Meeting Value-based Care Challenges

Social Determinants of Health

Central Pennsylvania Population Health Symposium
Harrisburg, Pennsylvania
Mary Jane Osmick MD
May 2, 2019

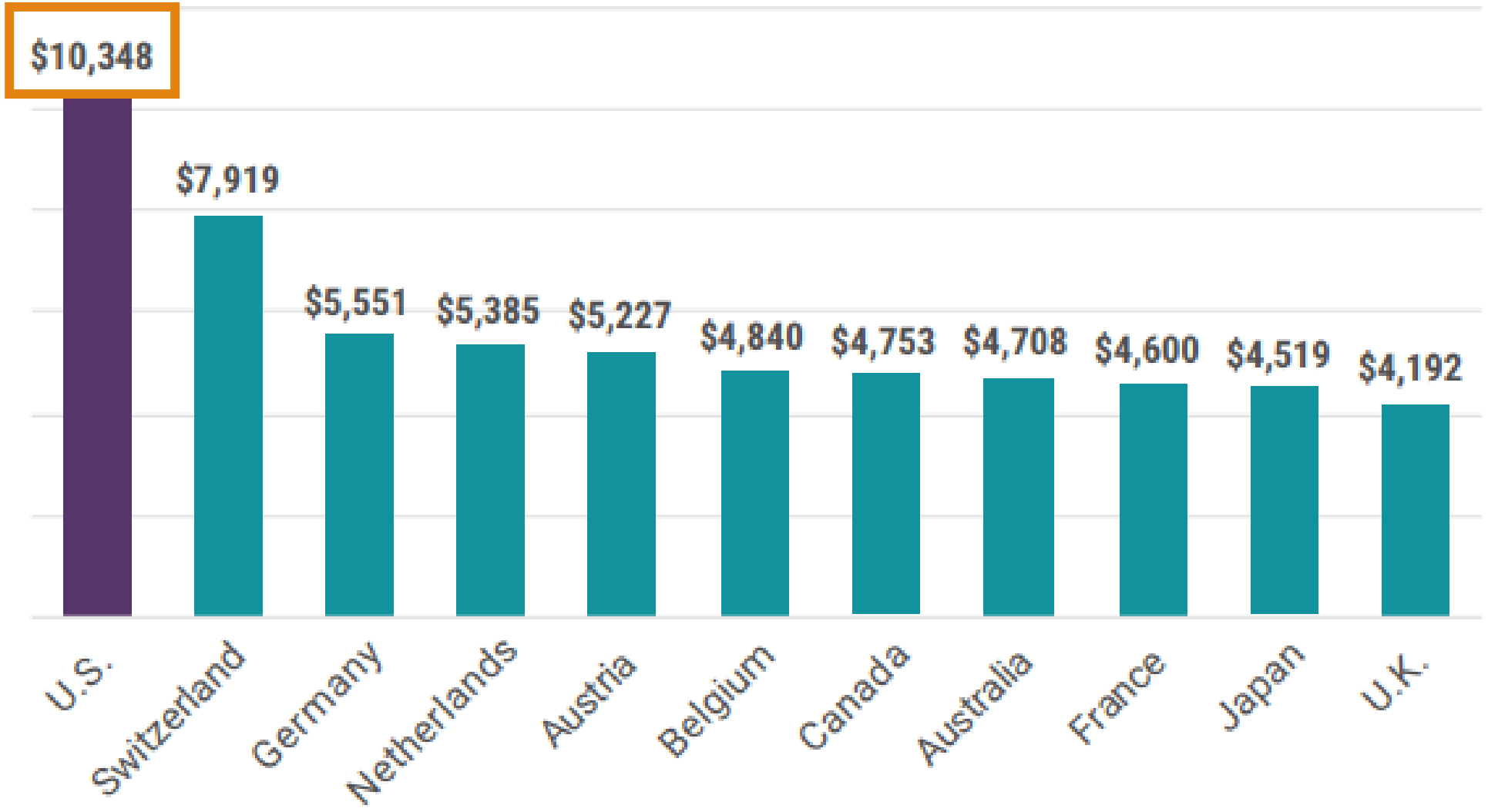
You can lead a horse to water…

But, can he drink…?

Agenda

- Setting the Social Determinant Stage
- Population Health Alliance Framework & White Paper
- Health Disparities
- Research on Social Determinants of Health
- Special Case – Low Wage Worker considerations
- Taking Action on Social Determinants
- Questions/Answers

Total Health Expenditures per Capita, U.S. Dollars, PPP Adjusted, 2016



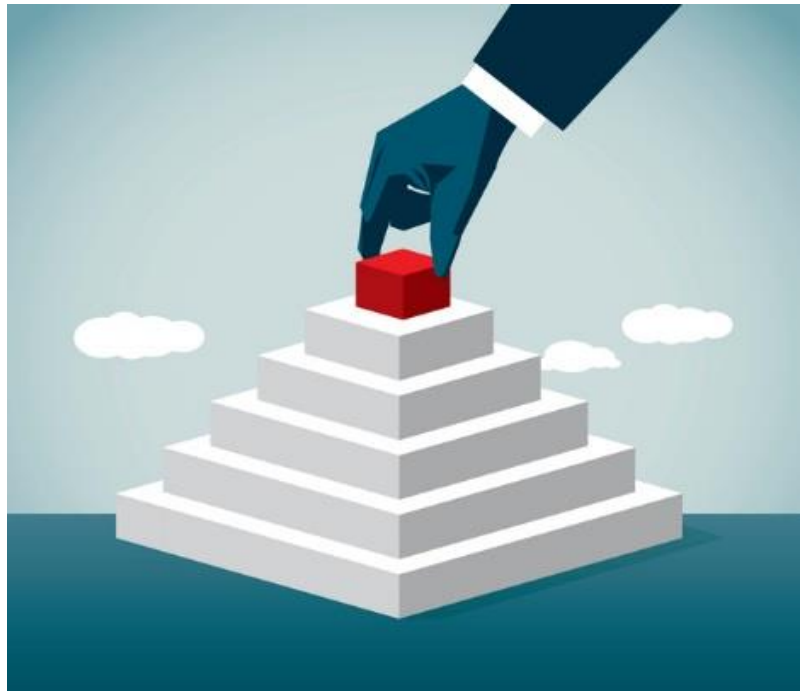
In 2017, the US spent $3.5 trillion on healthcare

AMONG 36 OECD NATIONS, THE UNITED STATES RANKS:

- ✓ 28th in the life expectancy of its residents,
- ✓ 31st in infant mortality and
- ✓ 16th in heart attack mortality, but is
- ✓ 1st in the highest healthcare costs per person.

Based on the Organisation for Economic Co-operation and Development, the US ranks for life expectancy, infant mortality and heart attack mortality (based on the most recently available statistics/retrieved from OECD.Stat on March 17, 2019).

Hunger, cold, fear, loneliness trump a focus on health every time



Self-Actualization

Esteem

Belonging

Safety

Physiologic

Scarcity – the lack of any required resource

Scarcity captures our attention, changes how we think, and keeps us immediately focused on the scarce resource we do not have, to the exclusion of other important issues in our lives.

