



The business case for investing in public health





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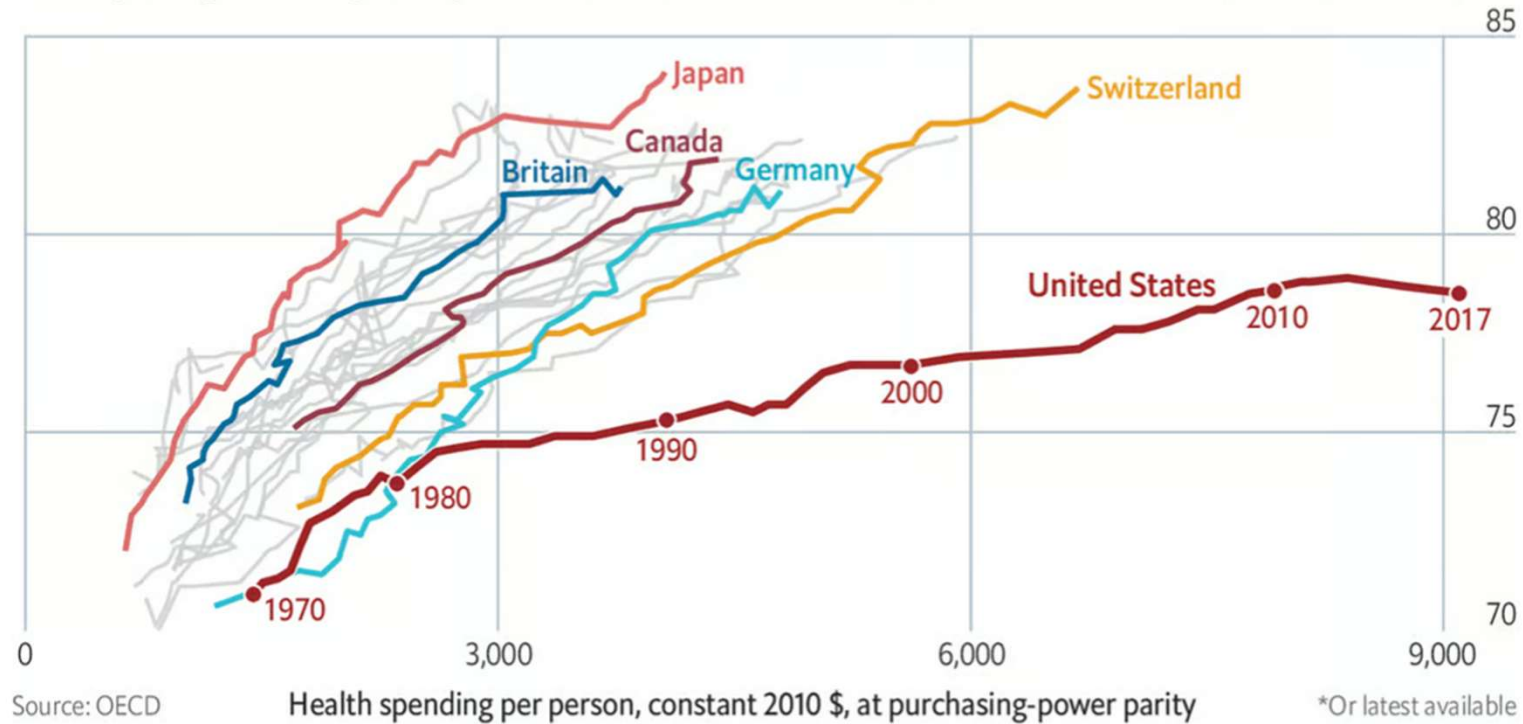
- **Role of social determinants**
- **Health & the economy / ROI**
- **What you can do**



