk of stroke, adding it to a list of diseases (diabetes, heart disease and some cancers) associated with high levels of sugar intake.

A New York court last year struck down former Mayor Michael Bloomberg's ban on the sale of oversize soft drinks, a decision now being appealed, but national and global efforts to reduce the health risks of sugar consumption have continued.

Where We Are Today

- Little has changed relative to regulation of sugary beverages: Massachusetts remains one of 16 states³ that do not tax soft drinks, and instead gives them preferential treatment by classifying them as food that is exempt from the sales tax.
- The most recently available data suggest that soda consumption among Massachusetts youth is trending downward, consistent with national soft-drink sales. As



of 2011, 18 percent of high-school students drank soda one or more times each day, down from 21 percent in 2009. Because there has been a simultaneous rise in teen consumption of energy drinks, which are also high in sugar, the downward trend in soda consumption does not necessarily indicate a drop in sugar intake.⁴

■ In Vermont, the number of voters who said they would support a tax on sugar-sweetened beverages rose from 42 to 77 percent when the resulting tax revenue would be used to make health care programs for children more affordable or to fund oral health programs for children.⁵

Best Practices

- Evidence-based health guidelines continue to support the adoption of practices that can enable individuals to reduce the amount of sugars in their daily diets. In fact, pending World Health Organization (WHO) guidelines recommend reducing daily intake from 10 percent of daily calories to 5 percent, or an average of about 6 teaspoons per day.⁶
- Research supports the effectiveness of taxing sugary beverages. The Cambridgebased National Bureau of Economic Research (NBER) suggests that products with more sugar are significantly price elastic, and that taxation will reduce consumption.⁷
- In 2013, Mexico imposed a peso-per-liter national tax on the sale of sugar-sweetened beverages; consumption is now forecast to drop by up to 7 percent in 2014.8

- States now considering sugary beverage taxes include Connecticut, Hawaii,
 Massachusetts, New York, West Virginia and Vermont.⁹
- San Francisco is now studying a 2014 ballot initiative that would place a 2-cents-perounce tax on sugar-sweetened beverages. The projected \$31 million generated from the measure would be diverted to the city's public schools to improve nutrition and physical activity programs.¹⁰

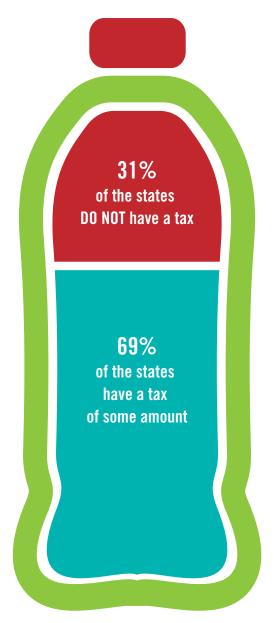
Current Policy Landscape

- Pending Massachusetts legislation—An Act to Reduce Childhood Obesity (House Bill 2634)—would eliminate the exemption on sugar-sweetened beverages and direct the resulting revenue (about \$60 million per year) to support physical activity programs in the public schools.
- Previously enacted legislation in Massachusetts (the 2012 School Nutrition Act) required schools to phase out soft drink sales by August 2013.
- At the national level, the FDA has not responded to calls by nutrition experts to directly regulate the level of added sugar in foods, but the FDA has called for listing added sugars on food labels, despite ongoing industry resistance.¹¹

GRADE: F

RATIONALE: While many people in Massachusetts appear to be reducing the amount of sugary soda and juice they drink, the Commonwealth remains one of the few states that grant special tax treatment for these items.

Soda Sales Taxes



Source: Bridging the Gap, 2014 State-by-State Soda Tax Rates.

Raising the Grade

The Legislature should pass House Bill 2634, An Act to Reduce Childhood Obesity, which would eliminate the sales-tax exemption for sugar-sweetened beverages.

FOOD ACCESS GRADE: B-

Background

During the last decade, access to healthy, nutritious food has become an increasingly important factor in public health, sparked by research that links such access to health outcomes. Food "deserts" (neighborhoods with little or no access to healthy food) and food "swamps" (neighborhoods with a heavy concentration of fast food and other sources of poor nutrition) are often concentrated among lower-income or vulnerable neighborhoods subject to poor health and health care disparities.

