

**REDUCING COST  
AND ENHANCING WELL BEING  
THROUGH PAYMENT REFORM  
AND UPSTREAM INVESTMENTS:  
WHICH PATH, OR BOTH?**

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for CAPH/SNI Annual Conference

San Diego, CA

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# Overview

- Fundamental Problems
- Options
- Results So Far
- Promising Ideas
- Tasks

## Federal Debt Held by the Public

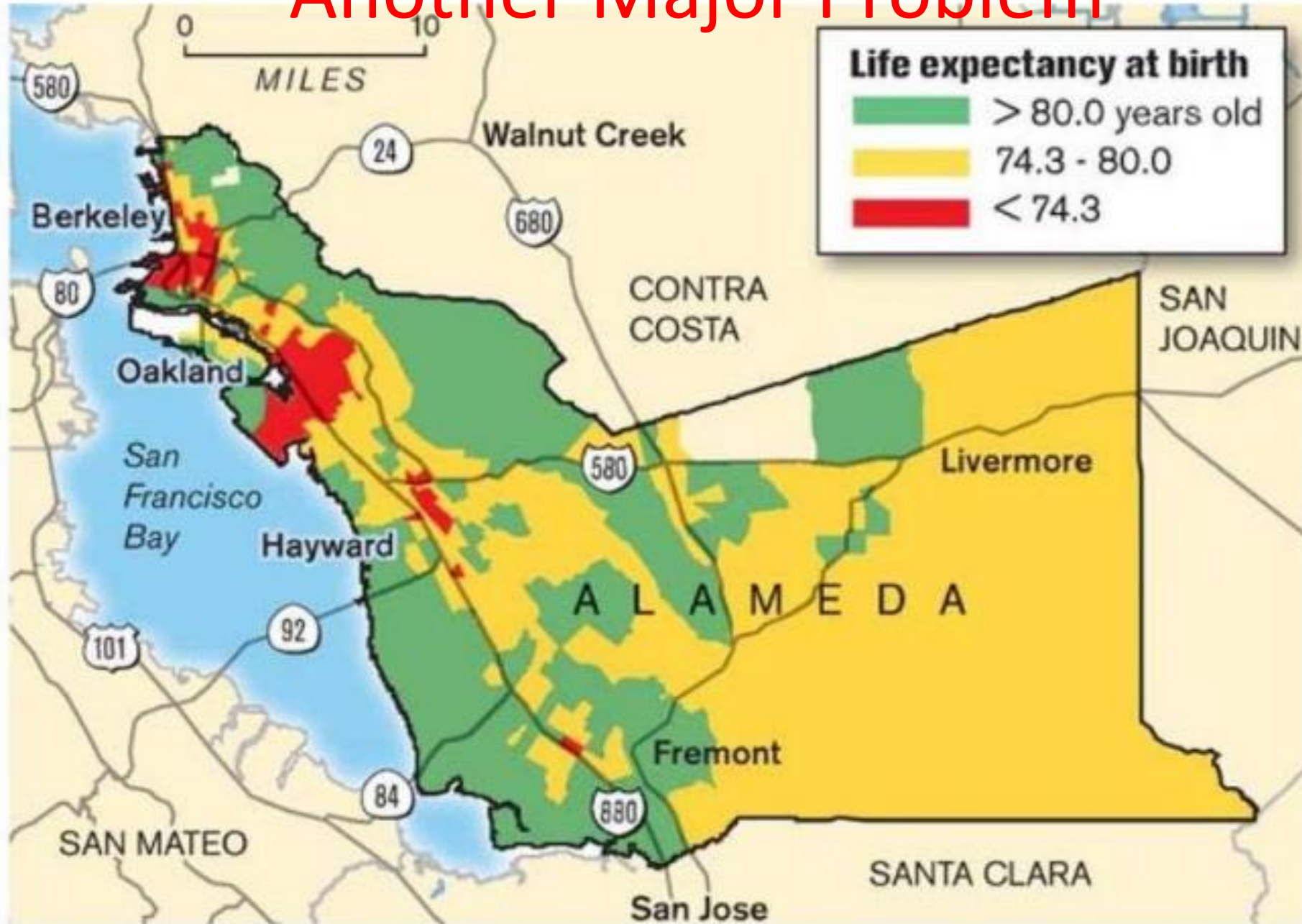
Percentage of Gross Domestic Product

# One Major Problem



Source: Congressional Budget Office. For details about the sources of data used for past debt held by the public, see Congressional Budget Office, *Historical Data on Federal Debt Held by the Public* (July 2010), [www.cbo.gov/publication/21728](http://www.cbo.gov/publication/21728).