Odd man out

Health spending and life expectancy, 1970-2017*, selected OECD countries

Life expectancy at birth, years



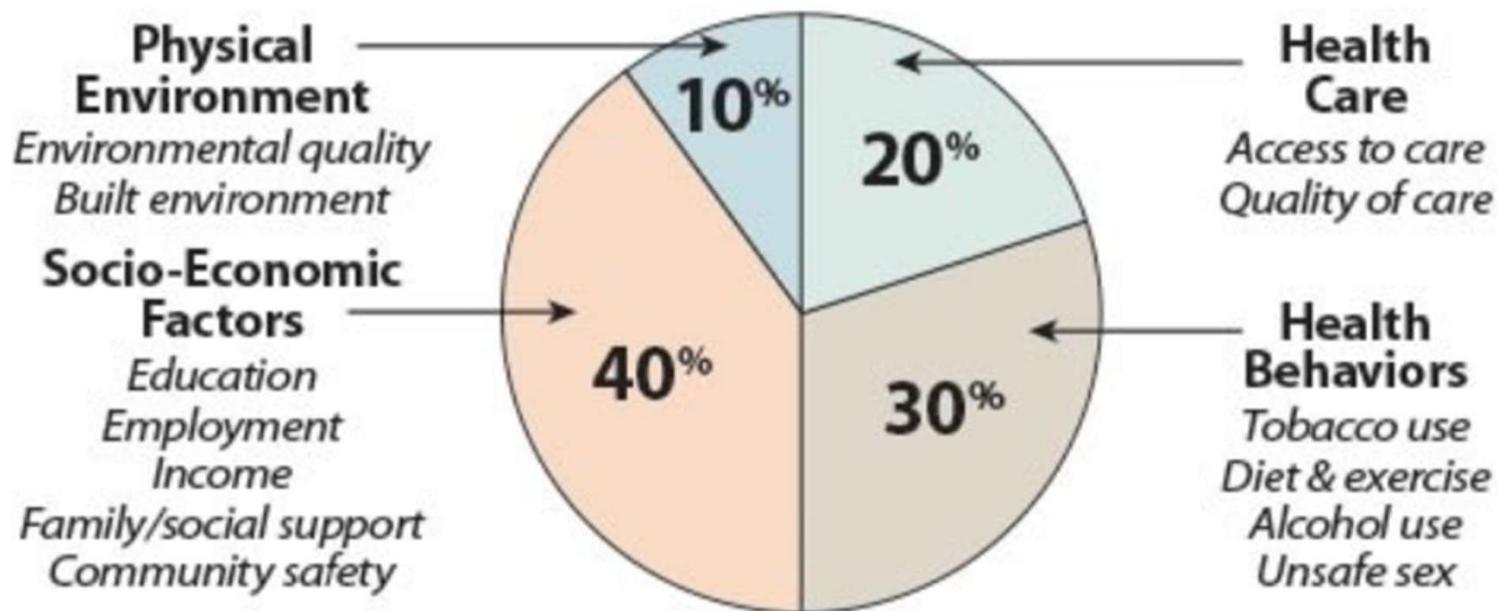
Source: OECD
The Economist

*Or latest available

May 22nd 2019

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Population Health



MEDICAL
expenditures =

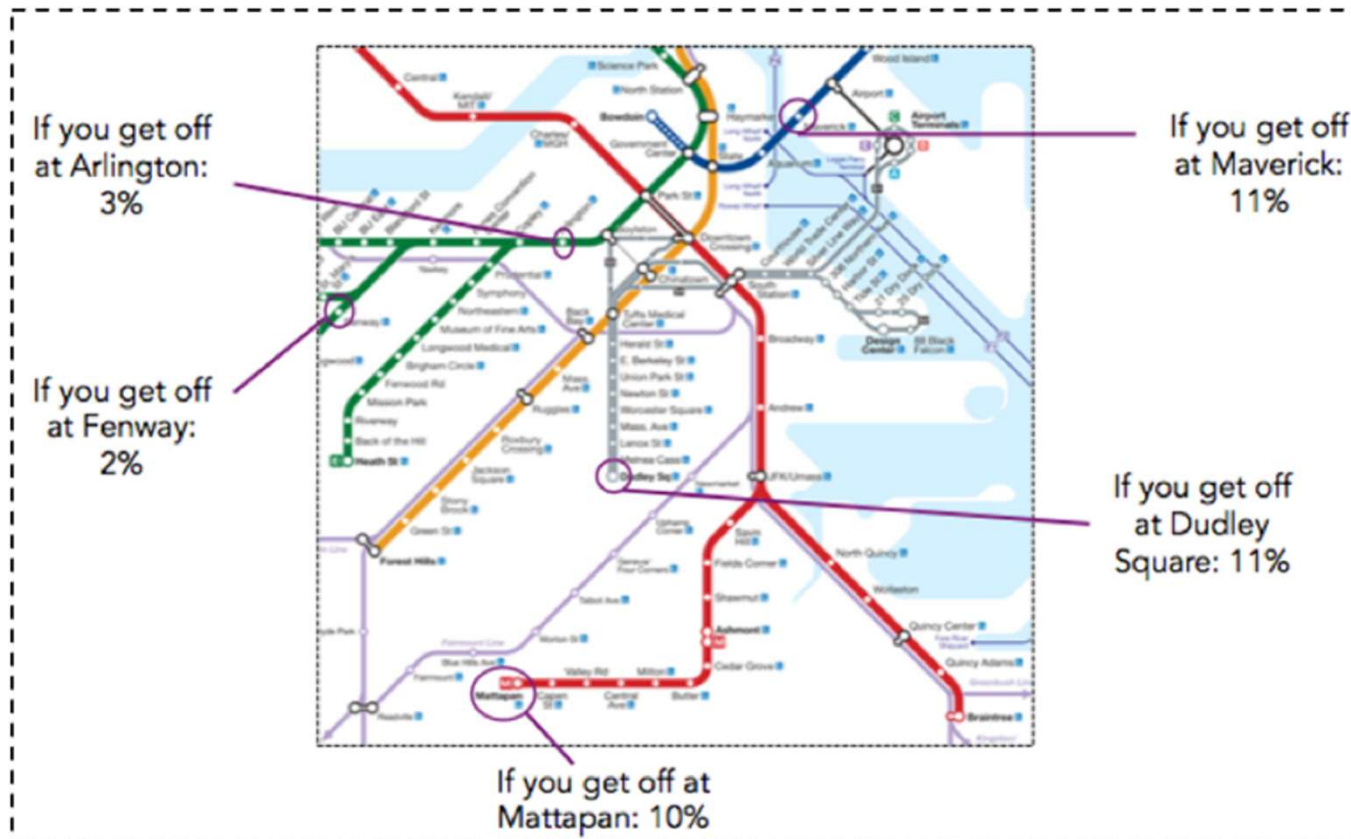
**90% of all
health
expenditures
nationally**

The non-medical factors that determine health

Figure 1

Social Determinants of Health

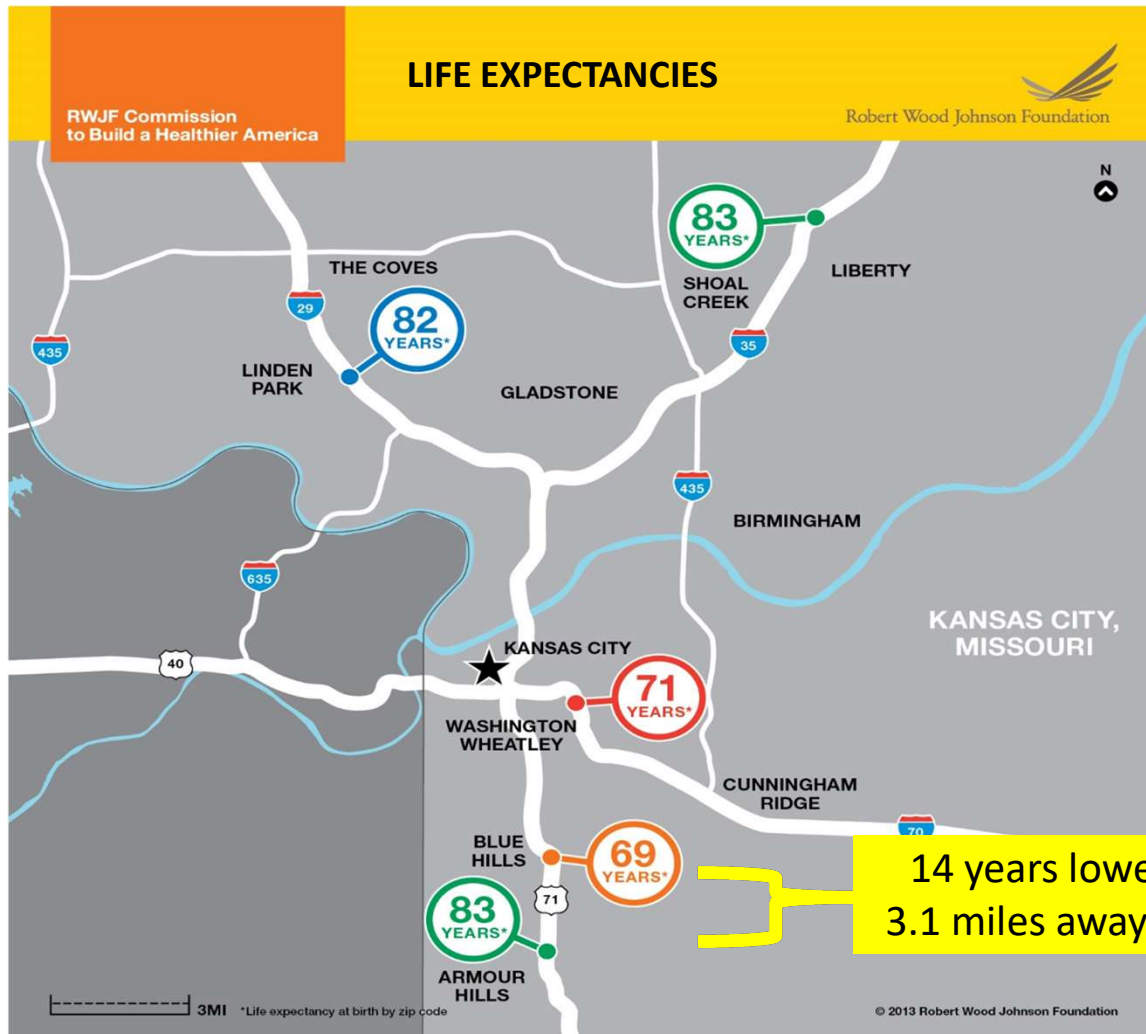
Economic Stability	Neighborhood and Physical Environment	Education	Food	Community and Social Context	Health Care System
Employment	Housing	Literacy	Hunger	Social integration	Health coverage
Income	Transportation	Language	Access to healthy options	Support systems	Provider availability
Expenses	Safety	Early childhood education		Community engagement	Provider linguistic and cultural competency
Debt	Parks	Vocational training		Discrimination	Quality of care
Medical bills	Playgrounds	Higher education		Stress	
Support	Walkability				
	Zip code / geography				
Health Outcomes Mortality, Morbidity, Life Expectancy, Health Care Expenditures, Health Status, Functional Limitations					



Your **zip code** determines your **health**.

Figure 5. Percent of adults with diabetes by T stop, 2010.