Where We Are Today

- Massachusetts continues to be a national leader in the expansion of farmers' markets, which bring local produce directly to customers. Massachusetts ranks 7th among the 50 states for the number of active farmers' markets in the state (approximately 290).¹²
- Massachusetts has one of the lowest rates of supermarkets per capita in the country. Boston, Springfield, and Brockton have 30 percent fewer supermarkets per capita than the national average. Rates in Lowell and Fitchburg would have to double to provide sufficient access.¹³

Best Practices

■ In Pennsylvania, the Fresh Food Financing Initiative has served a wide range of purposes: building large grocery stores, family food markets, farmers' markets, and corner markets in underserved areas to allow access to healthy food. So far, the

- program has increased food access, helping more than 500,000 people and adding 5,000 new jobs.¹⁴
- In 2008, Boston Mayor Thomas M. Menino established the Boston Food Council to help support efforts to bring healthy and locally sourced food to the city's residents. In December 2013, the City Council passed Article 89 to expand urban commercial agriculture projects throughout the city. The passage of this ordinance represents a signature achievement of the Council.¹⁵
- The state's Mass in Motion campaign supports local food initiatives in more than 50 communities. They include:
 - Healthy Markets: A program in Dorchester and Springfield that enables corner stores and small retailers to offer fresh fruits and vegetables.
 - Healthy Dining: a program to help more than 100 local restaurants in more than two dozen municipalities offer healthier options.
 - "Veggiemobiles": Worcester, Somerville and Fall River have created "veggiemobiles" to increase the availability of affordable fruits and vegetables.
- The Live Well Springfield initiative created the "Go Fresh Mobile Market," a truck filled with fresh local produce that travels through neighborhoods selling affordable fresh food and offering food storage tips, recipes and demos.

Current Policy Landscape

- The state's Grocery Access Task Force made recommendations in 2012 to improve fresh food financing, provide technical assistance for food retailers and entrepreneurs, and reform food-related zoning and land-use regulation. These recommendations are now part of pending legislation before the Massachusetts Legislature (Senate Bill 380/House Bill 3504, and House Bill 1859).
- The Massachusetts Public Health Association (MPHA) is currently leading the Act FRESH Campaign, a project that brings together a diverse array of grassroots and statewide organizations to improve access to healthy, affordable food and safe, public spaces for physical activity.
- The Massachusetts Department of Agriculture and its Food Policy Council chose a team led by the Metropolitan

Area Planning Council (MAPC) to conduct a comprehensive assessment of the Commonwealth's food system and its agricultural sector in order to create a detailed strategic plan by 2015.¹⁶

GRADE: B-

RATIONALE: The growth of farmers' markets has expanded access to healthy foods across Massachusetts and more comprehensive action is planned. While measures to expand healthy food retailing are still largely in the planning stage and are subject to debate at the State House, the policy landscape is promising.

Raising the Grade

Massachusetts should move forward on legislation to promote financing for healthy food and regulatory reform to promote food access even as it awaits completion of a comprehensive food-policy strategy.

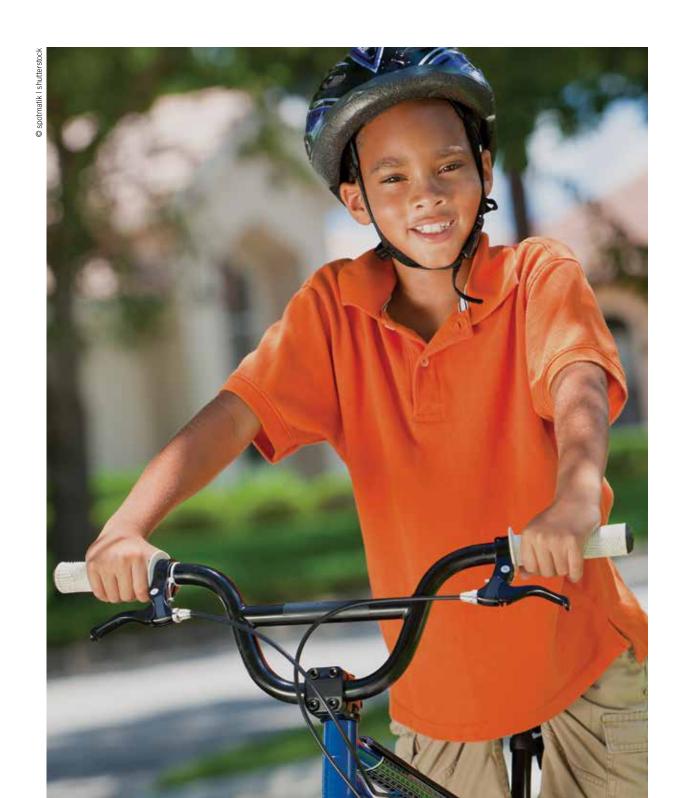


Healthy Living by Design

Biking and Walking

Smart Growth and Healthy Transportation Planning

Health Impact Assessments



BIKING AND WALKING



Background

Research shows significant physical and mental benefits of active transport (biking and walking), including reductions in Type 2 diabetes, obesity, and cardiovascular disease. People who live in highly walkable neighborhoods experience nearly 30 minutes more of active transport each week,¹ and thus generally have low rates of obesity on a comparative basis.²

