Health is more than healthcare

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Duke/NIH Collaboratory Grand Rounds

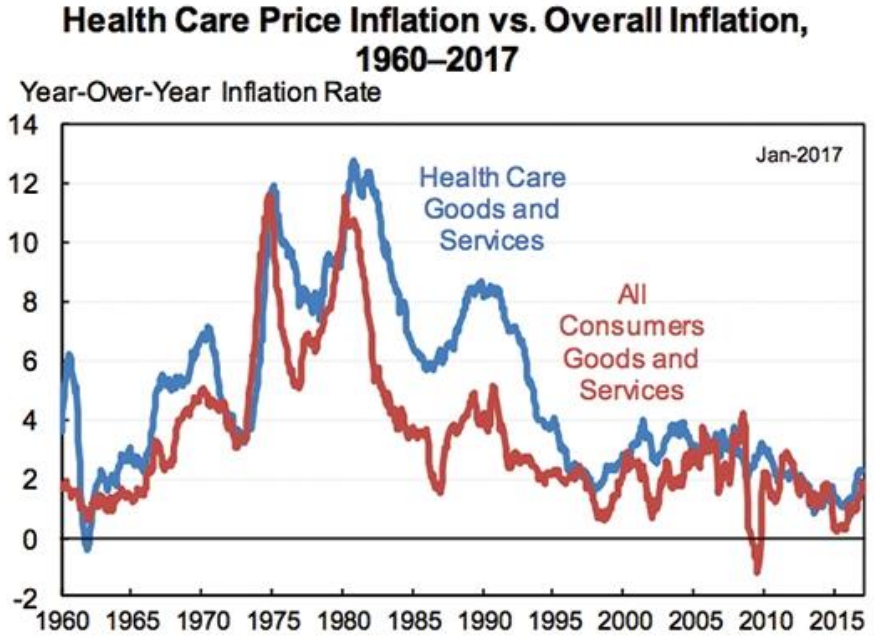
October 6, 2017

GOALS

1. Share mounting evidence that bending trends will require attention to more than health care
2. Highlight some ways the practice environment active in efforts to address health beyond health care
3. Raise areas of priority in the research agenda around the social determinants of health

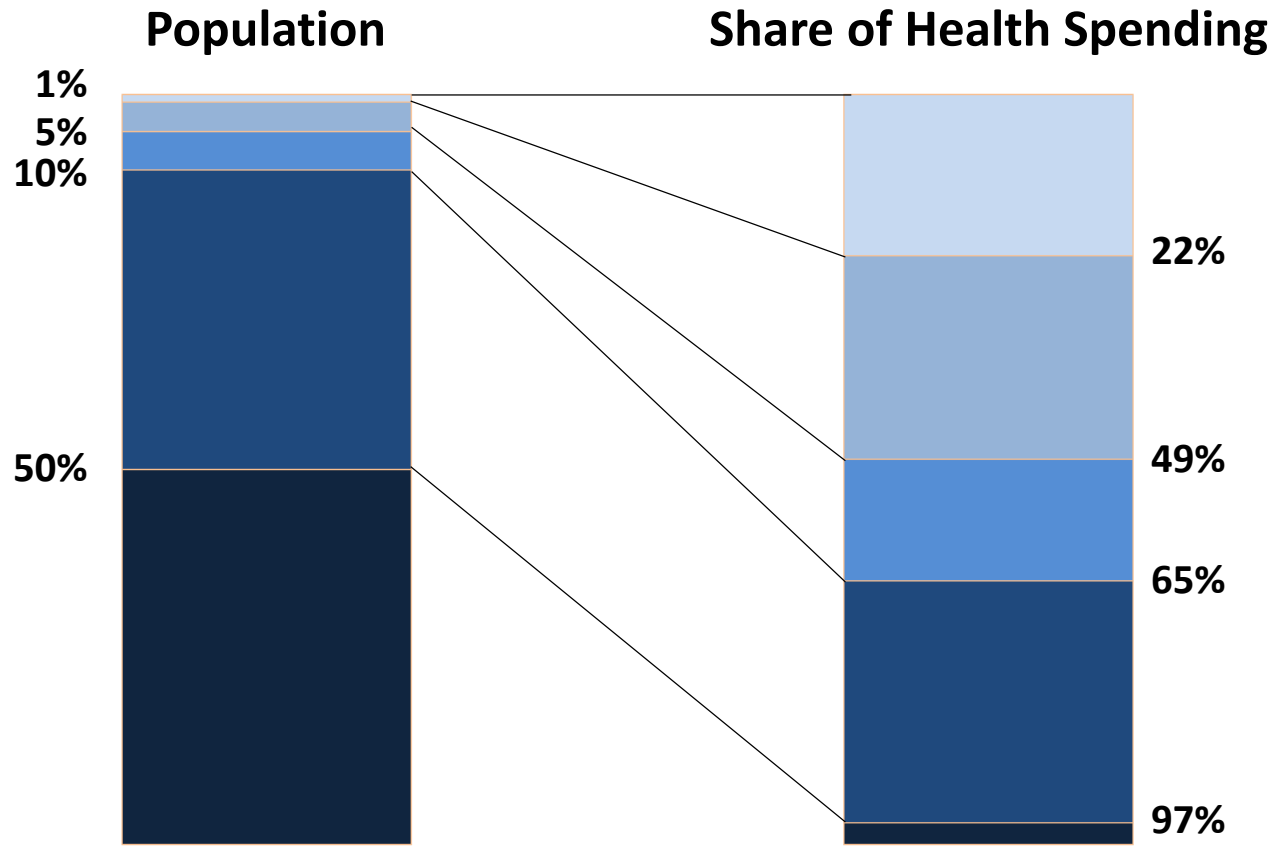
BETTER, MORE AFFORDABLE HEALTHCARE

- Significant progress
  - *Quality and safety improved*
  - *Patient experience improved*
  - *Bent the cost curve*
- Ongoing movement
  - *MACRA*
  - *Medicaid*
  - *Private sector*