# Another Major Problem



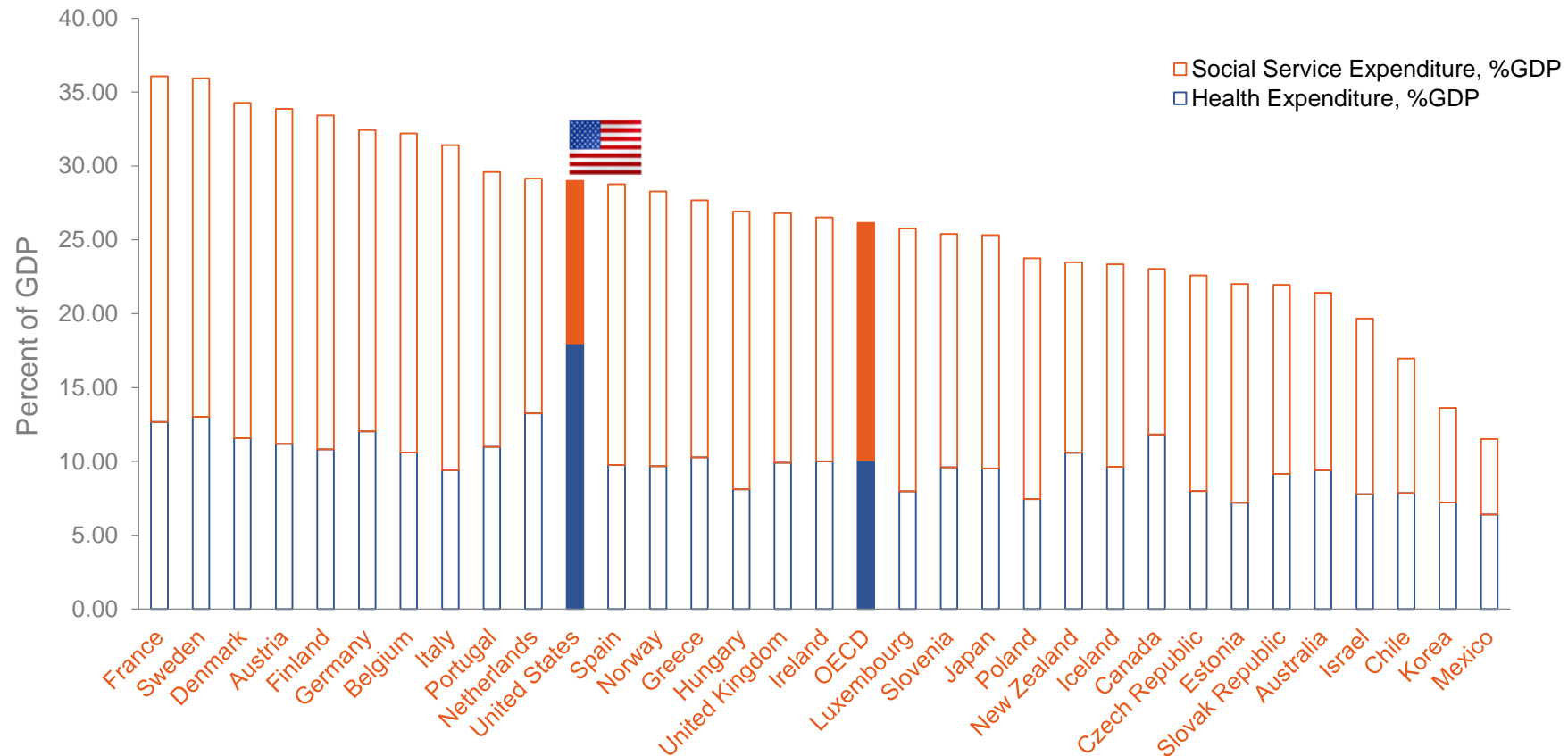
Sources: ESRI, Alameda County Public Health Department

The Chronicle



# Total Expenditures as a %GDP

(Slide borrowed from Lauren A. Taylor)



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

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

DOI: 10.1377/hlthaff.2015.0814  
HEALTH AFFAIRS 35,  
NO. 5 (2016): 760-768  
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# Variation In Health Outcomes: The Role Of Spending On Social Services, Public Health, And Health Care, 2000-09

## EXHIBIT 4

Adjusted associations between the ratio of social to health spending with a one-year lag and health outcomes across the fifty states and the District of Columbia, 2000-09

Health outcome	Model 1 <sup>a</sup>		Model 2 <sup>b</sup>	
	Estimated coefficient <sup>c</sup>	p value	Estimated coefficient <sup>c</sup>	p value
<b>PERCENT OF ADULTS WHO:</b>				
Were obese (body mass index $\geq 30$ )	-0.33	0.014	-0.16	0.101
Had asthma	-0.11	0.041	-0.12	0.012
Reported 14+ days in past 30 days as mentally unhealthy days	-0.43	0.007	-0.24	0.035
Reported 14+ days in past 30 days with activity limitations	-0.37	<0.001	-0.25	0.002
<b>MORTALITY RATE FOR:</b>				
Acute myocardial infarction (per 100,000 population)	-4.02	0.032	-0.64	0.649
Lung cancer (per 100,000 population)	-2.72	0.001	-2.35	0.002
Type 2 diabetes (per 100,000 population)	-0.45	0.004	-0.51	<0.001
Postneonatal infants <sup>d</sup> (per 100,000 live births)	-4.15	0.325	-6.56	0.037



By Irene Papanicolas, Liana R. Woskie, Duncan Orlander, E. John Orav, and Ashish K. Jha

# The Relationship Between Health Spending And Social Spending In High-Income Countries: How Does The US Compare?

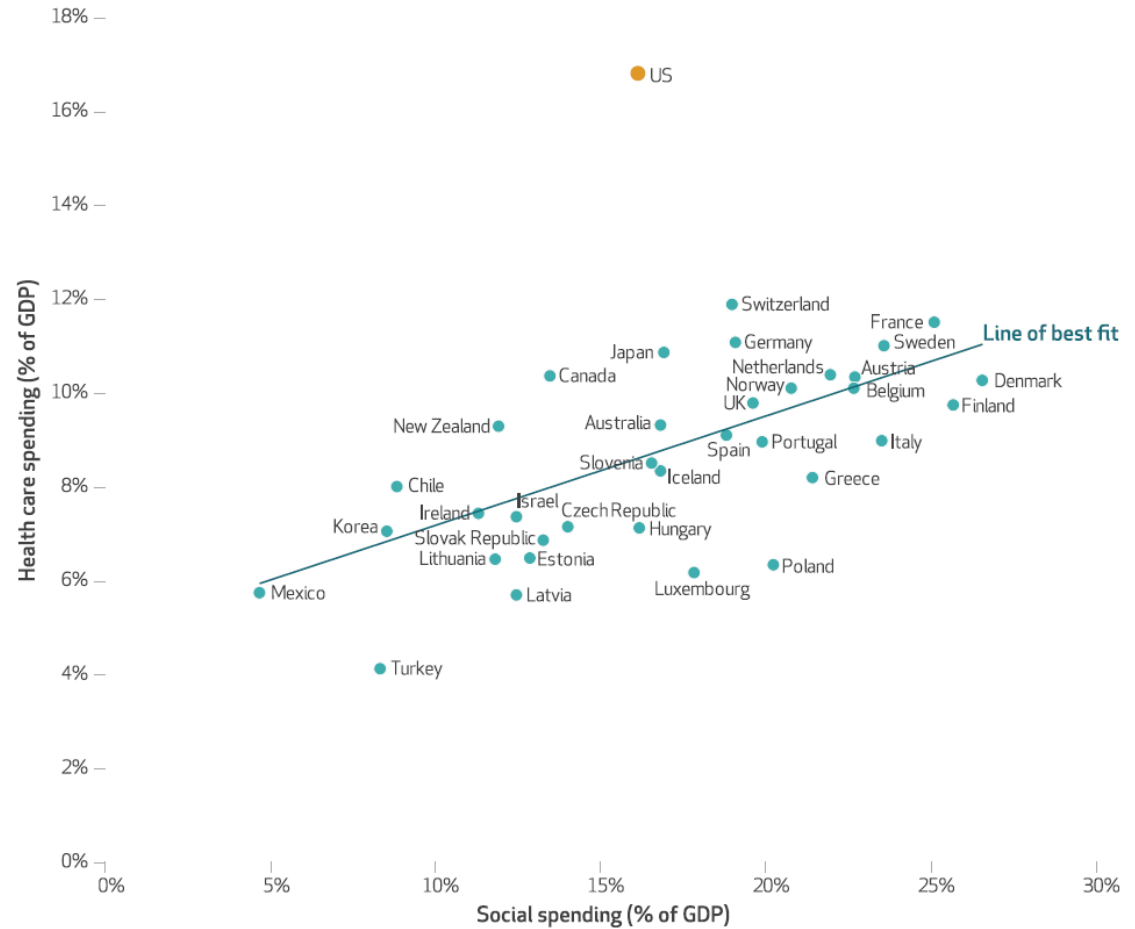
DOI: 10.1377/hlthaff.2018.05187  
 HEALTH AFFAIRS 38,  
 NO. 9 (2019): –  
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Fundamental point: you won't necessarily lower health spending by shifting aggregate dollars from health to social purposes