Where We Are Today

- National rankings place Massachusetts 7th among states for the percentage of commuters biking or walking to work, though the percentage remains small: 4.7 percent walk and 0.7 percent cycle.³
- Boston ranks No. 1 among large cities for the percentage of residents who walk to work (15 percent) and 12th (1.7 percent) for those bicycling to work.⁴ However, there remain issues of inequity. Biking is far less prevalent among communities of color, and public safety considerations may be a factor.
- Boston also ranks 1st among large cities for lowest pedestrian fatality rates (0.9 persons per 10,000 daily walkers) and 12th for bicyclist fatality rates (2.5 per 10,000 daily bicyclists).⁵
- Massachusetts is one of a few states to adopt fairly comprehensive policies to promote biking and walking on public ways, but ranks 28th in per-capita public funding for pedestrian and cycling improvements.⁶

■ The Massachusetts Safe Routes to School program funds 31 local projects totaling more than \$13 million. Currently, the program has more than 620 school partners in 170 communities, thereby working with 43 percent of the Commonwealth's public K-8 schools.⁷

Best Practices

- Bike sharing programs continue to expand in Massachusetts and throughout the United States. The Hubway bike share program will reopen full operations in 2014 with a record 140 bike sharing stations in Boston, Cambridge, Somerville, Arlington and Brookline. A pared-down Hubway program operated successfully in Cambridge through the winter of 2013-14.8
- "Vision Zero," originally a Swedish approach to road safety that "accepts no traffic fatality as inevitable," was recently adopted by the new de Blasio administration in New York City.9
- Boston has been steadily adding bike lanes since 2008 to its 63-mile network of existing multi-use paths. In addition, it has designated various travel lanes for shared use and painted advance stop lines for bicycles (so-called bike boxes) at 77 intersections.¹⁰

Current Policy Landscape

In 2012 the state Department of Transportation's Healthy Transportation Policy set a goal for tripling the share of travel by 2030 through bicycling, transit

and walking in Massachusetts. In 2013, the department (MassDOT) announced that all state transportation projects would be designed to increase cycling, transit and walking options.¹¹

- In April the Legislature enacted, and Governor Patrick signed into law, a new state transportation bond authorization that includes \$50 million in aid to cities and towns for the installation of complete streets and new provisions for technical assistance to communities. This will make it easier for residents and visitors to take transit, walk, or bike to their destinations.¹²
- Pending legislation (House Bill 1859) to reform local zoning and promote healthy community design includes significant provisions to enhance biking and walking in Massachusetts communities.¹³

GRADE: B

RATIONALE: The state has instituted many innovative policies to expand biking and walking opportunities, with the recently authorized transportation bond illustrating the state's support for complete streets. While Boston ranks high in quality active transport, however, other areas continue to lag behind.

Raising the Grade

Raising the grade will depend on whether these new incentives for complete streets create more equity outside the Boston city limits. Additionally, the Legislature should pass House Bill 1859, a zoning reform measure that would advance a culture of biking and walking throughout the Commonwealth.



SMART GROWTH & HEALTHY TRANSPORTATION PLANNING



Background

"Smart Growth" describes a set of urban planning principles designed to produce great communities and neighborhoods. Smart Growth policies facilitate safe walking and biking, encourage a range of housing choices, provide for mixed land use, support the local economy, promote environmental sustainability and maximize the use of public transportation.

Situating housing and commercial development near public transportation is a form of "healthy transportation" planning, which includes all forms of design that encourage physical activity and, consequently, lower health risks.¹⁴

Transit-oriented communities that are conducive to walking and biking are associated with healthier people because their residents tend to be more physically active. While the risk of obesity falls by 5 percent with every kilometer walked, it rises 6 percent with every hour spent commuting by car. Among children, access to sidewalks and parks is linked to higher rates of physical activity. Public transit users walk an average of 19 minutes per day getting to and from transit stops. ¹⁵

Where We Are Today

- Massachusetts residents who commute by car have an average commute of 28 minutes, longer than the 25-minute national average.
- Mass-transit users in the Commonwealth have an average commute of 45.2 minutes, compared to the national average of 47.8 minutes.¹⁶

- Mass-transit ridership in Greater Boston surged to a 50-year high in 2012, but suffered a slight decline in 2013, a drop attributed partly to 2012 fare hikes. Nationally, public transportation ridership reached a 57-year high in 2013.¹⁷
- The housing market recovery is enabling development that meets Smart Growth goals, including the Commonwealth's Smart Growth districts, many of which are sited near mass-transit stations.¹⁸

