



JOINING FORCES: Adding Public Health Value to Healthcare Reform

The Prevention and Wellness Trust Fund
EXECUTIVE SUMMARY

**PREVENTION
& WELLNESS
TRUST FUND**



EXECUTIVE SUMMARY

Established by the legislature in 2012 as part of Chapter 224, the Prevention and Wellness Trust Fund (PWTF) is an integral part of the state's multifaceted approach to healthcare transformation. Two programs, the Prevention and Wellness Trust Fund Grantee Program and the Massachusetts Working on Wellness, form PWTF.



Together, these two programs have **expanded disease prevention and wellness efforts across the state**, reaching over **372,000 people** in the Commonwealth.

The impact of prevention and wellness activities on the health of the Commonwealth is best represented in the story of Arnetta (see next page).

PWTF has demonstrated positive outcomes and potential cost savings. Two independent evaluations confirm the importance of a program like PWTF. This Executive Summary highlights findings from both evaluation reports along with a final progress report.

In the PWTF Grantee Program, the Harvard Catalyst independent evaluation found preliminary indications of improvements in health outcomes and costs along with important systems changes. Data was analyzed from the first year and a half of implementation.

- ✓ PWTF communities had improvements in systolic blood pressure, which if sustained over the lifetime of PWTF clinical patients, could result in 500 to 1,000 fewer heart attacks and strokes per million residents, and lead to 125 to 250 fewer deaths due to cardiovascular

disease per million residents treated. The hypertension interventions are highly cost effective – on par with mammography screening, treatment for heart attacks, and treatment for elevated cholesterol. Over enough time, these interventions should have a positive ROI as intervention costs diminish with more routine screening and interventions.

- ✓ The asthma interventions had promising results with decline in overall healthcare costs in PWTF communities when compared to comparison communities. Although available data is incomplete, data suggests that asthma interventions may give very good value and may result in net costs savings.
- ✓ Significant infrastructure was developed to address the growing public health concern of older adult falls and more than 900 falls were prevented in one year of PWTF. The interventions are cost effective.
- ✓ Important systems changes occurred in all nine partnerships for all four conditions resulting in important infrastructure and capacity development.

For the PWTF Massachusetts Working on Wellness Program, the independent evaluators found an estimated savings for medical care ranging from \$0.76 million to \$4.07 million for the combined top three health behaviors (diet and nutrition, leisure-time exercise, and stress reduction) targeted by the programs.

These early outcomes bode well for more significant returns if PWTF were to continue.

MEET ARNETTA

Arnetta Baty, age 64, is a woman of conviction. She runs a business with her husband Carl, called Rounding the Bases, Inc., which is a recovery-oriented program in Dorchester. They are both fierce advocates in their community.

Arnetta tries to maintain a full life, despite experiencing more than 10 falls in the past year alone. Her last bad fall happened in her bathroom, slipping into a vent and damaging her hip and leg. She also lives with several other health conditions such as diabetes, lung disease, asthma, and poor eyesight. But, Arnetta is aware of the burden and possible consequences of just one fall. She's seen her mother experience terrible falls and knows that "...it's the fall that puts someone in the hospital."

Through PWTF, the Batys met Tammy, a Community Health Worker through Boston Senior Home Care, who conducted a home safety assessment. This led to several practical improvements, such as securing handrails on the outside of their home, raising the bathroom toilet seat, and installing bathtub grab bars. Grateful by the assistance of Tammy, Arnetta recommended the program to 10 of her friends and even her 94-year-old mother. She's also enrolling in the Matter of Balance class through PWTF.

Arnetta hasn't had a fall in the last few months thanks to the services of PWTF. The Batys shared that building trust is important to engage older adults with services, especially those who are isolated. "Although we are old, we still like to be social and mobile."



THE CREATION OF THE PREVENTION AND WELLNESS TRUST FUND

Massachusetts Lawmakers created PWTF, a \$57 million resource included in the 2012 healthcare reform law called Chapter 224. The funding itself doesn't come from taxes, but from the healthcare system itself: hospitals and commercial insurers. By directing healthcare funding into community disease prevention, the legislature created a new opportunity for attaining the dual goals of Chapter 224: improving health and reducing spending.

