

3-9-2017

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Jessica Mantel
University of Houston Law Center

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Recommended Citation

Jessica Mantel, *Tackling the Social Determinants Of Health: A Central Role For Providers*, 33 GA. ST. U. L. REV. 217 (2017).
Available at: <https://readingroom.law.gsu.edu/gsulr/vol33/iss2/1>

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TACKLING THE SOCIAL DETERMINANTS OF HEALTH: A CENTRAL ROLE FOR PROVIDERS

Jessica Mantel*

Americans' poor health and high health care costs largely stem from social, environmental, and behavioral factors that adversely impact health. Yet, health care providers traditionally have neglected the social determinants of health, focusing instead on medically treating patients' symptoms. As a result, addressing the social determinants of health has primarily been the domain of government and community groups. Unfortunately, the efforts of the public health and social services sectors are stymied by chronic underfunding, a situation unlikely to change in the current political environment. This article identifies a potential solution to this problem: recent health care reforms that encourage health care providers to move beyond traditional medicine and give greater attention to the social determinants of poor health. This promising development already has improved the health of many individuals. However, this trend represents an incomplete solution to the problem at hand, as providers lack the incentives and capacity to independently address many of the root causes of poor health. Effecting far-reaching changes in the social determinants of health instead will require providers to join forces with other sectors across a broad range of initiatives designed to improve the population's health.

INTRODUCTION

The Affordable Care Act (ACA)¹ has profoundly transformed the United States' health care system.² Much of the public's attention has

*Assistant Professor, University of Houston Law Center. Thank you to Charity Scott, Dayna Matthews, Gwendolyn Marquette; participants in the American Association of Law Schools New Scholars Workshop, the Texas Legal Scholars Workshop, and the University of Houston's faculty workshop for their useful discussion and suggestions; and to Emily Lawson and Theresa Langley for their research assistance.

1. Patient Protection and Affordable Care Act, Pub. L. No. 111-148, 124 Stat. 119 (2010).

2. ANNIE L. MACH & NAMRATA K. UBEROI, CONG. RESEARCH SERV., R43854, OVERVIEW OF

focused on the ACA's restructuring of the market for private health insurance.³ Yet the ACA also fundamentally changes the organization and delivery of health care. Various reforms encourage physicians, hospitals, and other health care providers to improve the quality and efficiency of the clinical care they provide to patients.⁴ Less appreciated is that these reforms also push providers to expand their attention beyond the clinical care setting. Rather than simply diagnosing and treating disease, providers increasingly are taking steps to address the social, environmental, and behavioral factors impacting their patients' health.⁵ This Article examines this recent trend and concludes that while providers' efforts to address these upstream causes of poor health is an encouraging development, more must be done to strengthen providers' incentives and capacity to do so. Ultimately, successfully tackling the root causes of poor health will require providers to collaborate with government agencies, schools, social services providers, community groups, and others that share the goal of improving their community's health.

Despite the United States having arguably the world's best biomedical research and specialty medical care, we consistently lag behind other developed countries in life expectancy and on other health outcome measures.⁶ Americans' poor health poses significant

PRIVATE HEALTH INSURANCE PROVISIONS IN THE PATIENT PROTECTION AND AFFORDABLE CARE ACT 1 (2016).

3. *See id.* at 2.

4. *See infra* Part III.A.

5. *Id.*

6. *See generally* ORG. FOR ECON. CO-OPERATION & DEV., OECD HEALTH STATISTICS 2015, <http://www.oecd.org/els/health-systems/health-data.htm> (last visited Jan. 13, 2016) [hereinafter OECD HEALTH STATISTICS 2015]; ORG. FOR ECON. CO-OPERATION & DEV., OECD HEALTH STATISTICS 2015: FREQUENTLY REQUESTED DATA <http://www.oecd.org/health/health-systems/OECD-Health-Statistics-2015-Frequently-Requested-Data.xls> [hereinafter OECD FREQUENTLY REQUESTED DATA 2015] (comparing health measurements across the thirty-four countries in the OECD). According to the Organization for Economic Co-operation and Development (OECD), the average life expectancy at birth in the United States in 2013 was 78.8 years, which falls below the 80.5 year average for all OECD countries and is higher than only seven of the thirty-four OECD countries. OECD FREQUENTLY REQUESTED DATA 2015, *supra*. Infant mortality in 2013 stood at 5.0 deaths per 1000 as compared to an average of 3.8 across OECD countries. *See* ORG. FOR ECON. CO-OPERATION & DEV., *Health at a Glance 2015: OECD Indicators* 59 (2015), http://www.keepeek.com/Digital-Asset-Management/oecd/social-issues-migration-health/health-at-a-glance-2015_health_glance-2015-en#.V7HkSUbYilg#page3 (last visited Aug. 22, 2016). And, among OECD nations, the United States has one of the highest levels of potential years of life lost due to poor health. *See* OECD FREQUENTLY REQUESTED DATA 2015, *supra*.

human costs. Americans increasingly suffer from preventable chronic illnesses such as cancer, heart disease, and diabetes,⁷ with experts predicting that the incidence of such diseases will continue to increase.⁸ Indeed, the current generation of children and young adults are in danger of becoming the first generation to experience “shorter, less healthy lives than their parents.”⁹

The population’s poorer health also has contributed to rising health care costs.¹⁰ The health care sector accounted for 17.5% of the U.S. gross domestic product (GDP) in 2014, as compared to only 5.2% in 1960.¹¹ Economists project that health care will comprise as much as one-third of GDP by 2040.¹² In the face of growing health care expenditures, health care programs such as Medicare and Medicaid consume a growing portion of federal government outlays¹³ and have

See generally OECD HEALTH STATISTICS 2015, *supra*.

7. *See* JEFFREY LEVI ET AL., TR. FOR AM.’S HEALTH, *INVESTING IN AMERICA’S HEALTH: A STATE-BY-STATE LOOK AT PUBLIC HEALTH FUNDING AND KEY HEALTH FACTS 1* (2011), <http://healthyamericans.org/assets/files/Investing%20in%20America’s%20Health.pdf>.

8. *See* Thomas Bodenheimer, Ellen Chen & Heather D. Bennett, *Confronting the Growing Burden of Chronic Disease: Can the U.S. Health Care Workforce Do the Job?*, 28 HEALTH AFF. 64, 64 (2009) (summarizing projections for increases in chronic conditions, including diabetes and chronic mental disorders); Carlos O. Weiss et al., *Patterns of Prevalent Major Chronic Disease in Older Adults in the United States*, 298 J. AM. MED. ASS’N 1160, 1161 (2007) (reporting that the number of people with chronic disease is expected to increase steadily in the United States for the next 30 years).

9. *See* LEVI ET AL., *supra* note 7; *see* INST. OF MED., FOR THE PUBLIC’S HEALTH: *INVESTING IN A HEALTHIER FUTURE 20* (2012), [hereinafter FOR THE PUBLIC’S HEALTH] (discussing the lack of progress in preventing poor health).

10. *See* FOR THE PUBLIC’S HEALTH, *supra* note 9, at 17.

11. *See* *National Health Expenditure Data, Historical*, CTRS. FOR MEDICARE & MEDICAID SERVS., <https://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/nationalhealthexpenddata/nationalhealthaccountshistorical.html> (last visited Oct. 9, 2016). In 2011, the percentage of the U.S. GDP devoted to health care spending (17.7%) was approximately 6% above the next group of countries and far exceeded the average across OECD nations (9.3%). *See* HEALTH AT A GLANCE 2013: OECD INDICATORS, ORG. FOR ECON. CO-OPERATION & DEV. 156, 209 (2013), <http://www.oecd.org/els/health-systems/Health-at-a-Glance-2013.pdf>.

12. *See* Peter J. Kalis & Judy Hlafcsak, *Healthcare Reform: Let’s Act Locally*, 50 DUQ. L. REV. 253, 257 (2012) (stating that healthcare “is projected to reach 34% [of GDP] by 2040, if costs continue to grow at historic rates”) (citing EXEC. OFFICE OF THE PRESIDENT, COUNCIL OF ECON. ADVISORS, *THE ECONOMIC CASE FOR HEALTH CARE REFORM* (2009), http://www.whitehouse.gov/assets/documents/CEA_Health_Care_Report.pdf).

13. *See* CONGR. BUDGET OFFICE, *UPDATED BUDGET PROJECTIONS: 2014 TO 2024*, at 3 tbl. 1, 6–7 tbl. 2 (2014), http://www.cbo.gov/sites/default/files/cbofiles/attachments/45229-UpdatedBudgetProjections_2.pdf. CBO estimates that federal government outlays for health care—Medicare, Medicaid, State Children’s Health Insurance Program (“SCHIP”), and other federal health care programs—cost an estimated \$861 billion in fiscal year 2013, almost 25% of total federal government outlays estimated at \$3.455 trillion. *See id.*

strained state budgets,¹⁴ threatening to crowd out other priorities such as education, crime prevention, transportation, and welfare.¹⁵ In addition, rising insurance premiums make U.S. companies less competitive internationally¹⁶ and have contributed to stagnant wages.¹⁷ A less healthy population also shrinks the labor supply and reduces worker productivity,¹⁸ which experts estimate diminishes economic output in the United States by over \$1 trillion annually.¹⁹

Given these challenges, policymakers have given enormous attention to increasing the quality and efficiency of the health care system. For the most part, these efforts have focused on doing better in the clinical setting, such as improving coordination among providers and avoiding unnecessary or duplicative services.²⁰ While these efforts certainly are important, they do little to address a key driver of higher health care spending—the rising prevalence of chronic diseases.

A recent study estimates that 77.6% of the growth in health care spending from 1987 to 2011 was associated with the treatment of chronic disease, particularly among those with four or more chronic conditions.²¹ While this growth in spending in part reflects

14. See David A. Squires, *Issues in International Health Policy—Explaining High Health Care Spending in the United States: An International Comparison of Supply, Utilization, Prices, and Quality*, 10 THE COMMONWEALTH FUND 1, 11 (2012) (“Medicaid spending also impacts state budgets, increasing faster than and potentially crowding out other socially desirable budget items, such as education and infrastructure.”).

15. See BIPARTISAN POLICY CTR., WHAT IS DRIVING UNITED STATES HEALTH CARE SPENDING?: AMERICA’S UNSUSTAINABLE HEALTH CARE COST GROWTH 4 (2012), http://www.rwjf.org/content/dam/farm/reports/issue_briefs/2012/rwjf401339.

16. See *id.* But see Henry J. Aaron, *Should Public Policy Seek to Control the Growth of Health Care Spending?*, HEALTH AFF., Jan. 8, 2003 at W3-28, W3-29 (stating that rising employer-financed health care costs do not reduce corporate profits but instead “eat into workers’ earnings”).

17. See Russell Korobkin, *Comparative Effectiveness Research as Choice Architecture: The Behavioral Law and Economics Solution to the Health Care Cost Crisis*, 112 MICH. L. REV. 523, 525 (2014); Aaron, *supra* note 16, at W3-29.

18. See FOR THE PUBLIC’S HEALTH, *supra* note 9, at 17 (“The indirect costs associated with preventable chronic disease—costs related to diminished labor supply and worker productivity and the resulting fiscal drag on the nation’s economic output—has been estimated at over \$1 trillion a year.” (citation omitted)). Lower productivity results from lost work time and diminished performance due to illness. See *id.* at 19.

19. See *id.* at 17.

20. See generally Jessica Mantel, *Accountable Care Organizations: Can We Have Our Cake and Eat It Too?*, 42 SETON HALL L. REV. 1393 (2012).

21. See Kenneth E. Thorpe, Lindsay Allen & Peter Joski, *The Role of Chronic Disease, Obesity, and*

population growth and higher treatment costs, approximately 30% is attributable to the rising incidence of chronic illnesses such as heart disease, diabetes, hypertension, and asthma.²² Today, over half of adults in the United States have at least one chronic condition, with a quarter having two or more conditions.²³

The increased incidence of chronic diseases stems largely from Americans' tobacco use, insufficient physical activity, and poor diet.²⁴ While many in society blame individuals for these unhealthy behaviors, the behaviors do not occur in a vacuum; rather, they are shaped in part by individuals' physical and social environments.²⁵ For example, unsafe neighborhoods and lack of green space limit the opportunities for exercise.²⁶ Stress associated with financial and other personal challenges contributes to overeating and substance abuse.²⁷ Physical and social factors also directly impact health, such as exposing individuals to toxic substances.²⁸ Together these factors, the so-called social determinants of health, account for 60% of the risk of premature death due to chronic disease and other health conditions.²⁹

Improved Treatment and Detection in Accounting for the Rise in Healthcare Spending Between 1987 and 2011, 13 APPLIED HEALTH ECON. HEALTH POL'Y 381, 381 (2015).

22. *See id.* at 384–85.

23. *See* Ursula E. Bauer et al., *Prevention of Chronic Disease in the 21st Century: Elimination of the Leading Preventable Causes of Premature Death and Disability in the USA*, 384 LANCET 45, 45 (2014).

24. *See id.* at 46 (stating that in the USA chronic diseases largely result from risk factors that include tobacco use, poor diet and physical inactivity). For example, Thorpe, Allen, and Joski estimate that between 11.4 and 23.5% of the increase in healthcare expenditures for specific chronic conditions from 1987 to 2011 can be explained by rising obesity levels. *See* Thorpe, Allen & Joski, *supra* note 21, at 381.

25. *See* Paula Braveman, Susan Egerter & David R. Williams, *The Social Determinants of Health: Coming of Age*, 32 ANN. REV. PUB. HEALTH 381, 383–84 (2010) (“[U]pstream determinants related to living and working conditions . . . can influence health both directly (e.g., through toxics exposures or stressful experiences) and indirectly (by shaping the health-related choices that individual have and make for themselves and their families).”).