Best Practices

- "Complete Streets" are designed to accommodate automobile, pedestrian, and bike traffic. They have been incorporated in highly trafficked areas, such as Cambridge, and major bridge projects such as the Longfellow and Boston University bridges linking Boston and Cambridge and the Burns Memorial Bridge connecting Shrewsbury and Worcester. More than 600 regional or local jurisdictions have adopted complete-street policies.¹⁹
- Transit Oriented Development (TOD) clusters housing and commercial development near transit stations, encouraging active lifestyles. Massachusetts promotes this type of development under Chapter 40R, the 10-year old statute that created financial incentives for development in 33 Smart Growth Districts throughout the Commonwealth. Nineteen of these districts have either completed or approved new housing.²⁰ In the Fairmount Corridor, which runs through low-income areas of Boston, the Massachusetts Association of Community Development Corporations

and the Greater Four Corners Action Coalition have played key roles in ensuring transportation equity (expanded service and lower fares) as the corridor develops.

Nationally, the Safe Routes to School (SRTS) program makes infrastructure improvements near schools so that children can safely bike and walk. Data from more than 4,700 schools participating in the program show a 27 percent increase in K-8 students walking to and from school between 2007 and 2012.²¹

Current Policy Landscape

- In 2013, the Massachusetts Legislature secured long-term transportation finances, providing new sources of funding to advance health equity through transportation policies that include complete street and Smart Growth elements. The first gas-tax increase in Massachusetts since 1991 was included. This tax, indexed to inflation to provide adequate future funding for transportation infrastructure, could be jeopardized by a ballot initiative to remove the indexing.
- The 2013 legislation allows the MBTA to raise transit fares every other year: an increase is scheduled for July 2014. This is expected to slightly reduce ridership, disproportionately affecting low-income neighborhoods. However, some MBTA services have been expanded and are attracting new riders.
- A state transportation bond bill was enacted in 2014 to provide \$50 million to cities and towns for construction of Complete Streets through the Active Streets Certification Program.²² Pending legislation (House

Bill 1859) would reform the state's zoning and land use regulations to encourage developments to improve recreation and physical activity opportunities.

GRADE: B+

RATIONALE: The Commonwealth's strong policies and sustainable funding are being used to implement healthy living by design through Smart Growth and healthy transportation planning.

Raising the Grade

Massachusetts should ensure that healthoriented policies are successfully disseminated throughout cities and towns by fully funding Smart Growth and healthy transportation initiatives and enacting zoning reforms. The Legislature should also ensure that transportation projects have a predictable and dedicated funding source.



HEALTH IMPACT ASSESSMENTS



Background

The National Research Council has defined health impact assessment as "a systematic process that uses an array of data sources and analytic methods and considers input from stakeholders to determine the potential effects of a proposed policy, plan, program, or project on the health of a population and the distribution of those effects within the population." Health Impact Assessments (HIAs) "provide recommendations on monitoring and managing those effects."²³

Unlike environmental impact assessments that are mandated by law and typically apply to pollution-related impacts alone, state, local and regional agencies are undertaking HIAs to assess a broad array of long-term health effects from an equally wide range of policies and projects. HIAs are also used by community organizations to provide a data-driven approach to their comments on public policy decisions that will affect local health.

Where We Are Today

- HIAs are actively encouraged by a number of public health authorities in the U.S., including the Centers for Disease Control and Prevention (CDC), as a way to promote "health in all policies" and in decisions about publicly funded projects.²⁴ Currently, no federal regulations require a HIA.
- The Health Impact Project, a joint project of the Robert Wood Johnson Foundation and the Pew Charitable Trusts, is actively monitoring use of HIAs in the United States: as of spring 2014, it counted more than

- 150 completed or in-progress HIAs in 28 states plus the District of Columbia and Puerto Rico.
- As of spring 2014, there were 16 HIAs either recently completed or in progress in Massachusetts, according to the Health Impact Project. HIAs in Massachusetts are assessing health impacts from a wide range of proposed policies and projects, including casino development, highway construction, housing policy initiatives and neighborhood revitalization.²⁵
- Massachusetts is one of only two states that require the use of HIAs for transportation policies and programs.

Best Practices

Massachusetts has helped set a standard for best practice on Health Impact
Assessments by requiring HIAs for the planning of state-funded transportation projects. HIAs are developed as a stipulation of the Healthy Transportation Compact created by the state's transportation agency and the Department of Public Health.²⁶

Current Policy Landscape

■ The Massachusetts Community Investment Tax Credit Grant Program HIA is currently in progress and expected to be complete in June 2014. This HIA will examine the connections between community development activity and public health.

For example, it is expected to address links between the design of community-development projects and factors such as indoor air quality, risk of injury, and access to safe places to exercise as well as links between the siting of community development projects and access to neighborhood grocery stores and clinics.