Finally, it is important to note that our findings explore aggregate trends in spending patterns at the national level. These findings should not be interpreted as suggesting that social spending might not be effective at lowering health care costs for subpopulations, such as frail elderly or homeless people. Indeed, other research has shown that investment in specific social interventions can result in a decrease in health spending for a subset of high-need patients, such as chronically homeless people with severe alcohol problems or asthma patients

EXHIBIT 3

Percent of gross domestic product (GDP) devoted to social spending and health care spending in the US and other Organization for Economic Cooperation and Development (OECD) countries



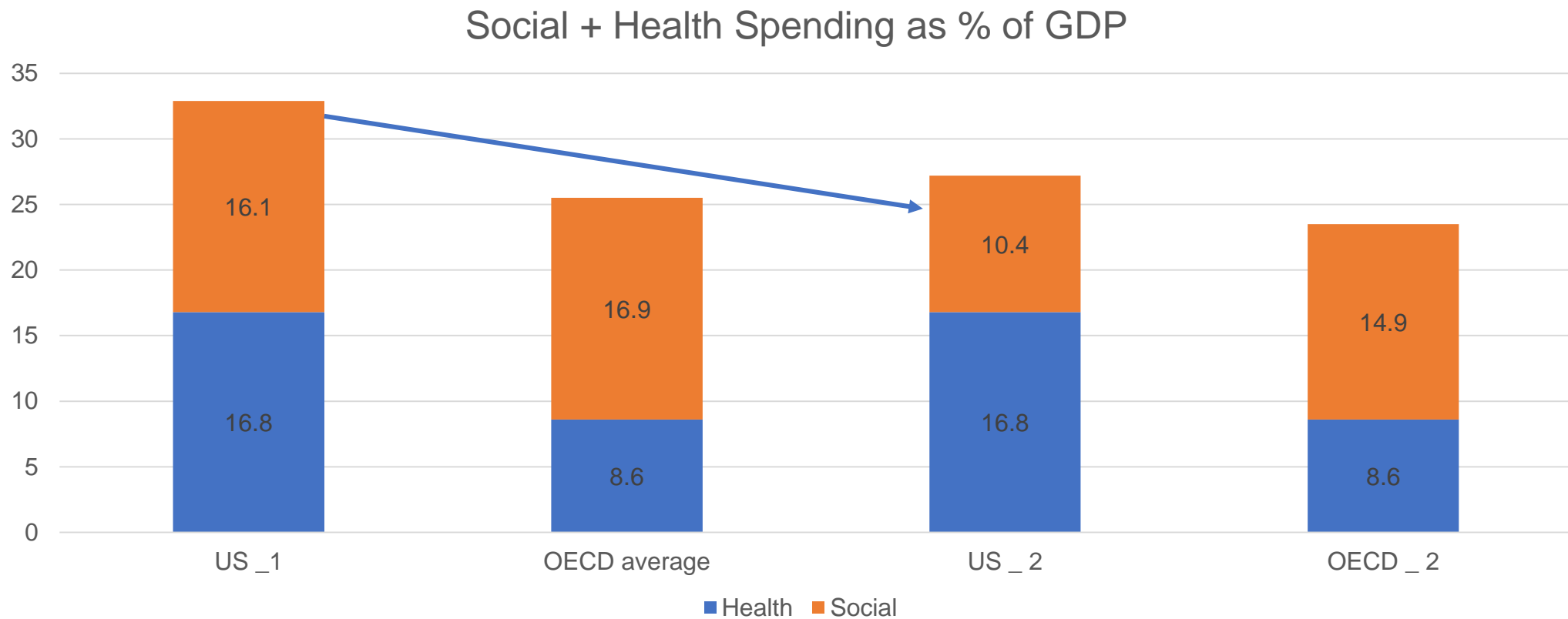
SOURCE Authors' analysis of data from the OECD's Social Expenditure Database (SOCX). NOTES Health-related social spending is excluded. Data are from 2015 for all countries apart from Poland. The line of best fit shows that countries that spend more on health tend to spend more on social spending (Pearson's  $r = 0.54$ ;  $p = 0.00$ ).