Consequences of Scarcity

- Causes individual to…"represent, manage, and deal with problems differently"
- Physical and mindset constraint
  - Produces "tunneling"
  - Levies "bandwidth tax"
  - Shapes choices and behaviors
  - Focus on short-term over long-term
- "Affects what we notice, how we weigh choices, how we deliberate, and ultimately what we decide and how we behave."

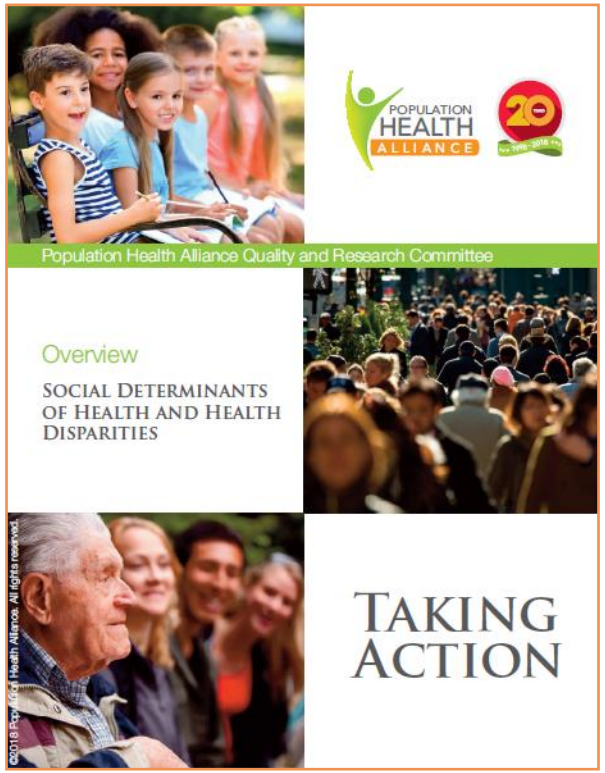
S. Mullainathan, E. Shafir "Why having too little means so much", Times Books, Henry Holt and Company New York
https://www.amazon.com/s?k=why+having+too+little+means+so+much&i=stripbooks&crid=1U74DDBSD2P0A&sprefix=Why+having+too%2Cstripbooks%2C141&ref=nb_sb_ss_fb_1_14

2017 - 2018 PHA Quality and Research Committee

"Social Determinants of Health and Health Disparities – Taking Action"

White Paper Authors

- MJ Osmick MD, Chair - American Specialty Health
- Bruce Sherman MD – Case Western Reserve
- Anthony Akosa MD, MBA– Franciscan Alliance
- Jaan Siderov, MD, MHSA, - The Collaborative at the PA Medical Society
- Greg Berg PhD – AxisPoint Health
- Carl Goff PhD, MBA, MHS, BSN – Blue Cross Blue Shield Assoc.
- Paulo Machado – Analytics Work Group



Now Available on Amazon.com

https://www.amazon.com/Social-Determinants-Health-Population-Alliance-ebook/dp/B07QFSJS16/ref=sr_1_fkmrnull_1?keywords=Social+Determinants+of+Health+Taking+Action&qid=1555452459&s=books&sr=1-1-fkmrnull

Social Determinants of Health

The conditions in which people are born, grow, work, live and age, and the wider set of forces and systems shaping the conditions of daily life.

World Health Organization

Social Determinants Domains

- Safety
- Housing status
- Financial & Resource constraints
- Race/Ethnicity, Cultural and Other considerations
- Level of Education & Health Literacy

- Transportation
- Behavioral/Mental Health
- Health Behaviors
- Employment status
- Health Insurance Status
- Access to Care (System vs. Personal level)

Health…the cumulative downstream effect of:

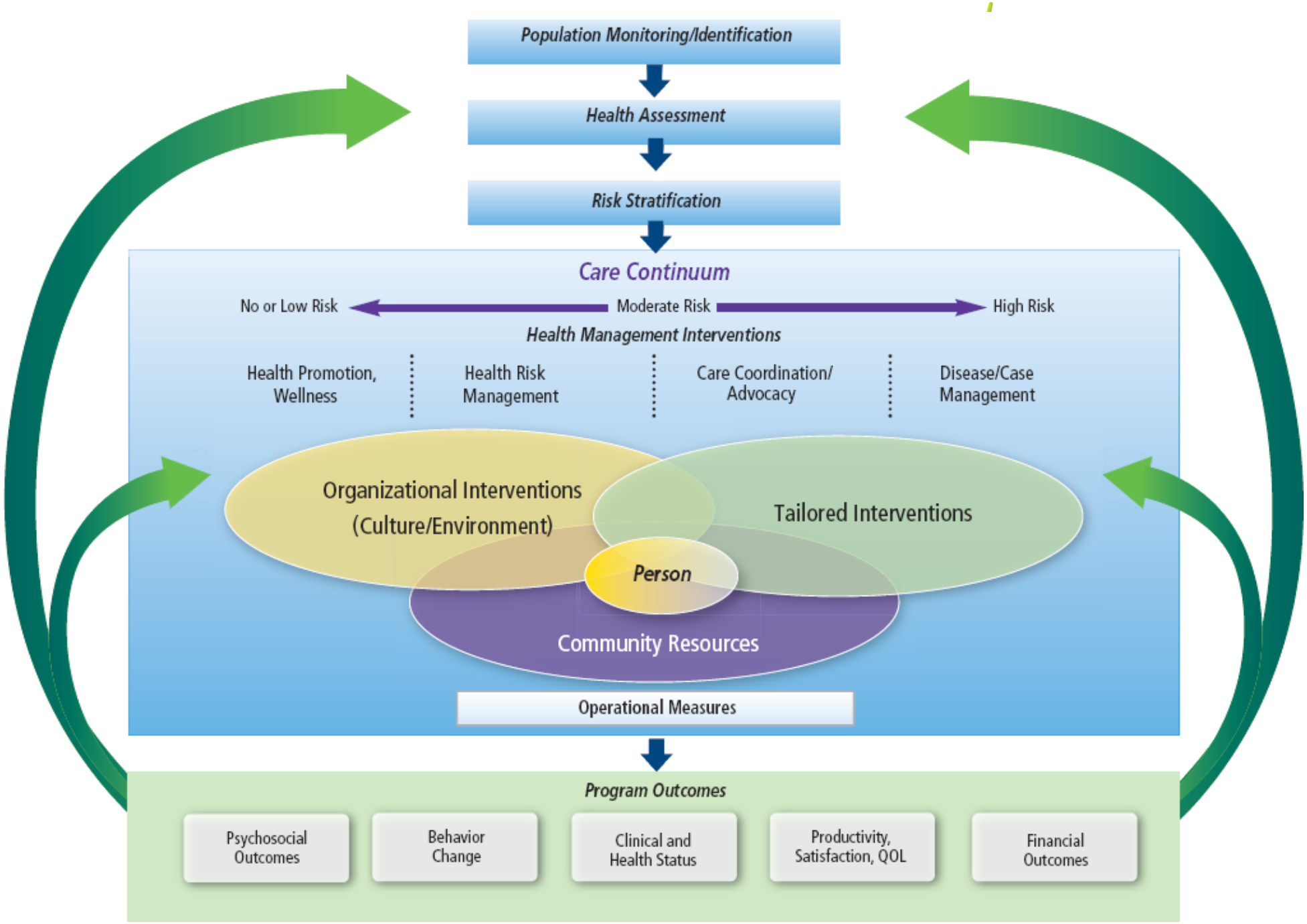
- genetic “gifts”,
- our circumstances,
- how we choose to live our daily lives,
- the health care services we receive.