26. *See* ACTIVE LIVING BY DESIGN, ROBERT WOOD JOHNSON FOUND., LOW INCOME POPULATIONS AND PHYSICAL ACTIVITY 2 (2012), http://www.bms.com/documents/together_on_diabetes/2012-Summit-Atlanta/Physical-Activity-for-Low-Income-Populations-The-Health-Trust.pdf; Braveman, Egerter & Williams, *supra* note 25, at 383–84.

27. *See* ACTIVE LIVING BY DESIGN, *supra* note 26; Braveman, Egerter & Williams, *supra* note 25, at 383–84.

28. *See* Braveman, Egerter & Williams, *supra* note 25, at 383–84.

29. *See* Sandra Braunstein & Risa Lavizzo-Mourey, *How the Health and Community Development Sectors Are Combining Forces to Improve Health and Well-Being*, 30 HEALTH AFF. 2042, 2043 (2011); MAIA CRAWFORD ET AL., MILBANK MEMORIAL FUND., POPULATION HEALTH IN MEDICAID DELIVERY SYSTEM REFORMS 2 (2015), <http://www.milbank.org/uploads/documents/papers/>

So although though improving the delivery of health care is an important goal, health experts have concluded that ameliorating the social, environmental, and behavioral conditions that contribute to chronic disease holds even greater promise for enhancing the population's health and constraining health care spending.³⁰

Despite the enormous impact social, environmental, and behavioral factors have on health, the vast bulk of health care spending in the United States goes toward the diagnosis and treatment of disease.³¹ Chronic shortfalls in public health and social services programs that target the social determinants of health have become the norm.³² Unfortunately, the status quo will remain unchanged for the foreseeable future, as elected officials and the public are unlikely to support increased funding for public health and social services. This Article identifies an alternative solution to this problem that bypasses the political budgeting process: incentivizing health care providers to allocate a portion of their resources to addressing the nonclinical determinants of health.

In response to reforms adopted under the ACA, providers increasingly are turning their attention to the nonclinical factors that adversely affect their patients' health.³³ This emerging trend promises to both improve health and lower health care spending in the United States.³⁴ Unfortunately, this trend, in its current form, is only a partial solution to the nation's neglect of the upstream causes of poor health, as providers lack the capacity and incentives to

CHCS_PopulationHealth_IssueBrief.pdf. An additional 10% of preventable deaths is attributable to shortfalls in medical care, with the remaining 30% attributable to genetic predispositions. *See id.*; *see also* Bridget C. Broske, et al., *Different Perspectives for Assigning Weights to Determinants of Health 1* (Univ. of Wisconsin Population Health Inst., Working Paper, February 2010) (reviewing different approaches to weighting the relative contribution to health outcomes of different factors, and recommending a weighting scheme that assigns 80% to social and economic factors, health behaviors, and environmental factors, with 20% assigned to clinical care).

30. *See* Johnson, *infra* note 63.

31. *See generally* FOR THE PUBLIC'S HEALTH, *supra* note 9, at 20–29 (generally describing the imbalance between spending on clinical care and spending on prevention and population health, and noting that “the bulk of [U.S. Department Health and Human Services] funding goes to publicly funded clinical care (through Medicaid and Medicare) and to the National Institutes of Health, largely for basic research, little of it for primary prevention and even less for population-based interventions.”).

32. *See* Johnson, *infra* note 63.

33. *See* discussion *supra* Part III.

34. *Id.*

address the full range of factors impacting health. Far-reaching improvement in the nation's health ultimately requires that the health care system integrate medical, public health, and social services. Providers, therefore, should be encouraged to combine their resources and expertise with other sectors in pursuit of shared community health goals, arrangements that I refer to as Population Health Partnerships. Toward this end, policymakers must implement policies that promote the development of sustainable Population Health Partnerships.

Part I discusses the causal link between social, environmental, and behavioral factors and individuals' health. Part I also highlights the chronic underfunding of public programs that address these factors. Part II then explains that various political and social dynamics pose significant barriers to those advocating for increased funding for public health and social services programs. Consequently, chronic underfunding of these programs will continue.

Part III presents a possible solution to this problem—encouraging the health care system to reach beyond its traditional clinical boundaries and into the public health and social services realms. Part III also describes how current reimbursement and tax policies nudge providers down this path. Part IV identifies the benefits of providers addressing the upstream causes of poor health, but also sounds a more pessimistic note and explains why this trend is only a partial solution to America's underfunding of public health and social services programs. Specifically, Part IV argues that providers will narrowly focus on improving the near-term health of individual patients and not on long-term improvements to the health of the community at-large.

Ultimately, enduring success in tackling the root causes of poor health will require that providers work collectively with one another and with other sectors. Part V describes these so-called Population Health Partnerships, identifies existing hurdles to their formation, and calls for the development of public policies and infrastructure that will lower these hurdles.

I. THE IMPACT OF SOCIAL, ENVIRONMENTAL, AND BEHAVIORAL FACTORS ON HEALTH

Advances in medicine have helped patients live longer and have improved their quality of life. Yet, despite the clear link between medical care and health, experts estimate that access to medical care prevents only 10% of premature deaths.³⁵ A growing body of literature suggests that social, environmental, and behavioral factors play an even bigger role in determining an individual's health,³⁶ accounting for 60% of the risk of premature death.³⁷ Those facing greater social disadvantage are particularly at risk of poor health.³⁸

The social determinants of health (SDHs) are the nonmedical factors that impact an individual's health status.³⁹ They encompass “the conditions in which people are born, grow up, live, work and age,”⁴⁰ including “income and wealth, family and household structure, social support and isolation, education, occupation, discrimination, neighborhood conditions, and social institutions,

35. See CRAWFORD ET AL., *supra* note 29, at 2; Braunstein & Lavizzo-Mourey, *supra* note 29, at 2043.

36. See David A. Asch & Kevin G. Volpp, *What Business Are We In? The Emergence of Health as the Business of Health Care*, 367 NEW ENG. J. MED. 888, 888 (2012) (“An enormous body of literature supports the view that differences in health are determined as much by the social circumstances that underlie them as by the biologic processes that mediate them.”); John V. Jacobi, *Multiple Medicaid Missions: Targeting, Universalism, or Both?*, 15 YALE J. HEALTH POL’Y, L. & ETHICS 89, 97 (2015) (“[Nonmedical factors] can be more powerfully determinative of the health of a population than the delivery of traditional health services.”).

37. See CRAWFORD ET AL., *supra* note 29, at 2; Braunstein & Lavizzo-Mourey, *supra* note 29, at 2043. With 70% of preventable deaths attributable to access to medical care and the social determinants of health, the remaining 30% is attributable to genetic predispositions. See CRAWFORD ET AL., *supra* note 29, at 2.

38. See Braveman, Egerter & Williams, *supra* note 25, at 384 (“Evidence from decades of research examining associations between key social factors—primarily educational attainment and income in the United States and occupational grade (ranking) in Europe—and health outcomes throughout the life course overwhelmingly links greater social disadvantage with poorer health.”).

39. WORLD HEALTH ORG., SOCIAL DETERMINANTS OF HEALTH: KEY CONCEPTS (2016), http://www.who.int/social_determinants/thecommission/finalreport/key_concepts/en/.

40. *Id.* The WHO definition also includes “the systems put in place to deal with illness.” *Id.* For purposes of this article, however, I exclude the traditional health care system as a social determinant of health. Cf. Adina Preda & Kristin Voigt, *The Social Determinants of Health: Why Should We Care?*, 15 AM. J. BIOETHICS 25, 26 (2015) (defining a social determinant as “‘a socially controllable factor *outside the traditional health care system* that is an independent partial cause of an individuals’ health status” (quoting Gopal Sreenivasan, *Justice, Inequality, and Health*, STANFORD ENCYCLOPEDIA OF PHILOSOPHY (2008))).

among others.”⁴¹ As described below, these factors impact individuals’ health in three ways: (1) they affect an individual’s ability to access traditional medical care, (2) they directly impact an individual’s physical or mental health, and (3) they support or constrain an individual’s capacity to follow healthy behaviors.⁴²

Various financial and nonfinancial factors influence whether individuals receive appropriate medical care in a timely manner. Financial considerations such as lack of health insurance, inability to pay cost-sharing obligations, or plans refusing to pay for care lead some individuals to delay or forego needed medical care.⁴³ While the insurance reforms and subsidies put in place by the ACA lower these barriers, they do not completely eliminate them.⁴⁴ Nonfinancial factors including transportation challenges,⁴⁵ lack of paid sick leave,⁴⁶ and an inability to arrange for child care during appointment

41. LAURA MCGOVERN, GEORGE MILLER & PAUL HUGHES-CROMWICK, HEALTH AFF., HEALTH POLICY BRIEF: THE RELATIVE CONTRIBUTION OF MULTIPLE DETERMINANTS TO HEALTH OUTCOMES 2 (2014), http://www.healthaffairs.org/healthpolicybriefs/brief_pdfs/healthpolicybrief_123.pdf.

42. See Geoffrey R. Swain et al., *Health Care Professionals: Opportunities to Address Social Determinants of Health*, 113 WIS. MED. J. 218, 218 (2014) (describing the different types of social determinants affecting health).

43. See Jeffrey T. Kullgren et al., *Nonfinancial Barriers and Access to Care for U.S. Adults*, 47 HEALTH SERVS. RES. 462, 465, 467 (2007) (reporting the results of a survey finding that “barriers in the affordability dimension were the most common reasons for unmet need or delayed care”).

44. See Benjamin D. Sommers, *Health Care Reform’s Unfinished Work – Remaining Barriers to Coverage and Access*, 373 NEW ENG. J. MED. 2395, 2395–96 (2015) (stating that for people with higher incomes who do not qualify for subsidies under ACA, cost remains a significant barrier to obtaining health insurance, and, even among insured individuals, high cost-sharing can limit access to timely and affordable care).

45. See Kullgren et al., *supra* note 43, at 470 (identifying transportation problems as a reason for unmet need or delayed care); Richard Wallace et al., *Access to Health Care and Nonemergency Medical Transportation: Two Missing Links*, 1924 J. TRANSP. RES. BOARD 76, 76 (2005) (reporting that approximately 3.6 million Americans do not obtain medical care in a given year because of lack of transportation).

46. See KEVIN MILLER, CLAUDIA WILLIAMS & YOUNGMIN YI, INST. WOMEN’S POLICY RESEARCH, PAID SICK DAYS AND HEALTH: COST SAVINGS FROM REDUCED EMERGENCY DEPARTMENT VISITS 3 (2011), <http://www.iwpr.org/publications/pubs/paid-sick-days-and-health-cost-savings-from-reduced-emergency-department-visits> (finding that “workers with paid sick days are less likely to delay seeking care for themselves and their famil[ies]”). For example:

The percentage of workers who underwent mammography, Pap tests, [and] endoscopies at recommended intervals, who had seen a doctor during the previous twelve months, or who had at least one visit to a health care provider during the previous twelve months was significantly higher among those with paid sick leave as compared to those without sick leave [even] after controlling for sociodemographic and health-care-related factors.

See Lucy A. Pepins et al., *The Lack of Paid Sick Leave as a Barrier to Cancer Screening and Medical*

times⁴⁷ may also lead patients to delay or forego medical care. Families with a limited ability to speak English face the additional challenge of navigating a health care system in which many providers do not provide interpreter services.⁴⁸ Finally, cultural considerations, such as a stigma against mental illness and HIV, lead some individuals to forego needed care.⁴⁹

Physical environmental risks also directly affect individuals' physiology. Exposure to hazardous chemicals, lead paint, mold, dust, or pest infestation in the workplace or home can harm individuals' health.⁵⁰ For example, individuals exposed to microbial or toxic agents are at higher risk for infections, cancer, neurological problems, and cardiovascular, respiratory, liver, kidney, and bladder disease.⁵¹ Similarly, stress from coping with demanding jobs, job loss, economic hardship, unsafe neighborhoods, racism, or other challenges can lead to psychological conditions and damage immune defenses, vital organs, and physiological systems.⁵²

Care-Seeking: Results from the National Health Interview Survey, 12 BMC PUB. HEALTH 520, 523–24 (2012), <http://bmcpubhealth.biomedcentral.com/articles/10.1186/1471-2458-12-520>.

47. See Jason R. Woloski et al., *Childcare Responsibilities and Women's Medical Care*, 3 J. WOMENS HEALTH, ISSUES & CARE 1, 4–5 (linking foregoing and delaying care to logistical challenges associated with childcare responsibilities).

48. See Yael Schenker et al., *Patterns of Interpreter Use for Hospitalized Patients with Limited English Proficiency*, 26 J. GEN. INTERNAL MED. 712, 712 (2011) (finding that although the use of professional interpreters improves the quality of care and patient outcomes for hospital patients with limited English proficiency, the use of professional interpreters was infrequent).

49. See Margaret A. Chesney & Ashley W. Smith, *Critical Delays in HIV Testing and Care: The Potential Role of Stigma*, 42 AM. BEHAV. SCIENTIST 1162, 1162 (1999) (discussing the impact that HIV-related stigma has on HIV testing and care); Laysha Ostrow, Ron Manderscheid & Ramin Mojtabai, *Stigma and Difficulty Accessing Medical Care in a Sample of Adults with Serious Mental Illness*, 25 J. HEALTH CARE POOR UNDERSERVED 1956, 1956, 1959 (2014) (reporting that in a survey of adults with mental illness, 13% attributed difficulties in accessing medical care to stigma).