# Some thoughts on Papanicolas et al

- OECD Social Spending data, used by Papanicolas, et al, include private pensions = private social spending
- Growth in private pensions is biggest difference in US social spending since Bradley et al did their work
- For US, private social spending now = 5.7% of GDP
- If you take private social spending out of total social spending, the picture changes



# Health and Social Spending as % of GDP, with and without private pensions = private social \$



# Maybe what really matters is social spending on social gaps, not aggregate social OR health \$\$\$

- US Poverty rate 17%, OECD 11.2 (8.9 for UK, FR, GR, SW)
  - 56m US citizens live in poverty, 13m children 17% of kids live in poverty
- US Inequality (Gini = 41.5, avg. for UK, FR, GR, SW = 31.6)
- Homelessness
  - US has over 500k homeless
  - Would cost approximately \$7-10B annually to house the homeless IF there was space, (but they need supportive housing, which costs more)
- Hunger, in 2017 40m food insecure in US, including 12m kids
- Transportation: 2.3% of pop is challenged, 7.6m in 2019

Figure 1

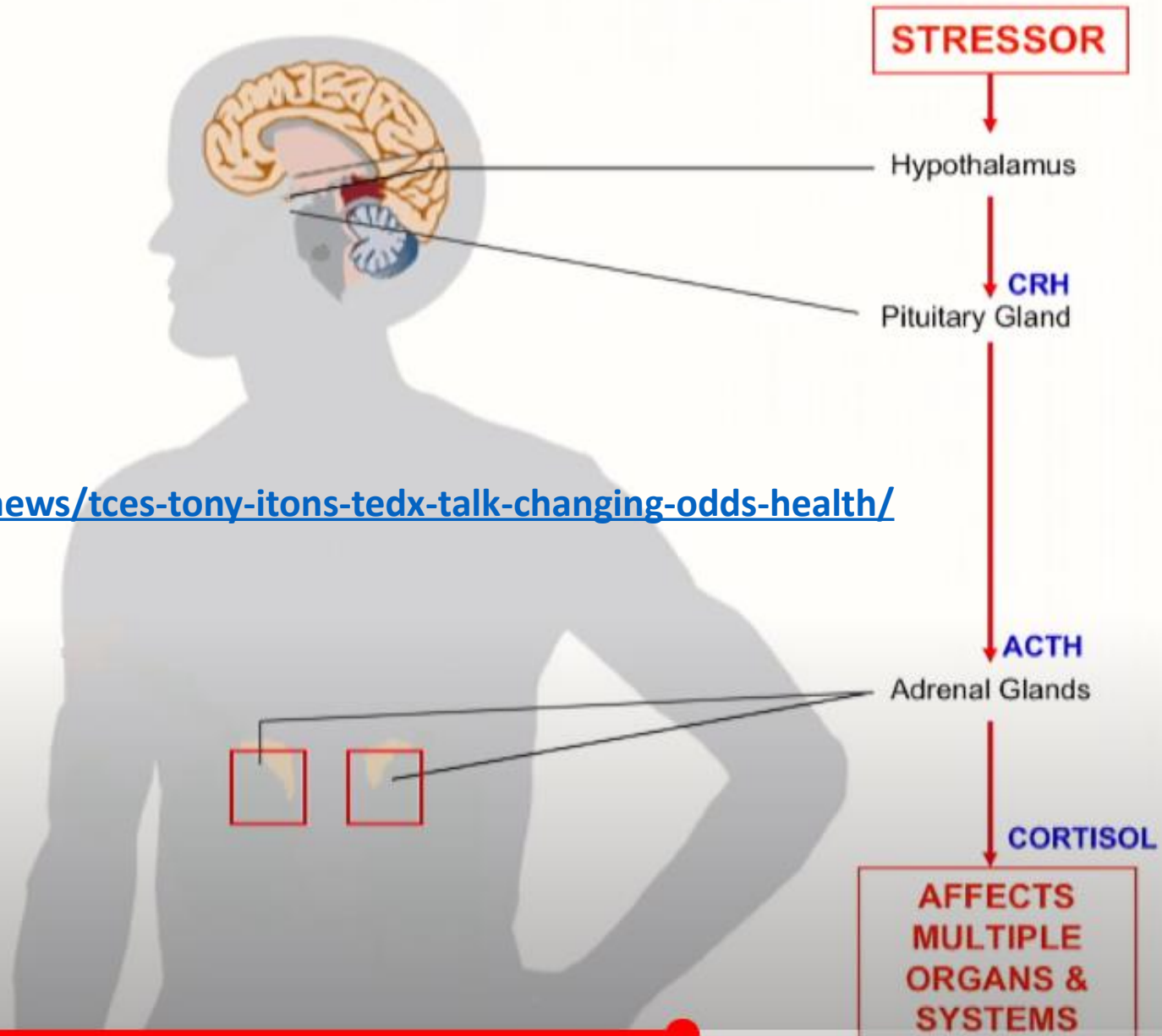
# Social Determinants of Health (Healthy Opportunities)

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				
Support	Walkability	Higher education		Stress	
	Zip code / geography				

**STRESS**

**Health Outcomes**  
 Mortality, Morbidity, Life Expectancy, Health Care Expenditures, Health Status, Functional Limitations

# STRESS PATHWAY from brain to body



<http://www.calendow.org/news/tces-tony-itions-tedx-talk-changing-odds-health/>

# Options to Deal with Fundamental Problems

- To Reduce Cost

- Cut Coverage and Eligibility
- Reduce Prices
- Re-orient advanced illness care
- Eat and drink healthier + exercise
- Re-align incentives (VBP etc)
- Targeted Investments in “Healthy Opportunities” (SDOH)

- To Enhance Well-Being

- Tax and Spend Enough to Take Care of People thru current delivery mechanisms
- Tax and spend more than we do now on social services
- Find ways to invest in “Healthy Opportunities” **COLLABORATIVELY**
  - *Targeted Investments*
  - *Enhanced and coordinated services*
  - *Optimize VBP for health stakeholders and social service providers*
  - *{Will require some policy changes}*

# Results So Far: Payment Reform

- **ACOs**

- MSSP program, N = 548, hit net savings in 2017, 2019 with push to downside risk saved 0.67% of benchmark spending level, MD-led did the best
- <https://www.healthaffairs.org/doi/10.1377/hblog20191024.65681/full/>
- Next-Gen, N = 41, savings about 1.9% in 2018
- Pioneer, N = 8 at the end (2017), saved about 2.2% in last year