GRADE: B

RATIONALE: Massachusetts has helped set a national standard for use of Health Impact Assessments by incorporating them into its transportation planning process. A number of public agencies, including planning agencies,

are now employing HIAs to inform an increasingly diverse array of public policy and project planning decisions.

Raising the Grade

The Commonwealth can extend its leadership on HIAs by having other departments and state agencies use HIAs as a standard practice and linking the findings of HIAs to evidence of actual health outcomes.

The newly rehabilitated Boston University
Bridge features bicycle lanes and other
elements of "complete streets" design that
facilitate biking and walking.
Photo courtesy of Livable Streets.



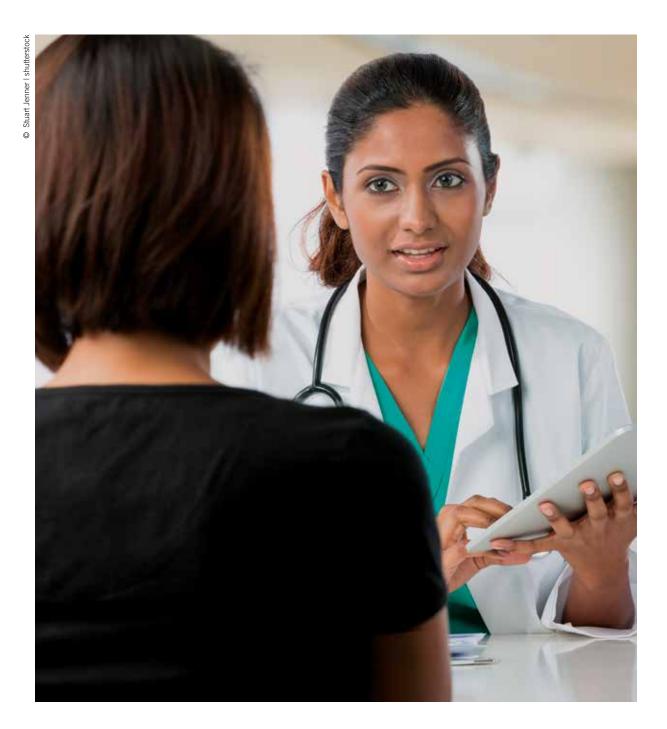


Public Health and Health Care

Primary Care

Employee Health Promotion

Public Health Funding



PRIMARY CARE



Background

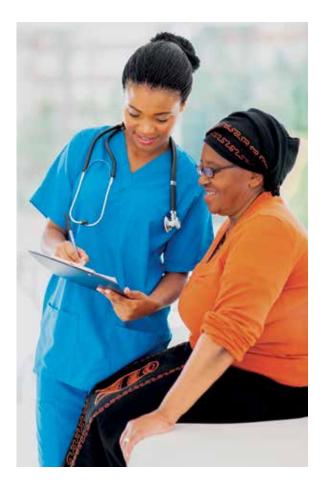
Massachusetts has a higher number of primary care physicians (PCPs) than other states and it ranks high in national quality evaluations. However, there are gaps in the availability of primary care that signal a potential future shortage. Despite the Commonwealth's early adoption of health care reform, about 4 percent of the population remains uninsured (the lowest percentage in the country).¹

Cost remains a serious concern. PCPs are under pressure to lower costs through preventive care and coordination, and the Patient-Centered Medical Home (PCMH) has emerged as the dominant model for doing so. Under the PCMH model, a diverse team of care providers meets the majority of each patient's physical and mental health care needs, including prevention and wellness, acute care, and chronic care.

Where We Are Today

- Massachusetts ranks No. 1 for access to PCPs, with 196 physicians per 100,000 residents.² Even so, issues remain:
 - There are more than 60 localities designated as high need (Health Professional Shortage Areas) in Massachusetts. In these areas, only 56 percent of the need for primary care professionals is currently being met, compared to 61 percent nationally.³
 - In 2012, 11 percent of non-elderly adults reported a problem getting primary care, compared to a 14 percent average in 2008.⁴

- Fewer internal medicine physicians are accepting new patients—45 percent in 2014, compared to 51 percent in 2012. This is the lowest percentage since 2009.⁵
- Massachusetts will need 725 additional PCPs by 2030 to maintain current utilization, a 12-percent increase over 2010.6
- The average wait time for an internal-medicine physician is 50 days, with the longest wait time in Bristol County (128 days) and the shortest in Worcester County (26 days).⁷



Best Practices

- Results from several Patient-Centered Medical Home programs indicate early success in increasing the delivery of preventive services, reducing unnecessary emergency room visits and lowering overall medical spending.8
- Massachusetts has two widely cited examples of innovative approaches to primary care practice. The Commonwealth Care Alliance, which targets high-risk patients, has reported significant cost reductions, and lora Health has redesigned its primary care delivery so that each patient is assigned a health coach in addition to a physician. The health coaches are available by e-mail, text, video or in person to help patients stay well and achieve their goals.

