

## INSTITUTE FOR HEALTHCARE IMPROVEMENT

## SUMMARY REPORT: 90-DAY PROJECT

The Trillion-Dollar Challenge: Strengthening the Social Support System to  
Accomplish the Triple Aim

March 31, 2018

## I. Research and Development Team:

- John Whittington
- Tam Duong
- Bryan Buckley

## II. Intent:

This work has two parts:

1. Understand the state of the art on social determinants of health (SDoH) screening process and improve it.

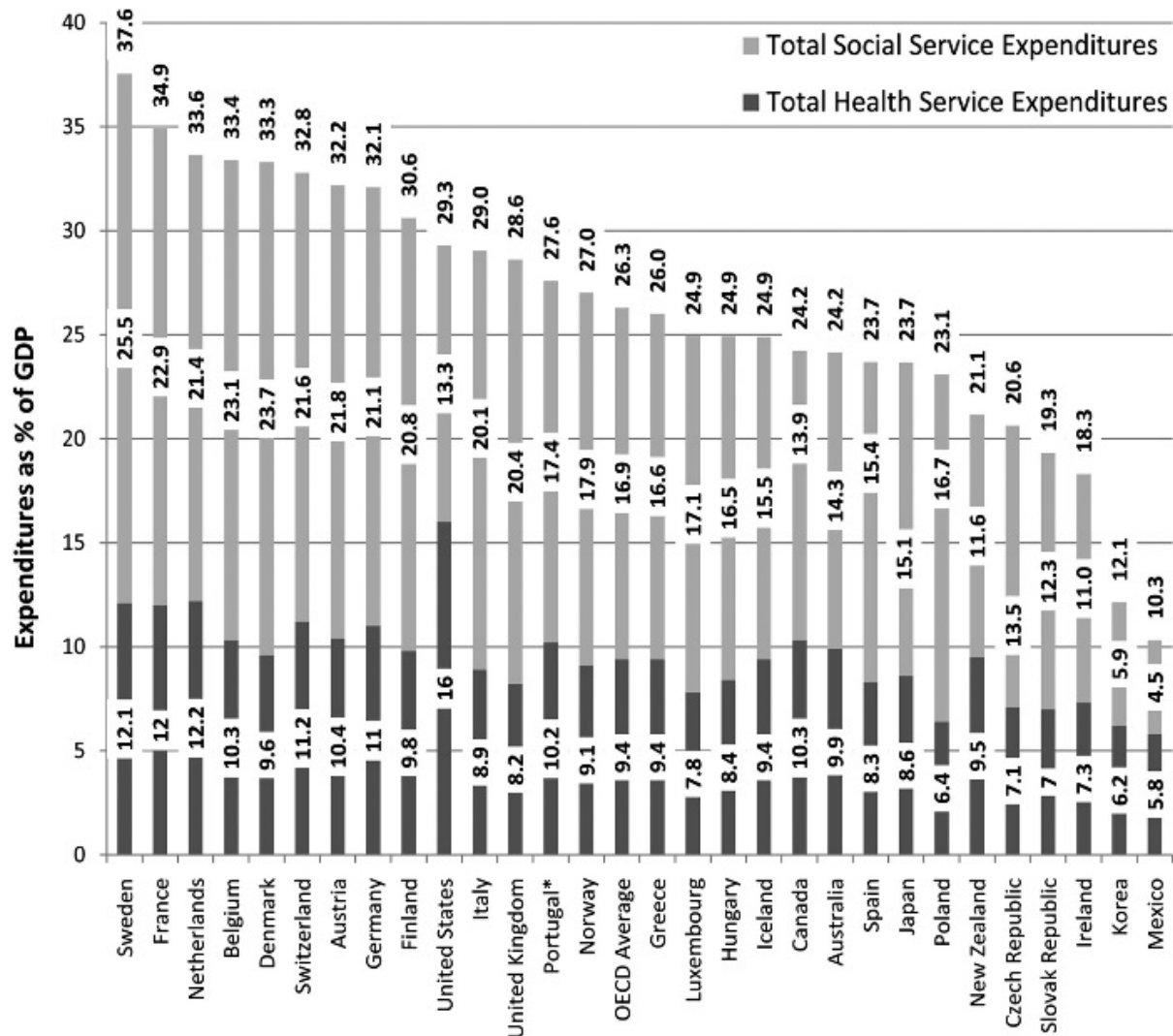
- a. Process
- b. Tools
- c. Data

2. Understand where money presently flows both qualitatively and quantitatively from health care to social support. By understanding this better, we hope to find out where and how we could improve the use of this money and increase the flow of it to other SDoH.