- **Bundled Payments**

- Total Joint Replacement saved a bit
- BPCI did not save money on medical conditions, did save a little in post-acute for surgeries

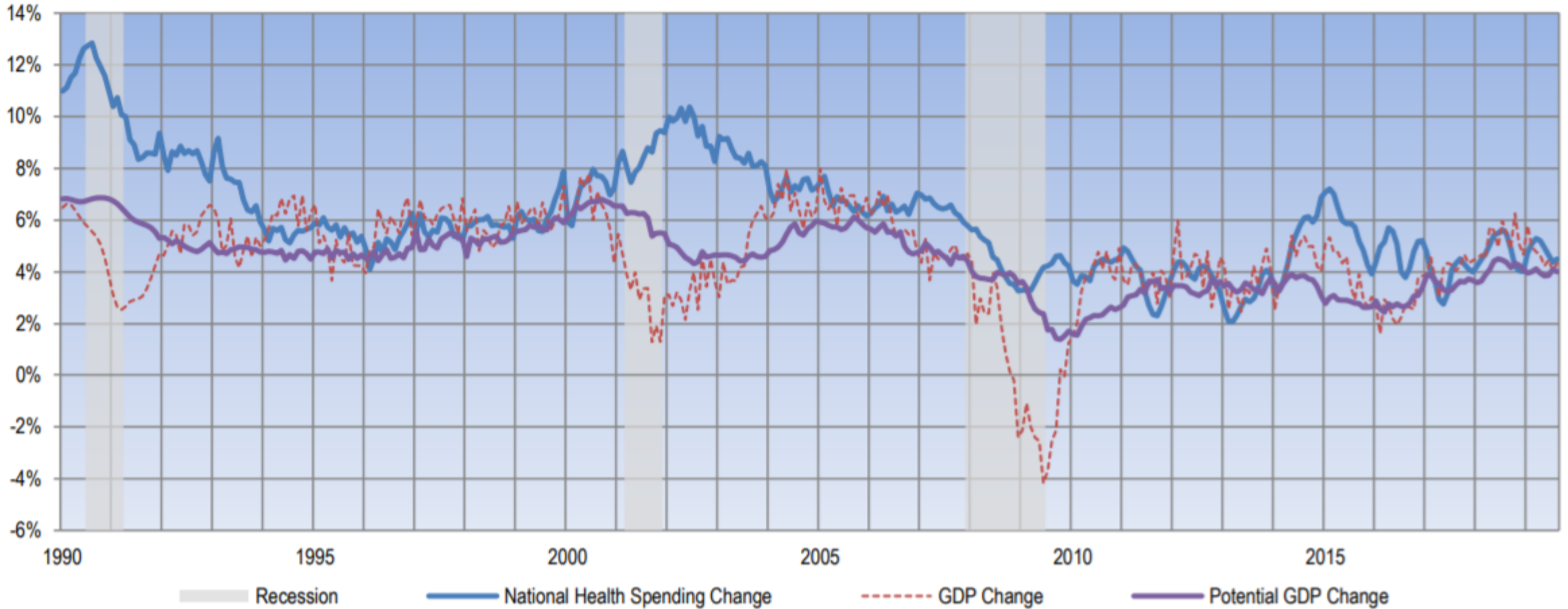
- **Primary Care**

- CPCI did not save \$, CPC+ cost Medicare 2-3% in year one (2017)
- Private sector PCMHs do sometimes save 1-3%



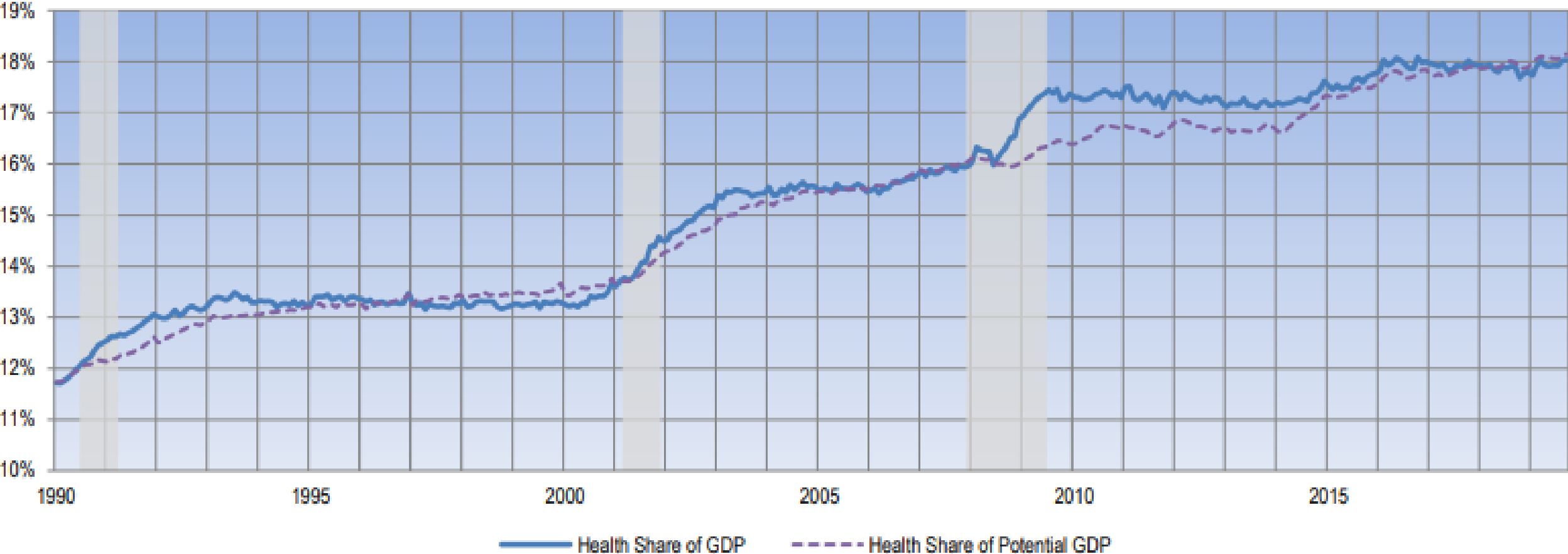
## TIME SERIES TRACKER

Exhibit 7. Year-over-Year Percentage Change in Spending and GDP



Source: Altarum monthly national health spending estimates. Monthly GDP is from Macroeconomic Advisers and Altarum estimates.