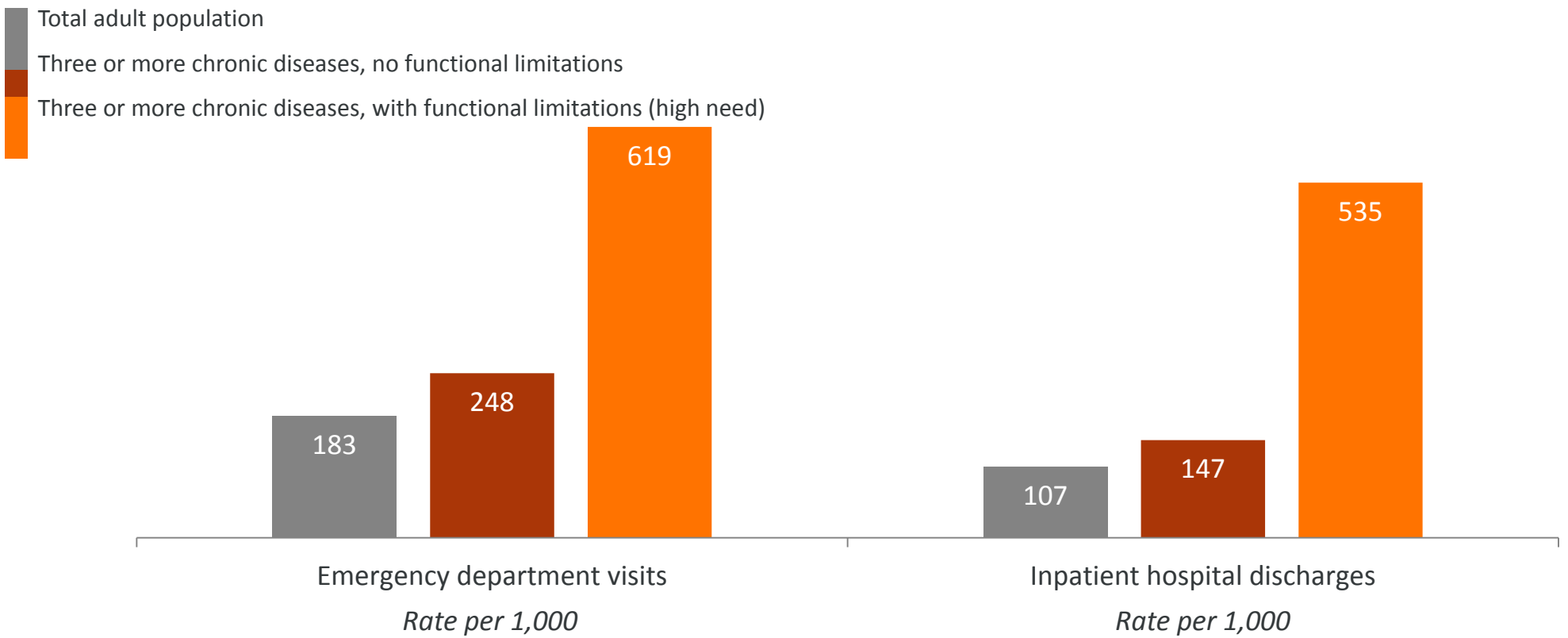
HEALTH CARE COSTS CONCENTRATED IN SICK FEW

Distribution of health expenditures for the U.S. population, by magnitude of expenditure, 2013



Source: Agency for Healthcare Research and Quality analysis of 2013 Medical Expenditure Panel Survey; MEPS Statistical Brief 480.

HIGH-NEED ADULTS HAVE MORE EMERGENCY DEPARTMENT VISITS AND HOSPITAL STAYS

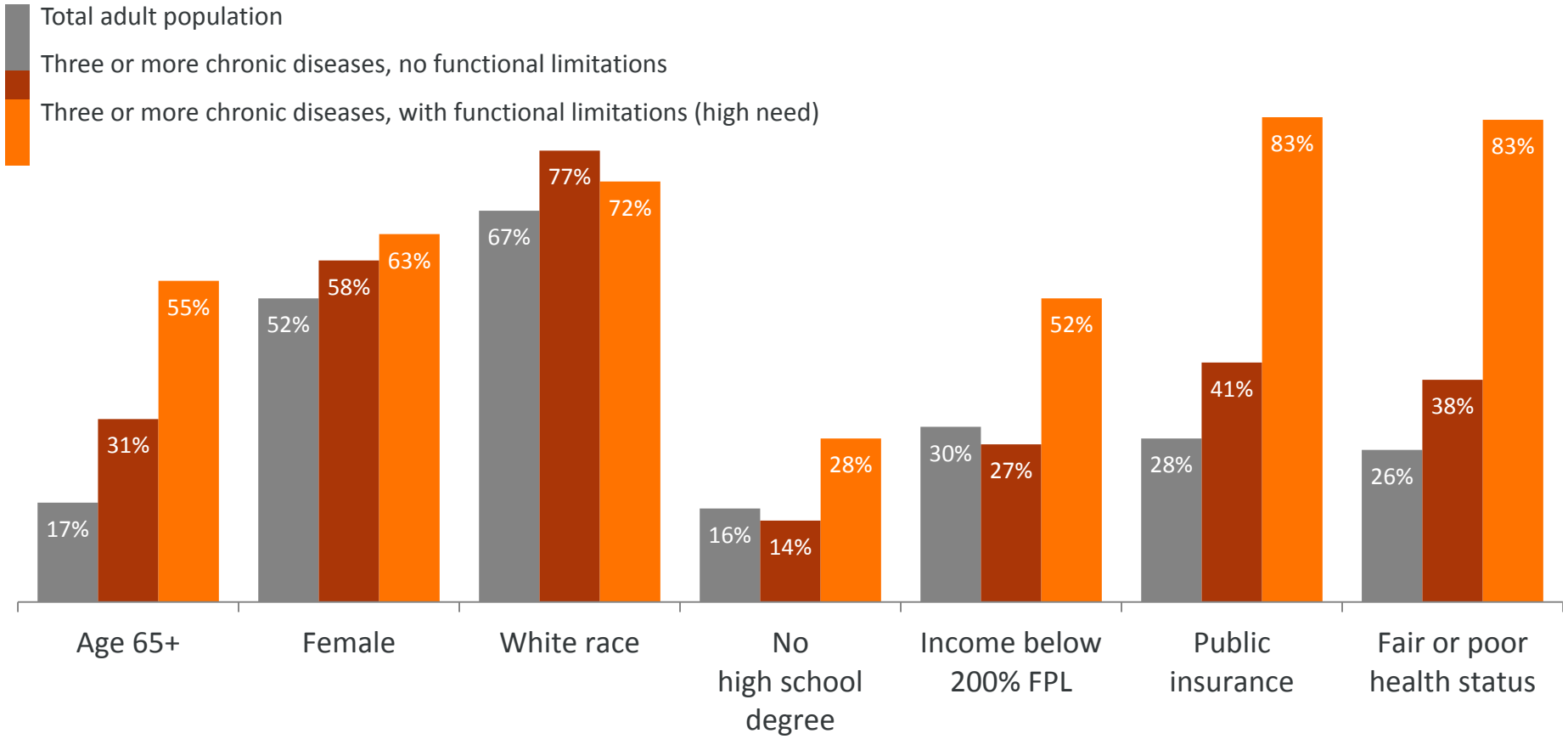


Note: Noninstitutionalized civilian population age 18 and older.
Data: 2009–2011 Medical Expenditure Panel Survey (MEPS). Analysis by C. A. Salzberg, Johns Hopkins University.