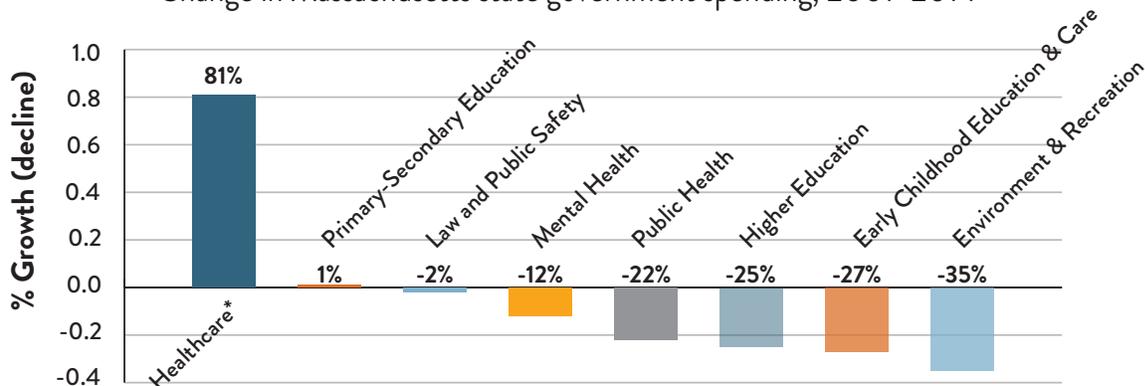
In addition, PWTF focuses on:

- reducing rates of the most prevalent and preventable health conditions;
- increasing healthy behaviors;
- increasing the adoption of workplace-based wellness or health management programs that result in positive returns on investment for employees and employers;
- addressing health disparities; and
- developing a stronger evidence-base of effective prevention programming.

WHY MASSACHUSETTS NEEDS PWTF

Healthcare spending in Massachusetts is unsustainable. In 2015, Massachusetts spent \$57 billion on healthcare. While healthcare spending slowed, it stayed above the state's benchmark of 3.6% yearly increase. Burdensome healthcare spending diverts resources from public health, early childhood education and care, and mental health. Meanwhile, studies show that clinical services account for approximately 20% of overall health while other factors including individual health behaviors, a person's income, and physical environment account for the other 80%. PWTF provides a model for shifting spending to activities that help maintain or improve the health of citizens rather than spending on costly "sick care."

Change in Massachusetts state government spending, 2001–2014



* Healthcare expenditure is Group Insurance Commission spending plus MassHealth (Medicaid)

Source: Healthy People/Healthy Economy: An Initiative to Make Massachusetts the National Leader in Health and Wellness. 2015. Data from Massachusetts Budget and Policy Center Budget Browser. <http://www.tbf.org/tbf/56/hphe/Health-Crisis>.

CHRONIC DISEASE IN MASSACHUSETTS – A COST DRIVER

The Commonwealth needs a program like PWTF that focuses on those conditions that drive healthcare costs.

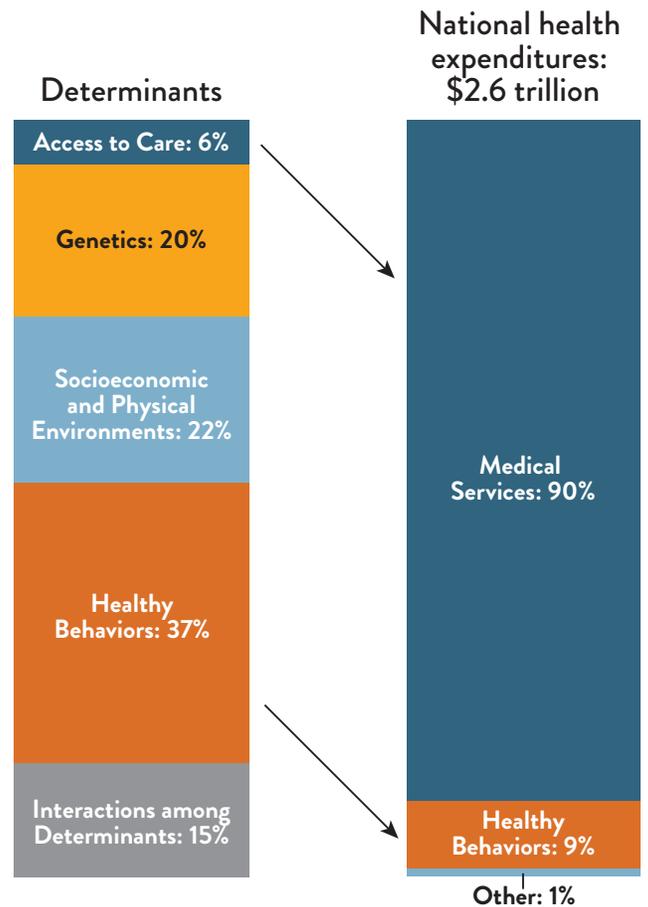
Chronic conditions affect 52.8% of Massachusetts' population and **chronic disease** is the **leading cause of death and disability** in Massachusetts.¹