Current Policy Landscape

- The state Department of Health and Human Services has called for all primary care practices to have PCMH status by 2015.9 Several initiatives include:
 - The former Safety Net PCMH Initiative, which began extending the model to the state's community health centers.
 - The state PCMH Initiative, begun in 2009, which is bringing the PCMH model to 46 practices serving more than 500,000 patients.
 - The Primary Care Payment Reform Initiative, created by a 2012 law to control health care costs. It will create payment incentives for PCMH practices that participate in MassHealth (Medicaid).

- The Massachusetts State Innovation Model (SIM), funded by the federal government. It commits \$44 million to build infrastructure so that all physician practices can operate as medical homes. The SIM project also calls for integration of primary care with public health.¹⁰
- To address access issues, the state
 Department of Public Health issues visa
 waivers to international physicians who will
 work in Underserved Health Professional
 Shortage areas. The department also offers
 a loan repayment program to encourage
 medical students to enter the primary care
 workforce.¹¹

GRADE: B+

RATIONALE: Massachusetts continues to score high marks for the quality of its primary care. The Commonwealth has made a major commitment to expansion of the PCMH model, which is expected to prevent more illnesses and minimize health risks through improved coordination of care and integration with community resources.

Raising the Grade

The state's next step will be demonstrating tangible results in improving health outcomes and avoiding preventable medical costs.

EMPLOYEE HEALTH PROMOTION



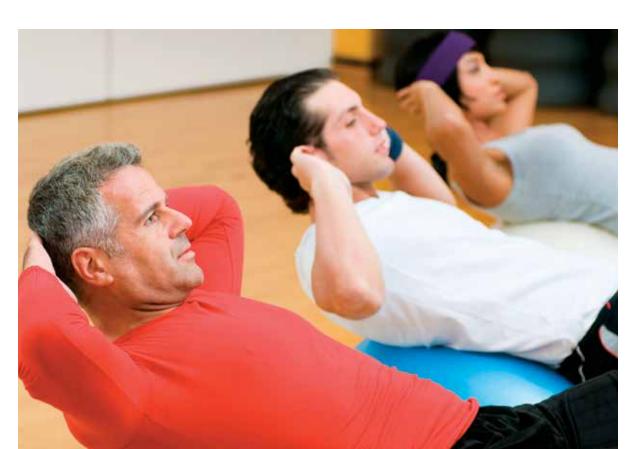
Background

Surveys indicate that about 80 percent of employers that provide health insurance include at least one employee wellness- or health-promotion offering among their benefits. Research shows that well-designed employee health plans can improve health outcomes and reduce health risks, as well as achieve savings by preventing disease that would otherwise be treated medically.¹²

Where We Are Today

■ The health promotion and wellness benefits offered by employers range from smoking cessation programs to lifestyle coaching. In addition, some companies are making environmental changes to promote employee health by subsidizing healthy food offerings in the cafeteria or building on-site gyms.¹³

- Far fewer employers offer their workers tangible rewards for participating in health-promotion and wellness activities, or for achieving specific health goals. Nationally, only 3 percent of firms offer lower premiums or cost-sharing in exchange for employee participation in wellness programs.
- Health risk assessments (HRAs) are online surveys that some employers ask employees to complete to identify specific health risks. Employee health data is subject to confidentiality under the federal HIPAA statute, but it may be directed to thirdparty aggregators who can remove personal identifiers, analyze it and report back to employers. Trend data from HRAs may be utilized to customize employer-sponsored health programs.



- Only a minority of U.S. employers use HRAs, although one-quarter of large (200 or more employees) firms offer them. Just over half of those companies provide some financial inducement for employees to take the surveys. About 60 percent of Massachusetts companies responding to a 2013 survey said they use an HRA: of those, more than 40 percent offer direct cash rewards, and 13 percent offer a discount on employee contributions to the health plan.¹⁴
 - About 43 percent of the respondents indicated that they are using or plan to use biometric screenings, which are tests for specific markers of disease risk. Only about 25 percent said they are offering or are planning to offer discounted healthy food in company cafeterias

Best Practices

Two Massachusetts firms are among the most recent award winners in the National Business Group on Health's annual competition for employee health promotion practices:

- MassMutual Life Insurance was recognized for offering an integrated health and wellness program promoted through "incentive dollars" for online HRAs, physical activity, and coaching programs.
- Fidelity Investments' "Well for Life" program offers healthy dining options, fitness centers and free health screenings, along with an incentive program that encourages healthy choices.¹⁵

Current Policy Landscape

Major policy action to encourage employee health promotion has occurred at both the federal and state levels, but implementation is still in its early stages.