Source: S. L. Hayes, C. A. Salzberg, D. McCarthy, D. C. Radley, M. K. Abrams, T. Shah, and G. F. Anderson, High-Need, High-Cost Patients: Who Are They and How Do They Use Health Care? The Commonwealth Fund, August 2016.

The COMMONWEALTH FUND

ADULTS WITH HIGH NEEDS HAVE UNIQUE DEMOGRAPHIC CHARACTERISTICS



Notes: Noninstitutionalized civilian population age 18 and older. Public insurance includes Medicare, Medicaid, or combination of both programs (dual eligible).
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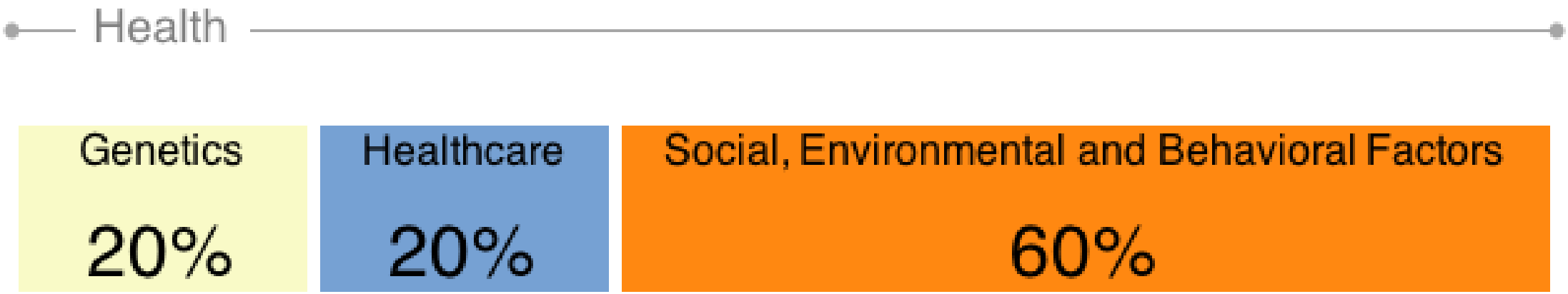
The COMMONWEALTH FUND

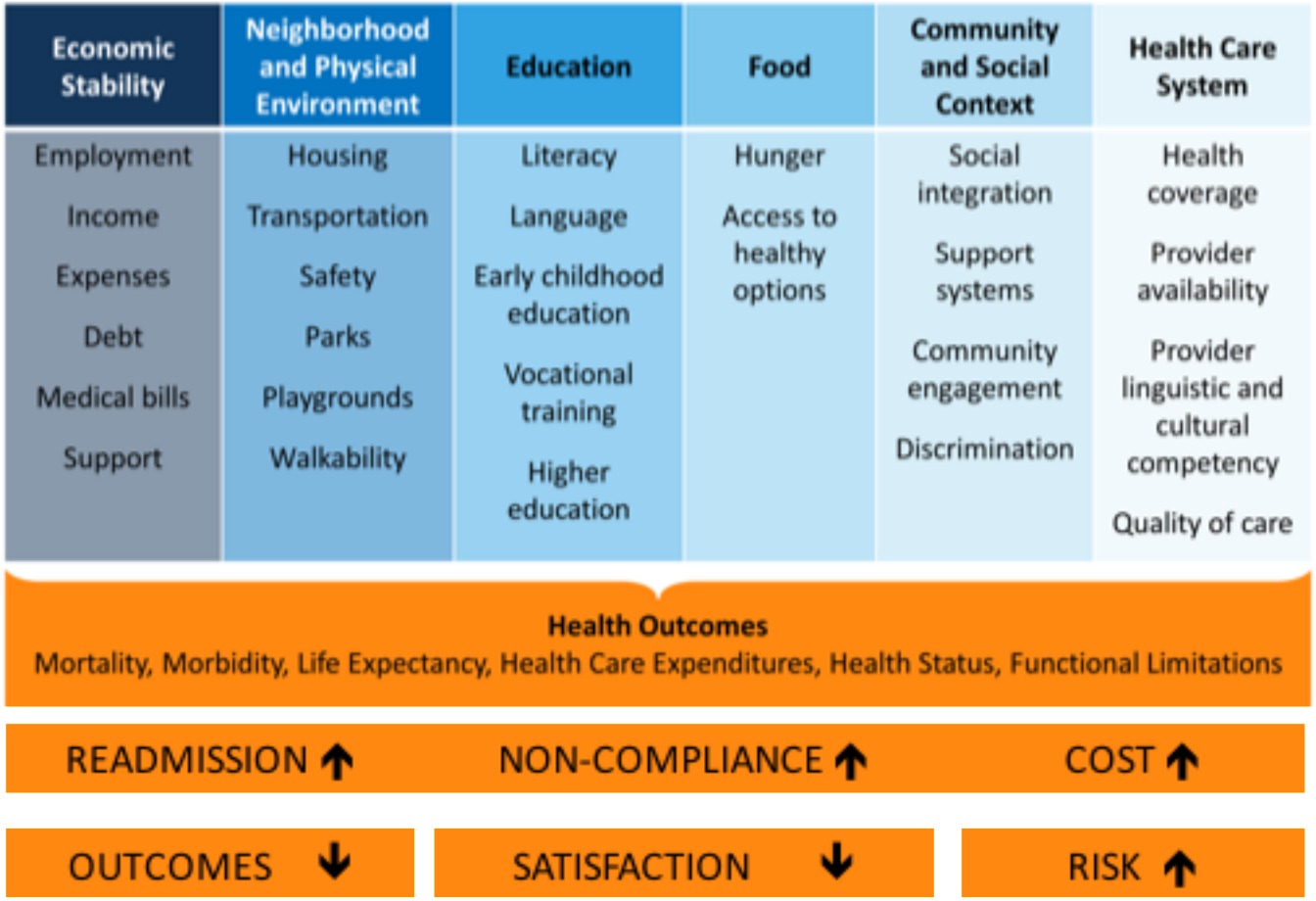
ACTION BEYOND THE BLUE BOX



SOCIAL DETERMINANTS OF HEALTH (SDOH)

"conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks."

