

# Social Determinants of Health: *Opportunities and Challenges*

MA Annual Cost Trends Hearing  
Oct 18, 2016

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# Goals for Today

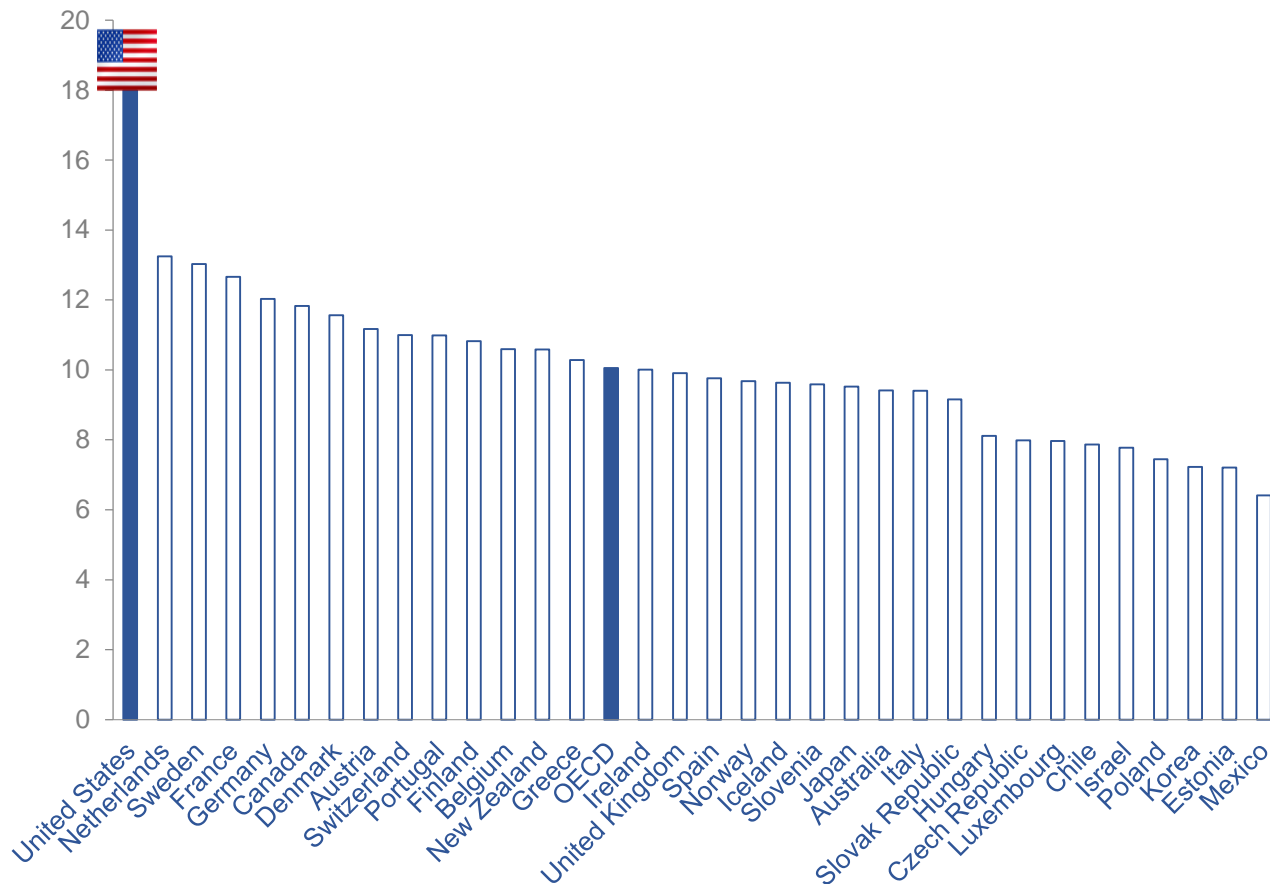
## Overall

*“The annual health care cost trends hearing is a public examination into **the drivers of health care costs** as well as the engagement of experts and witnesses to identify **particular challenges** and **opportunities** within the Commonwealth's health care system.”*