50. See Braveman, Egerter & Williams, *supra* note 25, at 385–86 (discussing the impact of the physical aspects of neighborhoods, housing, and the workplace on health).

51. See Lawrence O. Gostin et al., *Restoring Health to Health Reform: Integrating Medicine and Public Health to Advance the Population's Well-Being*, 159 U. PA. L. REV. 1777, 1794 (2011) (discussing the conditions caused by exposure to microbial or toxic agents).

52. See Braveman, Egerter & Williams, *supra* note 25, at 385, 388 (noting the impact of stress generally and the association between poor health and workers in jobs characterized by high demands and low control); Patti Neighmond, *People with Low Incomes Say They Pay a Price in Poor Health*, NPR (Mar. 2, 2015, 4:05 AM), <http://www.npr.org/sections/health-shots/2015/03/02/389347123/people-with-low-incomes-say-they-pay-a-price-in-poor-health> (reporting that surveys and studies suggest that lower-paying jobs and unemployment harms health, increasing the risk for conditions such as stroke, heart disease, diabetes, and emotional or psychiatric conditions).

Living and working conditions also indirectly impact individuals' health by shaping their health-related behaviors. Economic and environmental circumstances can contribute to a poor diet and insufficient physical activity.⁵³ Many individuals consume less healthy foods because they either cannot afford or lack access to healthier options, increasing their risk for obesity or malnutrition.⁵⁴ Similarly, hospitals have observed a spike in admissions for hypoglycemia among low-income diabetics during the last week of the month, when SNAP allocations are exhausted.⁵⁵ Studies also show that advertising can affect children's eating habits, and that these habits often last a lifetime.⁵⁶ Finally, unsafe neighborhoods or lack of green space limit opportunities for exercise.⁵⁷ The resulting poor diets and lack of exercise increase individuals' risk for chronic diseases such as cancer and cardiovascular disease.⁵⁸

Living and working conditions influence other health-related behaviors as well.⁵⁹ For example, financial problems, unstable housing, and safety concerns cause stress, which in turn can lead individuals to engage in harmful behaviors such as smoking and

53. See generally Ross C. Brownson et al., *Environmental and Policy Determinants of Physical Activity in the United States*, 12 AM. J. PUB. HEALTH 1995 (2001).

54. See Michele Ver Ploeg, *Access to Affordable, Nutritious Food is Limited in "Food Deserts"*, U.S. DEP'T AGRIC. (Mar. 1, 2010), <http://www.ers.usda.gov/amber-waves/2010-march/access-to-affordable,-nutritious-food-is-limited-in-%E2%80%9Cfood-deserts%E2%80%9D.aspx#.VrZbCtIhJE> (explaining that "food deserts" are neighborhoods where residents do not live near supermarkets or other food retailers that carry affordable and nutritious food, and that they instead rely on smaller stores that often do not carry healthy foods and/or charge higher prices); see also Neighmond, *supra* note 52, at 2 (profiling the story of Anna Beer, who after losing her job could no longer afford fresh fruits, vegetables, and poultry and instead purchased less expensive canned and frozen foods with more salt and preservatives, which she believed had contributed to her deteriorating health).

55. See Hilary K. Seligman, *Exhaustion of Food Budgets at Month's End and Hospital Admissions for Hypoglycemia*, 33 HEALTH AFF. 116, 116 (2014), <http://content.healthaffairs.org/content/33/1/116>.

56. See FOR THE PUBLIC'S HEALTH, *supra* note 9, at 29 (discussing the impact of advertising on children's eating habits).

57. See Gary G. Bennett et al., *Safe to Walk? Neighborhood Safety and Physical Activity Among Public Housing Residents*, 4 PLOS MED. 1599, 1599 (2007) (discussing the connection between neighborhood safety and physical activity); Brownson et al., *supra* note 53, at 1994 (finding neighborhood characteristics such as sidewalks, enjoyable scenery, and heavy traffic were positively correlated with physical activity).

58. See James Corbett & Manel Kappagoda, *Doing Good and Doing Well: Corporate Social Responsibility in Post Obamacare America*, 41 J.L., MED. & ETHICS 17, 17 (2013) (stating that physical activity and poor diet, along with tobacco use, are leading causes of death and are linked to increased incidences of a wide range of chronic diseases).

59. See *id.*

substance abuse in an effort to self-medicate or self-soothe.⁶⁰ Studies also have found that higher levels of education are associated with healthier behaviors and earlier compliance with health-related recommendations.⁶¹ Experts believe this finding may reflect better-educated individuals having greater health knowledge and being more adept at managing medical care for themselves and their families.⁶²

As these examples illustrate, chronic health conditions are largely the downstream result of social, economic, and environmental circumstances. For many health conditions, “the latest and best medicine in the world” will do little to improve patients’ health if we “send them back to live in the same conditions that made them sick in the first place.”⁶³ A national strategy to improve health therefore must include investments in prevention and wellness initiatives that ameliorate the upstream causes of preventable diseases.⁶⁴ Spending more on public health⁶⁵ and social services⁶⁶ also makes economic

60. Fred C. Pampel et al., *Socioeconomic Disparities in Health Behaviors*, 36 ANN. REV. SOC. 349, 353 (2010) (explaining that “[t]hose deprived economically and living in disadvantaged neighborhoods face a variety of chronic stressors” that may lead to smoking and other unhealthy behaviors in an attempt to cope or self-medicate); see Sue A. Kaplan et al., *The Perception of Stress and its Impact on Health in Poor Communities*, 38 J. CMTY. HEALTH 142, 142 (2013) (reporting the results of focus groups examining how low income individuals perceive stress and how their perceptions relate to health).

61. See Braveman, Egerter & Williams, *supra* note 25, at 386 (discussing the association between education and health).

62. See *id.*

63. Steven Ross Johnson, *Getting to the Root of the Problem*, MOD. HEALTHCARE (Feb. 1, 2014), <http://www.modernhealthcare.com/article/20140201/MAGAZINE/302019986> (quoting David Williams, a professor of public health at Harvard University).

64. See LEVI ET AL., *supra* note 7, at 1, 3 (“Investing in disease prevention is the most effective, common-sense way to improve health—helping to spare millions of Americans from developing preventable illnesses”); Jeffrey Levi et al., *The Need to Increase Funding for Public Health, in SHORTCHANGING AMERICA’S HEALTH: A STATE-BY-STATE LOOK AT HOW FEDERAL PUBLIC HEALTH DOLLARS ARE SPENT AND KEY STATE HEALTH FACTS 3, 3* (Trust for America’s Health, 2009) [hereinafter Levi, *Increase Funding*] (“Funding public health programs is essential to improving the health and the productivity of the nation’s workforce”).

65. The term “public health” refers to activities that protect and improve the health of populations, as opposed to individuals, through the promotion of healthy lifestyles, research for disease and injury prevention, and the detection and control of infectious diseases. *What is Public Health?*, CDC FOUND., <http://www.cdcfoundation.org/content/what-public-health> (last visited Feb. 1, 2017).

66. For purposes of this article, “social services” include education, support services for older adults, survivor benefits, disability and sickness benefits, family supports, housing programs, employment programs, unemployment benefits, and similar programs other than those that pay for medical care. Cf. MCGOVERN, MILLER & HUGHES-CROMWICK, *supra* note 41, at 1 (defining social services).

sense because society can “reduce the need for advanced, costly medical care” by “addressing the root causes of disease and injuries.”⁶⁷

Despite the importance of investing in the upstream causes of poor health, the United States has primarily directed its resources downstream on treatment of illness.⁶⁸ For 2013, per capita spending on health care in the United States exceeded the average among OECD nations by two-and-a-half times and was more than one-third higher than the next largest spending country.⁶⁹ But a comparison of countries’ combined investment in health care and social services reveals that the United States ranks only tenth among developed countries.⁷⁰ This result stems largely from the fact that, while other

67. FOR THE PUBLIC’S HEALTH, *supra* note 9, at 21; *see also* Gostin et al., *supra* note 51, at 1785 (“[E]ffective public health ‘reduces the need for medical services to treat conditions that can be prevented, thereby helping to control costs and make personal health care affordable.’” (quoting Thomas G. Rundall, *The Integration of Public Health and Medicine*, 10 FRONTIERS HEALTH SERVICES MGMT. 3, 9 (1994))); MCGOVERN, MILLER & HUGHES-CROMWICK, *supra* note 41, at 6 (“[A]s the literature suggests, . . . the multilevel promotion and adoption of health behaviors stands to reap the most ‘bang’ for our health care ‘buck.’”). For example, a recent evaluation of the Tips from Former Smokers Campaign found that the campaign helped 100,000 people to successfully quit smoking immediately, preventing more than 17,000 premature deaths. Evaluators estimated a cost of \$480 per quitter with a \$2,800 return in premature death averted. *See* LEVI ET AL., *supra* note 7, at 12 (discussing key programs funded under the Prevention Health and Health Services Block Grants). *But see* Preda & Voigt, *supra* note 40, at 32-33 (questioning whether the existence of a link between a social, economic, or environmental conditions and health means interventions targeting such conditions will improve health and lower health care costs).

While a comprehensive description of public health and social interventions addressing the social determinants of health is beyond the scope of this article, some illustrative examples include the following:

- Keeping schools open after hours so children can play with adult supervision;
- Making nutritious foods more affordable and accessible to low-income areas;
- Providing young parents with information about how to make good choices about nutrition;
- Creating more safe spaces for physical activity;
- Offering counseling and proven pharmacological treatments for people trying to quit smoking and other tobacco use;
- Raising taxes on cigarettes and other tobacco products;
- Providing transportation services to and from health care providers;
- Providing financial help in paying any cost-sharing for medical care; and
- Improving the quality of housing stock and enforcing housing standards.

See generally Levi, *Increase Funding*, *supra* note 64, at 4.

68. *See* Kelly M. Doran, Elizabeth J. Misa & Nirav R. Shah, *Housing as Health Care – New York’s Boundary-Crossing Experiment*, 369 NEW ENG. J. MED. 2374, 2374 (2013).

69. *See* OECD FREQUENTLY REQUESTED DATA 2015, *supra* note 6.

70. *See id.*; Kenneth Davis, *To Lower the Cost of Health Care, Invest in Social Services*, HEALTH AFF. BLOG (July 14, 2015), <http://healthaffairs.org/blog/2015/07/14/to-lower-the-cost-of-health-care-invest-in-social-services/> (arguing that the U.S. health care system delivers disappointing results because

developed countries generally spend two dollars on social services for each dollar spent on medical care, the United States spends only fifty cents on social services for every dollar spent on medical care.⁷¹ According to the Institute of Medicine, the “shortfalls in educational achievement[] and lack of investment in and policy attention to other social factors known to have favorable effects on health” explain, in part, the United States’s poor performance among OECD nations on most health outcome measures.⁷²

The growing recognition that the United States spends too much on medical care and too little on SDHs has led to calls for government to correct this imbalance.⁷³ Unfortunately, for the reasons discussed in Part II, government investment in public health and social services likely will remain insufficient for the foreseeable future.

other developed nations invest substantially more in social services that impact health, which leads them to do a “far better job than the United States in preventing their vulnerable populations from suffering serious illness”); Jennifer DeCubellis & Leon Evans, *Investing in the Social Safety Net: Health Care’s Next Frontier*, HEALTH AFF. BLOG (July 7, 2014), <http://healthaffairs.org/blog/2014/07/07/investing-in-the-social-safety-net-health-cares-next-frontier/>.

71. See DeCubellis & Evans, *supra* note 70.

72. See FOR THE PUBLIC’S HEALTH, *supra* note 9, at 13, 33 (noting that the United States has fallen behind its global counterparts on health outcomes, and that a “fundamental but often overlooked driver of the imbalance between spending and outcomes is the nation’s inadequate investment in nonclinical strategies that promote health and prevent disease and injury population-wide”); see also JOE ALPER & ALINA BACIU, INST. OF MED., FINANCING POPULATION HEALTH IMPROVEMENT: WORKSHOP SUMMARY 1 (2015).

The Institute of Medicine’s assertion that the United States’s low rankings on health outcomes is due in part to its failure to devote sufficient resources to the broader determinants of health finds support in studies comparing spending across European nations and across states. See FOR THE PUBLIC’S HEALTH, *supra* note 9, at 26. The European studies found a relationship between a nation’s population health status and its national investment in social programs related to employment and income protection. See *id.* Specifically, European countries with the lowest levels of social spending had the poorest outcomes, while the Scandinavian countries, with their larger social safety nets, topped the rankings. See *id.* Similarly, within the United States, states with a higher ratio social to health spending had better health outcomes on a range of population health measures, including lower adult obesity, fewer mentally unhealthy days and days with activity limitations, and lower mortality rates for lung cancer, acute myocardial infarctions, and type 2 diabetes. See Elizabeth Bradley et al., *Variation in Health Outcomes: The Role of Spending on Social Services, Public Health, and Health Care, 2000-09*, 34 HEALTH AFFAIRS 760, 764 (2016).

73. See, e.g., FOR THE PUBLIC’S HEALTH, *supra* note 9 (arguing for greater investment in public health); Gostin et al., *supra* note 51, at 1814–15, 1820 (stating that the United States overinvests in treating disease and underinvests in public health).

II. AMERICA'S NEGLECT OF THE SOCIAL DETERMINANTS OF HEALTH

Advocates have long bemoaned what they perceive as chronic underfunding of public health and social services programs that address the upstream causes of poor health.⁷⁴ Weak support for such programs stems from a range of political and social factors: a fragmented budgeting process for government spending; a media that focuses on immediate threats to health; health benefits that lack visibility and accrue in a distant future; an American culture that highly values autonomy and self-responsibility; and interest group politics.⁷⁵ Unfortunately, these factors will continue to create a political climate hostile to increased funding for public health and social services programs that promote prevention and healthy living.