- Healthy People 2020

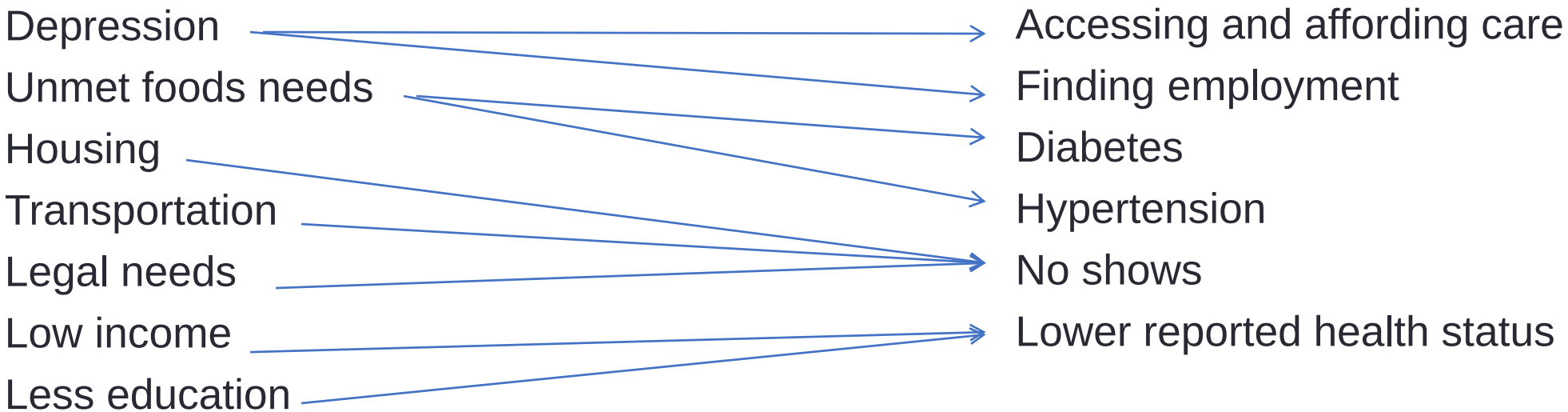


Sources: healthypeople2020.gov; Healthy People/Healthy Economy: An Initiative to Make Massachusetts the National Leader in Health and Wellness. 2015. Data from NEHI 2013. http://www.tbf.org/tbf/56/hphe/Health-Crisis. Source: James Rubin.

SDOH CORRELATED WITH POOR HEALTH OUTCOMES

- Prevalence of diabetes, hypertension, depression, and ED usage is higher in patients with unmet needs
- Worse glycemic and cholesterol control as well as more “no shows”

- Associations between:



Berkowitz, S. A.et al (2016). Addressing basic resource needs to improve primary care quality: a community collaboration programme. BMJ Qual Saf, 25(3), 164-172
Braveman, P. A.et al (2010). Socioeconomic disparities in health in the United States: what the patterns tell us. American journal of public health, 100(S1), S186-S196.

ADDRESSING SDOH IMPROVES OUTCOMES

- For high cost high need patients:
  - Camden model
  - Arkansas
- Associated with clinically meaningful improvements:
  - blood pressure
  - lipid levels
- Associated with reductions in utilization and cost:
  - Hospital readmissions following total joint surgery

Edwards PK. J Arthroplasty 2015; Berkowitz SA. JAMA Intern Med. 2017; Berkowitz, S.A. British Medical Journal Quality and Safety 2015; Berkowitz, S.A." JAMA 2016.

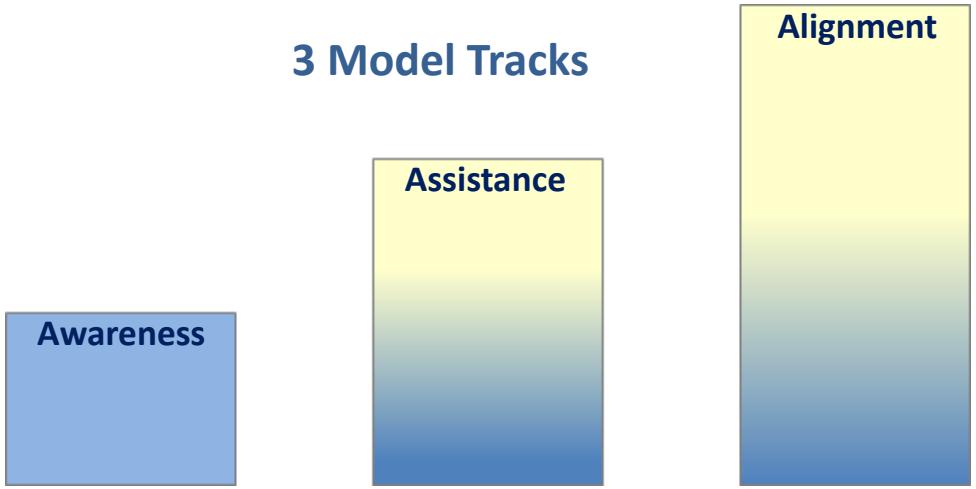
Practice environment active in efforts to address health beyond health care

CMS ACCOUNTABLE HEALTH COMMUNITIES MODEL

Key Innovations

- **Systematic screening** of all Medicare and Medicaid beneficiaries to identify unmet health-related social needs
- Testing the **effectiveness of referrals** and **community services navigation** on total cost of care using a rigorous mixed method evaluative approach
- **Partner alignment** at the community level and implementation of a community-wide quality improvement approach to address beneficiary needs

3 Model Tracks



Track 1 **Awareness –** Increase beneficiary ***awareness*** of available community services through information dissemination and referral

Track 2 **Assistance –** Provide community service navigation services to ***assist*** high-risk beneficiaries with accessing services

Track 3 **Alignment –** Encourage partner ***alignment*** to ensure that community services are available and responsive to the needs of beneficiaries

UNDERSTANDING POPULATION NEEDS

- SDOH Assessment tools
  - Many now available
  - Most focused on “health-related social needs”
- Examples
  - PRAPARE
  - Center for Medicare and Medicaid Services proposed tool
- Will allow for sharing best practices

Box 1 | Accountable Health Communities
Core Health-Related Social Needs Screening Questions

Underlined answer options indicate positive responses for the associated health-related social need. A value greater than 10 when the numerical values for answers to questions 7-10 are summed indicates a positive screen for interpersonal safety.