Impact of Social Determinants on Health

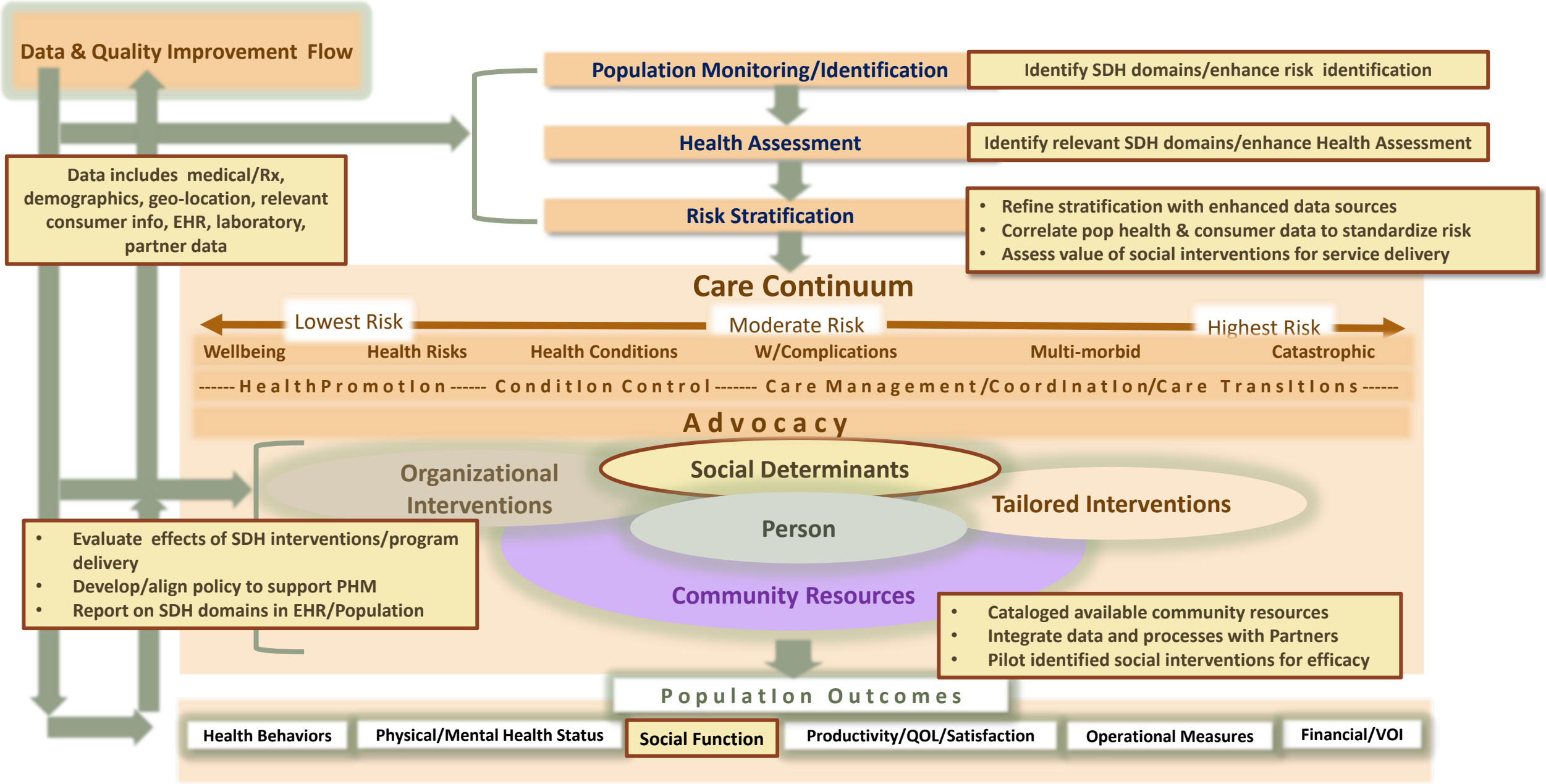
Research model estimate ranges

- 10 – 20% - the health care an individual receives
- 20 – 30% - an individual's genetic code
- 50 – 60% - an individual's health behaviors, social and environmental factors

Population Health Framework



PHA FRAMEWORK WITH SOCIAL DETERMINANT ELEMENTS




Vinny & JOE'S

Health Inequities (Disparities)

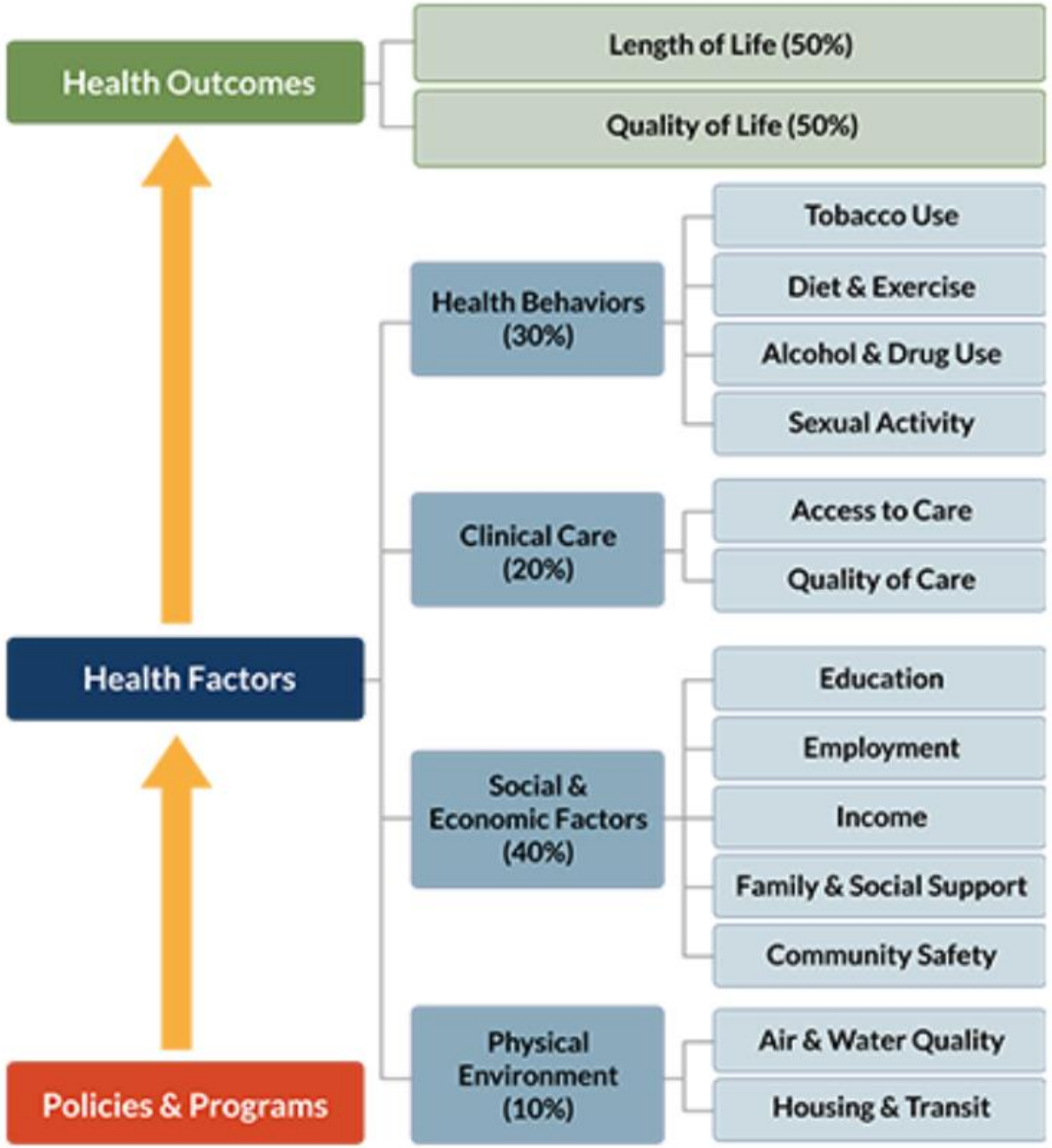
The unfair and avoidable differences in health between groups of people within and between countries which stem from social determinants of health resulting in stark differences in health and health outcomes.