### Exhibit 8. Monthly Health Spending as a Percentage of Monthly GDP



**Source:** Altarum monthly national health spending estimates. Monthly GDP is from Macroeconomic Advisers and Altarum estimates. PGDP is from the U.S. Congressional Budget Office and has been converted to monthly estimates.

**Note:** Lightly shaded bars denote recession periods.



# Lessons Learned → Payment Reform 3.0

- ID *which* patients on which to focus care coordination/integration
- Hospitals/systems/MD groups see bearing risk (and consolidation) as way to get leverage v. health plans
- BUT, many plans reluctant to share data and risk with providers
- Information systems not ready for prime time
- PTAC *tried* to get ideas from the field into practice, but has failed
- Trump Admin Hospital Price Transparency Rule => ???
- ***Focus on price levels, PROMs, and identifying target patients is coming; win-win reductions in “unnecessary” utilization not enough***
- ***Maybe Look “UPSTREAM” to “Healthy Opportunities” ???***



# Some Promising Ideas

- What if we **COMBINED** value based payment and a specific upstream focus? (include upstream service in cap rate)
- Need CMS/State Medicaid “permission,” (or forgiveness)
- Need to separate opportunities for collaboration from areas of necessary competition
- AND remember, health care can’t pay for ALL of what is needed upstream

# SOCIAL DETERMINANTS AND SOCIAL NEEDS: MOVING BEYOND MIDSTREAM



## HUMANA

Is targeting loneliness as  
A high need indicator

## United Health Care

Housing for Chronically  
Homeless

## Centene's Social Bridge

<https://www.socialhealthbridge.com/>

Kaiser  
Permanente's

## THRIVE LOCAL

Using *Unite Us* to connect  
Social services and EHRs

<https://healthanalytics.com/news/kaiser-permanente-launches-full-network-social-determinants-program>

North Carolina's  
Medicaid  
1115 waiver allows  
Healthy Opportunity Pilots

# Leveraging What Works

- Evidence is strong that upstream interventions can affect health outcomes (from Lauren Taylor, Laura Gottlieb, and others)
  - [https://bluecrossmafoundation.org/sites/default/files/download/publication/Social\\_Equity\\_Report\\_Final.pdf](https://bluecrossmafoundation.org/sites/default/files/download/publication/Social_Equity_Report_Final.pdf)
  - <https://www.commonwealthfund.org/sites/default/files/2019-07/ROI-EVIDENCE-REVIEW-FINAL-VERSION.pdf>
- Specific interventions – targeted investments in SDOH, or Healthy Opportunities – **may** have net financial payoffs
  - Housing First for homeless with SMI, SUD, other CCs
  - Food through WIC, SNAP, Meals on Wheels
  - Complex Case management and navigation for high need adults and children (ex., Nurse Family Partnership, Community Health Workers, etc.)
  - Non-emergency transportation for people with chronic conditions
- Not every intervention will save money, may still be “worth doing”



# Motivations for Collaborative Approach

- Our nation suffers from underinvestment in upstream SDOH deficits / Healthy Opportunities
- Underinvestment stems from 5 distinct causes
  - People who could benefit have not been able to make their voices heard
  - Leaders of institutions which could benefit financially are often not aware of the evidence on ROI from upstream investments
  - Health care systems and social service delivery systems are somewhat like Mars and Venus
  - Governments have restrictions on how money can be blended and braided, and are often constrained from funding novel projects
  - Upstream investments are “public good” like => “free rider” financing problems

By Len M. Nichols and Lauren A. Taylor

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**POLICY INSIGHT**

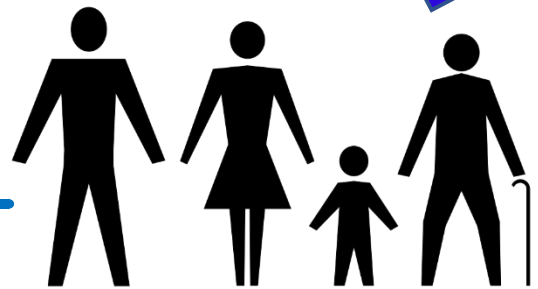
# **Social Determinants As Public Goods: A New Approach To Financing Key Investments In Healthy Communities**

**DOI:** 10.1377/hlthaff.2018.0039  
HEALTH AFFAIRS 37,  
NO. 8 (2018): 1223-1230  
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The People-to-People Health  
Foundation, Inc.

<https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2018.0039>

# Value Creation from Upstream Interventions

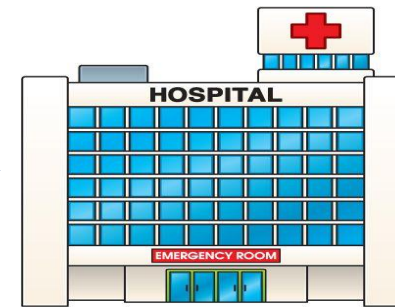
Stronger  
Community



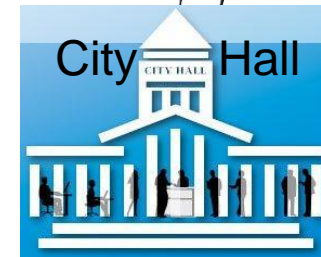
*Improved Health  
And well being*



*Lower Costs*



How Long?