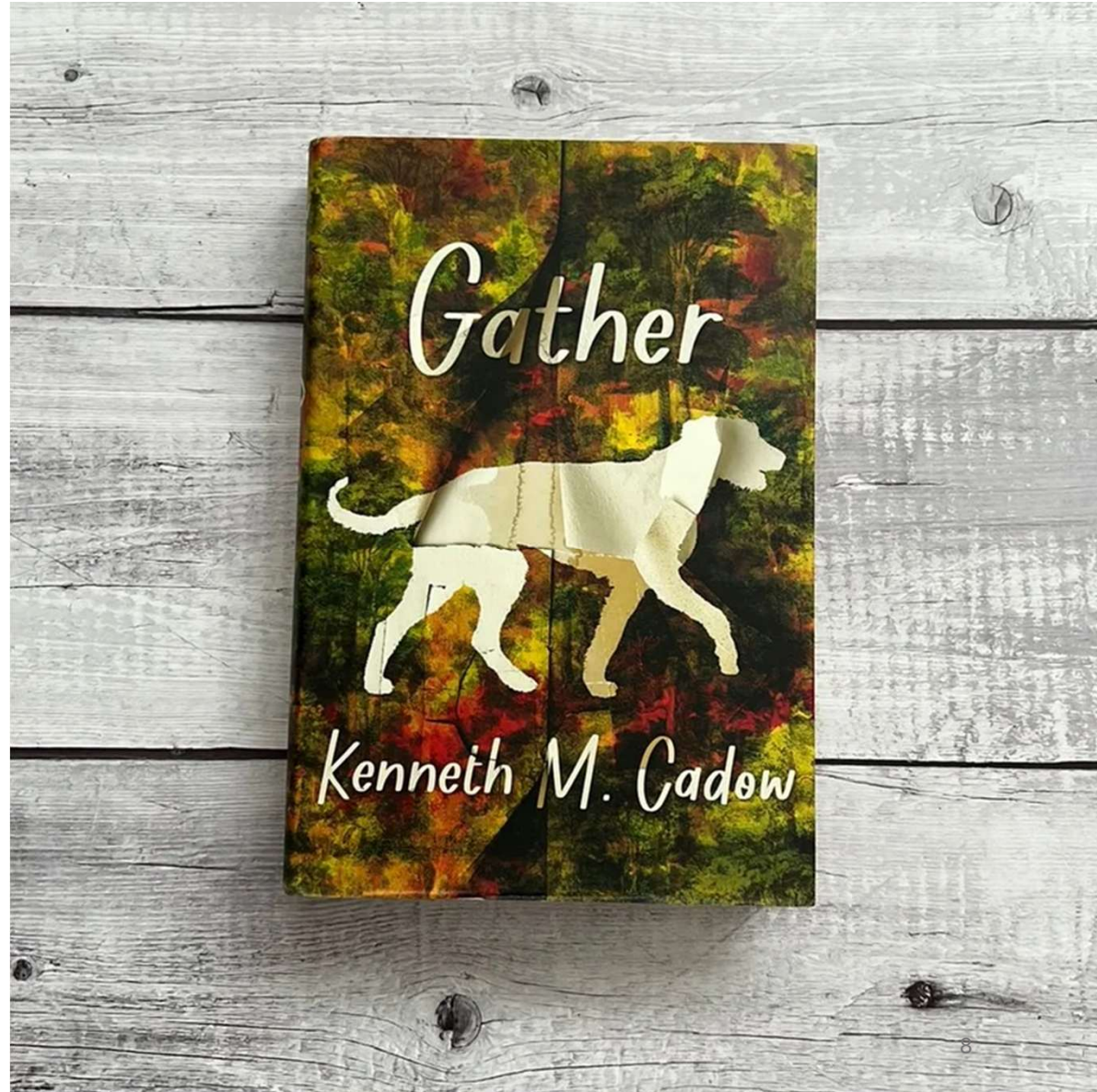
Data from Health of Boston 2012—2013: A neighborhood focus. <http://www.bphc.org/healthdata/health-of-boston-report/Pages/Health-of-Boston-Report.aspx> Accessed May 30, 2016. Boston Public Health Commission.



Your **zip code** determines your **life expectancy**.

“A resourceful teenager in rural Vermont struggles to hold on to the family home while his mom recovers from addiction in this striking debut novel.”

- *Poverty*
- *Gentrification*
- *Property taxes*
- *Old housing stock*
- *Public education*
- *Opioid epidemic*
- *Loss of elders*
- *Divorce*
- *Child protective services*
- *Rural transportation*
- *Employment opportunities*



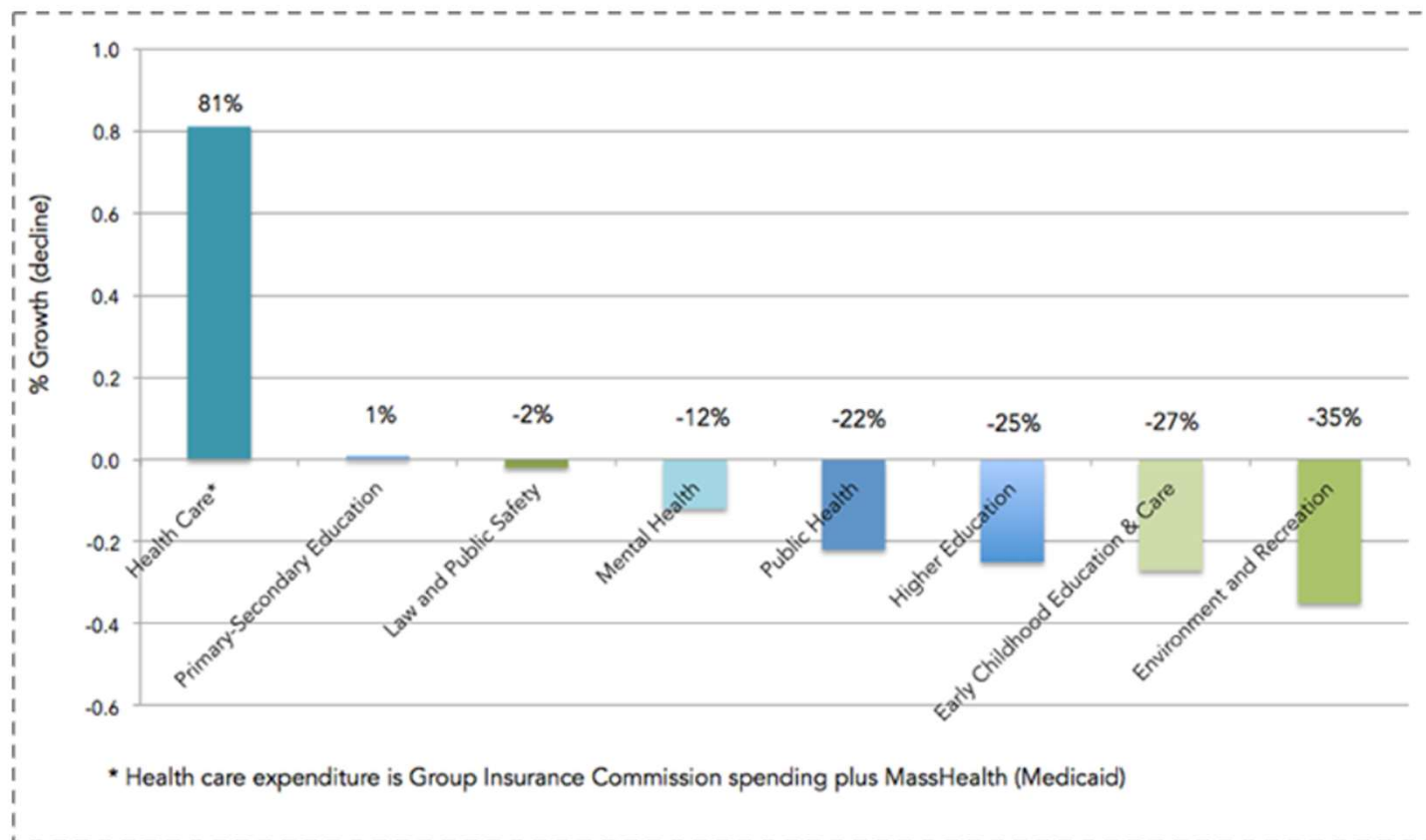


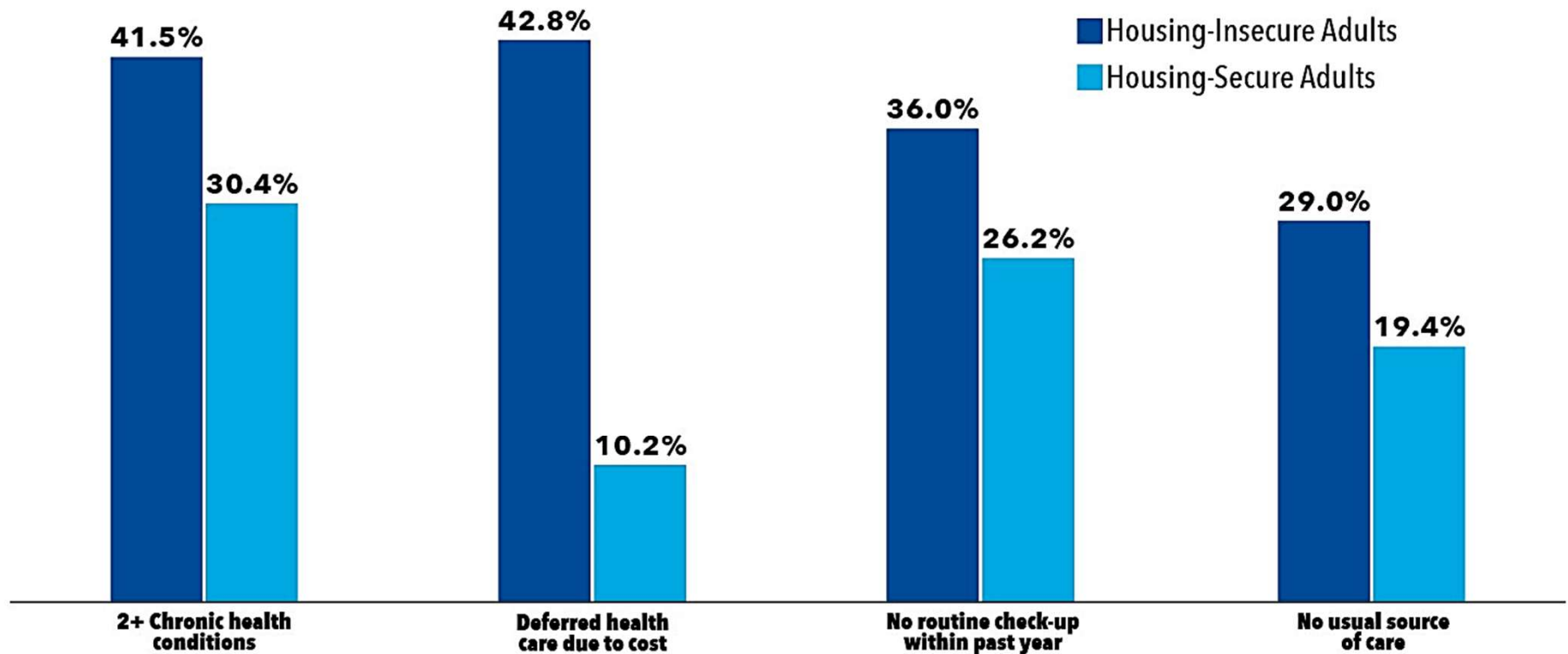
Figure 9. Change in Massachusetts state government spending, 2001–2014.