## This 40min

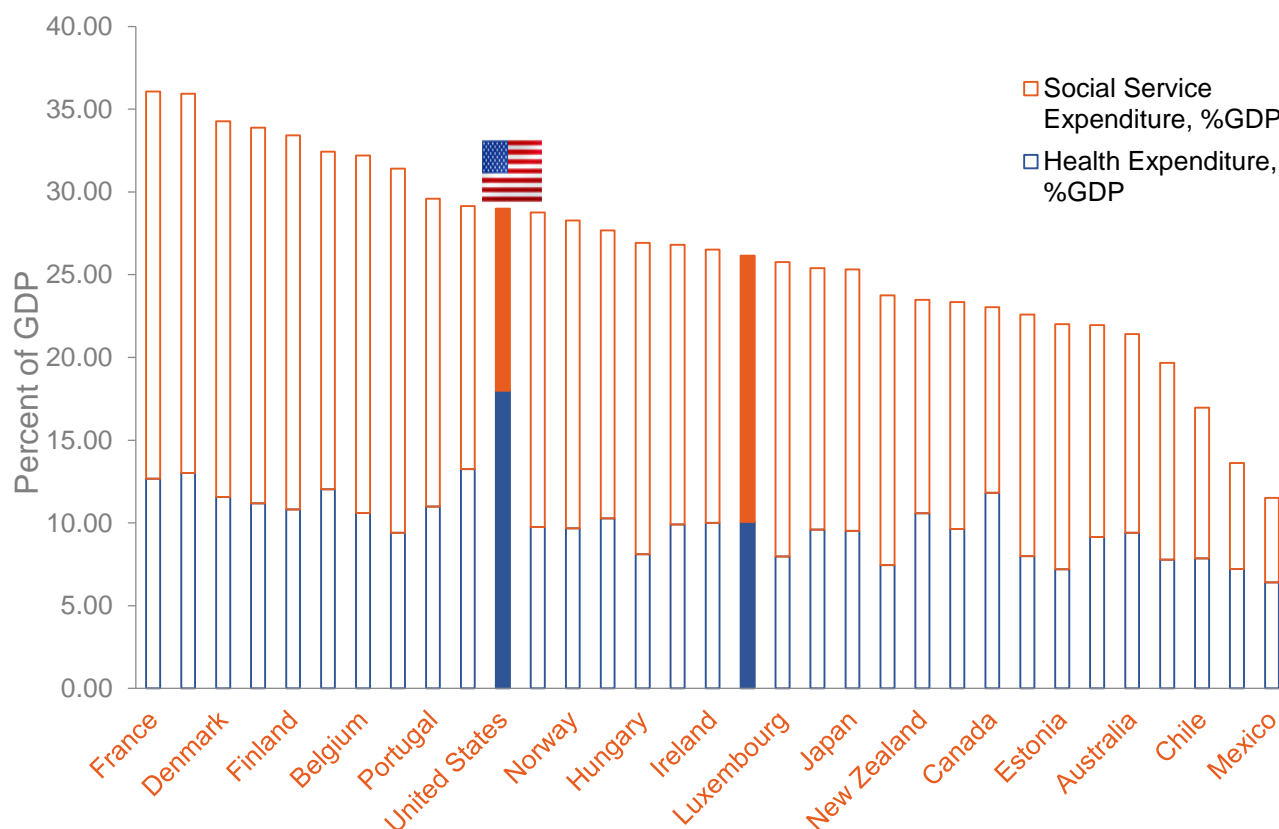
- 1. A Driver – Unmet Social Need*
- 2. An Opportunity – Social Service Investment*
- 3. Two Challenges – Governance and Contracting*

# Health Expenditures as a % of GDP, 2009\*



\*Turkey is missing data for 2009; Data from Bradley and Taylor, The American Health Care Paradox.

# Total Expenditures as a %GDP



\*Turkey is missing data for 2009; Data from Bradley and Taylor, The American Health Care Paradox.

METHOD: Multivariable regression using OECD pooled data from 1995-2007 on 29 countries and 5 health outcomes.

FINDING: The ratio of social to health spending was significantly associated with better health outcomes: less infant, mortality, less premature death, longer life, expectancy and fewer low birth weight babies.

NOTE: This remained true even when the US was excluded from the analysis.

Original research

## Health and social services expenditures: associations with health outcomes

Elizabeth H Bradley,<sup>1</sup> Benjamin R Elkins,<sup>1</sup> Jeph Hemin,<sup>2</sup> Brian Elbel<sup>3</sup>

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### ABSTRACT

**Objective:** To examine variations in health service expenditures and social services expenditures across Organisation for Economic Co-operation and Development (OECD) countries and assess their association with five population-level health outcomes.