## III. Background:

Nearly 1/5 of the US economy is now spent on healthcare. The results for all that spending are a society that is getting sicker.<sup>1</sup> Other developed countries have better health with lower spending on healthcare and more spending on social support.<sup>2</sup> In the US, organizations are now beginning to screen large-scale numbers of people for social determinants. They are then attempting to connect those persons with needed resources. Although there are many community-based organizations, it is doubtful that they have the size and scale to meet the need. We estimate that we will need to shift one trillion dollars from health care to social support in order to match what more successful health generating societies have done.<sup>3</sup>

The US is near the top as other OECD countries (tenth) when it comes to spending on health and social support combined, but the balance is tipped toward healthcare in the US.<sup>4,5</sup>



In effect, this is about 1/3 more on health care than other OECD countries. We spend about 3 trillion on health care today, so if we spent 1/3 less and allocated it to social support, that would be a trillion dollars. There is no way to know if that is the right figure, but we have good evidence that health is not heading in the right direction in the US and that we need to change.<sup>6</sup>

The IHI Leadership Alliance published 10 new rules for radical redesign in health care, one of which is, “Return the money: Return the money from health care savings to other public and private purposes”<sup>7</sup>

The flow of health spending in the US is skewed toward health care versus social support. Within health care, it tilts toward tertiary care versus primary care, and between hospitals, it favors affluent hospitals versus poor hospitals.<sup>8,9</sup> In summary, we spend too much on health care versus social support and what we spend on health care we spend poorly.

We hypothesize that if we spent more on social support and less on health care, we would have better outcomes as a society. For example, based on the RWJ County Health Rankings model, we normally think of health care as producing 20% of health and that 80% of health is produced by economics, behaviors and environment.<sup>10</sup>

Health systems are waking up to the fact that unmet social needs often cause unnecessary health care spending.<sup>11, 12, 13</sup> To address that, health systems are now screening for social needs and then attempting to connect those individuals with appropriate services. If health systems are successful in screening large numbers, and then attempt to connect individuals to available resources, we believe that they will soon find out that the resources to support those needs are inadequate. This is based on IHI field experience with communities. Social services provide important support for many individuals but are underfunded, often lack coordination between agencies, focus on process rather than outcomes, often lack quality improvement skills to improve complex processes and struggle to supply the scale of services needed for an entire population.

#### IV. Description of Work to Date:

We divided this work into three parts:

Tam Duong, IHI research associate, focused on understanding the state of the art when it comes to screening for social determinants with a focus on tools and process. Bryan Buckley, DrPH student, public health Harvard, focused on following the money from health care to other social determinants. John Whittington focused on thinking about how you would move the money from health care to SDoH.

We interviewed representatives from:

San Francisco Federal Reserve  
Chicago Federal Reserve  
Blue Cross of Tennessee  
United Health Care  
Former Fortune 500 Medical Director  
Kaiser Permanente Care Management Institute  
Health Partners  
AllianceChicago  
NFF-one of the largest CDFI in the US  
CHI Franciscan Health  
(University of California, San Francisco and Social Interventions Research & Evaluation Network (SIREN) )  
Contra Costa Health Services

Rush University Medical Center

Health Leads

Northwell Health

## V. Results of the 90-Day Scan:

### A. State of the art on social determinant screening

Below is a summary of the key domains that common SDoH assessment tools cover. For the complete details please see the IHI Innovation paper titled “Current State of Social Determinants of Health Screenings”.

Table 2. Common Social Needs Screening Tools & Recommended Domains for Assessment

	Health Begins	Health Leads	PRAPARE	CMS
Education	X	X	X	X
Employment	X	X	X	X
Exposure to violence	X	X	X	X
Financial strain	X	X		X
Food insecurity	X	X	X	X
Health behaviors	X	X		
Housing condition			X	X
Housing instability	X	X	X	X
Immigration	X		X	
Mental/behavioral health	X		X	X
Physical activity	X			X
Social support and isolation	X	X	X	X
Substance use		X		X

Transportation	X	X	X	X
Utility Needs		X	X	X
Other questions asked	Civic engagement	Childcare	Veteran Status; Insurance status; Income; Access to health care; phone; incarceration; refugee	Disabilities

Outline of key processes and ideas to consider when implementing SDoH screening:

1. Identify the population's needs.
2. Ensure patient- and family-centered care.
3. Maintain a database for community resources.
4. Integrate the screening into electronic health records.
5. Build will and support for this work.