Public health advocates justify calls for greater investment in public health and social services on cost-benefit grounds, arguing that reducing the social impediments to good health will “reap the most ‘bang’ for our health care ‘buck.’”⁷⁶ Unfortunately, the public budgeting process does not prioritize government programs based on cross-sector cost-benefit calculations. First, as explained by Nicole Lurie, “calculating the savings that might accrue from spending in one program (such as education) to another (such as health) is at best an imperfect science, . . . and making budgeting decisions based on such calculations is extremely difficult.”⁷⁷ Consequently, such

74. See, e.g., GENE FALK, CONG. RESEARCH SERV., R41823, LOW-INCOME ASSISTANCE PROGRAMS: TRENDS IN FEDERAL SPENDING (2014) (summarizing Congressional Budget Office estimates and finding that while federal spending on low-income programs other than health increased between 2010 and 2011 due to the recession, such spending has decreased in recent years and will decline through 2024 under current law); FOR THE PUBLIC'S HEALTH, *supra* note 9 (bemoaning the chronic underfunding of public health); Ife Floyd & Liz Schott, *TANF Cash Benefits Have Fallen by More Than 20 Percent in Most States and Continue to Erode*, CTR. ON BUDGET & POLICY PRIORITIES (Oct. 30, 2014), <http://www.cbpp.org/research/family-income-support/tanf-cash-benefits-have-fallen-by-more-than-20-percent-in-most-states> (stating that inflation-adjusted cash assistance to poor families with children has fallen in purchasing power at least 20% since their 1996 levels in 38 states, after having declined by 40% between 1970 and 1996 in two-thirds of states).

75. See FOR THE PUBLIC'S HEALTH, *supra* note 9, at 27–28.

76. MCGOVERN, MILLER & HUGHES-CROMWICK, *supra* note 41, at 6.

77. *Id.* at 102–03.

calculations can be easily challenged by those benefitting from the status quo.⁷⁸

Second, even if cross-sector savings calculations could be done with reasonable precision, governments' siloed approach to appropriations does not promote policymakers taking such savings into account. Congress and state legislatures typically adopt budgets for different sectors in separate bills drafted by separate legislative committees.⁷⁹ For example, the bill establishing the federal or state health budget may be considered by a different committee than the one considering the education, housing, and agricultural budgets.⁸⁰ With each committee focused on the policy issues affecting the sectors under its jurisdiction, non-health related committees generally lack an awareness of or interest in how their decisions impact health care spending.⁸¹ Similarly, local jurisdictions generally do not consider the impact of their public health and social services policies on state and federal health care spending, nor do states account for the impact of their decisions on the federal budget.⁸² Consequently, cost-benefit considerations are unlikely to convince government officials to devote more resources to addressing the social impediments to good health.⁸³

78. *See id.* (stating that the difficulty in calculating cross-sector savings leaves such calculations "open to both error and political challenge").

79. *See id.* at 102 (discussing how the federal budget process does not facilitate cross-sector budget considerations).

80. *See id.*

81. *See id.*

82. Nicole Lurie, *What the Federal Gov't Can Do About the Nonmedical Determinates of Health*, 21 HEALTH AFF. 94, 103 (2002). For example, as explained by Nicole Lurie:

[F]ederal housing, transportation, and environmental standards may promote environments that are more conducive to physical activity, but ultimate decisions about land use, such as whether housing developments are built with safe places to walk, are left to local zoning boards. Such local bodies often lack an awareness that their decisions could have health consequences. Similarly, . . . [i]f increased investment in Medicaid did succeed in reducing the burden of chronic disease, failure of states to make sufficient investment would be borne disproportionately by the federal government, through Medicare, rather than by states themselves. Similarly, educational attainment is a major factor in the ultimate health status of the Medicare population, yet the federal government, not state and local government, is the ultimate payer for health consequences of a failed educational system.

Id.

83. *See* Samuel Y. Sessions, *Financing State and Local Public Health Departments: A Problem of*

Political factors also lead federal and state governments to prioritize funding for other government programs—particularly direct medical care—over public health.⁸⁴ Health improvements from public health initiatives targeting social determinants of health are less visible than the benefits generated by spending on medical care or other government programs, such as scientific research and social security.⁸⁵ Relatedly, unlike government programs that benefit identifiable individuals, the benefits of public health are diffuse and “save[] ‘statistical lives.’”⁸⁶ In addition, the benefits from reduced rates of chronic disease accrue in the future, well beyond the next election cycle.⁸⁷ Politicians concerned with re-election thus have little incentive to shift tax dollars to public health initiatives at the expense of government programs addressing current, more visible needs.⁸⁸

An American ethos that highly values individualism also impedes support for public programs addressing SDHs. As previously noted, chronic disease often is the product of individual behaviors such as smoking, poor diet, and insufficient physical activity.⁸⁹ Although social conditions significantly shape these behaviors,⁹⁰ in a culture such as ours that stresses autonomy and self-responsibility, poor

Chronic Illness, in FOR THE PUBLIC’S HEALTH, *supra* note 9, at 226.

84. *See id.*

85. *See id.* (explaining that weak political support for public health in part stems from the fact that “the benefits of public health services may be less visible than schools, roads, water systems, and police and fire department protection (police cars and fire trucks are visible enough)”); Gostin et al., *supra* note 51, at 1797 (“[I]ndividuals are not often aware when they benefit from public health interventions such as clean water or reduced air pollution or food safety.”).

86. Gostin et al., *supra* note 51, at 1797.

87. *See id.* (stating that one reason for low public and political support for public health is that, “unlike medical interventions, which generally provide a recognizable and immediate benefit, the benefits of public health vest in the future, long after tax dollars are spent”).

88. *See id.* (explaining that low support for public health reflects the fact that elected officials are reluctant to incur the costs for public health when it will be future administrations who reap the benefits); Lurie, *supra* note 82, at 103 (“[B]ecause most expected savings [from public health] occur at a future point (often well beyond the life of a budget, an election cycle, or public expectations), it is difficult to invest in anticipation of improving the health of our children without shortchanging a generation of people with current needs.”).

89. *See sources cited supra* note 24.

90. *See supra* notes 39–49 and accompanying text (discussing how the conditions in which we live and work shape individual behavior).

lifestyle “choices” typically are attributed to the individual.⁹¹ Similarly, our cultural emphasis on autonomy and personal responsibility lead many to ascribe personal failings to those facing social disadvantage.⁹² It therefore is easy to blame individuals for their poor health and argue against taxpayer funded programs that target unhealthy behaviors.⁹³ Relatedly, public health initiatives that require behavioral changes are vulnerable to criticism that they smack of paternalism or interfere with individual liberty.⁹⁴

Interest group politics also hinder adoption of public health and social services programs. Politicians have little incentive to champion causes that largely benefit disadvantaged individuals who make few campaign contributions and vote in far smaller numbers than other voters.⁹⁵ In contrast, well-organized and well-financed special

91. See Martha Albertson Fineman, *The Vulnerable Subject and the Responsive State*, 60 EMORY L.J. 251, 254 (2010).

92. See *id.* at 257 (“Increasingly, government is unresponsive to those who are disadvantaged, blaming individuals for their situation and ignoring the inequities woven into the systems in which we all are mired.”).

93. See *id.* at 251–52. As Martha Fineman explains:

Profound inequalities are tolerated—even justified—by reference to individual responsibility and the workings of an asserted meritocracy within a free market. The state is not mandated to respond to those inequalities, nor does it have to establish mechanisms to ensure more equitable distributions of either social goods or responsibilities among individuals, groups, and institutions. Quite the opposite: in the United States, the state is restrained from interference in the name of individual liberty, autonomy, and paramount principles such as freedom of contract.

Id.; see also FOR THE PUBLIC’S HEALTH, *supra* note 9, at 226 (“[T]o the extent that chronic disease is seen as . . . the product of individual behavior, public health can be viewed as . . . not a suitable use of public revenues.”).

94. See Gostin et al., *supra* note 51, at 1798 (“Public health often requires societal or behavior changes that are difficult to achieve, particularly when they . . . interfere with the strong cultural sense of individual liberties.”); cf. Lindsay F. Wiley, Wendy E. Parmet & Peter D. Jacobson, *Adventures in Nannydom: Reclaiming Collective Action for the Public’s Health*, 43 J. L., MED. & ETHICS 73, 73 (2015) (discussing opposition to public health initiatives and urging public health advocates to recognize that “the anti-paternalistic rhetoric resonates with deeply held beliefs about the relationship between the government and its citizens in a pluralistic society”).

95. Patrick Flavin, *Income Inequality and Policy Representation in the American States*, 40 AM. POL. RES. 29, 30 (2012) (noting that wealthier citizens have more influence over government policy than poorer citizens, and that “[t]he most common theoretical explanation for unequal political representation is the fact that the more affluent tend to participate more in politics—whether it be voting, contributing to or volunteering for a campaign . . . —compared with disadvantaged citizens”); TASK FORCE ON INEQUALITY & AM. DEMOCRACY, AM. POLITICAL SCI. ASS’N, AMERICAN DEMOCRACY IN AN AGE OF RISING INEQUALITY 14 (2004), <http://www.apsanet.org/portals/54/Files/Task%20Force%20Reports/taskforcereport.pdf> (finding that lower income individuals vote less

interest groups exert tremendous influence on policy agendas and frequently block public health proposals adverse to their interests.⁹⁶ For example, the sugar and food industries have repeatedly blocked regulatory efforts to reduce sugar consumption.⁹⁷

Finally, political considerations not only cause underfunding of public health generally, but also skew existing public health funding toward “short-term, dramatic priorities” over the prevention of chronic disease. Despite the fact that chronic disease linked to SDHs is a major cause of preventable morbidity and mortality, immediate threats to public health such as Ebola and other pandemics garner far greater public attention.⁹⁸ This in turn motivates government officials to mobilize public health resources for the latter over the former. As explained by Karen Siegel and her co-authors:

So that they will be seen as addressing the immediate concerns of their constituents, policymakers tend to focus on what is most prominently featured in media coverage. The media, on the other hand, exploit the “scare factor,”

frequently and make fewer financial contributions to politicians, and that this leads government officials to disproportionately respond to the interests of wealthier constituents over the least affluent); see Emily Badger, *One Reason the Poor Have So Little Political Clout*, CITYLAB (Jan. 10, 2014), <http://www.citylab.com/work/2014/01/one-reason-poor-have-so-little-political-clout/8068/> (discussing low voter turnout among disadvantaged groups as one reason for why these groups have little political clout).

96. See Gostin et al., *supra* note 51, at 1798 (stating that public health initiatives that mandate changes in behavior are difficult to enact “when they impede the efforts of powerful industry groups”).

97. See, e.g., Roberto Ferdman, *How the Sugar Lobby Helps Perpetuate that Sweet Tooth of Yours*, WASH. POST (June 25, 2014), <http://www.washingtonpost.com/news/wonkblog/wp/2014/06/25/how-the-sugar-lobby-helps-perpetuate-that-sweet-tooth-of-yours/> (discussing the political influence of the sugar lobby). See generally GRETCHEN GOLDMAN ET AL., CTR. FOR SCI. & DEMOCRACY, ADDED SUGAR, SUBTRACTED SCIENCE: HOW INDUSTRY OBSCURES SCIENCE AND UNDERMINES PUBLIC HEALTH POLICY ON SUGAR (2014), <http://www.ucsus.org/sites/default/files/legacy/assets/documents/center-for-science-and-democracy/added-sugar-subtracted-science.pdf> (discussing how the successful tactics of the food and beverage industry have blocked public policies seeking to address Americans’ high sugar consumption).

98. See, e.g., Karen R. Siegel, K.M. Venkat Narayan & Christine Hancock, *Silent Killers Amidst the Fast and the Furious*, HEALTH AFF. BLOG (May 7, 2015), <http://healthaffairs.org/blog/2015/05/07/silent-killers-amidst-the-fast-and-the-furious/>. A study of global public health funding found that during the H1N1 pandemic, public attention to the disease was twenty-five times greater than that given to diabetes, despite the latter causing far more deaths over the measured time period. See *id.* Governments responded to the H1N1 threat quickly, allocating significantly more funding for H1N1 than for diabetes. See *id.*

focusing on dramatic issues such as natural disasters, bio-terrorism threats, emerging virulent pandemics, and other shock-inducing crises to increase their market share.⁹⁹

Accordingly, only a small portion of public health funding targets the social determinants of chronic disease.¹⁰⁰

These social and political forces have not only led to chronic underfunding for public health and social services programs, but also make existing public and social services programs prime targets for budget cuts. For example, although Congress established the Prevention and Public Health Fund for prevention, wellness, and other public health programs with passage of the ACA, Congress subsequently diverted approximately half of this funding to other uses.¹⁰¹ More generally, combined federal, state, and local public health spending has declined from \$241 per person in 2009 to \$239 per person in 2013, a 10% decline after adjusting for inflation.¹⁰² Spending on social services programs has also decreased. For example, in 2014 Congress cut funding for the Supplemental Nutrition Assistance Program (SNAP)—formerly known as food stamps—by \$8.6 billion, resulting in 850,000 households losing an average of \$90 per month in benefits.¹⁰³

99. *Id.* For example, in response to the heightened public attention given the H1N1 pandemic, discussed *supra* note 98, Congress allocated significant funding—\$7.45 billion—to fighting the disease, as compared to only \$61–66 million for diabetes surveillance, education, and control over the same time period. *See id.*

100. *See* FOR THE PUBLIC'S HEALTH, *supra* note 9, at 46.