World Health Organization

“Health disparities can be understood as disadvantages in health associated with one’s social, racial, economic, or physical environment, which originate in childhood and persist across an individual’s life course.”

Health Affairs 36, No. 6 (2017):999-1005; 2017 Project HOPE - The People to People Health Foundation Inc.

County Health Rankings and Roadmaps



http://www.countyhealthrankings.org/explore-health-rankings/measures-data-sources/county-health-rankings-model University of Wisconsin Population Health Institute/RWJ

USALEEP - Census-Tract Level Data

- “The more local the data, the more useful it can be for pinpointing disparities and driving action.” (RWJ)
- United States Small-Area Life Expectancy Estimate Project (USALEEP)
  - Partnership of HCHS, Robert Wood Johnson Foundation (RWJF) and National Association for Public Health Statistics and Information Systems (NAPHSIS)
  - Neighborhood Life Expectancy Project - https://www.cdc.gov/nchs/nvss/usaleep/usaleep.htmln
- Measures average number of years a person can expect to live based on census tract data
- Can be used in conjunction with County/City health rankings to better understand communities

"Place-based Risks"

- Community-level data to inform and personalize interventions
- Efficient person-risk identification
  - Tailor recommendations
  - Target resources
- Improve care experiences and clinical outcomes while reducing disparities and costs

ADDRESSING SOCIAL DETERMINANTS OF HEALTH

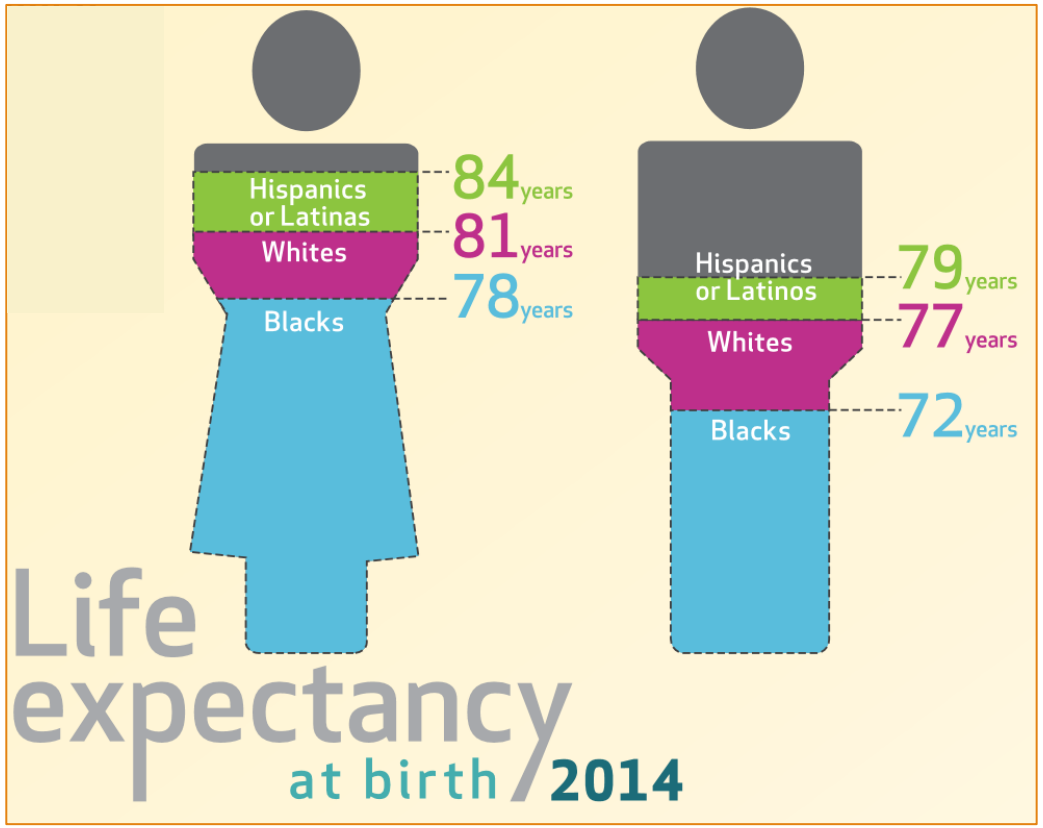
By Andrew F. Beck, Megan T. Sandel, Patrick H. Ryan, and Robert S. Kahn

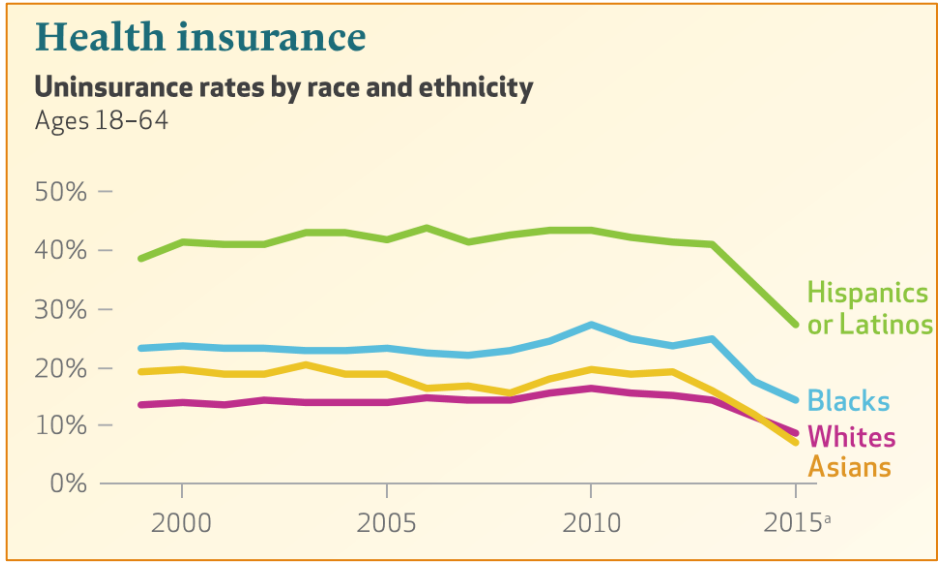
Mapping Neighborhood Health Geomarkers To Clinical Care Decisions To Promote Equity In Child Health