Healthy People/Healthy Economy: An Initiative to Make Massachusetts the National Leader in Health and Wellness. 2015.

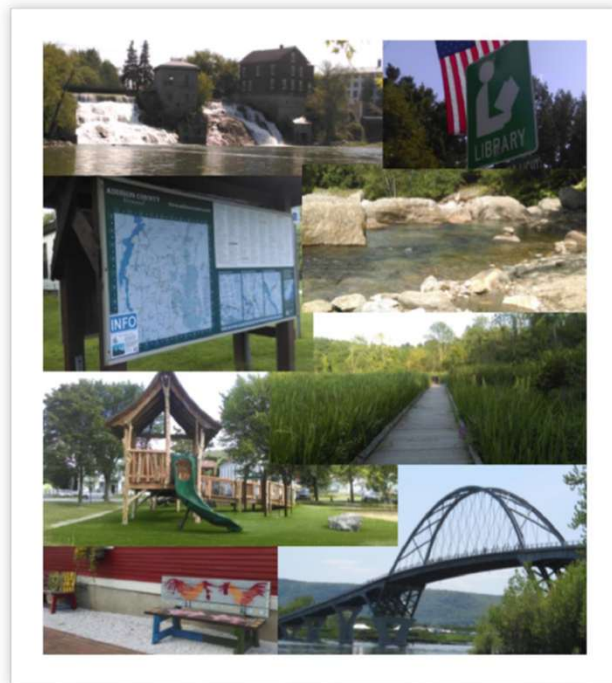
Data from Massachusetts Budget and Policy Center Budget Browser. <http://www.tbf.org/tbf/56/hphe/Health-Crisis>

Accessed May 30, 2016.

Health And Access to Health Care by Housing Security



Note: Housing-Insecure = Always or usually worried about paying rent or mortgage in the past twelve months. **Source:** Martin, P. et. al. (2019). Adults with Housing Insecurity Have Worse Access to Primary and Preventive Care. *Journal of the American Board of Family Medicine*, 32(4): 521-530.



Local Determinants of Health in Addison County

SUMMER 2015

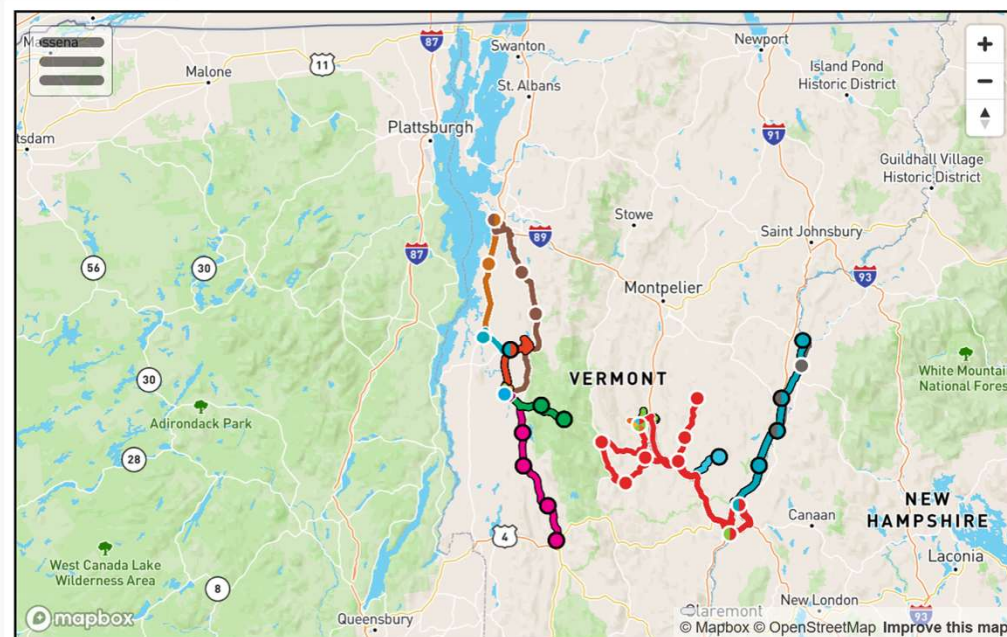
Alessandria Schumacher | Pamela Berenbaum



Local Determinants of Health in Addison County

SUMMER 2015

Alessandria Schumacher | Pamela Berenbaum



Abundance of data for return on investment (ROI) in public health



- Lots of evidence from UK on payoffs of investing in public health (because they spend more and have nationalized health coverage)
- Price comparisons of disease screenings vs. advanced disease treatment
- WHO, World Bank data

Some ROI estimates (ratio of benefits/savings to costs)

Table 1

Examples of public health intervention ROIs, ranked highest to lowest.

Intervention	ROI	Source
Child safety seat	3900%	CPHA and APHA
Water fluoridation	3700%	CPHA and APHA
Mental health and addiction	3600%	CPHA
Tobacco prevention	1900%	CPHA
Vaccination	1500%	CPHA
Early education	1300%	APHA
Biking and walking opportunities	1200%	APHA
Food and nutrition	1000%	APHA
Childhood health and development	800%	CPHA
Workplace safety	500%	CPHA and APHA
Cleaner vehicles	300%	CPHA
Tobacco cessation	125%	APHA

Sources: APHA, CPHA.

California Tobacco Control Program



1989: 1 in 5 residents smoked

2024: less than 1 in 10 adults smoke

California now has the 2nd lowest adult smoking rate and one of the lowest youth vaping rates.

Savings:

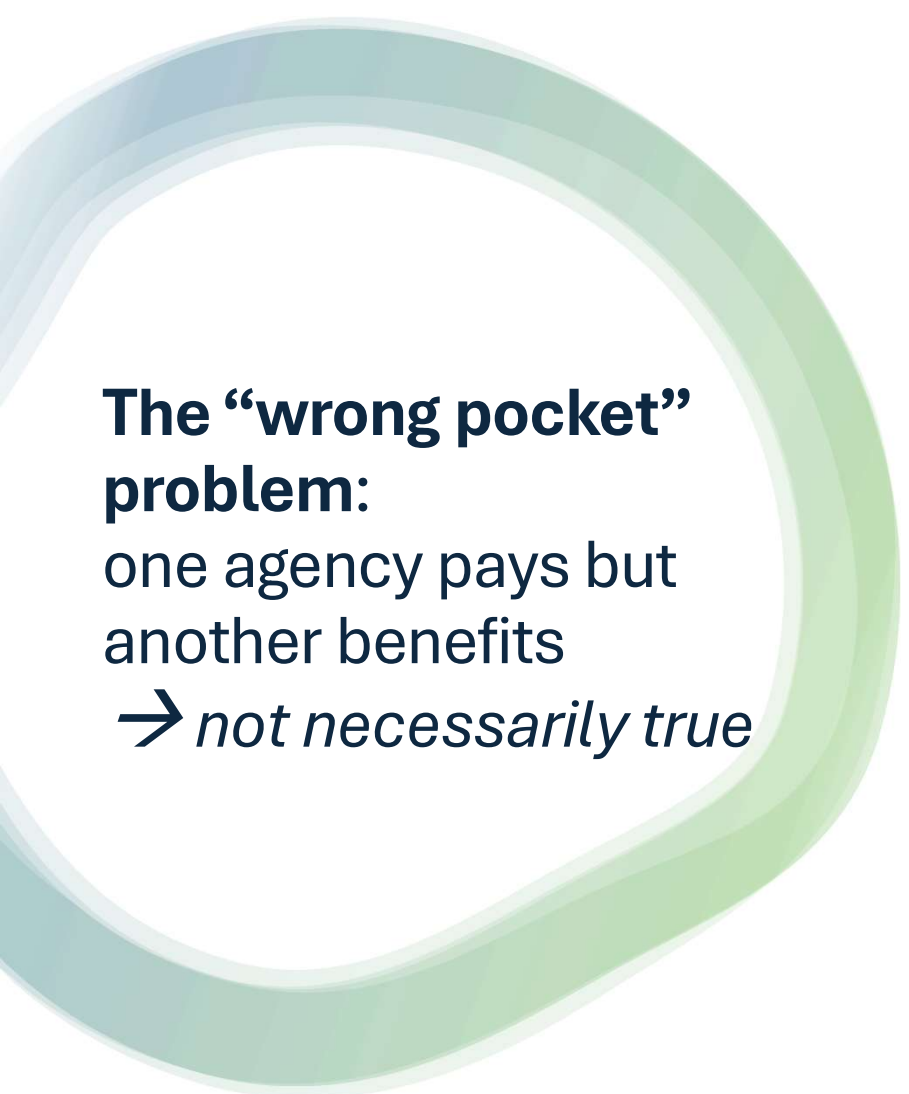
- **> 1,000,000 lives**
- **> \$816,000,000,000 in healthcare costs for the state**

“Our vision for a comprehensive statewide tobacco control program funded by a tobacco tax altered the trajectory of tobacco use and tobacco-related diseases in California. It fundamentally changed the structure, implementation, and evaluation of tobacco use prevention and cessation programs in California, the nation, and the world.”

“There are recognized barriers to investing in public health:

- the greater requirements for cost-effectiveness sometimes placed on public health interventions,
- the belief that in the long run prevention may cost more than treatment,
- the timeframes required for some public health interventions,
- the ‘identifiable victim effect’,
- the influence of interest groups,
- and the reality that evidence alone does not drive health policy.”





**The “wrong pocket”
problem:**
one agency pays but
another benefits
→ *not necessarily true*

*Example: Why should the state invest in **preventive health for the elderly** if they are covered by Medicare?*

- Many are on Medicaid or use other state-funded support services
- Staying active: consumer spending; some may choose to work or volunteer
- Keeping adult children in workforce
- Family stability: caring for grandchildren when parents are unable to (e.g. due to substance abuse disorder)
- Happiness and social cohesion



“Most SASH participants live in congregate affordable housing. They are supported by a statewide network of social-service agencies and health-care partners, including nonprofit housing organizations, area agencies on aging, community mental health centers, home health agencies, primary and community care teams, and regional hospitals.

Read our success stories!

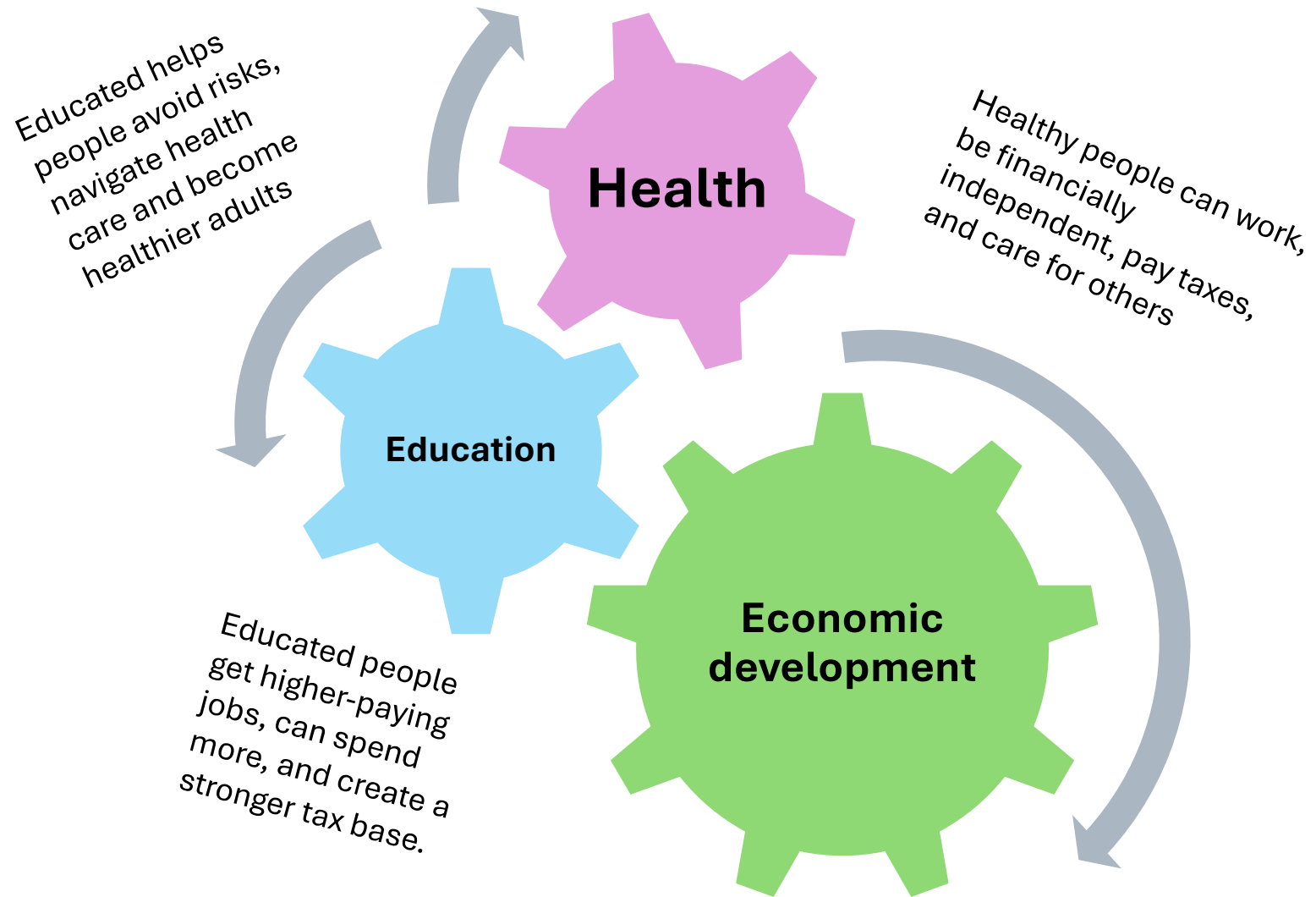
[**Data Suggest that SASH Participation Reduces the Frequency of ER Visits**](#)

[**Succeeding with Diabetes Management & Prevention**](#)

[**SASH Shown to Succeed in Reducing High Blood Pressure**](#)

[**SASH Found to Save Medicare Costs for Emergency Room and Specialist Visits**](#)

[**Federal Study Ties SASH to Medicaid Savings for Long-Term Care**](#)