101. *See* TR. FOR AM.'S HEALTH, PREVENTION AND PUBLIC HEALTH FUND ALLOCATIONS (FY 2010 TO 2022) (2014), <http://healthyamericans.org/health-issues/wp-content/uploads/2014/12/Prevention-Fund-Over-Time.pdf> (last visited Jan. 14, 2016) (showing the differences between the funding levels established under the ACA and current funding levels, including a difference of over \$1 billion for fiscal year 2015—\$2 billion vs. \$0.927 billion—and \$1 billion for fiscal year 2016—\$2 billion vs. \$1 billion).

102. *See Public Health Scan for Apr 16, 2015*, CTR. FOR INFECTIOUS DISEASE RESEARCH AND POLICY, <http://www.cidrap.umn.edu/news-perspective/2015/04/public-health-scan-apr-16-2015>.

103. *See* RANDY ALISON AUSSENBERG, CONG. RESEARCH SERV., R43332, SNAP AND RELATED NUTRITION PROVISIONS OF THE 2014 FARM BILL (P.L. 113-70), at 2 (2014) (reporting that the Agricultural Act of 2014 cut funding in SNAP by \$8.6 billion); ED BOLEN, DOROTHY ROSENBAUM & STACY DEAN, CTR. ON BUDGET & POLICY PRIORITIES, SUMMARY OF THE 2014 FARM BILL NUTRITION TITLE: INCLUDES BIPARTISAN IMPROVEMENTS TO SNAP WHILE EXCLUDING HARSH HOUSE PROVISIONS (Feb. 3, 2014) (reporting that CBO reported that the \$8.6 billion reduction in SNAP funding would shrink benefits for 850,000 households by an average of \$90 a month).

In sum, there is little hope that government officials will correct the imbalance in spending between medical care and public health or otherwise increase funding for public health and social services. Therefore, those who believe the United States should do more to ameliorate SDHs must look elsewhere for financing of such efforts. Part III identifies one source for doing so: health care providers.

III. MOVING TOWARD GREATER INTEGRATION OF MEDICINE, PUBLIC HEALTH, AND SOCIAL SERVICES

Prior to the 20th century, medicine and public health were largely intertwined.¹⁰⁴ The 20th century, however, brought various developments that led to a separation of medicine and public health, most importantly health providers' embrace of the biomedical paradigm, and the creation of separate schools for public health and medicine.¹⁰⁵ Medical practice thus came to focus on the downstream treatment and curing of disease, while public health emphasized upstream prevention through the mitigation of the social, environmental, and behavioral causes of disease.¹⁰⁶ A fee-for-service

104. See Gostin et al., *supra* note 51, at 1784 (stating that sharp boundaries between medicine and public health did not emerge until the early to mid-20th century); Russell L. Gruen, Steven D. Pearson & Troyen A. Brennan, *Physician-Citizens—Public Roles and Professional Obligations*, 291 J. AM. MED. ASS'N 94, 94 (2004) (noting that “for centuries” physicians were involved in solving health problems in the community, but that “public roles” became “less familiar to physicians” as the community gravitated toward the biomedical model).

105. The separation of public health and medical education led medical professionals to view public health as an economic competitor that often infringed on the physician-patient relationship. See INST. OF MED., *PRIMARY CARE AND PUBLIC HEALTH: EXPLORING INTEGRATION TO IMPROVE POPULATION HEALTH* 33 (2012) [hereinafter *PRIMARY CARE AND PUBLIC HEALTH*]; Allan M. Brandt & Martha Gardner, *Antagonism and Accommodation: Interpreting the Relationship Between Public Health and Medicine in the United States During the 20th Century*, 90 AM. J. PUB. HEALTH 707, 709 (2010). In addition, the separation also “isolated [medical education] from fundamental issues in prevention and social epidemiology.” Brandt & Gardner, *supra*, at 710. The emergence of the biomedical model of disease led physicians to focus on the cellular level of disease, rather than social, environmental, and behavioral causes. Brandt & Gardner, *supra*, at 710. As a result, “[t]he timely and effective delivery of new and effective treatments for specific disease became the new paradigm of clinical medicine,” with little attention given to the social, environmental, and behavioral causes of disease. Brandt & Gardner, *supra*, at 711.

106. See Brandt & Gardner, *supra* note 105, at 707–08 (“Although public health has come to be identified with prevention, medicine has historically been committed to cure. Medicine is commonly associated with the care and treatment of the individual, . . . [w]hile public health claims to ‘focus upstream’—on ameliorating the social and environmental conditions producing disease”); Arvin

payment methodology that rewarded providers for the quantity of care provided, and not for keeping patients healthy, further reinforced medicine's neglect of SDHs.¹⁰⁷ Thus, despite health care providers and the public health community sharing a common goal—improving health—they have, for the most part, operated on separate tracks.¹⁰⁸

Fortunately, as described below, the divide between public health and medicine is beginning to dissipate. In response to various policies adopted under the ACA, providers are increasingly allocating their time and resources to the social factors adversely impacting their patients' health. Importantly, this shift begins to redress the imbalance between spending on traditional medicine and spending on public health and social services.

A. Incentivizing Providers to Address the Social Determinants of Health

The ACA set into motion various changes that encourage providers to broaden their focus to include both the clinical and *nonclinical* factors impacting health. As described below, new payment models under Medicare and Medicaid reward providers for improving health outcomes and lowering costs. Indeed, the U.S. Department of Health and Human Services (HHS) has set a goal of

Garg, Brian Jack & Barry Zuckerman, *Addressing the Social Determinants of Health Within the Patient-Centered Medical Home*, 309 J. AM. MED. ASS'N 2001, at 2001 (2013) (“Mitigating the harmful consequences of social factors that contribute to health disparities has largely been left to the public health and policy communities, whereas clinical medicine has traditionally focused on identifying and reducing biological risk factors for an individual patient.”).

107. Under fee-for-service, providers receive a separate payment for each unit of service they provide. See Harold D. Miller, *From Volume to Value: Better Ways to Pay for Health Care*, 28 HEALTH AFF. 1418, 1419 (2009). Fee-for-service not only fails to reward providers for improving their patients' health, but actually penalizes those who do so, as healthier patients consume fewer medical services. See Johnson, *supra* note 63 (“[Under] a fee-for-service payment model that rewards the quality of services and not results, programs that address the social determinants of health come right out of a provider's bottom line.”); Mary Crossley, *Health and Taxes: Hospitals, Community Health and the IRS*, 16 YALE J. HEALTH POL'Y L. & ETHICS 51, 80 (stating that because hospitals receive no compensation for keeping their communities healthy, “[o]ne need not be a cynic to question how vigorously hospitals will pursue efforts that—if successful—will diminish their revenue streams”). Moreover, fee-for-service only pays for medical care, leaving providers “to use their own dollars to help patients address the social conditions” that impact health. Johnson, *supra* note 63.

108. See generally Brandt & Gardner, *supra* note 105 (presenting a historical overview of the division between health care and public health).

shifting 85% of traditional Medicare payments to these new payment models by 2016 and 90% by 2018, with HHS encouraging state Medicaid programs and private payors to adopt similar payment models.¹⁰⁹ Providers increasingly are realizing that success under these new payment models requires them to address both upstream and downstream causes of poor health.¹¹⁰ In addition, the ACA gives tax-exempt hospitals—comprising approximately 58% of all hospitals¹¹¹—greater incentives to dedicate resources to programs aimed at social impediments to good health.

1. Payment Reforms

The ACA ushered in important changes to how Medicare and Medicaid pay providers for patient care. One of the more promising payment reforms is the accountable care organization (ACO) model. ACOs are local organizations comprised of primary care physicians and other providers that agree to be jointly accountable for the cost and quality of care delivered to a patient population.¹¹² Under the voluntary Medicare Shared Savings Program, providers participating in ACOs that successfully lower the aggregate annual cost of caring for their Medicare patients receive a percentage of the savings, provided the ACO also satisfies certain quality metrics.¹¹³ CMS has

109. See Press Release, U.S. Dep't of Health & Human Servs., Better, Smarter, Healthier: In Historic Announcement, HHS Sets Clear Goals and Timeline for Shifting Medicare Reimbursements from Volume to Value (Jan. 26, 2015), <http://www.hhs.gov/news/press/2015pres/01/20150126a.html>.

110. See generally ASS'N FOR CMTY. HEALTH IMPROVEMENT, TRENDS IN HOSPITAL-BASED POPULATION HEALTH INFRASTRUCTURE: RESULTS FROM AN ASSOCIATION FOR COMMUNITY HEALTH IMPROVEMENT AND AMERICAN HOSPITAL ASSOCIATION SURVEY 4 (2013) [hereinafter TRENDS IN HOSPITAL-BASED POPULATION HEALTH INFRASTRUCTURE] (“Adopting a population-based approach to care that encompasses the spectrum of determinants of health is essential for care systems to thrive in the ACA era.”).

111. See *Hospitals by Ownership Type*, HENRY J. KAISER FAMILY FOUND., <http://kff.org/other/state-indicator/hospitals-by-ownership>. Just over 20 percent of hospitals are owned by state and local governments, with the remaining operating as for-profit hospitals. See *id.*

112. See Patient Protection and Affordable Care Act, Pub. L. No. 111-148, § 3022, 124 Stat. 119, 395–99 (2010) (codified at 42 U.S.C. § 1395jjj (2012)).

113. See Medicare Program; Medicare Shared Savings Program: Accountable Care Organizations, 76 Fed. Reg. 67,802, 67,927 (Nov. 2, 2011) (to be codified at 42 C.F.R. pt. 425). Under the shared savings payment model, the ACO continues to receive fee-for-service based payments, but Medicare also rewards an ACO that meets or exceeds its targeted cost savings with a bonus equal to a percentage of the savings. See *id.* The Medicare Shared Savings Program also includes economic incentives for ACOs to improve quality by tying a portion of an ACO's reimbursement to its performance on quality

stated that in the future it may pay ACOs on a capitated basis, with participating organizations receiving a single payment for each Medicare patient under their care.¹¹⁴ A number of state Medicaid programs, as well as private payors, similarly are adopting the ACO model.¹¹⁵ Collectively these payment reforms have encouraged the formation of over 600 ACOs, with more than half of Americans living in an area served by an ACO.¹¹⁶

ACOs have responded to these financial incentives by restructuring their practices so as to advance their patients' health at lower costs. To date, these efforts largely have focused on improving the medical treatment of patients within the walls of the clinical setting, primarily improving coordination of patient care across

benchmarks. *See id.* For example, an ACO that performs poorly on the relevant quality measures may be ineligible for any bonus payment under the shared savings or shared savings and risk payment models, even if the ACO lowers the cost of care. *See* 42 C.F.R. § 425.100(b) (2012) (stating that ACOs participating in the Medicare Shared Savings Program are eligible for shared savings only if they meet the minimum quality performance standards, among other requirements).

After completing their initial term in the program, providers participating in an ACO will continue to receive a percentage of any Medicare savings, but also will be penalized with a downward adjustment in their Medicare reimbursement rates if the ACO does not meet targeted cost savings. *See* 42 C.F.R. § 425.600(b) (2012) (providing that for subsequent agreement periods, an ACO may not operate under the one-sided model described at 42 C.F.R. § 425.604, leaving available only the two-sided model described at 42 C.F.R. § 425.606). ACOs also may elect to enroll in the shared savings and risk model during their initial term. *See* 42 C.F.R. § 425.600(a) (providing that during its initial agreement period, an ACO may elect to operate under either the one-sided model or two-sided model).

114. *See* Medicare Program; Medicare Shared Savings Program: Accountable Care Organizations, 76 Fed. Reg. at 67,805 (discussing the possibility of CMS in the future paying ACOs based on a capitation payment model). In addition to the Medicare Shared Savings Program, CMS has established the Pioneer ACO Model (Pioneer Program) for organizations with experience operating as ACOs. *See Pioneer ACO Model Fact Sheet*, CENTERS FOR MEDICARE & MEDICAID SERVICES, <https://innovation.cms.gov/initiatives/Pioneer-ACO-Model/PioneerACO-FactSheet.html> (last visited Jan. 14, 2016). Under this program, participating ACOs will receive higher levels of reward and assume greater financial risk than ACOs participating in the Medicare Shared Savings Program. *See id.* In addition, in year three of the Pioneer Program, CMS will begin testing a capitated payment model, with eligible ACOs receiving a monthly per-beneficiary amount in lieu of part or all of the ACO's fee-for-service payments. *See id.*

115. *See* David Muhlestein, *Growth and Dispersion of Accountable Care Organizations in 2015*, HEALTH AFFAIRS BLOG (March 31, 2015), <http://healthaffairs.org/blog/2015/03/31/growth-and-dispersion-of-accountable-care-organizations-in-2015-2/> (reporting that Medicaid ACOs have grown significantly since 2014, and that the growth in people included in accountable care arrangements since 2014 is primarily from the commercial and Medicaid sectors); CTR. FOR HEALTH CARE STRATEGIES, INC., MEDICAID ACCOUNTABLE CARE ORGANIZATIONS: STATE UPDATE 1 (2015), <http://www.chcs.org/media/ACO-Fact-Sheet-32515-ak.pdf> ("Many states have begun to implement Medicaid accountable care organizations (ACOs) . . .").