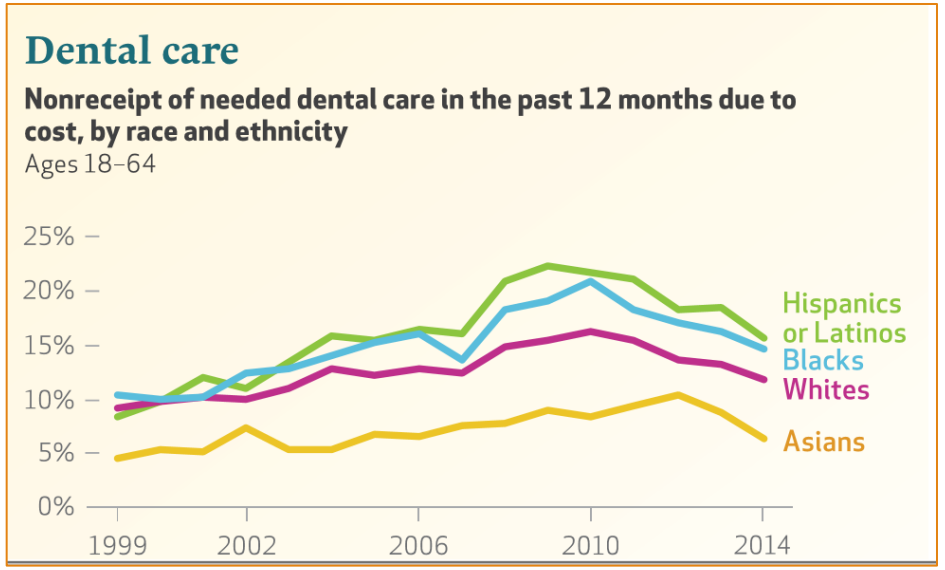
ABSTRACT Health disparities, which can be understood as disadvantages in health associated with one's social, racial, economic, or physical environment, originate in childhood and persist across an individual's life course. One's neighborhood may drive or influence these disparities. Information on neighborhoods that can characterize their risks—what we call place-based risks—is rarely used in patient care. Community-level data, however, could inform and personalize interventions such as arranging for mold removal from the home of a person with asthma from the moment that person's address is recorded at the site of care. Efficient risk identification could lead to the tailoring of recommendations and targeting of resources, to improve care experiences and clinical outcomes while reducing disparities and costs. In this article we highlight how data on place-based social determinants of health from national and local sources could be incorporated more directly into patient-centered care, adding precision to risk assessment and mitigation. We also discuss how this information could stimulate cross-sector interventions that promote health equity: the attainment of the highest level of health for neighborhoods, patient panels, and individuals. Finally, we draw attention to research questions that focus on the role of geographical place at the bedside.