Continued implementation of screening by health care of the SDOH would signify a cultural shift in how health is viewed and truly influence the underlying conditions resulting in health disparities.

B. Following the money trail between health care and the other SDoH

Table 2 Possible Healthcare source of money transfer

<u>Example of funding</u>	<u>Total spent in this sector (Billion)</u>	<u>Spending on social determinants outside of health care provision (Billion)</u>
1. Community Benefit (8.1%)		
Estimate (2016)	\$77.44	\$4.65
2. ACO		
- Commercial	\$114.09	?
- Medicare	\$115.35	?

- Medicaid	\$24.94	?
Alternative HEALTH PLANS Items 3 -6		
3.Medicare Advantage	\$192.68 total	?
-HMO (63%)	121.39	?
-Local PPO (26%) + Regional PPO (7%) ((33%))	63.58	?
-PFFS (1%)	1.93	?
-Other (3%)	5.78	?
4.Managed Medicaid	\$252.45	?
<i>5.Dual Eligible(Medicaid and Medicare)</i>		
<i>6.SNP Medicare Plans</i>		
<i>7. SDOH identification &amp; Social Rx with associated payments from HC to social care providers</i>		
<i>8.State Innovation Models</i>		
<i>9.Private investment by health care Trinity and Dignity health using their capital to make loans</i>		
<i>10.Private business funding social support to help their own employees</i>		

<i>11.1115 Medicaid wavers and DSRIP</i>		
<i>12. Private health insurance funding SDoH</i>		
<i>13. Accountable Care Communities</i>		
<i>Others to think about: social impact bonds, San Francisco Federal reserve, “Shared profit” or “shared benefit” approaches CDFIs , MACRA, Global Hospital Budgets Maryland and Pennsylvania</i>		

(All areas in italics will be completed during the next wave of innovation.)

In our analysis, we found the data on the total pool of money flowing into various insurance components for this table. We have literature that describes activities related to the flow of money from health care to other SDoH.<sup>14,15</sup> It has been hard to quantify how much money is flowing into the community and that is why you see “?” in the second column. To date our only success is with community benefit. We see that in 2016 \$77 billion was spent in total for community benefits, but when you analyze that in detail, only \$4.65 billion was spent in the community. The rest of the money was allocated to health care such as charity care and the shortfall between cost and payment in Medicaid. We will complete this table by May and write up a separate report about this work.

### C. Reflection on moving the money from health care to other SDoH

Twelve years ago we started a journey to accomplish the Triple Aim.<sup>16</sup> This paper is part of that journey. If we are going to accomplish the Triple Aim, particularly the per capita part of the Triple Aim, we need to think differently. There are three drivers that are important and need to be pursued constantly for the sake of the entire population: health care redesign, payment reform and insurance/finance coverage. Whatever we do in these three drivers needs to be done for the entire population. Much of our current thinking forgets parts of the population. We made a point in a recent publication that the “last should be first... we need to start with the

“last” population – one that may be more challenging and just not thriving – and partner with them to develop improvements.”<sup>17</sup> If we don’t do this, we will not close disparity gaps and we will continue to financially burden society. Our health-producing work in the US looks like a factory that builds cars with 85% that are nearly perfect and 15% that don’t even have wheels.

Our work at IHI primarily focuses on health care redesign. Political discussion in the US focuses on insurance and financing. CMS and other insurance companies experiment with payment reform. Rarely do we see work on all three. To move forward, we need cooperation between the health care sector, insurance companies and policy makers. However, what we see is consolidation among various industry sectors of health care. We now have “five big insurance companies, three big wholesalers, three large pharmacy chains and three big benefit managers”<sup>18</sup> along with consolidation in provider systems.<sup>19,20</sup> Cooperation is not the motive behind consolidation. “Rational common interests and rational individual interests are in conflict. Our failure as a nation to pursue the Triple Aim meets the criteria for what Garrett Harden called a “tragedy of the commons.” As in all tragedies of the commons, the great task in policy is not to claim that stake-holders are acting irrationally, but rather to change what is rational for them to do.”<sup>21</sup> So if we are going to move the money, we need to act on three fronts to help the entire population: health care redesign, payment reform and improved insurance coverage.