116. *See* Richard Ingram, F. Douglas Scutchfield & Julia F. Costich, *Public Health Departments and Accountable Care Organizations: Finding Common Ground in Population Health*, 105 AM. J. PUB. HEALTH 840, 840 (2015).

providers, ensuring that patients receive clinically-based preventive care, and avoiding medical care of limited value.¹¹⁷ But, linking ACOs' payments to the overall health of their patient populations also encourages ACOs to address SDHs.¹¹⁸ Under the ACO model, ACOs that improve patient health by investing in social services and other nonclinical interventions can accrue greater financial rewards.¹¹⁹ For example, a Medicaid ACO can improve health outcomes and lower the medical costs of treating its homeless patients by helping them obtain stable housing.¹²⁰

Other payment reforms incentivizing providers to address SDHs include value-based purchasing, bundled payments, and hospital readmissions penalties. The Medicare Hospital Value-Based Purchasing Program and Physician Value-Based Payment (VBP) Modifier link hospitals' and physicians' Medicare reimbursement rates to their performance on various cost and quality measures.¹²¹

117. See CRAWFORD ET AL., *supra* note 29, at 3–4 (discussing the types of health services that improve population health, such as immunizations, screening for disease, and counseling for tobacco use, obesity, and other risky behaviors); Jacobi, *supra* note 36, at 97 (explaining how ACOs reduce fragmentation among providers); Lauris Christopher Kaldjian, *Patient Care and Population Health: Goals, Roles and Costs*, 3 J. PUB. HEALTH RES. 81, 81 (2014) (“Much of the current emphasis on cost control is appropriately directed at avoiding tests and treatments that do not improve health.”).

118. See Corbett & Kappagoda, *supra* note 58, at 18 (“Because [the ACO] model incentivizes health systems to maintain the health of large patient populations rather than provide expensive treatments to individuals, institutions have a reason to look at all the factors that might negatively affect patients' health status, including the social determinants of health.”); Jacobi, *supra* note 36, at 90 (“This population orientation incents the organizations creating Medicaid ACOs to adopt a broader perspective toward health care, directly addressing some of the social factors beyond medical treatment that directly affect population health status.”).

119. See Jacobi, *supra* note 36, at 108 (explaining that ACOs that reinvest their financial rewards in nonclinical measures that ameliorate the social impediments to health can create a “virtuous cycle”).

120. See *id.* at 107–08 (“[Medicaid] ACOs serving a sizeable homeless population may be able to use a portion of their shared savings to work with local housing agencies to help get patients into stable housing and thereby reduce related, unnecessary medical spending” (quoting DeCubellis & Evans, *supra* note 70)). For example, Hennepin Health, a Medicaid ACO in Hennepin, MN, leases public housing units for some of its homeless patients. See CRAWFORD ET AL., *supra* note 29, at 10.

121. See Patient Protection and Affordable Care Act, Pub. L. No. 111-148, § 3001(a), 124 Stat. 119, 363–64 (2010) (codified as amended at 42 U.S.C. §§ 1395ww(o), 1395w-4(p) (2012)). The Hospital Value-Based Purchasing Program began in October 2012. 42 U.S.C. § 1395ww(o)(1)(B). Hospitals performing poorly had their payment rates for inpatient acute care services reduced by up to 1.0%, with the percentage reduction gradually increasing to 2.0% for fiscal year 2017. 42 U.S.C. § 1395ww(o)(7)(C). The Physician Value-Based Payment Modifier (PVP) began in January 2015. 42 C.F.R. § 414.1210 (2017). Initially the program applies only to physicians in groups of 100 or more physicians and other “eligible professionals,” but will apply to all physicians in 2017. See Medicare Program: Revisions to Payment Policies Under the Physician Fee Schedule, 77 Fed. Reg. 68,892,

Similar to the ACO payment models, improving patients' health and lowering costs by addressing SDHs will translate into higher Medicare payment rates by raising a provider's performance scores.¹²² Under the Medicare Bundled Payments for Care Improvement Initiative, participating providers receive a single payment for an episode of care that is then allocated among all providers treating a patient.¹²³ For providers participating in the bundled payments program, ameliorating SDHs can lower costs and help providers avoid exhausting the fixed bundled payment amounts.¹²⁴ Finally, the Medicare Readmission Reductions Program, which reduces payments to hospitals with high readmission rates,¹²⁵ promotes hospitals' addressing nonclinical factors that contribute to patients' readmission to the hospital, such as environmental hazards in a patient's home or barriers to receiving adequate follow-up care in the outpatient setting.¹²⁶ Many state Medicaid programs have adopted similar payment reforms.¹²⁷

69,306 (Nov. 16, 2012) (to be codified at 42 C.F.R. pts. 410, 414, 415). The Medicare statute includes in its definition of "eligible professional" physicians, physician assistants, nurse practitioners, clinical nurse specialists, certified registered nurse anesthetists, certified nurse midwives, clinical social workers, clinical psychologists, registered dietitians, nutrition professionals, audiologists, and physical, occupational, and qualified speech-language therapists. 42 U.S.C. § 1395w-4(k)(3)(B). Beginning in 2019, the PVP program will be replaced by the Merit-Based Incentive Payment System (MIPS), which was authorized by section 101 of the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA), H.R. 2, Pub. L. No. 114-10, 129 Stat. 87 (2015). Similar to the PVP program, under MIPS physicians who score highly on selected measures will receive payment bonuses. *See id.* Performance and composite scores under MIPS will be based on four categories: quality, resource use, meaningful use of electronic health records, and clinical practice improvement activities. *See id.*

122. *See generally* Medicare Access and CHIP Reauthorization Act of 2015 (MACRA), H.R. 2, Pub. L. No. 114-10, 129 Stat. 87.

123. *See* Press Release, Ctrs. for Medicare & Medicaid Servs., Bundled Payments for Care Improvement Initiative (Aug. 23, 2011), <https://cms.gov/newsroom/mediareleasedatabase/factsheets/2011-fact-sheets-items/2011-08-23.html>. The initiative tests four different bundled payment models, with the models varying by the types of health care providers involved and the services included in the bundle. *See* Press Release, Ctrs. for Medicare & Medicaid Servs., CMS Announces New Initiative to Improve Care and Reduce Costs for Medicare (Jan. 31, 2013), <http://www.cms.gov/Newsroom/MediaReleaseDatabase/Press-Releases/2013-Press-Releases-Items/2013-01-31.html>.

124. *Cf.* Asch & Volpp, *supra* note 36, at 889 (stating that bundled payments reflect a population approach to health focused on outcomes); Ingram, Scutchfield & Costich, *supra* note 116, at 842 (noting that an individual interviewed by the authors suggested that, under a bundled payments model, investments in public health agency activities could result in significant savings); Johnson, *supra* note 63 (describing how Sinai Health System hopes to generate savings under the Medicare bundled payments initiative that can be used to finance its efforts to address the social determinants of health).

125. *See* 42 U.S.C. § 1395ww(q) (2012).

126. *See* Crossley, *supra* note 107, at 83–84 (noting that the ACA's hospital readmission penalties are

2. *Obligations of Tax-Exempt Hospitals*

Both the decline in the number of uninsured individuals and changes in the tax laws reinforce the financial incentives described above, at least for tax-exempt hospitals. Section 501(c)(3) of the Internal Revenue Code exempts from federal income taxes entities organized and operated for charitable purposes.¹²⁸ Early IRS guidance stated that a hospital serves a charitable purpose only if it provides free care to those unable to pay for its services.¹²⁹ For decades the IRS issued little guidance on what constituted community benefits.¹³⁰ In 1965, however, the IRS established the broader community benefit standard, which requires that a hospital's activities benefit the community generally.¹³¹

Calls for greater accountability and transparency of hospitals' charitable activities led the IRS in 2007 to introduced Schedule H, a mandatory reporting schedule of hospitals' expenditures for charitable activities.¹³² Schedule H is incorporated into the Form 990 information return that all tax-exempt entities must file annually.¹³³ Schedule H lists hospital activities that are considered community

among the payment reforms pushing hospitals to give greater attention to population health improvement). For example, hospitals seeking to reduce readmissions among asthma patients can address environmental factors in a patient's home, such as mold and dust, that may aggravate asthma. *See id.*

127. *See* VERNON K. SMITH ET AL., MEDICAID REFORMS TO EXPAND COVERAGE, CONTROL COSTS AND IMPROVE CARE 35–38 (2015) (reporting that 37 states in either fiscal year 2015 or fiscal year 2016 are adopting or expanding their initiatives to reward quality and encourage integrated care, including patient-centered medical homes, health homes, and ACOs, with some states also implementing episode of care initiatives or value-based purchasing initiatives).

128. I.R.C. § 501(c)(3) (2015). Entities organized and operated for religious, scientific, or educational purposes also are exempt. *See id.*

129. *See* Rev. Rul. 56-185, 1956-1 C.B. 202.

130. *See* Crossley, *supra* note 107, at 61–62 (summarizing the history of the IRS's community benefit standard). Critics also contend that the community benefit standard has gone largely unenforced by the IRS, with few hospitals losing their tax-exempt status. *See, e.g.,* Jessica Wilen Berg, *Putting the Community Back into the 'Community Benefit' Standard*, 44 GA. L. REV. 375, 382 (2010) (“[T]he IRS historically took little action against hospitals failing to meet the [community benefit] criteria in their continued operations, except in cases of egregious violations.”); Crossley, *supra* note 107, at 62 (“Practically speaking, once a hospital achieved tax exempt status, the IRS typically did not closely scrutinize its ongoing operations to assess, much less quantify, what benefits its community actually received.”).

131. *See* Rev. Rul. 69-545, 1969-2 C.B. 117.

132. *See* Crossley, *supra* note 107, at 62–63

133. *See id.*

benefit activities.¹³⁴ The categories include not only charity care, defined as unreimbursed costs for treating indigent or uninsured patients and enrollees in means-tested government programs, but also “community health improvement.”¹³⁵ The IRS defines “community health improvement services” as “activities or programs . . . for the express purpose of improving community health.”¹³⁶

Despite this clarification of the community benefit standard, tax-exempt hospitals do little community health improvement, focusing instead on the provision of charity care.¹³⁷ According to a 2015 IRS report, more than half of hospitals’ community benefit expenditures were for the provision of charity care, with less than 8% of expenditures directed to community health improvement.¹³⁸

The ACA, however, adopts various reforms that incentivize hospitals’ to devote a greater share of their resources to community health improvement, including SDHs. First, the law’s health insurance reforms, premium subsidies for low and moderate income individuals, and expansion of Medicaid have reduced the number of uninsured individuals needing charity care.¹³⁹ Recent data shows that 20 million people have gained insurance under the ACA,¹⁴⁰ with a corresponding \$7.4 billion decline in the amount of uncompensated care provided by hospitals from 2013–2014, a 21% decrease.¹⁴¹ With lower demands for charity care, , to maintain their tax-exempt status,

134. INTERNAL REVENUE SERV., OMB NO. 1545-0047, SCHEDULE H (FORM 990) HOSPITALS (2015).

135. *Id.* Schedule H also lists “health professions education, subsidized health services, and research” as community benefit activities. *Id.*

136. INTERNAL REVENUE SERV., INSTRUCTIONS FOR SCHEDULE H (FORM 990) 16–17 (2015).

137. See Sara Rosenbaum et al., *The Value of the Nonprofit Hospital Tax Exemption Was \$24.6 Billion in 2011*, 34 HEALTH AFF. 1225, 1226 (2015).

138. See *id.* (discussing IRS report to Congress on tax-exempt hospitals; report is not publicly available). An additional 36% of total net community benefit spending was spent on health professions education, research, and certain subsidized health services. See *id.*

139. See Press Release, *20 Million People Have Gained New Coverage because of the Affordable Care Act, New Estimates Show*, DEP’T HEALTH & HUMAN SERVS. (March 3, 2016), <https://www.hhs.gov/about/news/2016/03/03/20-million-people-have-gained-health-insurance-coverage-because-affordable-care-act-new-estimates> [<http://wayback.archive-it.org/3926/20170128080500/>]; <https://www.hhs.gov/about/news/2016/03/03/20-million-people-have-gained-health-insurance-coverage-because-affordable-care-act-new-estimates>].

140. See *id.*

141. See DEPT. OF HEALTH & HUMAN SERVS., OFFICE OF THE ASSISTANT SEC’Y FOR PLANNING & EVALUATION, INSURANCE EXPANSION, HOSPITAL UNCOMPENSATED CARE, AND THE AFFORDABLE CARE ACT (2015), https://aspe.hhs.gov/sites/default/files/pdf/139226/ib_UncompensatedCare.pdf.

some hospitals will need to increase their other community benefit activities, such as community health improvement.¹⁴²

Second, to address concerns that hospitals were not providing sufficient community benefits to justify their tax exemption,¹⁴³ Congress imposed on tax-exempt hospitals new requirements that encourage greater responsiveness to communities' health needs.¹⁴⁴ Section 501(r)(3) of the Internal Revenue Code, added by the ACA, requires each tax-exempt hospital to conduct a community health needs assessment (CHNA) once every three years.¹⁴⁵ A hospital's CHNA must identify its community's "significant health needs."¹⁴⁶ IRS regulations clarify that a hospital's assessment of its community's health needs should consider nonclinical factors that impact health.¹⁴⁷ These factors include: "financial and other barriers" to accessing care; whether community members receive adequate nutrition; and social, behavioral, and environmental factors that influence the community's health.¹⁴⁸ When conducting its CHNA, a hospital must solicit input from individuals representing community interests, "including those with special knowledge of or expertise in public health."¹⁴⁹ After identifying its community's health needs, the hospital must adopt an implementation strategy that prioritizes those needs and identifies available resources for addressing them.¹⁵⁰ A hospital must also describe any plans to collaborate with other

142. See Crossley, *supra* note 107, at 76 ("The decline in the number of uninsured Americans . . . could call into question hospitals' reliance primarily on charity care to satisfy the community benefit standard."); Gostin et al., *supra* note 51, at 1790 (stating that if many formerly uninsured members of a hospital's community gain health insurance, "[s]ome facilities may then fail to supply the volume of uncompensated care needed to meet the community-benefit test").