HEALTH AFFAIRS 36, NO. 6 (2017): 999–1005

Health Disparities



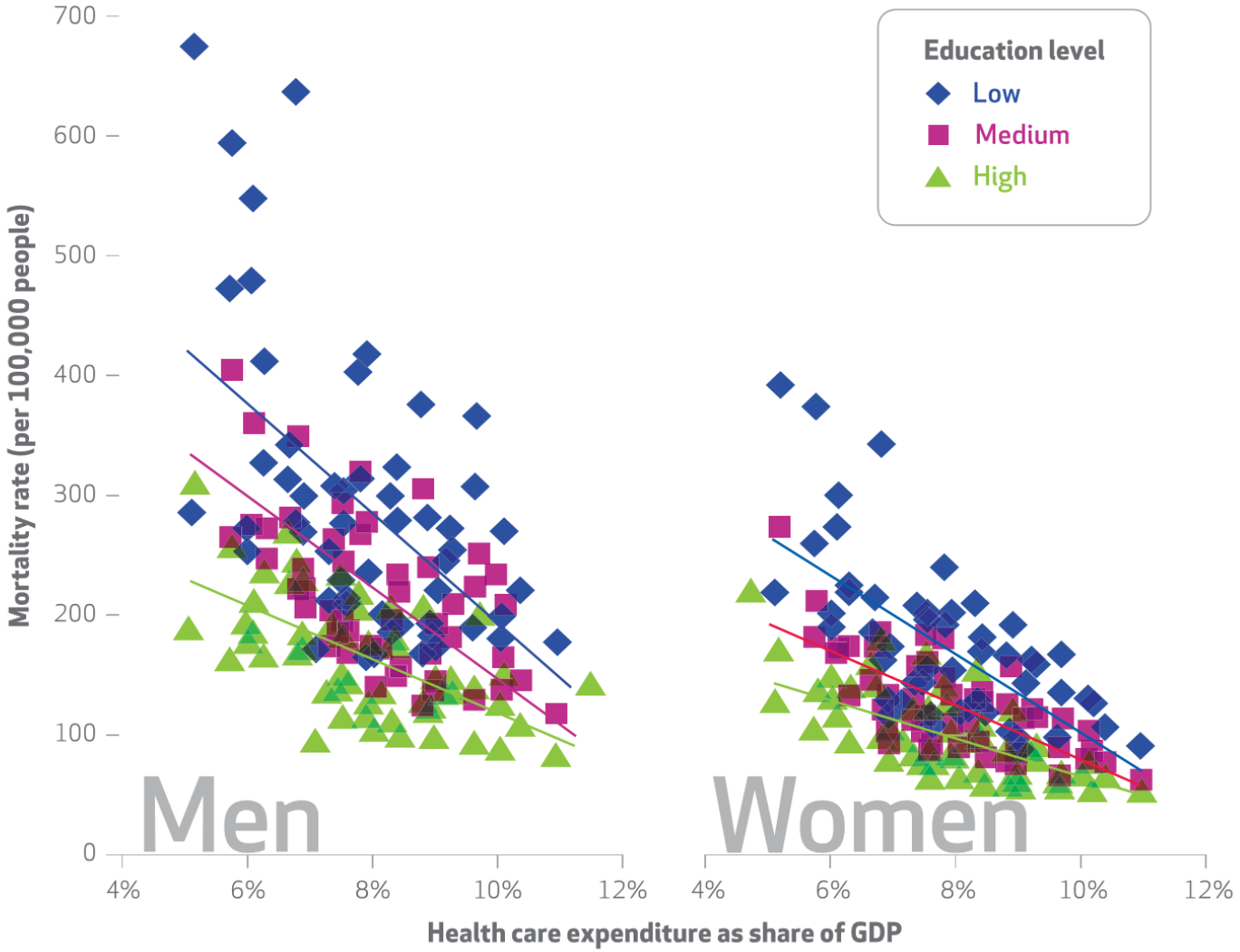




Health Equity Datagraphic; Health Affairs no.6 (2017):976-977

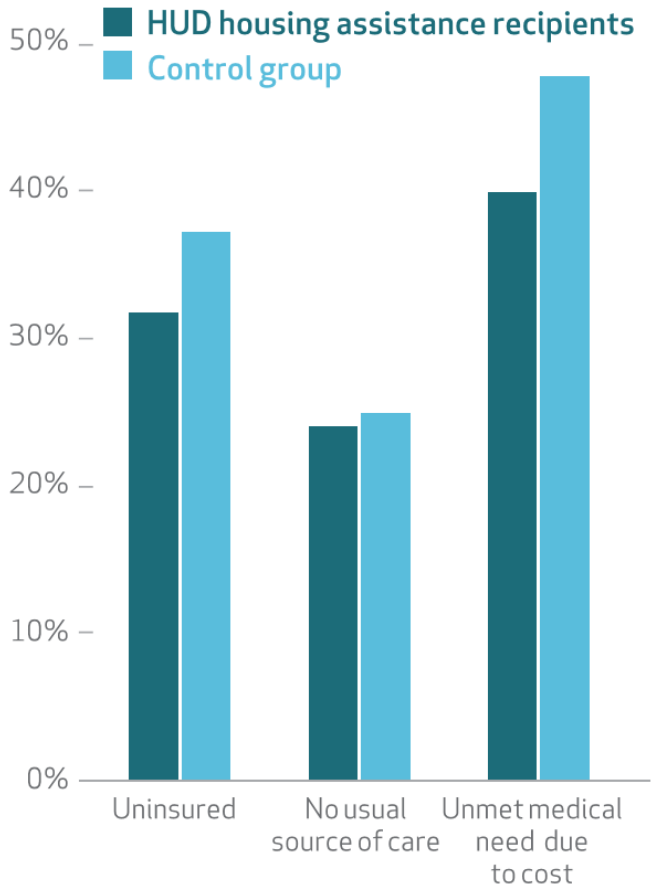
Health spending & mortality

In 17 European countries, mortality from conditions that are amenable to health care treatment declined over thirty years (1980–2010). In these countries, increases in the share of GDP spent on health care were associated with declines in amenable mortality among men and women across all levels of education, with a stronger absolute decline among those with low levels of education.



HUD housing assistance & health care

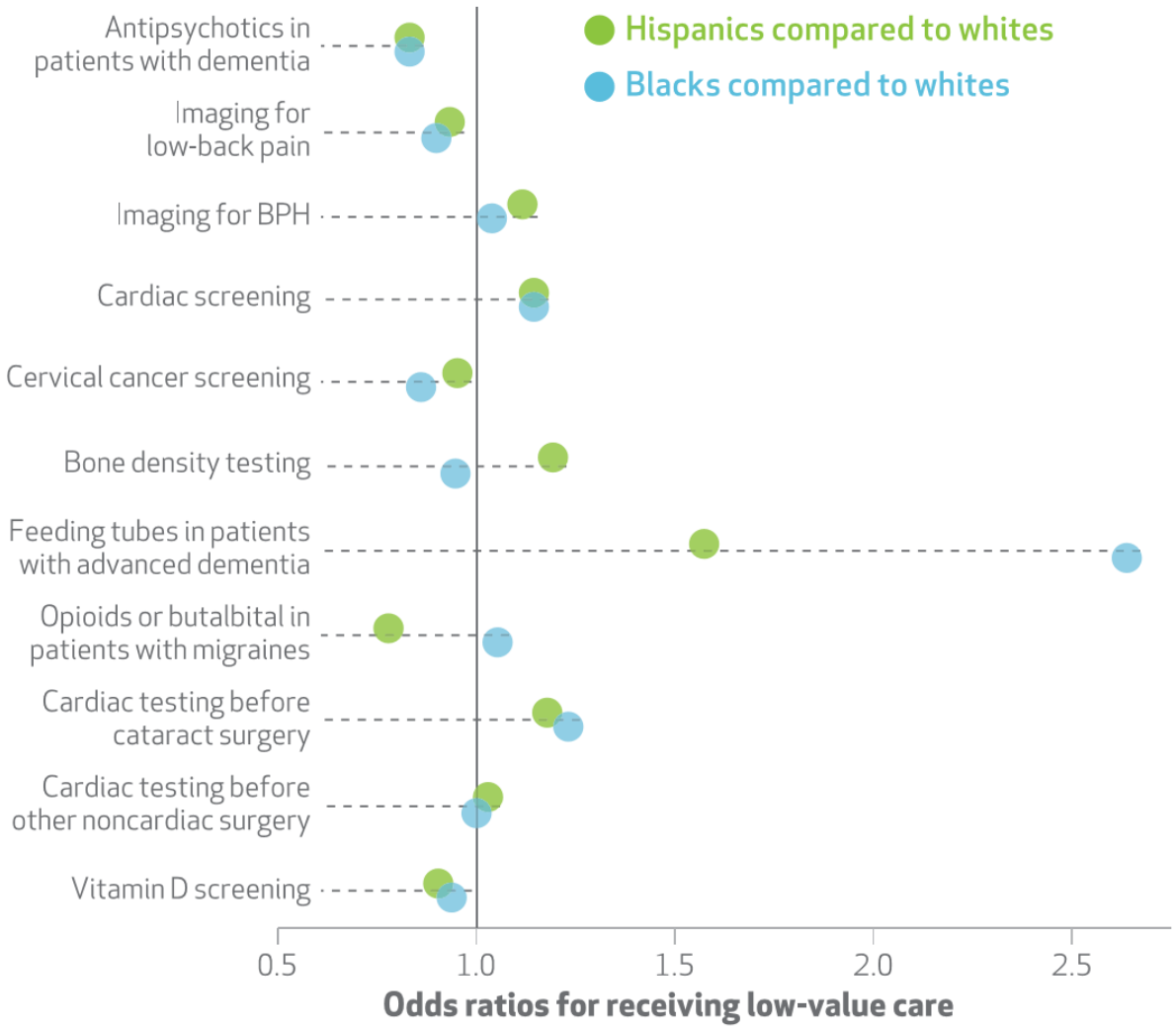
People receiving federal housing assistance from the Department of Housing and Urban Development (HUD) had lower rates of uninsurance and unmet medical need due to cost, compared to a control group with similar sociodemographic and health characteristics but not receiving housing assistance.



Health Equity Datagraphic; Health Affairs no.6 (2017):976-977

Disparities in who receives low-value care

According to Medicare data for the period 2006–11 and census data for 2006–10, compared to whites, black and Hispanic beneficiaries often received more of the services that are considered "low value" by the Choosing Wisely initiative.



Choosing Wisely Initiative – Low Value Care

Health Equity Datagraphic; Health Affairs no.6 (2017):976-977

How much do Americans have in emergency savings?

Enough to cover ...

Note: 8% responded "don't know/refused."