Housing Instability

1. What is your housing situation today?

- ☐ I do not have housing (I am staying with others, in a hotel, in a shelter, living outside on the street, on a beach, in a car, abandoned building, bus or train station, or in a park)
- ☐ I have housing today, but I am worried about losing housing in the future.
- ☐ I have housing

2. Think about the place you live. Do you have problems with any of the following? (check all that apply)

- ☐ Bug infestation
- ☐ Mold
- ☐ Lead paint or pipes
- ☐ Inadequate heat
- ☐ Oven or stove not working
- ☐ No or not working smoke detectors
- ☐ Water leaks
- ☐ None of the above

Food Insecurity

3. Within the past 12 months, you worried that your food would run out before you got money to buy more.

- ☐ Often true
- ☐ Sometimes true
- ☐ Never true

4. Within the past 12 months, the food you bought just didn’t last and you didn’t have money to get more.

- ☐ Often true
- ☐ Sometimes true
- ☐ Never true

https://nam.edu/wp-content/uploads/2017/05/ Standardized-Screening-for-Health-Related-Social-Needs- in-Clinical-Settings.pdf.

HEALTH LEADS' SOCIAL NEEDS DASHBOARD

Program Impact: September, 2014 -- August, 2015

Unique Clients

806 served

August, 2015	67
Average month	56
Total lives touched	3145
Benchmark	730

Resource Connections

750 made

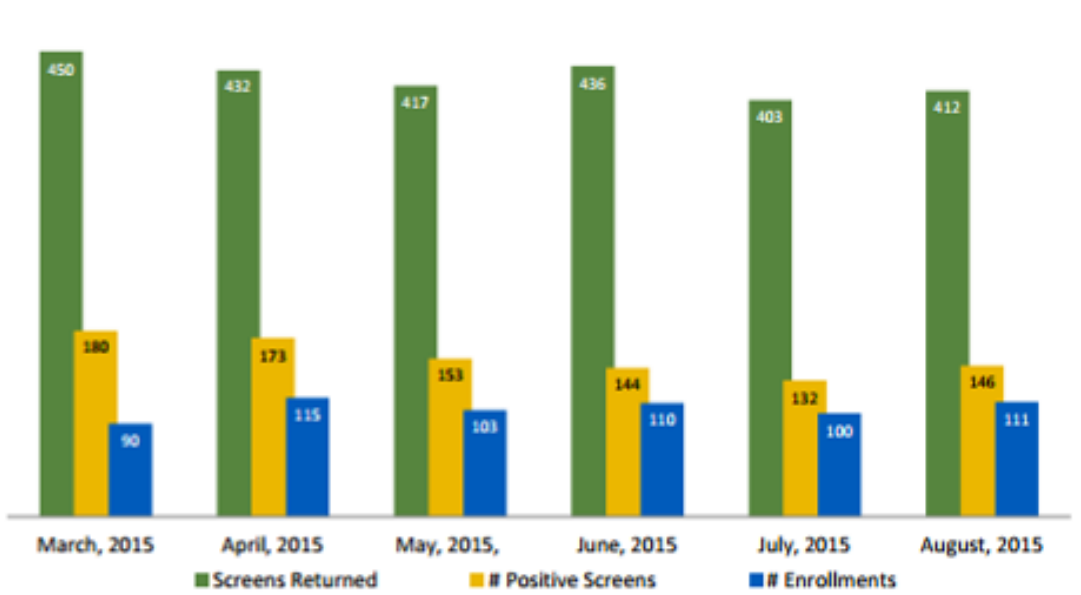
August, 2015	56
Average month	47
Benchmark	623
% Successful/All Connections	56%

Screening and Referral in August

60% of Clinic Screened

Average month	30%
Positive screen rate	35%
Referring providers	23
Referrals / provider	5
Enrollment rate (111 enroll of 146 pos. screens)	76%

of Enrollments March, 2015 -- August, 2015



Top Presenting Needs

Need	# Closed	% Connected	Days open
Food	666	60%	45
Child-Related	394	52%	46
Health	335	49%	21
Employment	278	19%	37
Utilities	254	36%	49
Adult Education	174	41%	47
Commodities	190	43%	50
Housing	153	62%	53

Results

% of patients who...			Bench mark
...**successfully** accessed a resource	45%	▲	36%
...were **equipped** to access a resource	34%	▼	40%
...did **not** access any resources	3%	▲	5%
...**disconnected** from services	18%	▲	19%

Patient Experience

			Bench mark
Touches per patient	5.6	▲	5.9
Ave. Days of Engagement	47	▼	45
NPS	74%	▲	69%
Clinic Rating due to HL	68%	▲	64%

Advocates

Metric	
# of advocates	15
NPS	74%
Patients per advocate	8
# FTEs	4.0

ADDRESSING THE SOCIAL DETERMINANTS

- From paper resource guide to digital support tools
- Some are simple digital resource guides
- Others provide communication and analytic platforms
  - Health Leads
  - TAV Health
  - Healthify
  - NowPow
  - PCCI Pieces
  - CMS tool
  - Many more “home grown” versions of digital tools
- Not standardized or necessarily interoperable; other issues emerging