143. See Crossley, *supra* note 107, at 65 (explaining that section 501(r)'s CHNA requirement was enacted in response to Senator Grassley's concerns about "hospital's lack of accountability for community benefits," and that the requirement was established "as part of the *quid pro quo* for relieving hospitals from their federal tax liability.").

144. See I.R.C. § 501(r)(3) (2012).

145. *Id.*

146. *Id.*; Treas. Reg. § 1.501(r)-3(b)(4) (2015).

147. Treas. Reg. § 1.501(r)-3(b)(4).

148. *Id.*

149. I.R.C. § 501(r)(3)(B)(i) (2012). Section 501(r) of the Internal Revenue Code also imposes new standards related to financial assistance for patients, charges for services, and debt collection. See *id.*

150. I.R.C. § 501(r)(3); Treas. Reg. § 1.501(r)-3(b)(4).

organizations—such as other hospitals, public health departments, and schools—in addressing community health needs.¹⁵¹

Although the new CHNA requirement does not *mandate* that tax-exempt hospitals devote resources to SDHs, it encourages hospitals to move beyond their patients' individual clinical needs and take a more proactive approach to population health.¹⁵² As explained by Mary Crossley:

The CHNA requirement . . . has the potential to prompt a more radical change in hospitals' relationship to their communities. . . . It directs a hospital to shift its gaze outward, to engage with its surrounding community, and to consider how the hospital might play a role in meeting the health needs of that community—that *group* of people—and not simply the medical needs of individual community residents.¹⁵³

In doing so, the CHNA requirement reinforces the financial incentives created by the payment reforms discussed above.¹⁵⁴

B. Examples of Providers Working to Address the Social Determinants of Health

Although no one formally tracks the number of providers addressing SDHs, many commentators believe providers increasingly are doing so in response to the reforms described above.¹⁵⁵ These

151. Treas. Reg. § 1.501(r)-3(c).

152. See Crossley, *supra* note 107, at 57.

153. *Id.*; see also PRIMARY CARE AND PUBLIC HEALTH, *supra* note 105, at 112 (stating that the CHNA requirement gives hospitals a reason to invest in community prevention).

154. Crossley, *supra* note 107, at 57.

155. See DeCubellis & Evans, *supra* note 70 (“Across the country, a growing number of innovators in the health care sector are designing care coordination programs to better serve low-income, high-need populations and begin to address the relevant social issues.”); see CRAWFORD ET AL., *supra* note 29, at 2–4 (“There are a growing number of examples of population health services that extend literally and/or figuratively beyond the traditional walls of the a clinical setting, . . . [including initiatives] promoting community or public health services.”); Johnson, *supra* note 63 (“[A] growing number of health systems across the country . . . have begun tackling the social, economic and environmental conditions in the communities they serve as part of their programs to reduce hospital readmissions and improve outcomes.”); Christopher J. Gearon, *Treating Hunger As a Health Issue*, U.S. NEWS & WORLD REP.

programs target both individuals' social needs and community-level causes of poor health.¹⁵⁶ While a comprehensive cataloging of these activities is beyond the scope of this article, this section describes some of the more common initiatives.

Some providers are linking their patients to community groups that help individuals address their resource and legal needs.¹⁵⁷ For example, providers coordinating with Health Leads write their patients prescriptions for basic needs such as food or heat, with Health Leads volunteers then “filling” the prescriptions by connecting patients to available community services.¹⁵⁸ Other providers help their patients enroll in public assistance programs, such as SNAP or the Women, Infants, and Children (WIC) program.¹⁵⁹

Recent years also have seen tremendous growth in provider-sponsored medical-legal partnerships.¹⁶⁰ Medical-legal partnerships assist patients with legal problems that affect stress levels or otherwise contribute to poor health.¹⁶¹ For example, medical-legal partnerships assist patients with housing issues, such as preventing

(Feb. 13, 2014), <http://health.usnews.com/health-news/hospital-of-tomorrow/articles/2014/02/13/treating-hunger-as-a-health-issue> (stating in response to “payment carrots and sticks” under the ACA that reward “keeping people well and preventing disease,” some hospitals are going beyond care-delivery transformations and “teaming up with local stakeholders . . . in hopes of moving the needle on social determinants of health in communities”).

156. See Decubellis & Evans, *supra* note 70.

157. See HEALTH LEADS, <https://healthleadsusa.org/what-we-do/our-model/> (last visited Jan. 14, 2016).

158. See *id.*

159. See Gearon, *supra* note 155; STUART BUTLER, JONATHAN GRABINSKY & DOMITILLA MASI, BROOKINGS INST., HOSPITALS AS HUBS TO CREATE HEALTH COMMUNITIES: LESSONS FROM WASHINGTON ADVENTIST HOSPITAL 7 (2015) (describing a hospital's program to help patients enroll in social services and benefits for which they are eligible).

160. See Tina Rosenberg, *When Poverty Makes You Sick, a Lawyer Can Be the Cure*, N.Y. TIMES (July 17, 2014, 9:30 PM), http://opinionator.blogs.nytimes.com/2014/07/17/when-poverty-makes-you-sick-a-lawyer-can-be-the-cure/?_r=0. Whereas there were few medical-legal partnerships five to ten years ago, today over 276 health care institutions have medical-legal partnerships. See *id.* (“There were few medical-legal partnerships until about five or 10 years ago”); *Partnerships Across the U.S.*, NAT'L CTR. FOR MED. LEGAL PARTNERSHIP, <http://medical-legalpartnership.org/partnerships/> (last visited Jan. 14, 2016) (presenting statistics on the current number of medical-legal partnerships).

161. See *The MLP Response*, NAT'L CTR. FOR MED. LEGAL PARTNERSHIP, <http://medical-legalpartnership.org/mlp-response/> (last visited Feb. 5, 2016) (“Medical-legal partnership (MLP) embeds lawyers and paralegals alongside health care teams to detect, address and prevent health-harming social conditions for people and communities.”).

evictions or suing landlords for noncompliance with local housing standards.¹⁶² They also help patients obtain public benefits to which they are legally entitled, like Medicaid.¹⁶³ The growth in medical legal partnerships reflects providers' recognition that such programs "are becoming a better investment" given the new payment models that reward providers for lowering costs.¹⁶⁴

Some providers are tackling social impediments to good health directly.¹⁶⁵ For example, several hospitals and health systems have launched various initiatives designed to address patients' food insecurity issues—providing meals to at-risk individuals, offering healthy meals cooking courses, and pushing for produce-filled grocery stores in urban food deserts.¹⁶⁶ Many providers arrange transportation for those needing transport to and from their medical appointments.¹⁶⁷ And, some providers have implemented programs that target risky behaviors among high-need patients, such as smoking cessation programs, gun violence prevention projects, parenting courses, diabetes prevention, and meditation.¹⁶⁸

162. See Jeffrey Martin et al., *Embedding Civil Legal Aid Services In Care For High-Utilizing Patients Using Medical-Legal Partnership*, HEALTH AFF. BLOG (Apr. 22, 2015), <http://healthaffairs.org/blog/2015/04/22/embedding-civil-legal-aid-services-in-care-for-high-utilizing-patients-using-medical-legal-partnership/> (describing the most common concerns addressed by Lancaster Health's medical-legal partnership).

163. See *id.*

164. Rosenberg, *supra* note 160.

165. See Gearon, *supra* note 155.

166. See *id.*

167. See, e.g., BUTLER, GRABINSKY & MASI, *supra* note 159, at 6, 9–10 (describing the efforts of Washington Adventist Hospital to coordinate transportation to and from appointments); Imran Cronk, *The Transportation Barrier*, ATLANTIC (Aug. 9, 2015), <http://www.theatlantic.com/health/archive/2015/08/the-transportation-barrier/399728/> (noting that some health care providers employ community health workers to coordinate transportation for patients to and from appointments); *Special Needs Resource Directory: Medical Transportation*, CINCINNATI CHILD., <http://www.cincinnatichildrens.org/patients/child/special-needs/medical/transportation/> (last visited Jan. 14, 2016).

168. See Douglas J. Noble & Lawrence P. Casalino, *Can Accountable Care Organizations Improve Population Health? Should They Try?*, 309 JAMA 1119, 1119–20 (2013) (describing a hospital's gun violence prevention project); CLIFFORD W. BEERS GUIDANCE CLINIC, INC. Summary of *The New Haven Wrap Around*, CENTERS FOR MEDICARE AND MEDICAID SERVICES, <https://innovation.cms.gov/initiatives/Participant/Health-Care-Innovation-Awards-Round-Two/Clifford-W-Beers-Guidance-Clinic-Inc.html> (last updated Sept. 9, 2016) (describing the integrated medical, behavioral health, and community-based services model of grantee Clifford W. Beers Guidance Clinic).

The future promises to bring additional anecdotes of providers moving beyond the biomedical model and targeting the SDHs that adversely impact patients' health.¹⁶⁹

In sum, the health care system is moving toward a blending of traditional medicine, public health, and social services, with greater attention and resources devoted to addressing SDHs. As described in Part IV, this shift has the potential to both improve the population's health and lower health care spending. Unfortunately, various factors may limit the range of SDH initiatives providers choose to undertake.

IV. THE BENEFITS AND LIMITATIONS OF PROVIDERS ADDRESSING THE SOCIAL DETERMINANTS OF HEALTH

With the biomedical paradigm deeply embedded within the existing health care system, shifting to a culture that also addresses nonclinical factors impacting health will happen only if providers have strong incentives to address SDHs.¹⁷⁰ The reforms discussed in Part III.A begin to do just that. This development provides a potential solution to America's chronic underfunding of public health and social services programs. Moreover, providers have certain inherent advantages over public health and social services agencies. In addition, as providers become more invested in improving the community's health, providers will use their political clout to push for greater public funding of government interventions that address SDHs. Nevertheless, the potential for health care reforms to broaden providers' orientation beyond the clinical setting should not be overstated, as providers lack the incentives and capacity to address many of the root causes of poor health. As a result, providers' efforts to address SDHs may prove an incomplete solution to American's underfunding of public health and social services programs.

169. See Asch & Volpp, *supra* note 36, at 889 ("In the future, successful doctors, hospitals and health systems will shift their activities from delivering health services within their walls toward a broader range of approaches that deliver health.").

170. See *supra* Part III.A.

A. The Benefits of Providers Addressing the Social Determinants of Health

Incentivizing providers to allocate more time and resources to addressing SDHs provides a potential solution to the problem discussed in Part II—chronic underfunding of public health and social services programs. Providers’ expanding focus on SDHs has other benefits as well. Relative to government agencies, providers’ are better positioned to provide coordinated clinical and nonclinical interventions tailored to both individual and community specific needs. Moreover, as providers’ financial interests increasingly align with broader public health goals, they will use their political clout to potentially accomplish what others have been unable to do—convincing elected officials to increase funding for public health and social services programs.

1. Providers’ Advantages

Relative to government actors, providers are better positioned to provide coordinated, multi-prong nonclinical interventions tailored to individuals’ unique circumstances and values. Government funding of public health and social services is inflexible and compartmentalized, characterized by categorical funding earmarked for specific concerns and individuals, such as transportation services for the disabled and elderly, and subsidized housing for families.¹⁷¹ Government agencies thus lack the flexibility to address issues or individuals falling outside the funded categories.¹⁷² For example, although permanent supportive housing can significantly improve the health of the chronically homeless,¹⁷³ Medicaid only pays for

171. See FOR THE PUBLIC’S HEALTH, *supra* note 9, at 52–53 (discussing categorical funding for public health).

172. See *id.* at 54–55 (arguing that categorical funding limits what public health agencies can do, leaving them unable “to meet local needs”); cf. Ani B. Satz, *Overcoming Fragmentation in Disability and Health Law*, 60 EMORY L.J. 277, 279–90 (2010) (arguing that legal structures fragment protections and benefits for the disabled, leaving some individuals with impairments excluded and others with important needs unaddressed).

173. See Doran, Misa & Shah, *supra* note 68, at 2374 (“Placing people who are homeless in supportive housing—affordable housing paired with supportive services such as on-site case management and referrals to community-based services—can lead to improved health, reduced hospital

enrollees' medical care and not their housing;¹⁷⁴ meanwhile, many state and local housing agencies exclude the homeless population from their programs.¹⁷⁵ Compartmentalized funding also often leaves public health departments and other government agencies with inadequate funding for basic capabilities, such as information systems and personnel for collecting and analyzing data.¹⁷⁶ Finally, with funding spread across different sectors of government, programs addressing SDHs often operate in uncoordinated silos, with “parallel activities and services that overlap, are duplicative and are inefficient.”¹⁷⁷

In contrast to government agencies, providers have the capacity and flexibility to undertake activities tailored to individual patient's social needs. Providers' in-person, one-on-one interactions with their patients make them “ideally placed, and perhaps uniquely so, to observe the health effects of socioeconomic factors or detect when such factors compromise their patients' care.”¹⁷⁸ Providers' ongoing relationships with patients further facilitate providers' gaining a fuller understanding of the factors affecting a patient's health, allowing providers to take a holistic view of a patient's health-related needs.¹⁷⁹ In addition, with no restrictions on how they allocate their resources,

use, and decreased health care costs, especially when frequent users of health services are targeted.”); Kathy Moses & Rachel Davis, *Housing is a Prescription for Better Health*, HEALTH AFF. BLOG (July 22, 2015), <http://www.healthaffairs.org/blog/2015/07/22/housing-is-a-prescription-for-better-health/> (“More and more evidence shows that housing homeless individuals leads to reductions in health care utilization and costs.”).