According to the Agency for Healthcare Research and Quality, 82% of all healthcare spending in the United States was on one or more chronic conditions.² Massachusetts has higher healthcare utilization compared to the nation with higher rates of readmissions, preventable hospitalizations, and emergency department utilization.³ These rates are two times higher in lower income communities than in higher income communities, highlighting the stark disparities in outcomes by income, race, and community.⁴

THE PWTF MODEL

The creation of PWTF is a recognition that public health and healthcare need to join forces to improve the health of the Commonwealth's people by directing resources to community interventions that address the most costly health conditions. Targeted investments in healthcare and public health in high-need areas yield a high value for the state. These concentrated efforts, when well organized and well resourced, have an impact not just on people like Arnetta, but on everyone in the community and with time, on the whole state.

The spending mismatch: Health determinants vs. health expenditures



Source: Healthy People/Healthy Economy: An Initiative to Make Massachusetts the National Leader in Health and Wellness. 2015. Data from NEHI 2013. <http://www.tbf.org/tbf/56/hphe/Health-Crisis>.

PWTF Grantee Program

The PWTF Grantee Program supports nine partnerships, representing both urban and rural communities and covering 15% of the state’s population, with a focus on populations with higher burdens of disease.⁵ The partnerships have a combined disease burden that is 23% higher than the state and have a 28% higher hospitalization rate for Blacks and Hispanics for the health conditions that the program addresses.⁶ The Grantee Program has five key elements:

- extending care into the community ,
- promoting sustainable change,
- focusing on priority conditions and evidence-based interventions,
- targeting sufficient resources to sufficient population levels, and
- using data-driven quality improvement.



The partnerships focus on improving clinical care to keep people well, referring to prevention and wellness services in the community and providing services that are accessible and evidence-based. Community organizations play a vital role by providing culturally appropriate evidence-based interventions and promoting community-wide policies. Community health workers (CHWs) play a central role in the partnerships – they deliver interventions, help patients navigate clinical and community systems, create supportive environments for patients, and eliminate barriers to care. This program is allocated 75% of the Trust funding and focuses on four priority conditions that have a high burden of disease in Massachusetts and can be improved in three to five years. These conditions are: pediatric asthma, high blood pressure, falls in older adults and tobacco use. Arnetta received home assessments services from the Boston Partnership for her falls risk and enrolled in the Matter of Balance community classes.



To date, clinical interventions supported **better treatment of 300,000 patients** across the state.⁷ It also **created 317** condition-specific **clinic and community connections** resulting in **15,404 referrals** to community prevention programs and **6,992 individuals** who have completed their programs.⁸

PWTF built significant capacity in **48 communities** – **over 13% of cities and towns** in Massachusetts. **More than 340 people** were supported by PWTF with **148 new jobs** created and **194 additional jobs** expanded.



Massachusetts Working on Wellness

The Massachusetts Working on Wellness Program includes worksite health promotion activities and policies that support employees' efforts to adopt a healthier lifestyle. The Trust allocates up to 10% of the funding for these activities. Working on Wellness provides training, technical assistance, and seed funding to Massachusetts employers to initiate this work for their employees, by teaching the skills to plan and implement a comprehensive wellness initiative.

One hundred and fifty-six employers are actively participating in Working on Wellness, impacting over 70,000 employees, 21% of which are lower-wage workers. Half (50%) of the organizations in Working on Wellness have 200 employees or less.