SOME INDUSTRY EXAMPLES

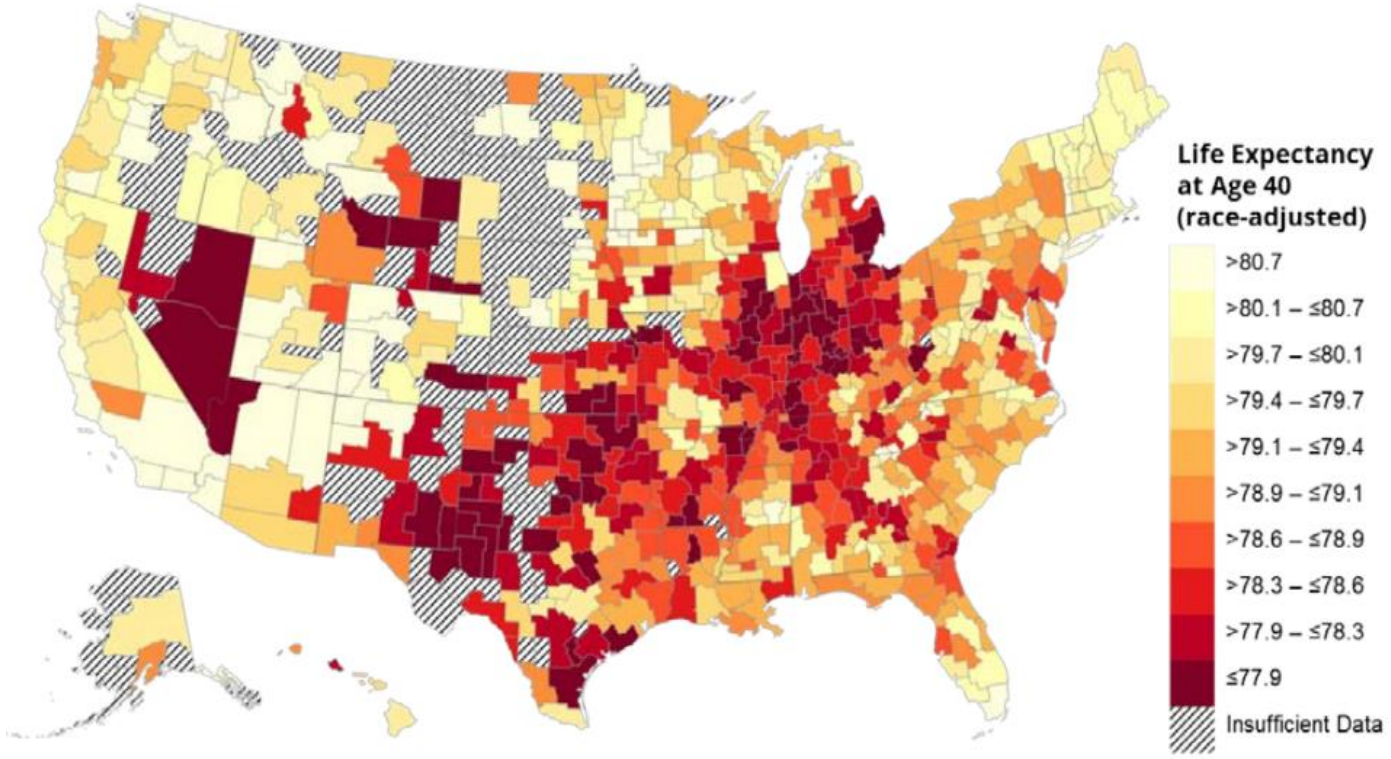
- Kaiser Permanente
- Intermountain Health Care
- Trinity
- United Healthcare

GOING FURTHER CHANGING THE CONTEXT

- Go beyond addressing health related social determinants
- Change upstream context
- Levels of engagement:
  - Refer to housing agency?
  - Pay for housing supportive services or Air-conditioner?
  - Build housing?
- Community alliances with public sector
- “Anchor Institution” concept

www.democracycollaborative.org; www.essentialhospitals.org; www.healthypeople2020.gov/ph3

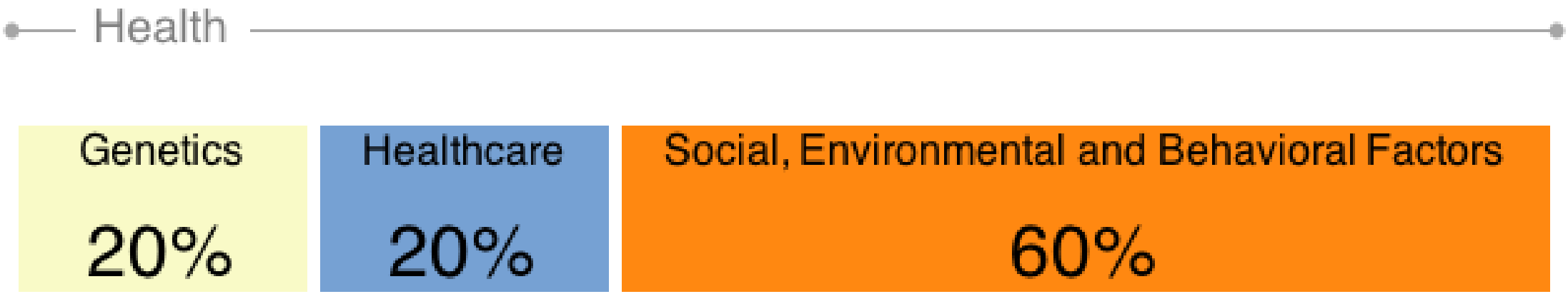
Need to Build Consistency in Resources



Our Zip Code Affects Our Health More Than Our Genetic Code...