Source: Bankrate's Financial Security Index, June 6-10, 2018

Bankrate

Financial Toxicity

- Described 2013 by Zafar and Abernethy relating costs of cancer care to effects on patients (Oncology Feb. 2013 Feb; 27(2); 80 – 149)
  - Suggested out-of-pocket expenses related to cancer treatment is akin to physical toxicity in that quality of life is diminished and delivery of highest quality care is impeded.
- Existing data identified objective financial burden and subjective financial distress as key components of financial toxicity.
  - Term being extended to general medicine
- Comprehensive Score for Financial Toxicity (COST)
  - Measures consumers' anxiety and distress as a result of medical costs can be measured using a modified version of the tool
  - Validated 11-item measure that asks about medical expenses and corresponding anxiety and stress as a result of medical costs

MDM Policy Pract.2018 Ja-Jun;4(1); online https://journals.sagepub.com/doi/10.1177/2381468318760298

Health Insurance Literacy

"The capacity to find and evaluate information about health plans, select the best plan given financial and health circumstances, and use the plan once enrolled."

Measuring Health Insurance Literacy: A Call to Action, A Report from the Health Insurance Literacy Expert Roundtable. Consumers Union, University of Maryland College Park, American Institutes for Research, February 2012. http://goo.gl/FywWmL

Health Insurance Literacy

- Widespread low health insurance literacy in US
- May lead to misunderstanding financial and health implications of choosing health insurance plans
- High deductible health plans
  - Do not provide adequate financial protection from risk, relative to incomes.
  - High deductibles or out-of-pocket costs associated with health care utilization among the insured may dissuade accessing health care
- Health Insurance literacy may be a previously unrecognized source of health disparities
  - Survey tested enrollees knowledge of basic health insurance terminology and their use
  - Overall, 62% of questions answered correctly; 53% for black, 50% for Hispanic, 74% for white, 45% for Spanish-speaking enrollees. SS results
  - Health Insurance terminology is confusing especially for racial and ethnic minorities

*Villagra MD, Victor G. et al; “Health Insurance Literacy: Disparities by Race, Ethnicity, and Language Preference”; American Journal of Managed Care March 2019; https://www.ajmc.com/journals/issue/2019/2019-vol25-n3/health-insurance-literacy-disparities-by-race-ethnicity-and-language-preference

What research tells us about SDOH

- **Medical care without a focus on SDH cannot significantly improve health outcomes**
- Accountable care models are driving a focus on SDH
- SDOH are greatly influenced by health care policies/systems and environments
- New frameworks that integrate SDOH into health care are under development
- Analytical and evaluation models are/must be developed
- Pilots are happening at community, state, federal levels/results will be forthcoming

What interventions work?

- Life-course interventions
- Housing quality and safety
  - Lead abatement
  - Indoor air quality
  - Housing mobility programs
- Income Supplements
  - WIC, Earned Income Tax Credits, SSI
- Employment as a health intervention

It takes a village to succeed in SDH

- Data, Technology and Analytics
- Health Plans
- Health Care Delivery Systems
- Health Care Providers
- Employers/Plan Sponsors
- Communities & Community Services
- Partner Service Organizations
  - Network Management, CM, DM, Wellbeing, Technology
- Brokers/Consultants
- Policy Makers/Regulators/Elected Officials

Stakeholder SDH Challenges

- New partnerships require trust-building
- Establish integration and bidirectional data and information exchange
  - Tech - Software interoperability
- Measurement/Evaluation
  - What measures are appropriate for each partner?
  - What does success look like for each partner?
  - How do you determine “partner success”?

Access to care is necessary, but insufficient

- Study examined characteristics of individuals who reported delaying or avoiding health care due to cost in the last 12 months
- Findings suggest:
  - Increased financial toxicity may lead individuals to delay or avoid both preventive and non-preventive care.
  - Lower health insurance knowledge, and specifically lower knowledge about preventive care coverage, may lead consumers to avoid preventive care due to perceived costs.
- Many participants indicated that they delayed care due to cost, even though most were insured, consistent with previous work

Smith, Kyle T., et al; MDM Policy & Practice, "Access is Necessary but Not Sufficient: Factors Influencing Delay and Avoidance of Health Care Services, March 26, 2018 https://journals.sagepub.com/doi/10.1177/2381468318760298

Special Case Consideration - Low Wage Worker (LWW)

An individual with access to health insurance but who experiences wage inadequacy or wage instability such that he/she is not able to use health care resources appropriately for health risk prevention or condition control or management.

Sherman, Bruce & Addy, Carol. (2018). Low-Wage Workers and Health Benefits Use: Are We Missing an Opportunity?. Population Health Management. 21. 10.1089/pop.2017.0191.

Low Wage Worker Health Care Utilization

Lowest wage band employees (up to $40K)

- 2x hospitalizations
- 3x ED visits
- 4X avoidable admissions
- ½ X the preventive care

Sherman, Bruce & Addy, Carol. (2018). Low-Wage Workers and Health Benefits Use: Are We Missing an Opportunity?. Population Health Management. 21. 10.1089/pop.2017.0191.

Taking Action – Getting Started

Wait a minute! How can I be responsible for this!

Consider Financial Risk Assessment

"Do you ever have difficulty making ends meet at the end of the month?"

Research Article

Development of a Tool to Identify Poverty in a Family Practice Setting: A Pilot Study

Vanessa Brcic, Caroline Eberdt, and Janusz Kaczorowski

Department of Family Practice, Faculty of Medicine, University of British Columbia, 3rd floor David Strangway Building, 5950 University Boulevard, Vancouver, BC, Canada V6T 1Z3

Correspondence should be addressed to Vanessa Brcic, brcic@interchange.ubc.ca

Received 14 January 2011; Revised 9 March 2011; Accepted 11 March 2011

Academic Editor: Stewart Mercer

Objective. The goal of this pilot study was to develop and field-test questions for use as a poverty case-finding tool to assist primary care providers in identifying poverty in clinical practice. *Methods*. 156 questionnaires were completed by a convenience sample of urban and rural primary care patients presenting to four family practices in British Columbia, Canada. Univariate and multivariate logistic regression analyses compared questionnaire responses with low-income cut-off (LICO) levels calculated for each respondent. *Results*. 35% of respondents were below the "poverty line" (LICO). The question "Do you (ever) have difficulty making ends meet at the end of the month?" was identified as a good predictor of poverty (sensitivity 98%; specificity 60%; OR 32.3, 95% CI 5.4–191.5). Multivariate analysis identified a 3-item case-finding tool including 2 additional questions about food and housing security (sensitivity 64.3%; specificity 94.4%; OR 30.2, 95% CI 10.3–88.1). 85% of below-LICO respondents felt that poverty screening was important and 67% felt comfortable speaking to their family physician about poverty. *Conclusions*. Asking patients directly about poverty may help identify patients with increased needs in primary care.

Consider Food Insecurity Risk Assessment

To help your patients/clients lessen food insecurity, take these three steps:

1. Read each statement* and ask your client if the statement is often true, sometimes true, rarely true, or never true.

   - Within the past 12 months, we worried whether our food would run out before we got money to buy more. ☐ Often True ☐ Sometimes True ☐ Rarely True ☐ Never True

   - Within the past 12 months, the food we bought just didn't last and we didn't have money to get more. ☐ Often True ☐ Sometimes True ☐ Rarely True ☐ Never True

2. If your client responds "often true" or "sometimes true" to either statement, they likely have food insecurity. Help them get more food by filling out the list of resources (see next page) and giving it to them.