Massachusetts Department of Public Health

The Massachusetts Department of Public Health (DPH) has been responsible for the design of the PWTF model, managing and monitoring the resources, and facilitating successful implementation of the programs. Changing healthcare delivery to include public health takes planning. The Department spent over one year developing the PWTF model and procuring the partnerships and vendors to implement the programs. The Department received guidance from the Prevention and Wellness Advisory Board to support alignment of PWTF with healthcare reform efforts as well as to select the partnerships and develop the evaluation strategies.

THE RESULTS

According to the independent evaluators and the Prevention and Wellness Advisory Board, the results of PWTF so far, in terms of outcomes, cost effectiveness and Return on Investment potential, and potentially sustainable system change, are promising.

PWTF Grantee Program Results

PWTF partnerships have successfully linked clinical and community organizations to address the four conditions of pediatric asthma, hypertension, older adult falls, and tobacco use. The program reached a large number of community residents and built the capacity of many clinical and community organizations in communities with significant health burden and health disparities. In some cases, such as older adult falls, PWTF built from scratch health and public health initiatives. In others, such as hypertension, PWTF expanded existing efforts to reach larger numbers of people at risk for poor health. Partnerships have had two years to implement clinical and community interventions that typically require three to five years, or more, to demonstrate results. However, the independent evaluation only had data for a year and a half of implementation. Even at this early stage, the independent evaluation found encouraging results.

Harvard Catalyst’s independent evaluation of the Grantee Program found:

HEALTH OUTCOMES AND COSTS

<p>Pediatric Asthma</p> 	<p>PWTF Results</p> <ul style="list-style-type: none"> \$ Interventions appear to be very cost effective at current rates ↓ Decline in overall healthcare costs in PWTF communities compared to comparison communities ↓ Declining prevalence in several PWTF communities ↑ Almost 6,000 school-based education and care management completions 			
<p>Hypertension</p> 	<p>PWTF Results</p> <ul style="list-style-type: none"> ↓ 0.515 to 0.945mmHg drop in Blood Pressure ↑ Increase in Hypertension screening from 58 to 62% ↑ Increase in controlled and treated hypertension in several PWTF communities <p>Projected Impact</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p>5-Year</p> <ul style="list-style-type: none"> ↓ Decrease of 21 to 28 Ischemic Heart Disease hospitalizations ↓ Decrease of 96 to 145 stroke hospitalizations ↓ Decrease of 28 to 48 Cardiovascular Disease deaths \$ \$2 million to \$3 million healthcare costs averted </td> <td style="width: 50%; vertical-align: top;"> <p>Lifetime</p> <ul style="list-style-type: none"> ↓ Decrease of 81 to 140 Ischemic Heart Disease hospitalizations ↓ Decrease of 444 to 784 stroke hospitalizations ↓ Decrease of 127 to 251 Cardiovascular Disease deaths \$ \$9 million to \$16 million healthcare costs averted </td> </tr> </table>		<p>5-Year</p> <ul style="list-style-type: none"> ↓ Decrease of 21 to 28 Ischemic Heart Disease hospitalizations ↓ Decrease of 96 to 145 stroke hospitalizations ↓ Decrease of 28 to 48 Cardiovascular Disease deaths \$ \$2 million to \$3 million healthcare costs averted 	<p>Lifetime</p> <ul style="list-style-type: none"> ↓ Decrease of 81 to 140 Ischemic Heart Disease hospitalizations ↓ Decrease of 444 to 784 stroke hospitalizations ↓ Decrease of 127 to 251 Cardiovascular Disease deaths \$ \$9 million to \$16 million healthcare costs averted
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<p>Older Adult Falls</p> 	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p>PWTF Results</p> <ul style="list-style-type: none"> ↓ Decrease in falls by 901 and 220 less injuries ↓ Decrease in 7 hospitalizations and 48 other cases requiring medical care ↓ \$188,000 healthcare costs averted </td> <td style="width: 50%; vertical-align: top;"> <p>5-Year Projected Impact</p> <ul style="list-style-type: none"> \$ Decrease in falls by 3,000 and 730 less injuries ↓ Decrease in 25 hospitalizations and 160 other cases requiring medical care \$ \$660,000 healthcare costs averted </td> </tr> </table>		<p>PWTF Results</p> <ul style="list-style-type: none"> ↓ Decrease in falls by 901 and 220 less injuries ↓ Decrease in 7 hospitalizations and 48 other cases requiring medical care ↓ \$188,000 healthcare costs averted 	<p>5-Year Projected Impact</p> <ul style="list-style-type: none"> \$ Decrease in falls by 3,000 and 730 less injuries ↓ Decrease in 25 hospitalizations and 160 other cases requiring medical care \$ \$660,000 healthcare costs averted
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<p>Tobacco Use</p> 	<p>PWTF Results</p> <ul style="list-style-type: none"> ↑ 6,396 Housing Units implemented smoke-free policies <p>Lifetime Projected Impact</p> <p>If PWTF results in 1 out of 1,000 people quitting smoking:</p> <ul style="list-style-type: none"> ↓ 7 less people would be hospitalized for Ischemic Heart Disease ↓ 28 less people would be hospitalized for stroke ↓ 8 less people would die from Cardiovascular Disease \$ \$622,118 to \$5.6 million in healthcare costs averted 			