**Design:** A pooled, cross-sectional analysis using data from the 2009 release of the OECD Health Data 2009 Statistics and Indicators and OECD Social Expenditure Database.

**Setting:** OECD countries (n=30) from 1995 to 2005.

**Main outcomes:** Life expectancy at birth, infant mortality, low birth weight, maternal mortality and potential years of life lost.

**Results:** Health services expenditures adjusted for gross domestic product (GDP) per capita were significantly associated with better health outcomes in only two of five health indicators; social services expenditures adjusted for GDP were significantly associated with better health outcomes in three of five indicators. The ratio of social expenditures to health expenditures was significantly associated with better outcomes in infant mortality, life expectancy and increased potential life years lost, after adjusting for the level of health expenditures and GDP.

**Conclusion:** Attention to broader domains of social policy may be helpful in accomplishing improvements in health envisioned by advocates of healthcare reform.

Many countries are increasingly confronting issues of rising healthcare costs with limited improvement in health outcomes. The issue is particularly acute in the USA, which ranks highest among Organisation for Economic Co-operation and Development (OECD) countries in healthcare spending as a percentage of gross domestic product (GDP) while remaining among the lowest in key health indicators.<sup>1-3</sup> As an illustration, in 2005 the USA spent 16% of GDP on healthcare compared with an average of 9% spent by other OECD countries, and in 2006, the USA ranked 25th in life expectancy, 29th in

infant mortality and 24th in maternal mortality among the 30 OECD countries.<sup>4</sup>

Previous efforts to understand the paradox of higher health care spending without necessarily better health outcomes have implicated over-reliance on private financing,<sup>5-8</sup> disparities in quality of care,<sup>9-12</sup> high medical prices<sup>13</sup> and too few primary care providers.<sup>14-16</sup> What has been less examined is the role of spending on social services, which may be productive for health. Social spending includes such investments as income supplements, housing, unemployment coverage and other social policy targets. Although health professionals have long recognised the importance of socio-economic, environmental and behavioural determinants of health, healthcare reforms have focused largely on spending for health services, with less attention focused on spending in potentially important social policy areas.