A good example of what this might look like is the work going on in Maryland where they have successfully expanded insurance coverage and reformed payment for hospitals. Each hospital is on a fixed budget for inpatient services.<sup>22</sup> We don’t know much about hospital redesign from this work but we do know that readmission rates have decreased while measures of hospital safety have improved. The work resulted in a savings to Medicare of approximately 450 million over three years. This works out to approximately a 2% yearly savings for Medicare. Maryland’s redesigned hospital payment is impacting the delivery systems to make care available for all at a price that society can afford by rewarding hospitals for keeping people healthier. It is a business model that rewards for utilizing less services not more and monitors abuse by following key metrics, and it is applied to all hospitals and to all patients they treat. We recommend that no matter what part of the system we work with, we need to think about all three of these items for the entire population to decrease or at least control the per capita spend for health care.

Here are a couple of other thoughts about thinking differently. Healthcare, along with other public sector work, spends significant amounts of money fixing “defects” versus trying to fix the problem, i.e. chronic disease, incarceration, remedial education, etc. Along with this, we spend too much time measuring process versus outcomes. David J. Erickson from the San Francisco Federal Reserve says, “Paying for outcomes creates a demand that begins to reshape institutions, behaviors, relationships, and culture. An open structure, like a market, will permit



problem-solving ideas to come from every direction”<sup>23</sup>. Also, ReThink Health has created an interesting typology of potential financing structures<sup>24</sup> for population health that we think is very helpful as we think through this work. It discusses: seed funding, debt and working capital and sustainable financing.

## VII. Conclusions and Recommendations:

1. Screening for social determinants of health needs has the potential to improve health. Our work so far has identified the key elements and processes needed to screen individuals. In the next cycle of R and D we will focus on the best processes for connecting individuals with essential supports to improve health and decrease health care cost. We plan to use the work with the pursuing equity teams and continue to look for other opportunities to help. We believe there is an opportunity for IHI to help with this work. We also recognize that terrific work is already going on in this field such as The Collaborative to Advance Social Health Integration (CASHI)<sup>25</sup>

It is an early thought, but in our interviews about this work, one person commented, “if you do enough screening, you might have the foundation for a real time understanding of community health needs.”

2. We studied the flow of money from health care to other determinants of health in order to see if there are any opportunities to increase the transfer of money for social support. We still have some more study to do in this area. However, at this time we see two opportunities. We should concentrate more on Managed Medicaid to help them do more around social support with community organizations. We know that work is already underway in this area and more can be done. The second opportunity is with community benefit. We should improve the use of money already flowing into the community. Health care, through the community health needs assessment every three years, is learning more about SDoH issues. As they learn more about these issues, we think that they can be more effective with the money they do spend in community. More controversially, we could alter policy so more community benefit money can be used in the community. One change would be to eliminate the counting of the shortfall in Medicaid payment compared to cost as community benefit. The normal accounting practices of any business including health care already accounts for the Medicaid loss in their business. Why do they get to count it twice? There is no policy that accounts for any shortfall in Medicare and why should there be one with Medicaid? The for-profit hospitals still see Medicaid and pay taxes.

3. The biggest issue that we grapple with is how to shrink health care spending. The economic pressure from health care in our society is causing a strain and even a breakage of it. We now see an opioid disaster that in part was caused by greed and ignorance within health care<sup>26</sup>.

Health care is estimated to grow to 5 trillion dollars in the next 8 years <sup>27</sup>. The cost has impacted state budgets for the last 30 years. <sup>28</sup> As the percent of health care costs have grown, the percent of other parts of state budgets have shrunk.

It is one thing to say we spend too much; it is another to actually spend less. As we mentioned earlier in the paper, we should focus on the following for the entire population: provider system redesign, payment reform and insurance/financing. Below are a few more thoughts related to this:

A. We need to quit playing by the present rules. We are putting the cart before the horse by working on provider system redesign at IHI in unfavorable payment and insurance/financing environments. We need to work with cities, states and nations where there is better alignment to accomplish the Triple Aim. The obvious question right now is why we are not involved with the work in Maryland. Think of how much we could be learning if we played an active role. Pennsylvania is also planning to implement global payment budget for rural hospitals.<sup>29</sup>

b. Can we create a market for health and healthy communities? Would this create the virtuous cycle we need to transfer funds from our sickness model to a health model? What policies do we need?