SYSTEM CHANGES

<p>Clinical and Community Linkages</p> 	<ul style="list-style-type: none"> • Increased capacity and coordination among clinical and community organizations • Enhanced teamwork, task reallocation, and cross-training • Community organizations added value in addressing health equity • New infrastructure developed for older adult falls
<p>Community Health Workers</p> 	<ul style="list-style-type: none"> • Over 72 community health workers employed to implement interventions • Succeeded in engaging and creating trust with hard-to-reach populations
<p>Building Capacity</p> 	<ul style="list-style-type: none"> • 304 jobs created or supported by PWTF • Over 500 people trained on PWTF model and interventions
<p>Improving Environments</p> 	<ul style="list-style-type: none"> • 27 policies implemented in 10 schools, 11 housing authorities, and six affordable housing management companies • Reaching over 22,000 students with asthma • Impacting 45,696 affordable housing units

Working on Wellness Results

The Working on Wellness program has successfully reached and delivered services to organizations that previously had no formal wellness program and few wellness policies or environmental support. In particular, this program has reached a large number of small and moderate-size employer organizations, and a substantial number of low-wage, non-college-educated, and racial/ethnic minority workers. A substantial proportion of these employees had

moderate to high health risks, especially being overweight or obese and not consuming the recommended amount of fresh produce per day. The independent evaluation of the PWTF Massachusetts Working on Wellness Program found an estimated savings for medical care ranging from \$0.76 million to \$4.07 million for the combined top three health behaviors (diet and nutrition, leisure-time exercise, and stress reduction) targeted by the programs.

THE FUTURE OF PWTF

The independent Prevention and Wellness Advisory Board, by a vote of the membership, recommends the legislature reauthorize PWTF (Note: DPH abstained given its role as administrator of the program). Massachusetts needs a program like PWTF. It represents the future of healthcare – a system that focuses on keeping people healthy instead of one primarily focused on treating the sick. As the independent evaluations found, this approach can save Massachusetts money and result in a healthier Commonwealth.

In the coming years, the Advisory Board recommends that PWTF expand its focus to include community wide-approaches aimed at improving population health. This extension of PWTF will allow the Commonwealth to tackle factors outside the healthcare system that significantly impact health, such as poor housing conditions or access to nutritious foods. Continuing the current program will provide an additional year of data to supplement the evidence for PWTF.

Simultaneously, components of PWTF can and should be adopted by Massachusetts healthcare systems, including insurers, now. PWTF has shown prevention

programs can work. As the state moves to value-based payments, the evidence-based community interventions in PWTF offer opportunities for health systems to realize savings by preventing illness. Health systems also should incorporate the lessons learned in creating clinical-community partnerships. These lessons will help jump start efforts to expand care outside of clinical settings.

PWTF plays an important complementary role in the evolving healthcare landscape. As Accountable Care Organizations develop, PWTF can foster innovation in healthcare delivery by testing innovative models that can later be adopted by health systems. At the same time, PWTF can extend beyond healthcare to prevent disease by directly impacting the social determinants of health. While some components of PWTF will be incorporated into Accountable Care Organizations in the future, there remains an important role for PWTF that is distinct from, but complementary to, Accountable Care Organizations and value-based payments. These community-wide interventions support Accountable Care Organizations to take on risk by tackling the cost drivers that are beyond the scope of health system intervention.

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