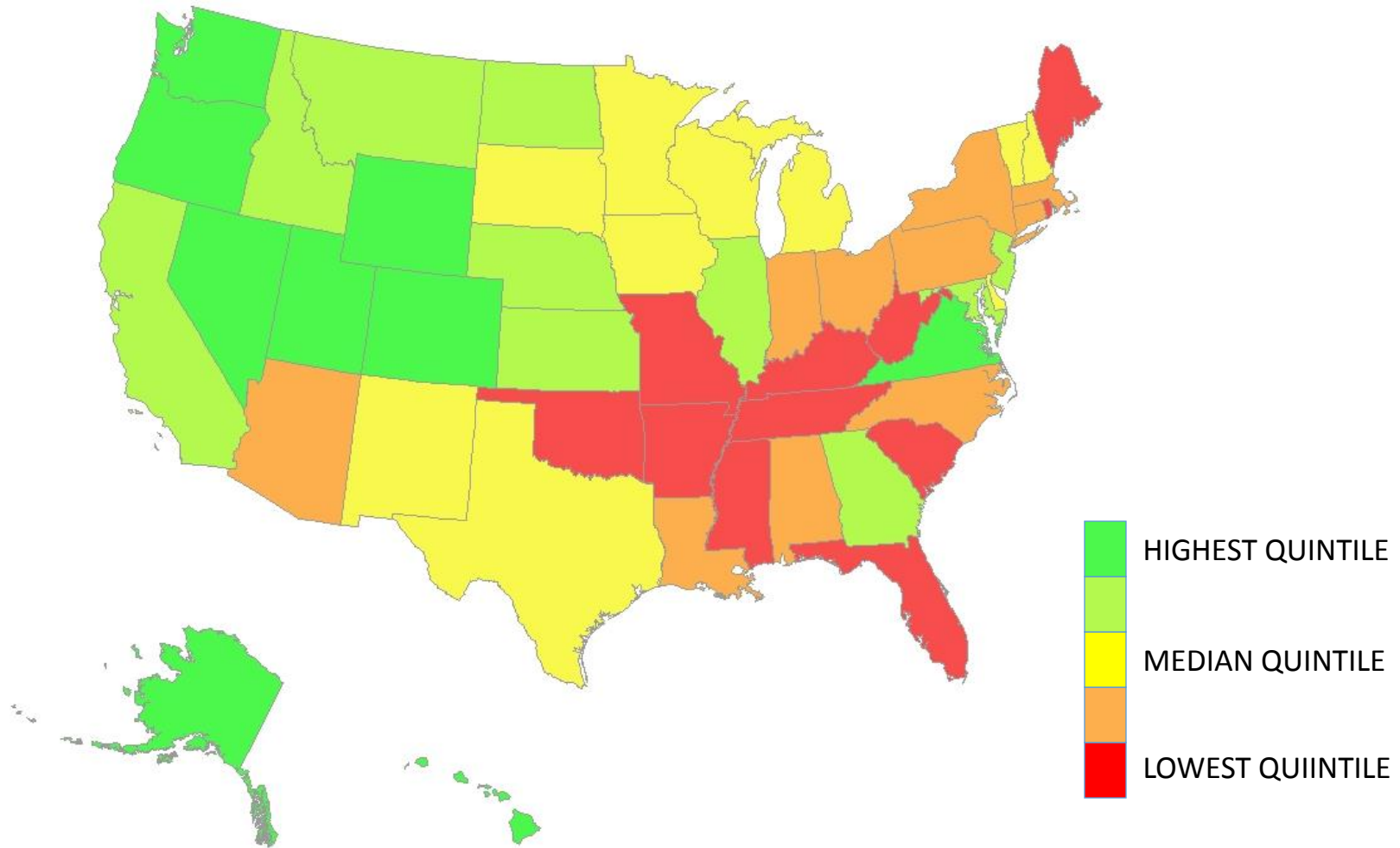
Accordingly, we sought to examine the associations between social expenditures and health expenditures, and a set of common health outcomes across the OECD countries. As a measure of relative investment, we also examined the ratio of social expenditures to health expenditures and its association with life expectancy, infant mortality, low birth weight, maternal mortality and potential life years lost using the OECD Health Data 2009 Statistics and Indicators and the OECD Social Expenditure database.<sup>17,18</sup> Findings from our analysis can contribute to the current debate in the USA and other countries about how best to direct limited resources to promote population health outcomes.

### METHODS

#### Study design and sample

We conducted a pooled, cross-sectional analysis of OECD countries (n=30 countries) using data from the 2009 release of the

# Ratio of social-to-health care spending\*



\*Medicare and Medicaid spending; Data from Bradley et al, Health Affairs, May 2016.<sup>6</sup>

METHOD: Multivariable regression using state-level repeated measures data from 2000-2009 with regional and time fixed effects.

FINDING: The lagged ratio of social to health spending was significantly associated with better health outcomes: adults who were obese; had asthma; reported fourteen or more mentally unhealthy days or fourteen or more days of activity limitations in the past thirty days; and had lower mortality rates for lung cancer, acute myocardial infarction, and type 2 diabetes.

#### POPULATION HEALTH

By Elizabeth H. Bradley, Maureen Canavan, Erika Rogan, Kristina Talbert-Slagle, Chima Ndimale, Lauren Taylor, and Leslie A. Curry

## Variation In Health Outcomes: The Role Of Spending On Social Services, Public Health, And Health Care, 2000-09

**ABSTRACT** Although spending rates on health care and social services vary substantially across the states, little is known about the possible association between variation in state-level health outcomes and the allocation of state spending between health care and social services. To estimate that association, we used state-level repeated measures multivariable modeling for the period 2000-09, with region and time fixed effects adjusted for total spending and state demographic and economic characteristics and with one- and two-year lags. We found that states with a higher ratio of social to health spending (calculated as the sum of social service spending and public health spending divided by the sum of Medicare spending and Medicaid spending) had significantly better subsequent health outcomes for the following seven measures: adult obesity; asthma; mentally unhealthy days; days with activity limitations; and mortality rates for lung cancer, acute myocardial infarction, and type 2 diabetes. Our study suggests that broadening the debate beyond what should be spent on health care to include what should be invested in health—not only in health care but also in social services and public health—is warranted.