# Fundamental Insights

- SDOH investments have public good-like properties => free rider problems
- Economics profession worked out a functional solution to the free-rider problem in the 1970s, Vickrey-Clarke-Groves (VCG), which works under 2 conditions
  - Operational local stakeholder coalition
  - “Trusted Broker”
- Those conditions are likely to be present in many communities grappling with SDOH/HO deficits today
- Key elements of VCG auction model:
  - Reveal willingness to pay to the trusted broker *only*
  - If project is economically feasible, it’s possible to have all pay less than they are willing to pay, and still collect enough to pay for the intervention
    - ❖ Contributions and Sustainability are based on enlightened self-interest

# Example of Pricing for Upstream Investments

**Cost: \$180 for Complex Case Management by CHWs and Social Workers**



**= \$200**

## Value Expressed



Sum of Bids (Collective Valuation) =  $\$110 + \$50 + 40 = \$200$

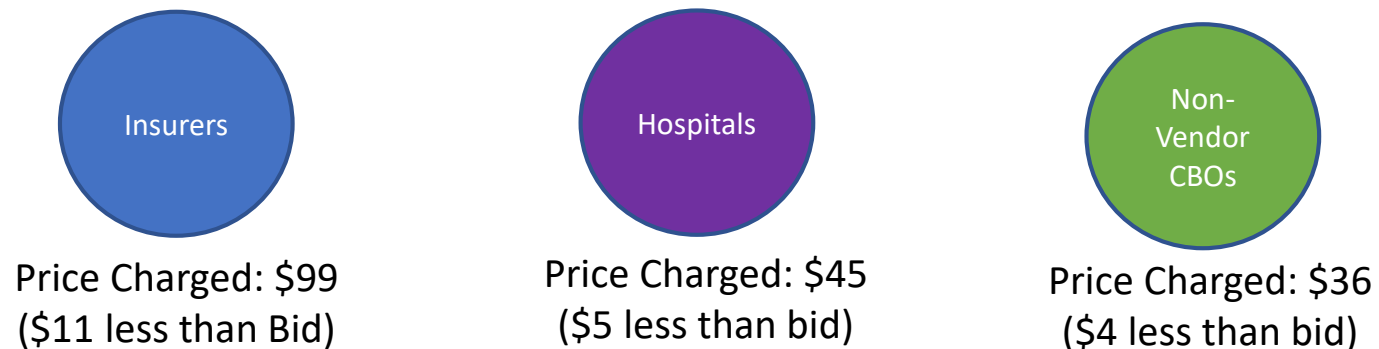
**But We only Need \$180 to Cover the Cost**