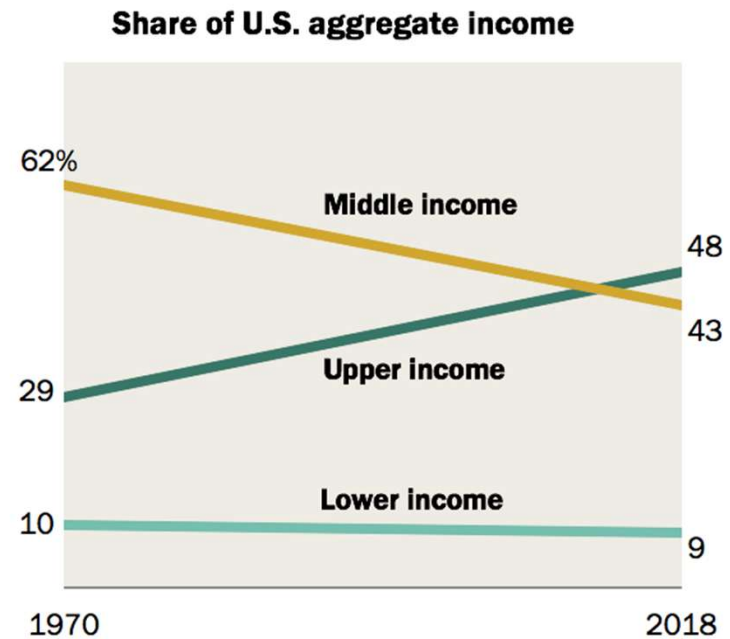
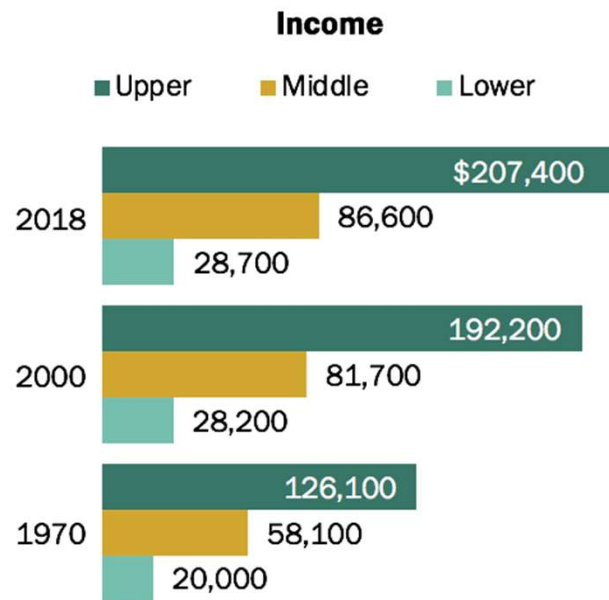
Health and economic growth in Vermont

- **Grow the tax base through healthy communities and social services:**
 - **Attract new young families** to the state through affordable homes, healthy environment, childcare, good schools
 - **Keep adults in the workforce** by keeping them and their loved ones healthy and supported through social services
- **Sensible tax structures** that require the wealthy to pay more (e.g. on 2nd, 3rd, 4th, 5th homes)



The gaps in income between upper-income and middle- and lower-income households are rising, and the share held by middle-income households is falling

Median household income, in 2018 dollars, and share of U.S. aggregate household income, by income tier



Note: Households are assigned to income tiers based on their size-adjusted income. Incomes are scaled to reflect a three-person household. Revisions to the Current Population Survey affect the comparison of income data from 2014 onwards. See Methodology for details.

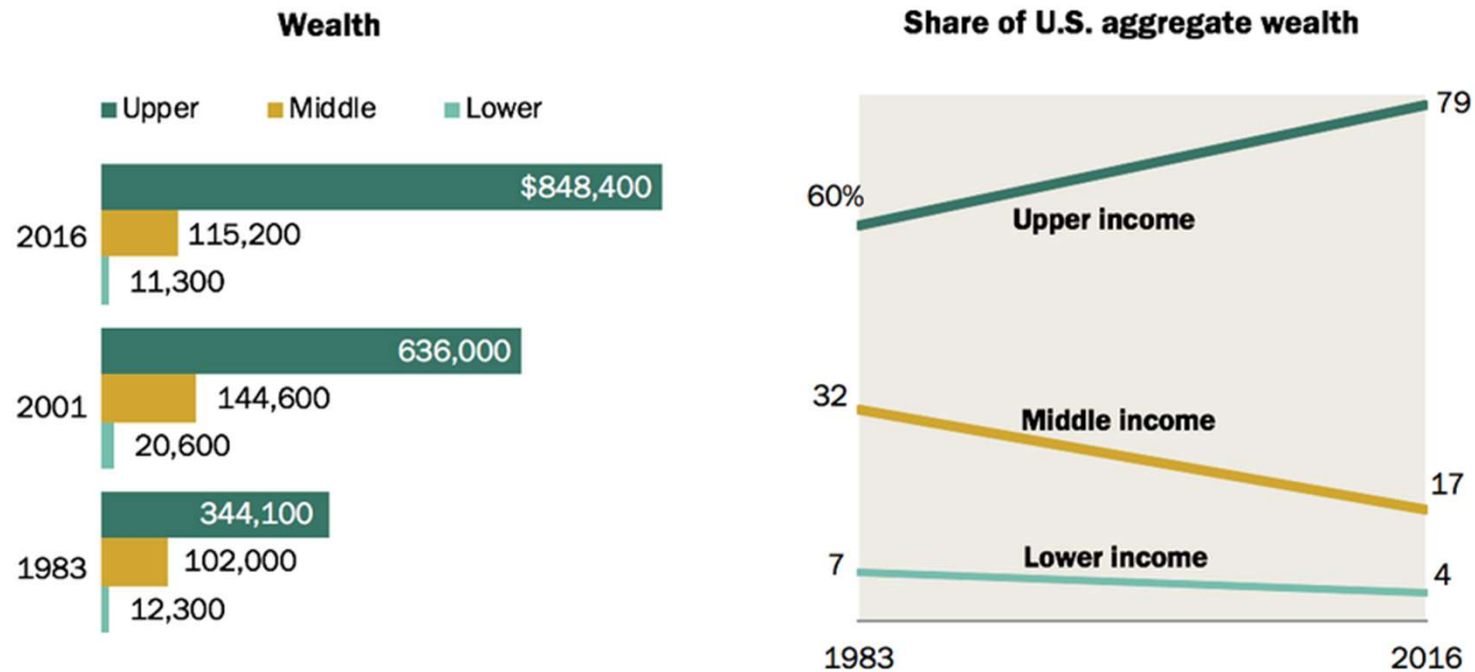
Source: Pew Research Center analysis of the Current Population Survey, Annual Social and Economic Supplements (IPUMS).

"Most Americans Say There Is Too Much Economic Inequality in the U.S., but Fewer Than Half Call It a Top Priority"

PEW RESEARCH CENTER

The gaps in wealth between upper-income and middle- and lower-income families are rising, and the share held by middle-income families is falling

Median family wealth, in 2018 dollars, and share of U.S. aggregate family wealth, by income tier



Note: Families are assigned to income tiers based on their size-adjusted income.

Source: Pew Research Center analysis of the Survey of Consumer Finances.

"Most Americans Say There Is Too Much Economic Inequality in the U.S., but Fewer Than Half Call It a Top Priority"

PEW RESEARCH CENTER

Low-cost/mutual aid approaches

- VDH presence at community events e.g. Addison Co. Fair & Field Days
- Workplace wellness
- Volunteer drivers e.g. TriValley Transit, health clinic
- Health literacy drop-in sessions (vs. WWW) similar to
 - ~ tax preparation clinics
 - ~ HealthConnect assisters
- Community health workers

Low-cost/mutual aid approaches

- Faith-based communities
 - Health education / debunking of misinformation
 - Health screenings e.g. blood pressure checks, vaccine clinics
 - Support groups for chronic conditions
 - Successes:
 - with the National Cancer Institute: “Body and Soul” program for healthy eating
 - Diabetes
 - HIV
- ** access, trust **

Important
components of
new public health
initiatives:

**modernization,
collaboration,
accountability**

- “Team sport” model of multisectoral collaboration:
 - integrate public health, health care, community-based organizations, and the private sector. *All hands on deck!*
 - collective goals
 - shared accountability
- Flexible financing models
- Data
 - to measure success
 - to hold partners accountable

EXAMPLE #1 of state-level initiatives:

Massachusetts Prevention and Wellness Trust Fund



Directs healthcare funding into community disease prevention, focusing on:

- reducing rates of the most common and preventable health conditions;
- increasing healthy behaviors;
- increasing workplace-based wellness or health management programs that yield positive ROI for employers;
- addressing health disparities; and
- tracking successes of effective prevention programming.

“Burdensome healthcare spending diverts resources from public health, early childhood education and care, and mental health.....

*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.’**”*



EXAMPLE #2 of state-level initiatives :

Minnesota Statewide Health Improvement Partnership (SHIP)

community-driven solutions → expanded opportunities for active living, healthy eating and commercial tobacco-free living → prevention of chronic diseases including cancer, heart disease, stroke and type 2 diabetes

****local leadership, local partners and local expertise****

- Increased access to fresh, local produce
- Healthy eating and increased physical activity for youth
- Improved walking and biking opportunities
- Smoke-free multi-unit housing
- Improved workplace health
- Improved referrals for patients
- Breast-feeding support for mothers returning to work

EXAMPLE #3 of state-level initiatives :

North Carolina's Healthy Opportunities Pilots program



Section 1115 Medicaid waiver to address social needs including access to:

- food
- housing
- transportation,
- interpersonal violence.