**T**he high cost of health care remains a pressing concern for state policy makers and taxpayers. During the period 1999-2009, health care costs increased faster than inflation,<sup>1</sup> and in many states Medicaid inflation-adjusted spending has had a compound annual growth rate of more than 5 percent since 2000.<sup>2</sup> Such increased spending may reflect greater insurance coverage and access to health care for the population. Nevertheless, greater investments in health care without equivalent economic and tax revenue growth may result in fewer resources for state-funded social services, such as housing, nutrition, and income support programs—which themselves may influence health outcomes in states.

The potential for social services to be crowded out to some degree by rising health care costs is of particular concern given health policy makers' growing interest in the role of social determinants in influencing the health of individuals and populations. Extensive evidence demonstrates a clear relationship between a variety of social determinants and health outcomes.<sup>3,4</sup> Poor environmental conditions, low incomes, and inadequate education have consistently been associated with poorer health in a diverse set of populations. Taken together, social, behavioral, and environmental factors are estimated to contribute to more than 70 percent of some types of cancer cases, 80 percent of cases of heart disease, and 90 percent of cases of stroke.<sup>5,6</sup>

Furthermore, several studies have aimed to

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*Which* social services produce better health **and** save dollars?

# LEVERAGING THE SOCIAL DETERMINANTS OF HEALTH: WHAT WORKS?

JUNE 2015

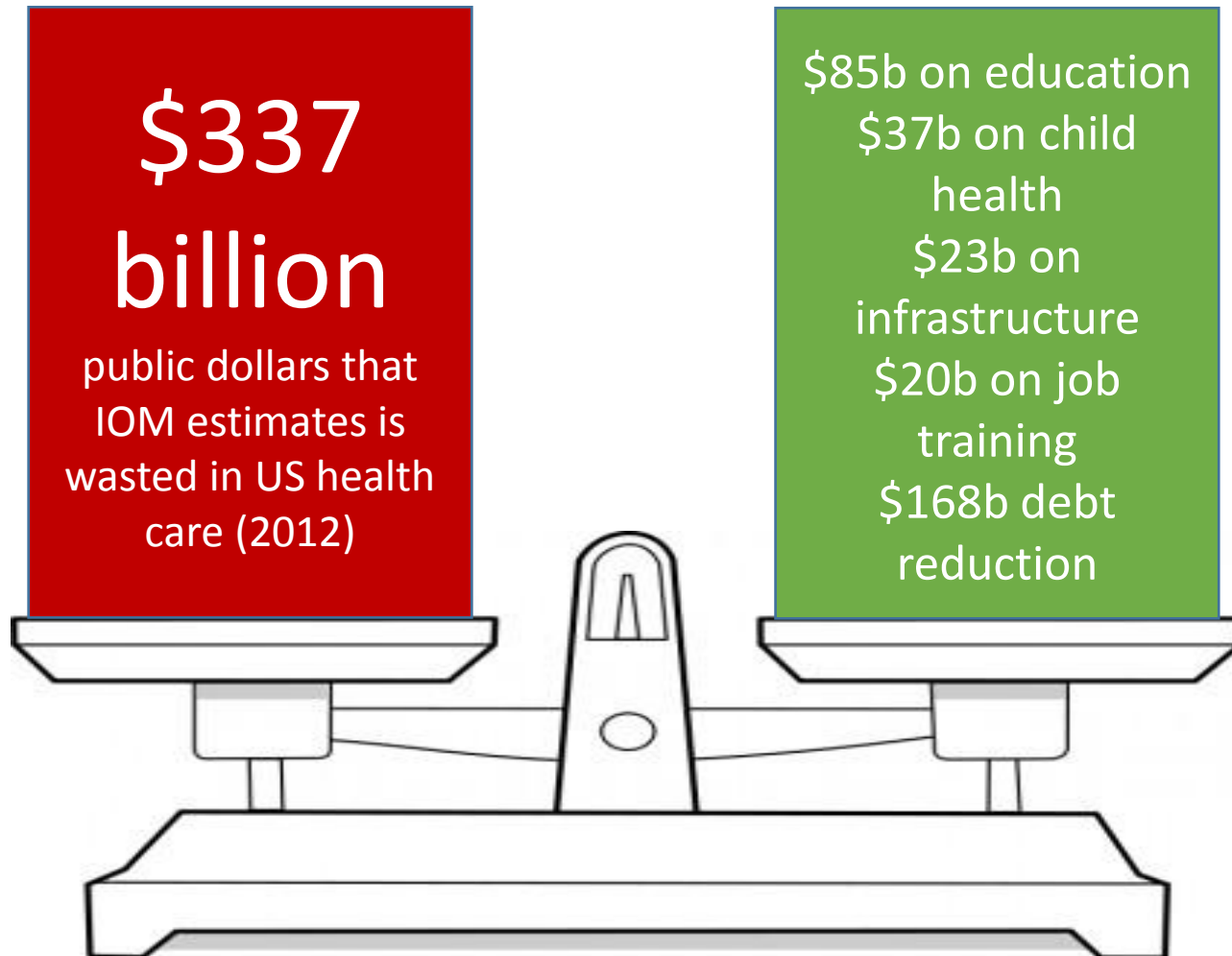


*prepared for the Blue Cross Blue Shield of Massachusetts Foundation by  
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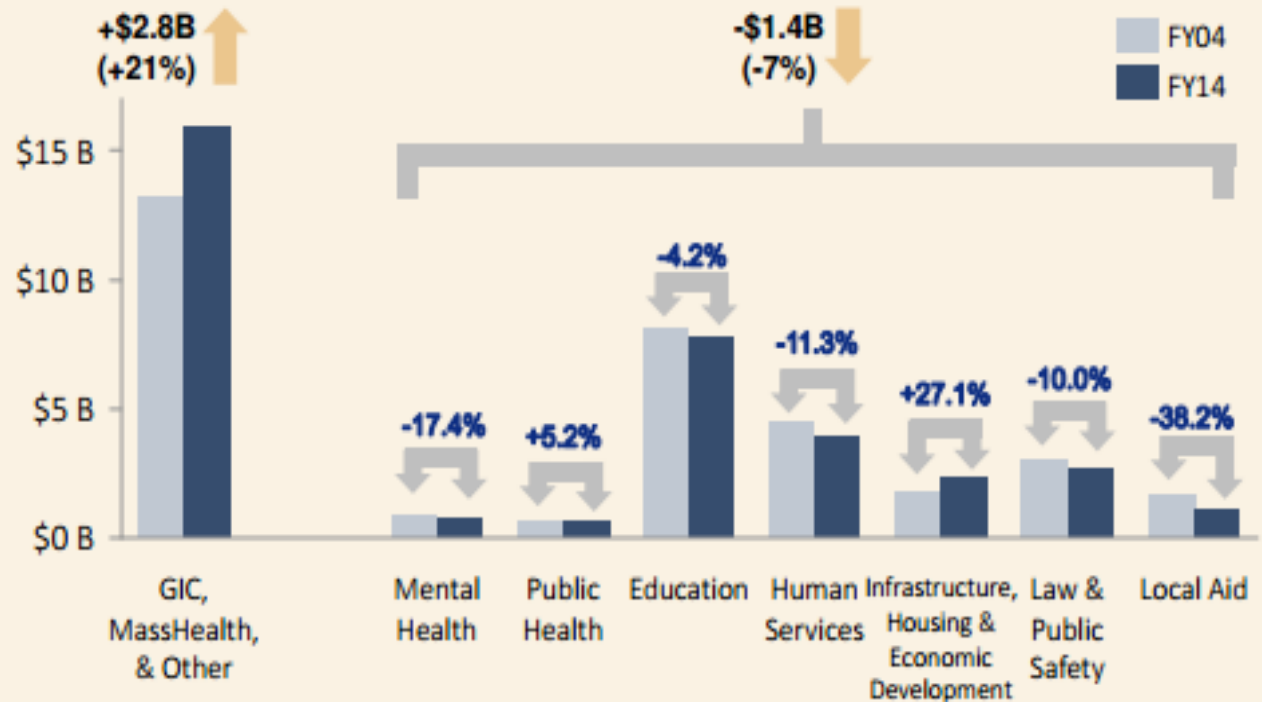