- The federal Affordable Care Act allows employer-sponsored health plans to allocate up to 30 percent of the value of an employee health plan to rewards on a "health-contingent" basis (for example, maintaining a healthy weight) provided they are non-discriminatory.
- Massachusetts' 2010 health care reform legislation authorizes the Commonwealth Connector Authority to offer employers rebates of up to 15 percent of premiums for approved wellness programs in employee health plans purchased through the Connector. The legislation also authorizes the Group Insurance Commission to offer a pilot program (WellMass) to state employees and retirees.
- The Commonwealth's 2012 health care cost control legislation, known as Chapter 224, creates a tax credit covering 25 percent of the cost of implementing approved wellness programs up to \$10,000 per year for businesses with fewer than 500 employees. This credit will expire in 2017.

GRADE: B

RATIONALE: Massachusetts continues to experiment with innovative approaches to bring health promotion benefits to employees, including those who work at smaller firms. Smaller firms historically have had limited access to employee health promotion and wellness programs or the in-house expertise to launch them.

Raising the Grade

In the next two to three years, Massachusetts employers and state government should document the outcomes from employee health promotion programs, particularly as the state's health promotion tax credit nears its expiration in 2017.

PUBLIC HEALTH FUNDING



Background

Many cities and states are looking at the role that public health agencies and programs can play in improving the quality of health care while reducing its costs. These efforts include improving the environment to support healthy living in communities where opportunities for physical activity, access to healthy food and other health-supporting factors are limited, and—in collaboration with health care providers—offering community-based services to vulnerable residents.

Research shows that investment in public health generates improvements in outcomes and experience of care and increased access for all populations. For example, a 2011 study found that a 10-percent increase in funding for evidence-based public health programs was associated with a 3.2-percent decrease in mortality from cardiovascular disease and a 14-percent drop in mortality from diabetes.¹⁶

Where We Are Today

- Massachusetts has taken significant steps in recent years to direct new public health investment toward innovative, communitybased services.
 - The Department of Public Health's Mass in Motion campaign now supports initiatives in 52 cities and towns.
 - The 2012 legislation to control health care costs, known as Chapter 224, created a first-of-its-kind Prevention and Wellness Trust Fund. In January 2014, the fund released its first awards to nine partnerships serving almost 1 million residents. These partnerships will coordinate community health resources

- to address tobacco use, pediatric asthma, and hypertension, along with other issues.
- The Commonwealth faces continuing challenges in public health, particularly a long-term pattern of disinvestment by the state Legislature.
 - Overall public health funding has fallen by just over 21 percent (adjusted for inflation) since 2001, despite a 3.8 increase in FY 2014, partly because of the Trust Fund.
 - Revenues directed at health promotion and disease prevention have plummeted by almost 85 percent (adjusted for inflation) since 2001.
- The United Health Foundation rates Massachusetts 11th in public health funding, with an average of \$111 dollars spent per person in 2013 compared to \$120 in 2012 and \$127 in 2011.

Best Practices

The Commonwealth's highly successful tobacco-control program demonstrated that well-executed public health initiatives can have a direct, measurable impact on patient health and medical spending. This program generated an estimated net savings of \$2.12 in Medicaid costs for every \$1 spent. Unfortunately, it has been significantly reduced.²² Promising practices that could have similar impacts are emerging from the Mass in Motion communities.

Current Policy Landscape

- The Prevention and Wellness Trust Fund is a one-time investment that is due to expire in 2016. Its continuation will hinge on whether grantees can demonstrate a positive impact on health and on health care spending and if the state will create a consistent funding stream for it.
- Massachusetts is one of 36 states that have decreased per-capita expenditures on public health since the height of the Great Recession in 2008-09.²³
- As of May 2014, the Legislature is considering a new state budget that would reduce state public health funding by up to 12 percent (net of inflation) in Fiscal Year 2015.²⁴
- Some 39 towns and cities—75 percent of the Mass in Motion communities—will be affected by the abrupt discontinuation in September 2014 of Community Transformation Grants from the Centers for Disease Control and Prevention (CDC). A budget amendment to direct funds to DPH in support of Mass in Motion is awaiting action.