Sources: Woolf, VCU; Chetty et al. JAMA 2016;315(16):1750-1766

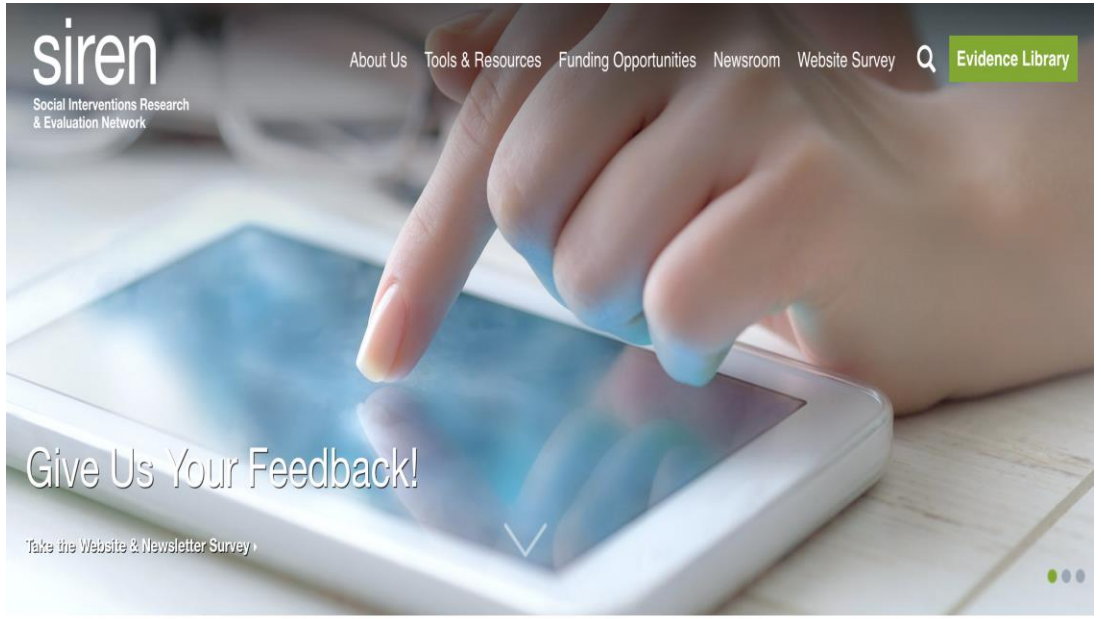
ACTION BEYOND THE BLUE BOX



Areas of priority in the research agenda around the social determinants of health

FIELD BUILDING NEEDS TO ACCELERATE

- Need “clear and coherent research agenda”
- Early focus on Health-care related efforts but more work needed beyond
- Avoid SDOH being a fad because “shot gun” approach in practice environment does not build the field, apply rigor
- Will require willingness to leverage new methods, data sources, fields
  - Simulation models



Our Mission

is to catalyze and disseminate high quality research that advances efforts to address social determinants of health in health care settings.

RESEARCH ISSUES AT THE FOREFRONT

- Foundational:
  - Percent SDOH contributes to health outcomes
- Assessment methods
- Study design for impact assessment
- Incentive structure and sectoral focus
- Outcomes measurement

Final Reflections on Policy Agenda

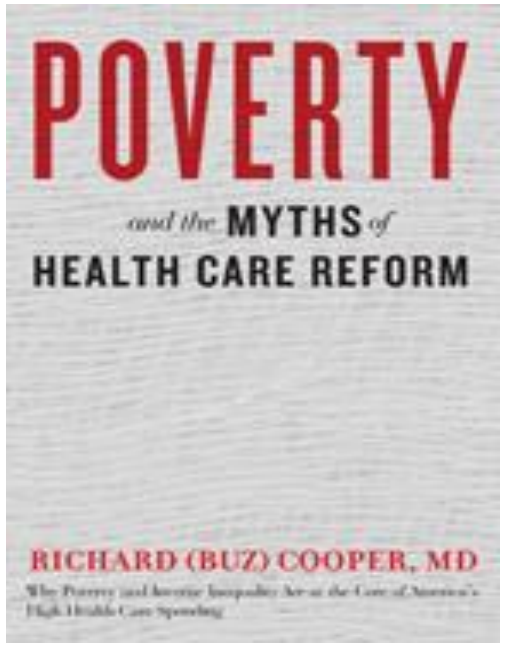
IT WILL TAKE SIGNIFICANT SYSTEMS CHANGE

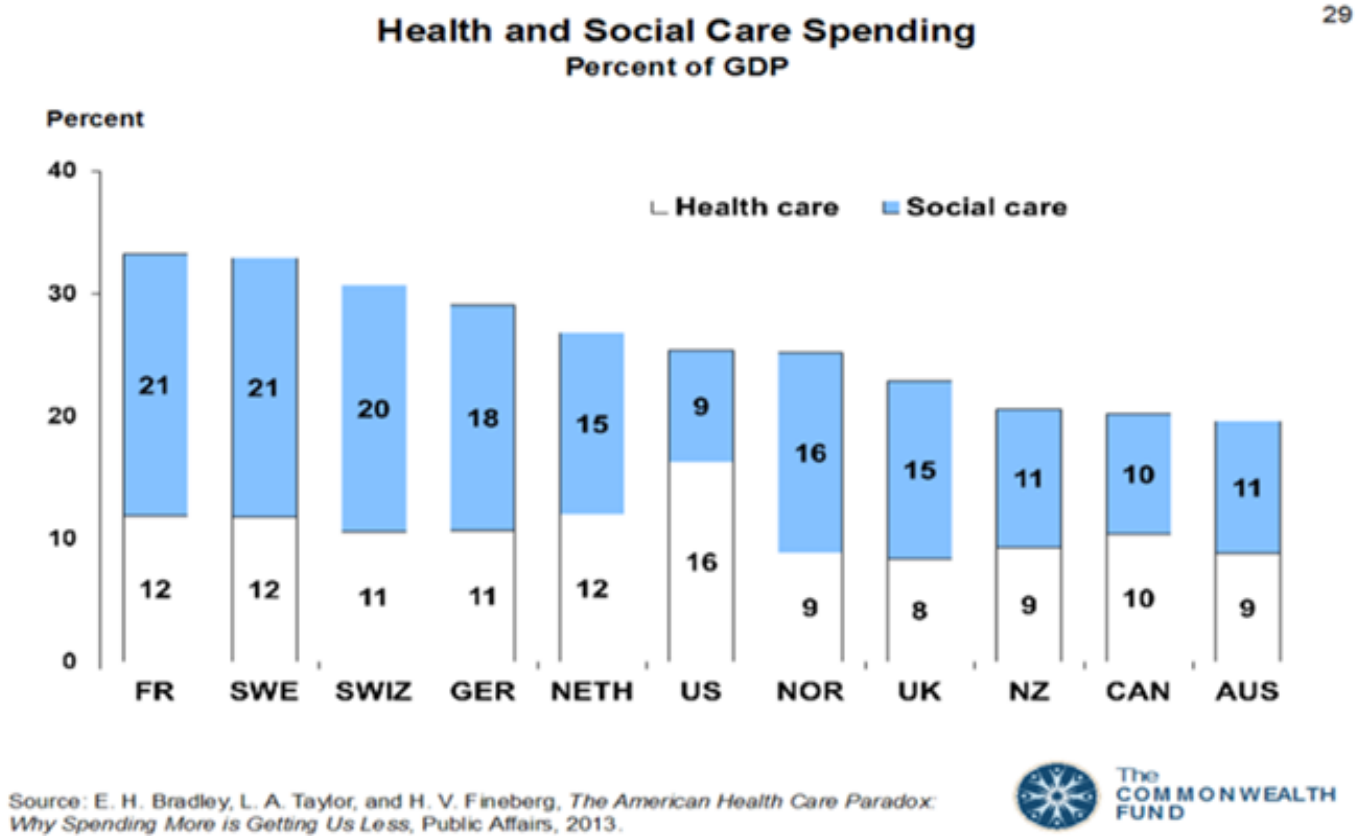
- Great health at an affordable cost to society cannot be achieved by even the most competent physician's actions
- It cannot be achieved by the highest quality health medical home or health system
- It requires
  - *"society working together to create the conditions in which everyone can be healthy"*