# National Tradeoffs



# Some Evidence of Crowd Out

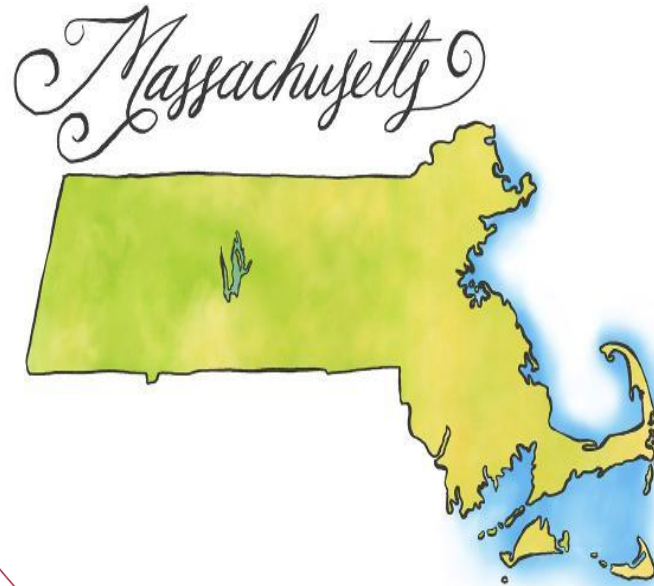
**Figure 1.1: State budgets for health care coverage and other priorities, FY2004- FY2014**  
Total budget (dollars in billions) and total real growth percentage, FY2004 – FY2014



NOTE: Figures all adjusted for Gross Domestic Product (GDP) growth; GIC = Group Insurance Commission

SOURCE: Massachusetts Budget and Policy Center

# Innovative Medicaid Redesigns





U.S.

## *6 Portland Health Providers Give \$21.5M for Homeless Housing*

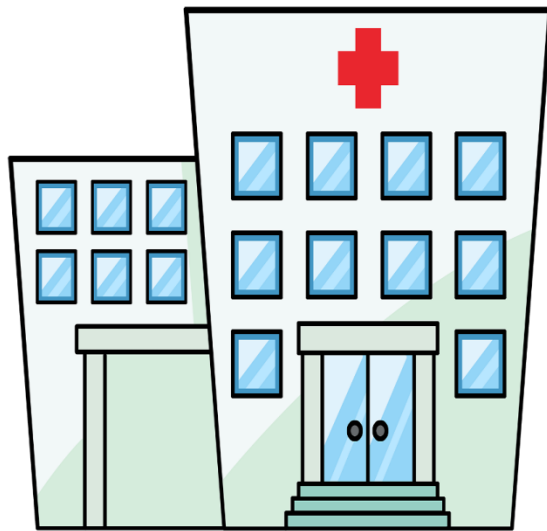
By THE ASSOCIATED PRESS SEPT. 23, 2016, 4:21 P.M. E.D.T.

PORTLAND, Ore. — Five major hospitals in Portland, Oregon, and a nonprofit health care plan said Friday they will donate a combined \$21.5 million toward the construction of nearly 400 housing units for the city's burgeoning homeless and low-income population — a move hailed by national housing advocates as the largest private investment of its kind in the nation.

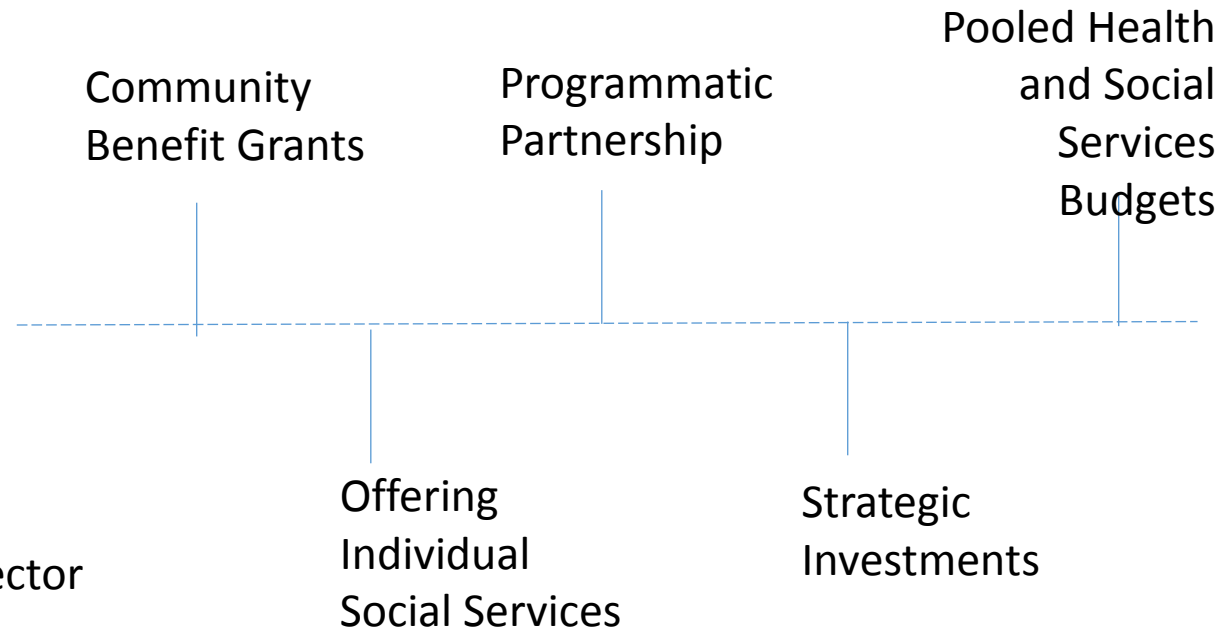
The money from the private health care providers will be part of a larger \$69 million capital construction plan that comes as the booming Pacific Northwest city struggles with a seemingly intractable homeless problem that has become more visible in the past few years and poses a political quagmire for local leaders.