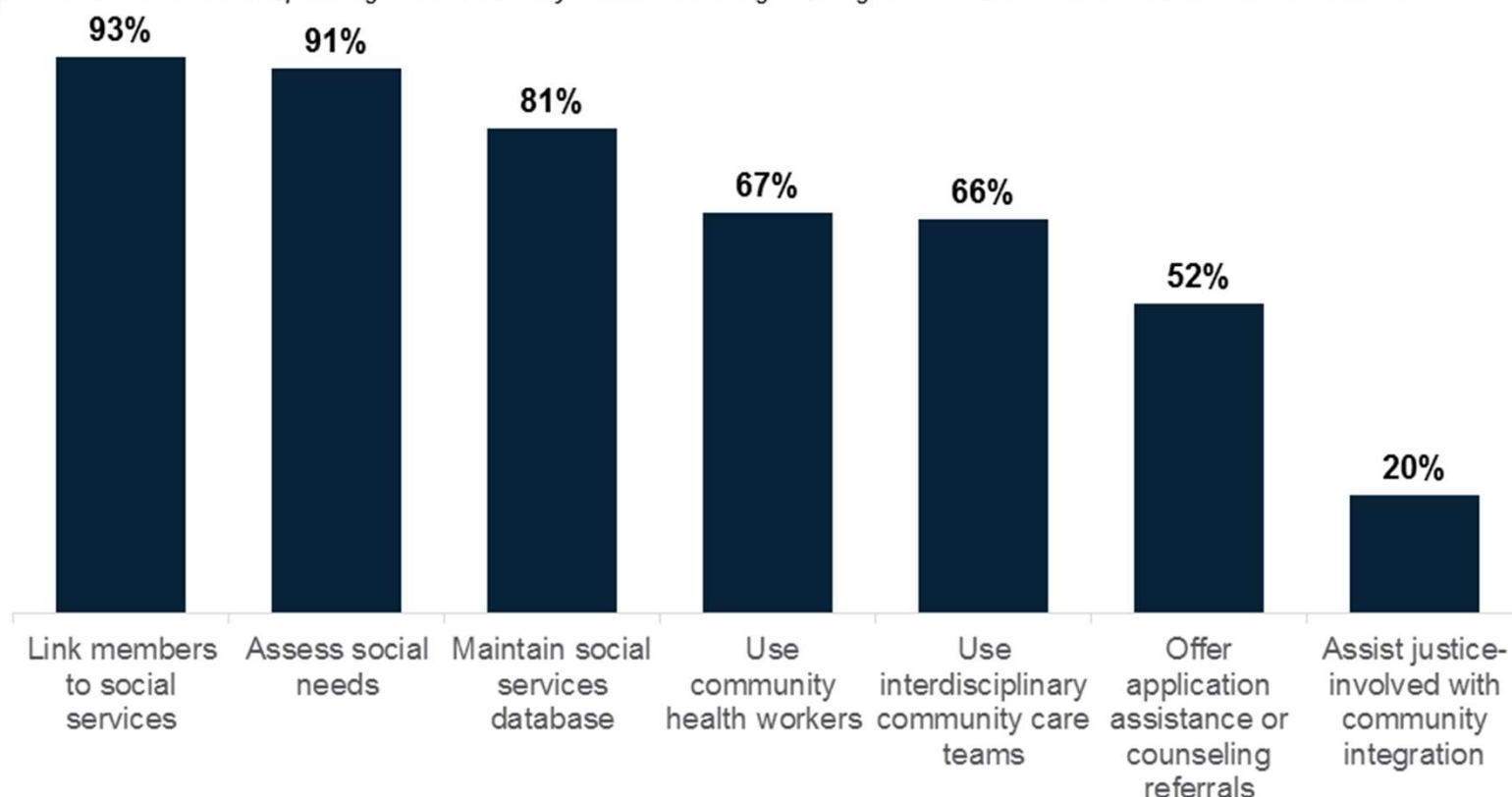
Successes: Enrollees had

- reduced social needs in targeted areas
- **fewer emergency department visits**
- **lower health care spending.**

Figure 2

Strategies Medicaid MCOs Use to Connect Members to Social Services

Share of Plans Responding that Used Any of the Following Strategies to Connect Members to Social Services:



NOTES: Plans were asked: "In the Past 12 months, has your Medicaid MCO used any of the following strategies to connect members with social services?" "Other" responses (4% of plans) not shown.

SOURCE: Kaiser Family Foundation Survey of Medicaid Managed Care Plans, 2017.

VT legislative actions for evidence-based improvements in population well-being



- ☐ Support the Governor's stopgap measure and vote to continue funding the Blueprint for Health
- ☐ Support affordable housing development so people can stay here, work here, and pay taxes here
- ☐ Support public schools and school-based health centers
- ☐ Support expansion of a robust rural transportation system, especially with impending hospital closures

As examples, please support:



- H.54/S.21: An act relating to **cell phone-free schools**
- S.26: An act relating to **prohibiting certain artificial dyes in foods** and beverages served or sold at school
- H.47: An act relating to Vermont's adoption of the Dentist and Dental Hygienist Compact
- Any and all legislation that:
 - **reduces the chance of gun violence** (handguns, automatic weapons) (numerous H/S bills)
 - promotes **patient choices at end of life** (HR.75?)
 - allows **veterans & disabled people to keep/maximize benefits** (H.104, S.6?)
 - increases **access** to healthcare services that are **preventive** and **low-tech** (H.13, H.84, S.1, S.8, H.114, S.14?)
 - Keeps **people in their homes and independent** (H.104, S.6, H.13, H.8, H.50, H.73?)

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- Flexible financing models
- Data
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Beyond ROI: all the other reasons

- Fairness, equity, human dignity
- Pride in Vermont
- We trust in you
- Vermonters value community and take care of each other



Thank you!