GRADE: D

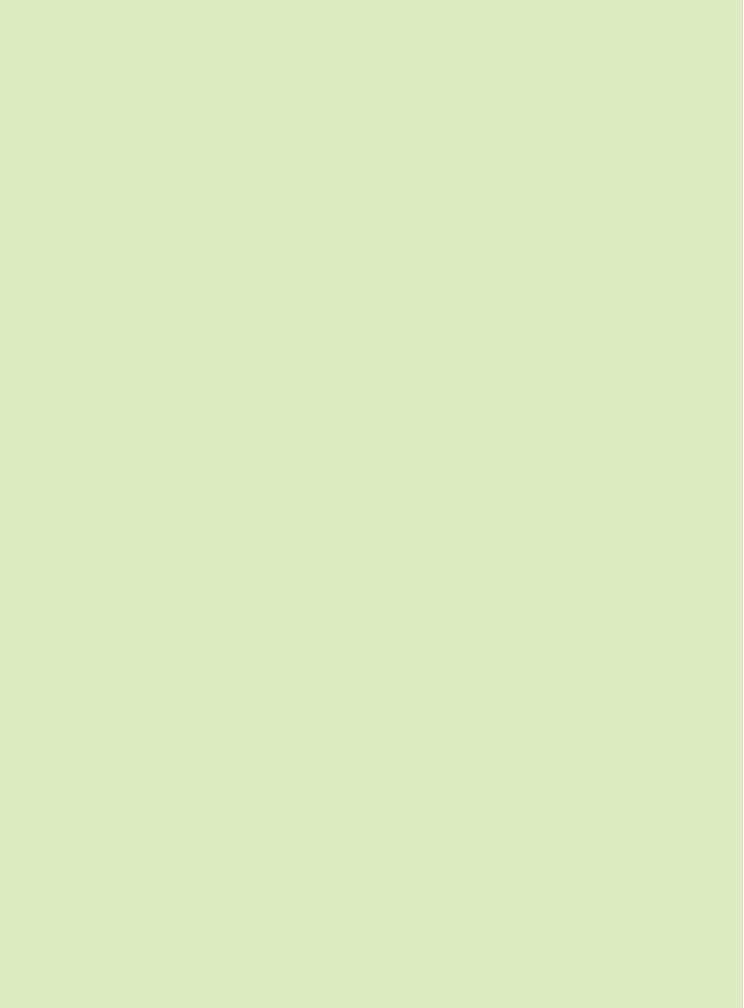
RATIONALE: The Commonwealth took a major step forward with the creation of the Prevention and Wellness Trust Fund and the release of its first round of grants this year, but it is not enough to make up for ongoing cuts at the federal and state level. Public health spending in the Commonwealth and elsewhere remains near historic lows and there is little to no effort to increase it in a significant way.

Raising the Grade

Massachusetts legislators should restore and increase investments in public health—particularly in health-promotion efforts—to fulfill the quality-improvement and cost-reduction goals of Chapter 224.

Volunteers serve homegrown kale salad at the Waltham Farm Day event at Waltham Fields Community Farm. Photo courtesy of Healthy Waltham.





Conclusion

The Healthy People/Health Economy Coalition has consistently worked for environmental, systems and policy change that can be summed up as follows: give everyone an equal opportunity for better health by making the healthy choice the easy choice. Right now, our state economy is distorted by massive health care spending at the expense of many other worthy priorities: education, public safety, public health and more.

The prior years' trend continued again in 2014 with progress in some areas, strength in many, and a few key areas in which we are stalled.

Last year's report noted that the gains we were making were not equally distributed among all residents. This is still true. People of color or those who have low incomes continue to experience more preventable chronic disease, despite some positive trends. Our commitment to equity remains strong, but we now realize that one way to achieve it is to intervene on behalf of good health in the first few years of a child's life.

At present, one in eight U.S. preschoolers is obese and those figures are notably worse among certain minority groups. One in five African-American preschoolers and one in six Hispanic preschoolers are obese. A child who is overweight at the beginning of kindergarten has nearly four times the risk of becoming obese as a child who is not (32 percent vs. 8 percent). "Weight fate" reflects the fact that half of obese 14-year-olds were already overweight by the age of 5.

In 2008, the Robert Wood Johnson Foundation (RWJF) convened the Commission to Build a Healthier America to help identify ways to improve the health of the nation. The Commission—a national, nonpartisan group of leaders from the public and private sectors—issued 10 sweeping recommendations aimed at enhancing the health of all Americans. The Commission's work sparked a national conversation that has led to a marked increase in collaboration among a wide variety of partners addressing the many determinants of health, and it has led to many of the policy recommendations included in previous versions of this report card. This year, the commissioners reconvened and emphasized the importance of:

- Investments in the lifelong physical and mental well-being of our youngest children
- Creation of communities that foster healthpromoting behaviors
- A change in the definition of health care to include promoting health outside of the medical system

The path to good health in a vibrant economy must include all residents regardless of race, income, or geography. This year we add age to that list, recognizing that lowering the incidence of preventable chronic disease and curtailing health care costs in Massachusetts must begin with our youngest residents and continue on to our older citizens. The interventions across the life span illustrated in this report are imperative for both a healthy economy and healthy people in the Commonwealth. We must continue to prioritize, and improve upon, these investments and policies starting today.

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