   You can also fill out the list, make copies, and leave them in waiting rooms and other areas for community members to pick up.

3. Advocate for nourishing foods in your community. Take steps to increase the availability of nutritious, affordable food.

* Hager ER, Quigg AM, Black MM, Coleman SM, Heeren T, Rose-Jacobs R, et al. Development and validity of a 2-item screen to identify families at risk for food insecurity. Pediatrics. 2010 Jul 1; 126(1):26-32.

Produced by the IHS Division of Diabetes Treatment and Prevention, 2015. To print this, go to www.ihs.gov/diabetes and search **Food Insecurity** using 'exact match' on the Education Materials and Resources (Online Catalog) webpage.

My organization's role

1. Establish institutional commitment to decrease health disparities
2. Align funding decisions with a commitment to health equity
3. Recruit and build staff skills to recognize and advance equity
4. Track health equity efforts in training and performance plans
5. Integrate health equity into services and resources
6. Establish multi-sector collaborations and relationships with diverse communities

Reference - HHS/CDC – Practitioners Guide for Advancing Health Equity

My role

- **<u>Be Aware</u>**
  - Learn more about health disparities and how they may relate to your patients
  - Look for patients whose health outcomes are not improving and ask why
  - Listen for clues that a patient may be struggling with SDH issues
- **<u>Decide</u>** if your practice lends itself to issues related to SDH
- **<u>Assess</u>** individuals or group of patient at risk for SDH-related health outcomes
- **<u>Work with your organization</u>** to make tools available and enhance interventions related to SDH

Proposed ICD-10, Z-Codes for SDOH

- Comments due to CDC May 10, 2019
  - Send to: nchsicd10CM@cdc.gov
- Proposals submitted for Z-codes
  - UnitedHealthcare (UHC) and American Medical Association (AMA)
  - Blue Cross Blue Shield of Vermont and Yale School of Nursing
- Allows a more granular and precise approach to documenting and intervening on SDOH
- Enabling more efficient use of resources
- Provides better sense of SDOH role in P4P models

https://medium.com/@patchwiselabs/at-a-glance-new-z-codes-for-sdoh-5368f354c769

New Z-Codes Proposed for Public Comment

comments due May 10, 2019 to: nchsicd10CM@cdc.gov

Z-CODE	SUBCODE	DESCRIPTION
Z55	**CATEGORY: Problems related to education and literacy**	
	Z55.5	Less than a high school degree
	Z55.6	High school diploma or GED
Z56	**CATEGORY: Problems related to employment and unemployment**	
Z56.8	**Subcategory:** Other problems related to employment	
	Z56.83	Unemployed and seeking work
	Z56.84	Unemployed but not seeking work
	Z56.85	Employed part time or temporary
	Z56.86	Employed full time
Z59	**CATEGORY: Problems related to housing and economic circumstances**	
Z59.4	**New Proposed Subcategory:** Lack of adequate food and safe drinking water/ Inadequate drinking water supply	
	Z59.41	Lack of adequate food/ Inadequate food/ Lack of food
	Z59.42	Food insecurity
	Z59.43	Lack of safe drinking water Inadequate supply of drinking water
	Z59.6	Low Income
	Z59.61	Unable to pay for prescriptions
	Z59.62	Unable to pay for utilities
	Z59.63	Unable to pay for medical care
	Z59.64	Unable to pay for transportation for medical appointments or prescriptions
	Z59.65	Unable to pay for phone
	Z59.66	Unable to pay for adequate clothing
	Z59.67	Unable to find or pay for child care
	Z59.69	Unable to pay for other needed items
Z59.9	**Subcategory:** Problem related to housing and economic circumstances, unspecified	
	Z59.91	Worried about losing housing
Z60	**CATEGORY: Problems related to social environment**	
Z60.8	**Subcategory:** Other problems related to social environment	
	Z60.81	Unable to deal with stress
	Z60.82	Inadequate social interaction - limited to once or twice a week
	Z60.83	Can hardly ever count on family and friends in times of trouble
	Z60.84	Feeling unsafe in current location
	Z60.85	Stressed quite a bit or very much
	Z60.86	Stressed somewhat
Z71	**CATEGORY: Persons encountering health services for other counseling and medical advice, not elsewhere classified**	
Z71.8	**Subcategory:** Other specified counseling	
	Z71.85	Counseling for socioeconomic factors
Z91	**CATEGORY: Personal risk factors, not elsewhere classified**	
Z91.1	**Subcategory:** Patient's noncompliance with medical treatment and regimen	
Z91.11	**Subcategory:** Patient's noncompliance with dietary regimen	
	Z91.110	Patient's noncompliance with dietary regimen due to financial hardship

All information in this table was obtained from cdc.gov on April 11, 2019 and compiled by Patchwise Labs, LLC

patchwise LABS

note: Yellow shading indicates the newly proposed z-codes

A Few Notes:

- We were pleasantly surprised to learn that the headlines and retweets missed the full story: There were actually two proposals for expanding Z-Codes: One from UHC and AMA, and another from a team led by BCBS of Vermont and the Yale School of Nursing. The latter focused on codes related to Food Insecurity across Categories Z59, Z71, and Z91. We've put them together and organized by code in the table above.

What we still need to learn…

- How to transition from an acute healthcare system to a focus on well-being and prevention
- The right SDOH interventions where, when and how
- Data and analytics models to determine whether SDH interventions work
- How to build partnerships among community, regional, state, federal entities to improve population health

Discussion, Questions & Answers

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Speaker's Bio

Mary Jane Osmick, MD
Executive Board Member, Population Health Alliance, West Chester, PA

As an innovative internal medicine physician executive with deep experience in vendor, provider, and health plan businesses, my professional purpose is to lead, create and advise forward-thinking organizations and communities that seek to integrate the value of health and prevention into daily experience. Throughout my career I have focused on designing, implementing and overseeing products and programs whose goal is to optimize the health of populations by reducing health risks and managing health conditions. Through the tools and techniques of quality management and process improvement combined with evidence-based clinical medicine, my work has focused on achieving efficient and effective products and services that result in better health for those served.

Over the last several years, by leading a national quality and research group, I have become convinced that current health care delivery models are ill-equipped to provide better health outcomes, higher quality and lower costs of care. Only by working to redefine the delivery system by partnering with wide-ranging businesses, not-for-profit organizations, and working with local, regional and federal institutions, will we solve for unfair social determinants that disadvantage so many. Secure, interoperable, supportive digital technology is a crucial component in this redefined delivery system. It is in these areas that I will focus my work.

As an entrepreneurial systems thinker with a collaborative management style and extensive national public speaking experience, I seek to join others from varied backgrounds committed to finding new ways to improve health and wellbeing. As a life-long learner/teacher, I welcome innovative thinkers, creative minds, and frame-breakers to my network.

My favorite quote from Francis Moore Lappe reminds us to take the long view: "If you expect to see the final results of your work, you simply haven't asked a big enough question."