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College

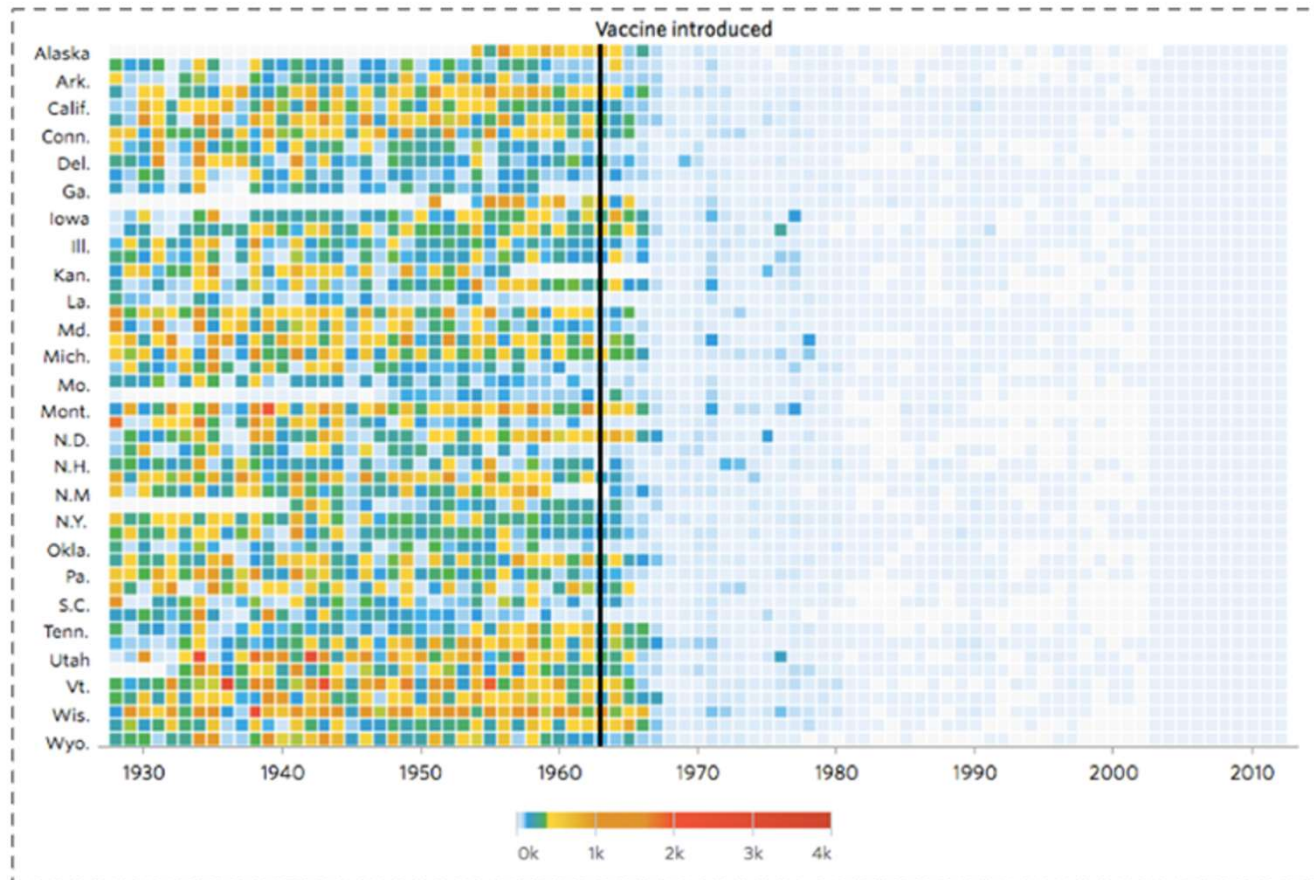
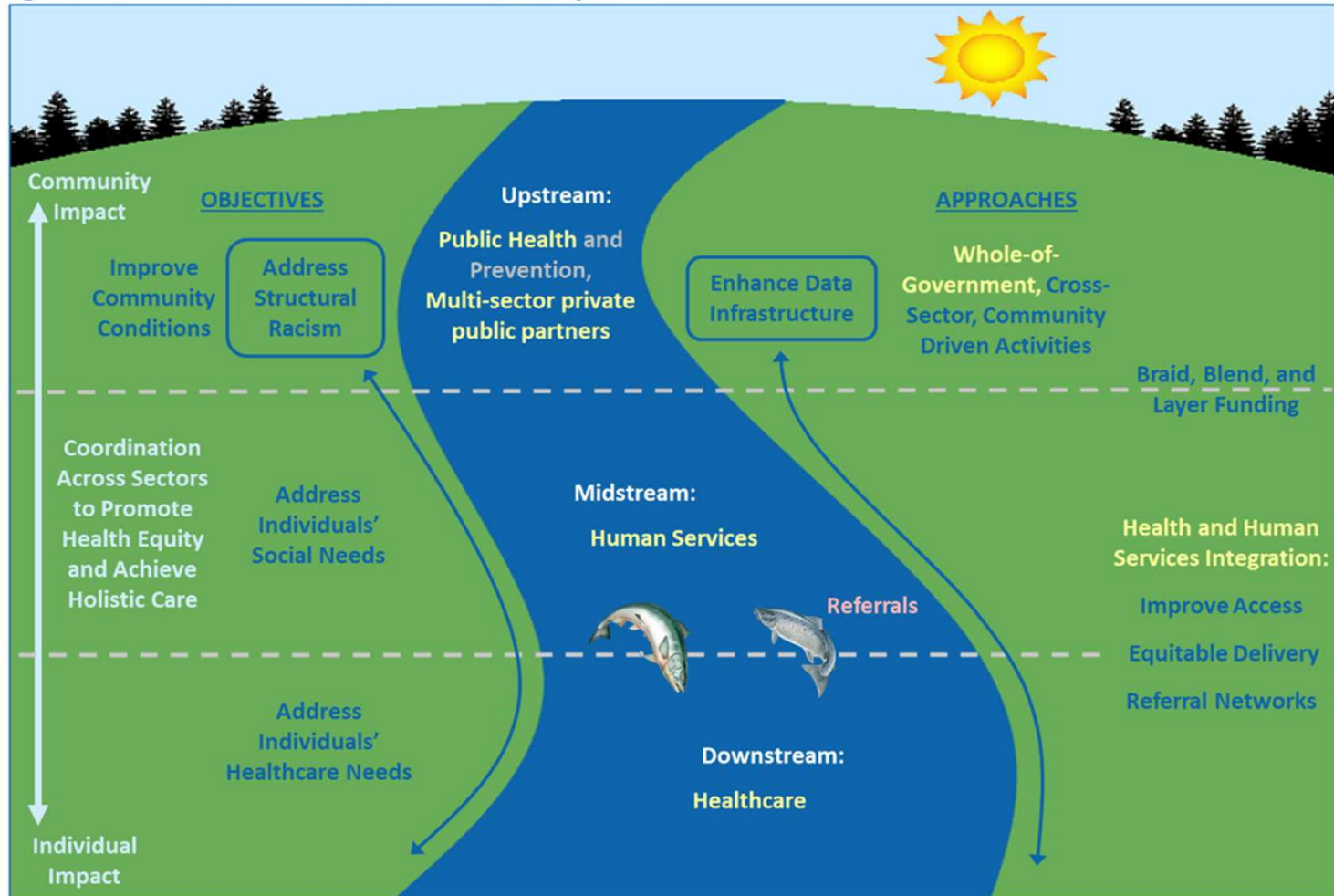


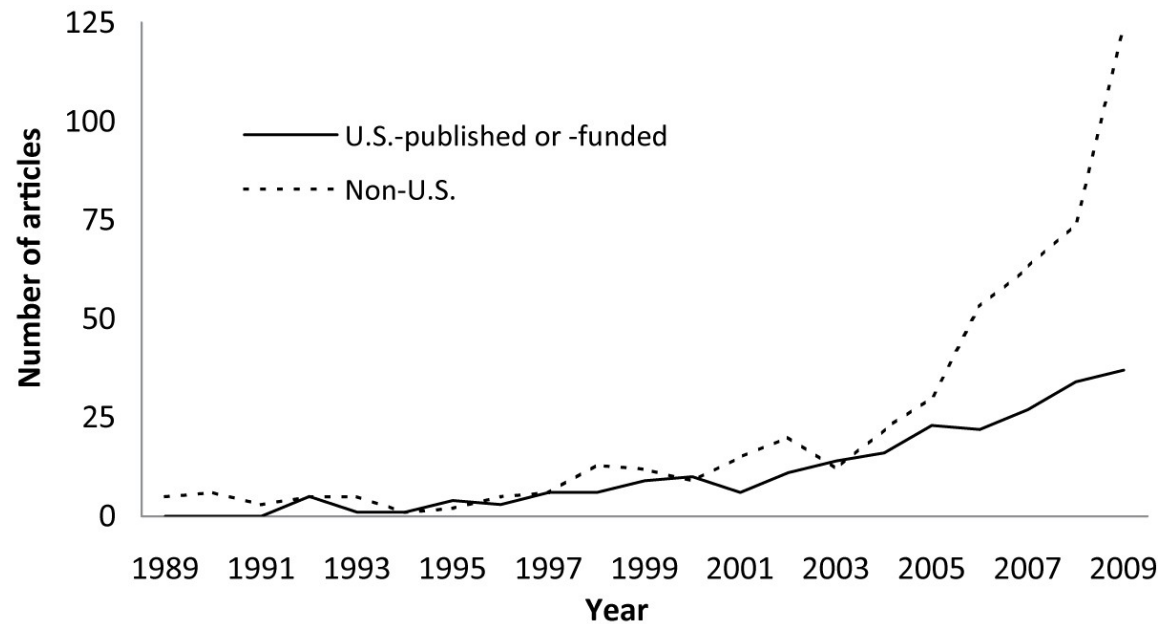
Figure 13. Heat map showing the number of cases of Measles per 100,000 people.

DeBold T, Friedman D. Battling Infectious Diseases in the 20th Century: The Impact of Vaccines. The Wall Street Journal, February 11, 2015. <http://graphics.wsj.com/infectious-diseases-and-vaccines/> Accessed May 30, 2016.

Figure 1. Social Determinants of Health Ecosystem



Note: Adapted from Castrucci B, Auerbach J. Meeting Individual Social Needs Falls Short of Addressing Social Determinants of Health. Health Affairs Blog. January 16, 2019



Increasing number of studies of social determinants of health in the United States and Europe.

AR Braveman P, et al. 2011.
Annu. Rev. Public Health. 32:381–98

Annual Reviews