c. Identify waste and remove it within health care. If we do this, however, we have to get the payment models right. Otherwise health care will fill the waste with other activities that also may not be increasing value for the patient. In 2012 Don Berwick identified 6 opportunities for waste reduction that are still applicable today: failures of care delivery, failures of care coordination, overtreatment, administrative complexity, pricing failures, fraud and abuse.<sup>30</sup> Brent James identified three kinds of waste: production-level waste, case-level waste, and population-level waste.<sup>31</sup> There has been recent discussion about the diminished role of hospitals.<sup>32</sup> We may want to start by eliminating most of what hospitals do presently. Replace as much as possible of physical health care with virtual care. Develop systems to coordinate care.

d. Lastly, we can no longer afford to play a game in health care and try to push it to someone else where each organization optimizes for themselves and not the whole. This is what we are seeing with health care consolidations on almost a daily basis.

## VI. Open Questions:

-The social service agencies don't have the scale needed to take on the problem.

- So how do we build a system that could meet the needs in every local community?
- And even if we built this improved system, how would we get individuals to engage?

<sup>1</sup> AMERICA'S HEALTH RANKINGS® ANNUAL REPORT  
[www.AmericasHealthRankings.org](http://www.AmericasHealthRankings.org)

<sup>2</sup> Bradley EH, Elkins BR, Herrin J, et al Health and social services expenditures: associations with health outcomes BMJ Qual Saf 2011;20:826-831.

<sup>3</sup> IBID

<sup>4</sup> IBID

<sup>5</sup> Bradley, Elizabeth and Taylor, Lauren A. The American Health Care Paradox: Why Spending More Is Getting Us Less. New York: PublicAffairs, 2013.

<sup>6</sup> <http://www.countyhealthrankings.org/explore-health-rankings/rankings-reports/2017-county-health-rankings-key-findings-report>

<sup>7</sup>[http://www.ihl.org/Engage/collaboratives/LeadershipAlliance/Documents/IHILeadershipAlliance\\_NewRulesRadicalRedesign.pdf](http://www.ihl.org/Engage/collaboratives/LeadershipAlliance/Documents/IHILeadershipAlliance_NewRulesRadicalRedesign.pdf)

<sup>8</sup> National Health Expenditure Data <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/index.html>

<sup>9</sup> The Death Gap: How Inequality Kills by David A. Ansell University Of Chicago Press; April 21, 2017

<sup>10</sup> <http://www.countyhealthrankings.org/what-is-health>

- <sup>11</sup> Sanne Magnan, MD, PhD, HealthPartners Institute; University of Minnesota Social Determinants of Health 101 for Health Care Five plus Five October 9, 2017 NAM.edu/Perspective
- <sup>12</sup> Onie, R., Lavizzo-Mourey, R., Lee, T., Marks, J., & Perla, R. (2018). Integrating Social Needs Into Health Care: A Twenty-Year Case Study Of Adaptation And Diffusion. *Health Affairs (Project Hope)*, 37(2), 240-247.
- <sup>13</sup> Taressa Frazee, Valerie A. Lewis, Hector P. Rodriguez, and Elliott S. Fisher  
Housing, Transportation, And Food: How ACOs Seek To Improve Population Health By Addressing Nonmedical Needs Of Patients *HEALTH AFFAIRS* 35, NO. 11 (2016): 2109–2115
- <sup>14</sup> Lauren A. Taylor<sup>1</sup>, et al Leveraging the Social Determinants of Health: What Works? *PLOS ONE* | DOI:10.1371/journal.pone.0160217 August 17, 2016
- <sup>15</sup> Medicaid Payment and Delivery Reform: Insights from Managed Care Plan Leaders in Medicaid Expansion States Sara Rosenbaum, Rachel Gunsalus, Maria Velasquez, Shylae Jones, Sara Rothenberg, J. Zoë Beckerman  
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- <sup>16</sup> IHI Technical Brief IHI Best Health Care Results for Populations: The “Triple Aim” Achieving the optimal balance of good health, positive patient experience of care, and low per capita cost for a population December 2006- February 2007
- <sup>17</sup> <http://www.ihl.org/communities/blogs/improving-health-equity-5-guiding-principles-for-health-care-leaders>
- <sup>18</sup> [https://www.economist.com/news/business/21738934-it-not-pharmaceutical-companies-which-firms-profit-most-americas-health-caresystem?utm\\_campaign=KHN%3A%20Daily%20Health%20Policy%20Report&utm\\_source=hs\\_email&utm\\_medium=email&utm\\_content=61556079&\\_hsenc=p2ANqtz-9ii\\_2VKR1tbBCK94gnpB\\_ZM\\_gCzulzEQohq3k-xrT0SxrYgAbTqOH4qgR2JxXUGdqKzrhSyb6hL6qfjISuO1atsxIH8IoU9kp-DFUyL0zY\\_V0O826Y&\\_hsmi=61556079](https://www.economist.com/news/business/21738934-it-not-pharmaceutical-companies-which-firms-profit-most-americas-health-caresystem?utm_campaign=KHN%3A%20Daily%20Health%20Policy%20Report&utm_source=hs_email&utm_medium=email&utm_content=61556079&_hsenc=p2ANqtz-9ii_2VKR1tbBCK94gnpB_ZM_gCzulzEQohq3k-xrT0SxrYgAbTqOH4qgR2JxXUGdqKzrhSyb6hL6qfjISuO1atsxIH8IoU9kp-DFUyL0zY_V0O826Y&_hsmi=61556079)