Earlier this month, hundreds of people were evicted from an informal tent camp on a nature trail on the city's east side, and the city has fielded thousands of complaints on a hotline for residents as leaders debate

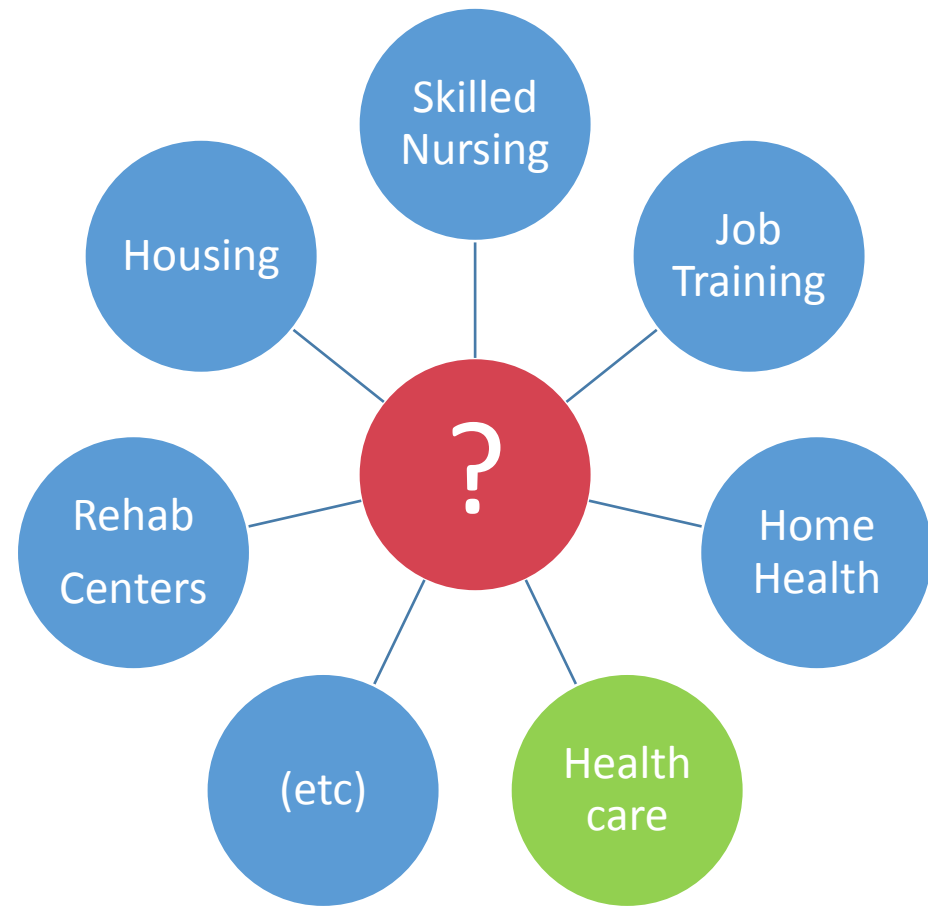
# Evidence Exists for Various Integration Models



Traditional Health Care Sector



# Key Governance Question



# Health + Social Contracting Challenges



*Look forward to learning from you.*

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