so

We need 90% ( $180/200$ ) of Total

We can allow 10% "Discount" or ROI to All Bidders

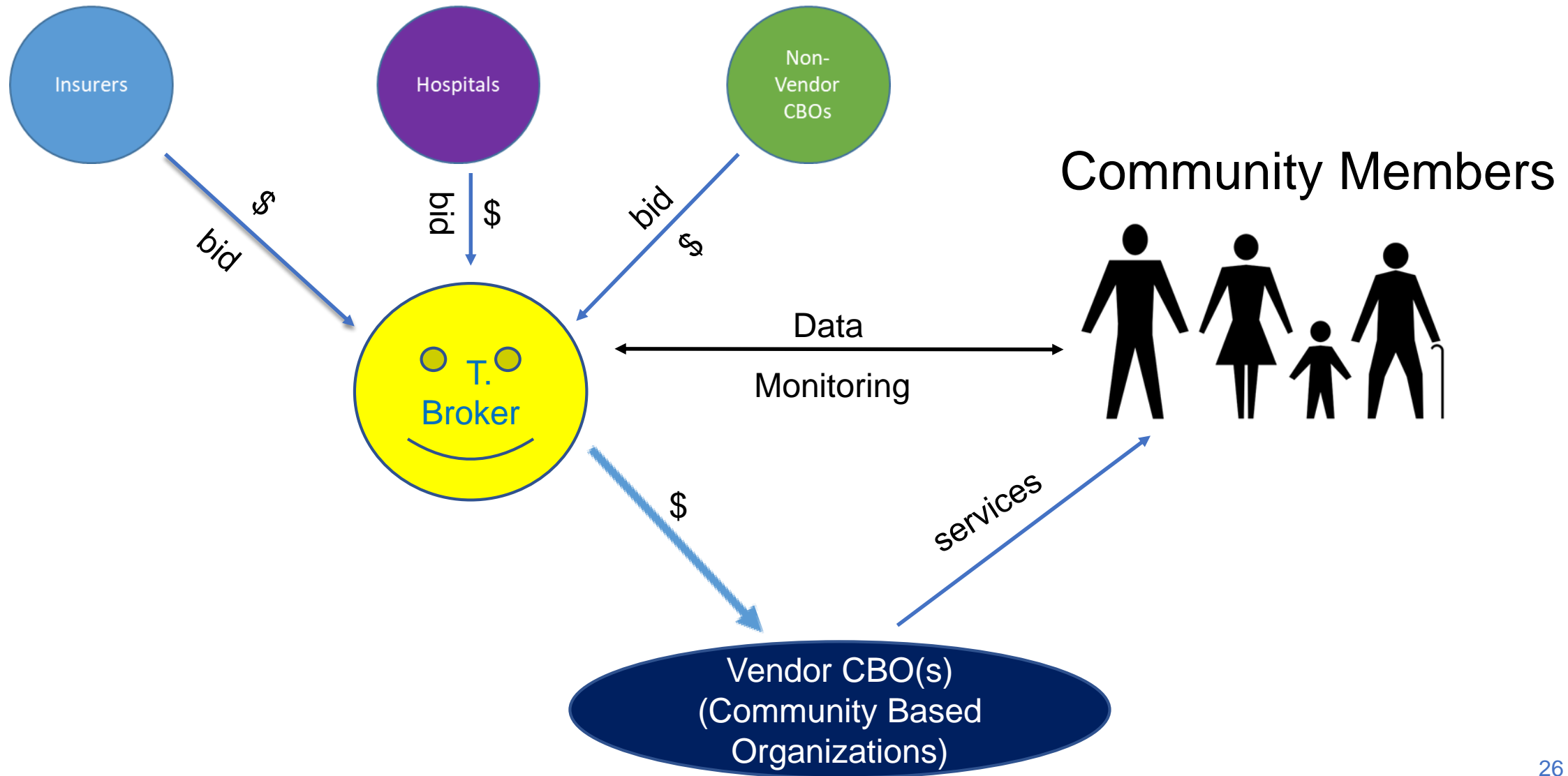
## Prices Assigned



**= \$180**

**Total Collected = \$180 = Cost of Intervention = \$180, but *VALUE delivered = \$200***

# CAPGI Roles







# Teaching the Model and Processes

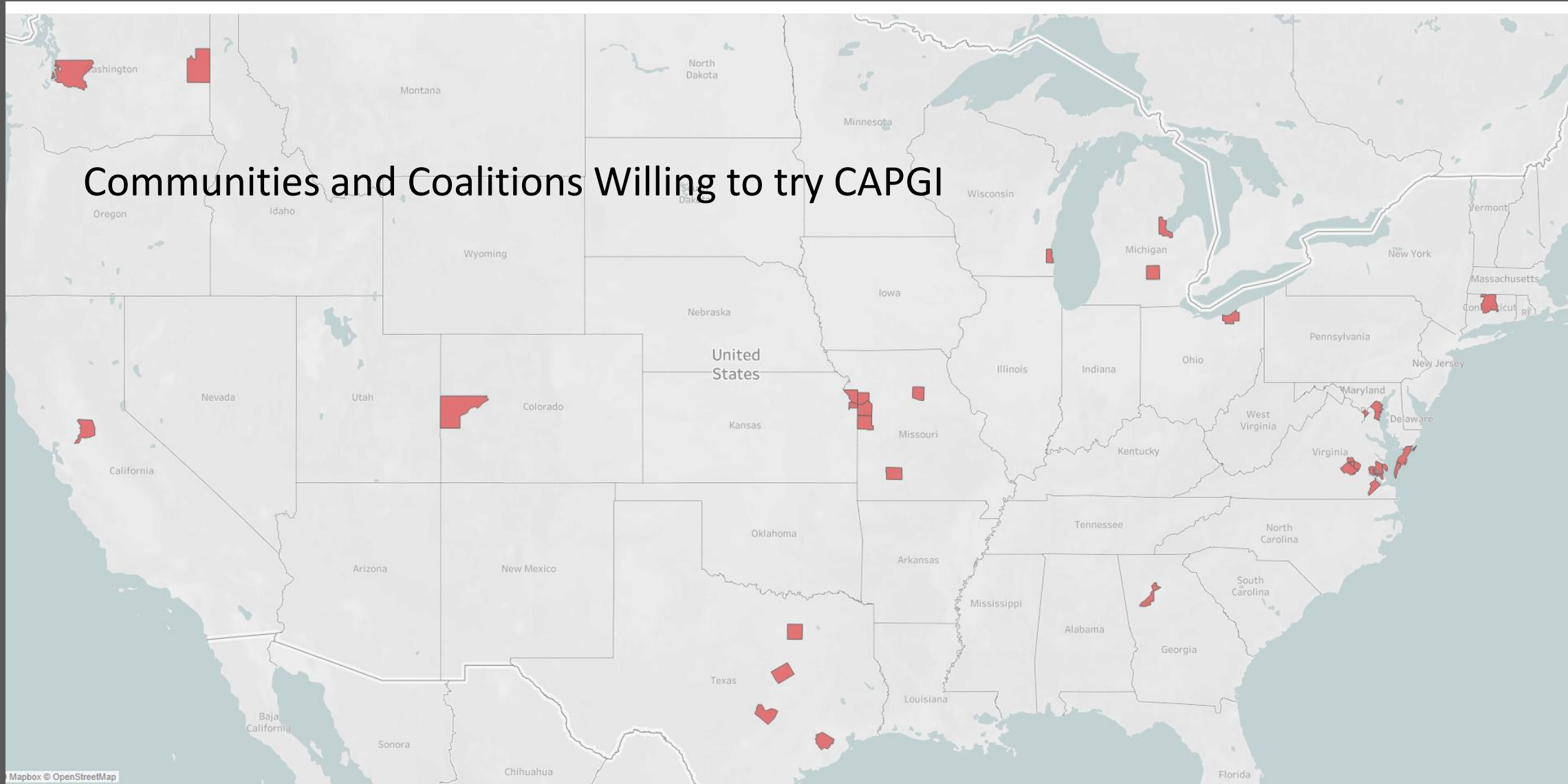
<https://capgi.gmu.edu>

## Collaborative Approach to Public Good Investments: A Feasibility Study

NEW TO CAPGI?

PROGRESS REPORT

# Communities and Coalitions Willing to try CAPGI



Mapbox © OpenStreetMap

Based on Longitude (generated) and Latitude (generated). Details are shown for State and County.

# Next Steps

- We're devising a continuum of support activities for each of 3 classes of coalitions/sites
  - Those that appear “shovel ready” (10)
  - Those that need to add one structural element (4)
  - Those that need more than element or time for their coalitions to mature (8)
- Site visits will occur in late 2019/early 2020
- In Winter-Spring of 2020 we will help write proposals for TA funding to implement and evaluate the model
- Virtual+ support will be provided at least until the end of Feasibility Study period (May 2020)
- We hope to begin implementation in mid-2020, bring coalitions on line through 2021, wrap up final evaluations in 2024

# Other Approaches to Upstream Investment besides CAPGI

- Pay for Success
  - Private capital bears risk, takes home some return, could jump start project where local resources limited
- Whole Person Care, NC Healthy Opportunities Pilots
  - Very much right idea, great ways to start
- CalAIM
  - Appears to be attempt to achieve upstream goals by coupling flexibility and \$ with requirements on plans, both God and the Devil are in the details to be worked out
- CMMI's Accountable Health Communities
- CACHIs and Wellness Funds

# Challenges and Tasks for us all

- Can sufficient trust, and willingness to share the surplus/ROI, be nurtured, enhanced, and channeled into collaborative efforts?
- Can we define precisely enough what health care should and should not pay for upstream?
- Will CMS/State Medicaid agencies let Medicaid MCOs and MA plans, *and* FFS Medicare, spend \$ upstream to the extent that they may come to want to?
  - For MCOs: in lieu of, value added, explicit VBP requirements, link profit rate increase with upstream investment requirement
  - For MA plans: let upstream spending count in bids/MLR/benchmarks
- Will state Medicaid agencies sabotage efforts by cutting PMPM instead of sharing savings with MCOs and providers?
- Will MCOs and MA plans share savings with providers to make them whole if necessary ?
- Will CFOs believe the intervention literature applies to their people/data?
- Will people believe they can and should work collaboratively, again? (The world is not zero sum !!! )