- <sup>19</sup> <http://fortune.com/2017/12/11/ascension-providence-merger/>
- <sup>20</sup> <https://www.aurorahealthcare.org/media-center/news-releases/advocate-and-aurora-to-merge-creating-top-10-health-system>
- <sup>21</sup> Donald M. Berwick, Thomas W. Nolan, and John Whittington The Triple Aim: Care, Health, And Cost HEALTH AFFAIRS ~ Volume 27, Number 3 759
- <sup>22</sup> Maryland's All-Payer Hospital Model Results Performance Year Three Calendar Years 2014 through 2016 Report from the Health Services Cost Review Commission March 2018 [http://www.hscrc.state.md.us/Documents/Modernization/Maryland%20APM%20Performance%20Report%20-CY2016\\_3\\_9\\_18.pdf](http://www.hscrc.state.md.us/Documents/Modernization/Maryland%20APM%20Performance%20Report%20-CY2016_3_9_18.pdf)
- <sup>23</sup> What Matters: Investing in Results to Build Strong, Vibrant Communities p 52 Federal Reserve Bank of San Francisco & Nonprofit Finance Fund
- <sup>24</sup> [https://www.rethinkhealth.org/wp-content/uploads/2018/03/RTH-TypologyChart\\_WB\\_Let\\_112018.pdf](https://www.rethinkhealth.org/wp-content/uploads/2018/03/RTH-TypologyChart_WB_Let_112018.pdf)
- <sup>25</sup> [https://healthleadsusa.org/wp-content/uploads/2018/02/Collaborative-to-Advance-Social-Health-Integration\\_Charter-Feb-2018.pdf](https://healthleadsusa.org/wp-content/uploads/2018/02/Collaborative-to-Advance-Social-Health-Integration_Charter-Feb-2018.pdf)
- <sup>26</sup> Dreamland: The True Tale of America's Opiate Epidemic. Sam Quinones Bloomsbury Press April 2016
- <sup>27</sup> NHE Fact Sheet <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NHE-Fact-Sheet.html>
- <sup>28</sup> State Expenditure Report (Fiscal 2015-2017) [https://higherlogicdownload.s3.amazonaws.com/NASBO/9d2d2db1-c943-4f1b-b750-0fca152d64c2/UploadedImages/SER%20Archive/State\\_Expenditure\\_Report\\_Fiscal\\_2015-2017\\_-S.pdf](https://higherlogicdownload.s3.amazonaws.com/NASBO/9d2d2db1-c943-4f1b-b750-0fca152d64c2/UploadedImages/SER%20Archive/State_Expenditure_Report_Fiscal_2015-2017_-S.pdf)

<sup>29</sup> A Path to Sustain Rural Hospitals Karen M. Murphy, PhD, RN1 ; Lauren S. Hughes, MD, MPH, MSc2; Patrick Conway, MD, MSc3 JAMA. 2018;319(12):1193-1194. doi:10.1001/jama.2018.2967

<sup>30</sup> Donald M. Berwick, MD, MPP; Andrew D. Hackbarth, MPhil Eliminating Waste in US Health Care JAMA. 2012;307(14):1513-1516. doi:10.1001/jama.2012.362

<sup>31</sup> Brent C. James, MD Gregory P. Poulsen The Case for Capitation FROM THE JULY–AUGUST 2016 ISSUE Harvard Business Review

<sup>32</sup> <https://www.nytimes.com/2018/02/25/opinion/hospitals-becoming-obsolete.html?partner=rss&emc=rss>