DeSalvo K, Harris A. "Bending the trends." Annals of Family Medicine, Jul/Aug 2017

BETTER HEALTH FOR ALL REQUIRES POLICY SHIFT: MATCH SPENDING WITH IMPACT

"Treating a homeless man's frostbitten toes is surely a waste, when a pair of shoes could have prevented it."





Source: Health Leads

From: **Inequalities in Life Expectancy Among US Counties, 1980 to 2014Temporal Trends and Key Drivers**

JAMA Intern Med. Published online May 08, 2017. doi:10.1001/jamainternmed.2017.0918

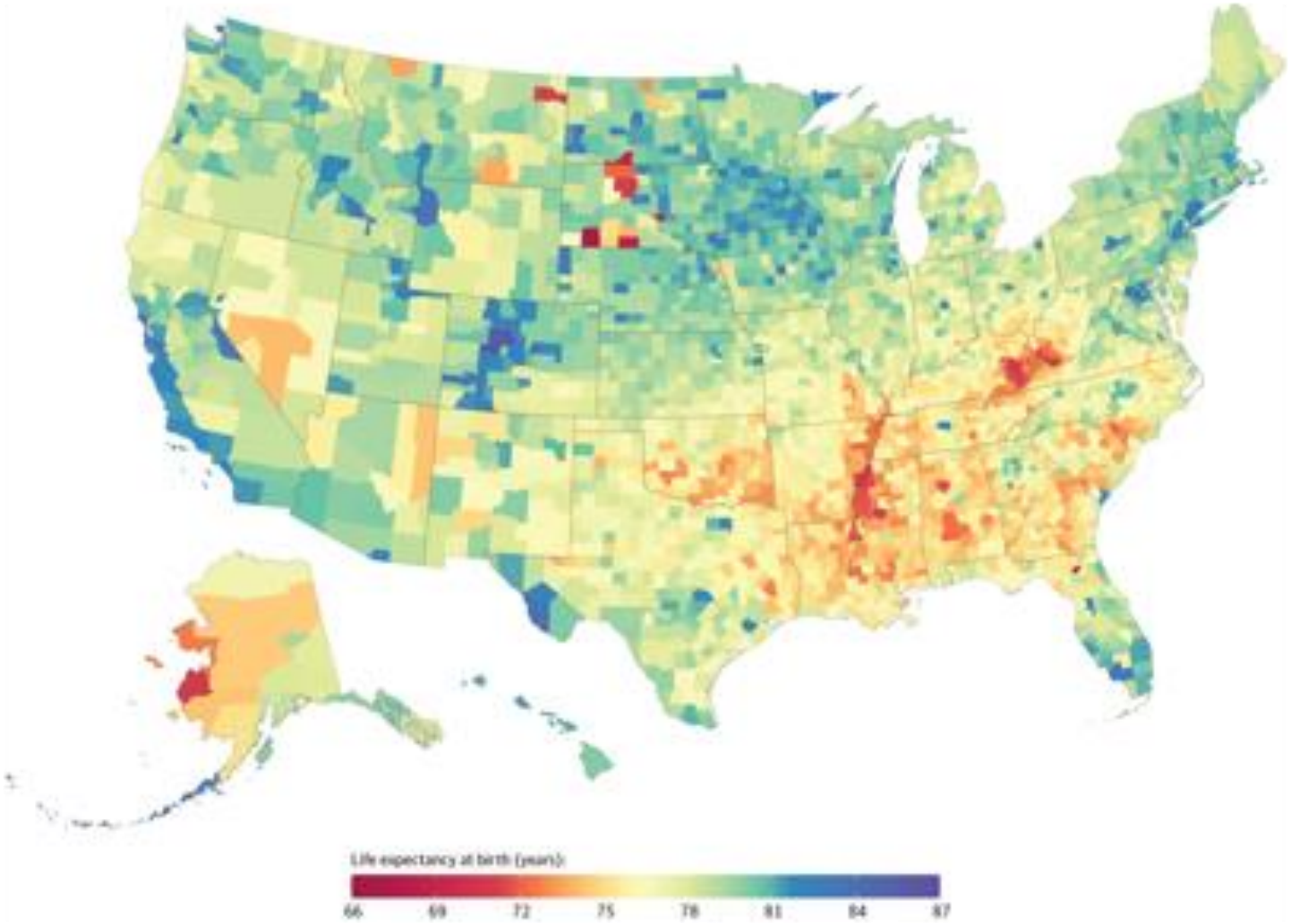


Figure Legend:

Life Expectancy at Birth by County, 2014Counties in South Dakota and North Dakota had the lowest life expectancy, and counties along the lower half of the Mississippi, in eastern Kentucky, and southwestern West Virginia also had very low life expectancy

GOALS

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→ School-Based Programs to Increase Physical Activity
→ School-Based Violence Prevention
→ Safe Routes to School
→ Motorcycle Injury Prevention
→ Tobacco Control Interventions
→ Access to Clean Syringes
→ Pricing Strategies for Alcohol Products
→ Multi-Component Worksite Obesity Prevention
Counseling and Education
Clinical Interventions
Long Lasting Protective Interventions
Changing the Context
Making the healthy choice the easy choice
→ Early Childhood Education
→ Clean Diesel Bus Fleets
→ Public Transportation System
→ Home Improvement Loans and Grants
→ Earned Income Tax Credits
→ Water Fluoridation
Social Determinants of Health
HI-5
SCHOOL
HEALTH IMPACT IN 5 YEARS