174. See CAROL WILKINS, MARTHA BURT & GRETCHEN LOCKE, A PRIMER ON USING MEDICAID FOR PEOPLE EXPERIENCING CHRONIC HOMELESSNESS AND TENANTS IN PERMANENT SUPPORTIVE HOUSING 5 (July 23, 2014), <https://www.aspe.hhs.gov/sites/default/files/pdf/77121/PSHprimer.pdf> (explaining that although state Medicaid programs can cover certain components of permanent supportive housing programs, they cannot pay for the housing itself).

175. See John J. Ammann, *Housing Out the Poor*, 19 ST. LOUIS U. PUB. L. REV. 309, 309 (2000) (explaining that federal housing policies have made it harder for the homeless to be admitted to the limited supply of public housing and other assisted housing programs).

176. See FOR THE PUBLIC'S HEALTH, *supra* note 9, at 51 (“Compartmentalized inflexible funding . . . leaves many health departments without financing for . . . needed cross-cutting capabilities (such as information systems and policy analysis).”).

177. FOR THE PUBLIC'S HEALTH, *supra* note 9, at 54.

178. Gruen, Pearson & Brennan, *supra* note 104, at 95.

179. Cf. PRIMARY CARE AND PUBLIC HEALTH, *supra* note 105, at 21 (“Primary care adopts mechanisms that facilitate the transfer of information about health needs and health care over time. Highly personalized solutions to patients' problems can be implemented when sustained relationships permit deeper knowledge and understanding of individuals' habits, preferences, and goals.”).

providers have the flexibility to develop coordinated, multi-pronged, “[h]ighly personalized solutions to patients’ problems.”¹⁸⁰ Providers’ budgeting flexibility also allows for investment in the basic capabilities needed to support such an approach.¹⁸¹ Finally, unconstrained by eligibility requirements that limit who they can help, providers can assist any patients who would benefit from interventions addressing their upstream health needs.

The patient-centered medical home epitomizes this more holistic, individualized approach to patients’ social needs. This approach relies on interdisciplinary teams guided by “the principle that individual patients are members of a broader community.”¹⁸² Team members work together to develop a comprehensive plan for improving a patient’s health, including steps for addressing nonclinical needs.¹⁸³ Policymakers have exhibited increased interest in the patient-centered medical home model,¹⁸⁴ with several state Medicaid programs actively promoting this model of care.¹⁸⁵

Similar to the patient-centered medical home model, programs targeting “super-utilizers”—patients with extraordinarily high health care costs—also provide comprehensive, tailored interventions that address both clinical and nonclinical needs.¹⁸⁶ These individuals

180. *Id.*; see also Jacobi, *supra* note 36, at 107–08 (noting that total accountable care organizations (TACOs) have the flexibility to use their resources to be responsive to the particular conditions affecting the population they serve).

181. See Jacobi, *supra* note 36, at 108.

182. PRIMARY CARE AND PUBLIC HEALTH, *supra* note 105, at 22–23.

183. See Jacobi, *supra* note 36, at 377 (explaining that the cross-functional care teams that span the continuum of physical health, behavioral health, and social services can tailor approaches to each patient).

184. See PRIMARY CARE AND PUBLIC HEALTH, *supra* note 105, at 22 (“In the last few years, intensive activity has focused on implementing the ‘patient-centered medical home,’ spurred by funding and research supported by the Centers for Medicare & Medicaid Services (CMS), the Commonwealth Fund, HRSA [Health Resources and Services Administration], and a number of other groups.”).

185. See JANET M. CORRIGAN & ELLIOTT S. FISHER, THE DARTMOUTH INST. FOR HEALTH POLICY & CLINICAL PRACTICE, ACCOUNTABLE HEALTH COMMUNITIES: INSIGHTS FROM STATE HEALTH REFORM INITIATIVES 1211 (2014), <http://tdi.dartmouth.edu/images/uploads/AccountHealthComm-WhPaperFinal.pdf> (describing state patient-centered medical home initiatives); MARY TAKACH & JASON BUXBAUM, THE COMMONWEALTH FUND, CARE MANAGEMENT FOR MEDICAID ENROLLEES THROUGH COMMUNITY HEALTH TEAMS 9 (2013), http://www.commonwealthfund.org/~media/files/publications/fund-report/2013/may/1690_takach_care_mgmt_medicaid_enrollees_community_hlt_teams_520.pdf (same).

186. See Sandra G. Boodman, *Hospitals and Insurers Struggle to Reduce Costs by Patients Dubbed “Super-Utilizers,”* WASH. POST (Oct. 7, 2013), <https://www.washingtonpost.com/national/health->

typically suffer from multiple chronic conditions and make frequent use of emergency room care.¹⁸⁷ Super-utilizer programs generally rely on case managers to manage super-utilizers' complex needs.¹⁸⁸ These case managers not only arrange for and coordinate these patients' clinical care, but also focus on the SDHs that can trigger these patients' frequent emergency room visits and need for other clinical care.¹⁸⁹

To illustrate this more holistic approach to patient care, consider the case of Delores Banks, a 61-year-old diabetic with congestive heart failure living in senior public housing.¹⁹⁰ Ms. Banks was unable to shop for food or attend scheduled doctor visits when the elevator in her building stopped working.¹⁹¹ Sinai Health System intervened, contacting the Chicago Housing Authority to expedite repair work.¹⁹² Sinai also attended to her other nonclinical needs, helping Ms. Banks with prescription drug costs, ensuring that she had transportation to and from her doctor, and assisting her in completing paperwork that allowed her to move to a better senior-living facility.¹⁹³

The same flexibility that allows providers to shape interventions to individual patients' unique needs also supports providers creating locally tailored innovations at the community level.¹⁹⁴ Unlike local governments that cannot shift funds between different categories of activities, providers can allocate resources based on their

science/hospitals-and-insurers-struggle-to-reduce-costs-by-patients-dubbed-super-utilizers/2013/10/07/2963b048-14ae-11e3-a100-66fa8fd9a50c_story.html.

187. *See id.*

188. *See* WILKINS, BURT & LOCKE, *supra* note 174, at 89 (describing the different types of super-utilizer programs). Like the medical home model, some super-utilizer programs also employ interdisciplinary teams. *See id.*

189. *See* Boodman, *supra* note 186 ("In addition to a patient's medical and mental health needs, [super-utilizer programs] focus on the social determinants of health including income, education and community support, low levels of which often trigger unnecessary readmissions.").

190. *See* Johnson, *supra* note 63.

191. *See id.*

192. *See id.*

193. *See id.*

194. *Cf.* TRICIA MCGINNIS & DAVID MARC SMALL, CTR. HEALTH CARE STRATEGIES, ACCOUNTABLE CARE ORGANIZATIONS IN MEDICAID: EMERGING PRACTICES TO GUIDE PROGRAM DESIGN 5 (2012), http://www.chcs.org/media/Creating_ACOs_in_Medicaid.pdf ("Provider-led ACOs are well positioned to create locally tailored innovations and partnerships essential for success.").

communities' specific needs and priorities.¹⁹⁵ This flexibility also allows providers to serve as social laboratories, testing different approaches to improving community health and seeing which interventions work best.¹⁹⁶ Providers' ability to experiment with different approaches to SDHs is an especially important function due to evidentiary gaps regarding which interventions are most effective and efficient.¹⁹⁷ Moreover, with regular patient interactions and access to vast patient data, providers are strategically placed to identify community health trends.¹⁹⁸

Ongoing initiatives undertaken by Boston Children's Hospital and Cincinnati Children's Hospital exemplify how providers can address community health needs in innovative ways. After its community needs assessment identified asthma as a top pediatric health issue, Boston Children's Hospital used admissions and other health data to identify five low-income neighborhoods in Boston that accounted for 70% of asthma-related admissions.¹⁹⁹ The hospital then provided tailored case management to high-risk asthma patients and their

195. *See id.* at 4.

196. *See id.* at 1.

197. *See Garg, Jack & Zuckerman, supra* note 106, at 2002. As explained by one group of commentators:

The current climate offers health care systems an opportunity to design, implement, and study the effects of [nonclinical] programs. If these programs could be shown to improve population health and help to control costs in ways such as reducing hospital admission and readmission, among other important outcome measures, then broad dissemination can occur.

Id.; *see also infra* note 228 and accompanying text for a discussion of the need for more research on how best to address social factors impacting health.

198. Providers' ability to detect community health trends is aided by the greater availability of health data and advances in electronic health records and health informatics that support population-level data analysis. *See Karen Hacker & Deborah Klein Walker, Achieving Population Health in Accountable Care Organizations*, 103 AM. J. PUB. HEALTH 1163, 1164 (2013) (stating the emergence of electronic medical records will help providers such as ACOs "become more facile at viewing their population as a whole and identifying trends across their panel's health"); PRIMARY CARE AND PUBLIC HEALTH, *supra* note 105, at 18–19 (explaining that increased availability of health-related data through greater use of electronic health records, data sharing among providers, and more publicly available health data sets, give providers and others "an unprecedented opportunity to access and analyze information that can aid in understanding and addressing community-level health concerns"). This in turn allows providers to "more carefully direct their health care assets" in a manner that maximizes the impact of their interventions on community health. ALPER & BACIU, *supra* note 72, at 19.

199. *See JULIANNE R. HOWELL ET AL., NEMOURS, TRANSFORMING POPULATION HEALTH: CASE STUDIES OF PLACE-BASED APPROACHES* 3 (2012), <http://nemours.org/content/dam/nemours/www/filebox/healthpro/advocacy/boston.pdf>.

families in these neighborhoods.²⁰⁰ But the hospital did not stop there. It also addressed the issue at the community level, promoting asthma education through workshops and social marketing and helping to organize asthma-related community activities, such as the Boston Asthma Games.²⁰¹ Cincinnati Children's similarly identified specific communities for population-based interventions in the areas of infant mortality, obesity, asthma, unintentional injuries, and early childhood development.²⁰² As one example, to address the high rate of child obesity in Avondale, Ohio, Cincinnati Children's plans to work with local schools to improve nutrition education for students and parents, promote better access to fresh produce, and support Let's Move It! programs in schools, the YMCA, and the Boys and Girls Club.²⁰³

2. Lobbying Efforts

As providers increasingly appreciate the link between SDHs and their financial success under the new payment reforms, they will recognize the need for greater public action on these issues. Consequently, payment reforms will spawn expanded lobbying by the health care industry for government policies that improve public health. For example, federal- and state-level providers may call on elected officials to increase funding for public health or social services programs such as SNAP or to enact more stringent environmental laws or public health regulations.²⁰⁴ Locally, providers may advocate for public health regulations such as no-smoking

200. *See id.* at 5.

201. *See id.*

202. *See* Cincinnati Children's, *About Cincinnati Children's*, CINCINNATI CHILDREN'S, <https://www.cincinnatichildrens.org/about/community/community-health> (last visited February 4, 2017).

203. *See* James M. Anderson Ctr. for Health Sys. Excellence, *Reversing the Trend of Child Obesity*, CINCINNATI CHILDREN'S, <http://www.cincinnatichildrens.org/service/j/anderson-center/community-population-health/obesity/> (last visited February 4, 2017).

204. *Cf.* PRIMARY CARE AND PUBLIC HEALTH, *supra* note 105, at 49 (calling on providers to advocate for health-related laws and regulations as part of their efforts to promote healthier communities); Kathleen A. Barnes, Jason C. Kroening-Roche & Branden W. Comfort, *The Developing Vision of Primary Care*, 367 NEW ENGL. J. MED. 891, 893 (2012) (stating that, as part of expanding their focus to include upstream determinants of health, physicians should lobby for issues such as improved air quality and increased public funding for the fight against childhood obesity).

ordinances or sugary drink bans in schools.²⁰⁵ While providers' lobbying efforts may not always overcome the political obstacles discussed in Part II, as a well-financed special interest group, their advocacy on SDH issues makes public action far more likely.²⁰⁶

B. Barriers in the Path of Greater Integration of Medicine, Public Health, and Social Services

The emerging trend of providers addressing the social determinants of health clearly holds great promise. Yet, a closer examination of this trend reveals reasons for more tempered optimism. Rather than target the SDHs that impact the long-term health of the community as a whole, providers may narrowly focus on SDH interventions that produce immediate improvement in the health of individual patients. Moreover, many providers lack the capacity to address certain SDHs, particularly the far upstream causes of poor health that operate across populations.

1. Financial Considerations under Current Payment Reforms

As discussed above, providers have the flexibility to allocate their resources toward a range of cost-effective interventions that address the root causes of poor health. But before investing time and resources in SDH initiatives, providers must consider the business case for doing so, including the likelihood that their efforts will yield a sufficient return on investment.²⁰⁷ The extent to which the ACA's

205. Cf. Lawrence P. Casalino et al., *Accountable Care Organizations and Population Health Organizations*, 40 J. HEALTH POL., POL'Y & L. 819, 829–30 (2015) (describing the efforts of St. Catherine Hospital in leading a coalition of community health partners that, among other things, helped pass a no-smoking ordinance in Garden City, Kansas).

206. See Geoffrey R. Swain et al., *Health Care Professionals: Opportunities to Address Social Determinants of Health*, 113 WIS. MED. J. 218, 221 (2014) (“[C]linicians’ participation in the policy advocacy process makes such changes far more likely to succeed—all for the ultimate benefits of patients, communities, and population health.”).

207. See CRAWFORD ET AL., *supra* note 29, at 9 (“Without appropriate financial incentives, ACOs may find that it is not in their best interest to address social determinants of health and support initiatives that impact future health status.”) While financial factors such as costs and revenue influence providers’ decisions on whether to address social determinants of health, other economic and noneconomic concerns also impact the decisionmaking process, such as marketing and altruistic considerations. See *infra* note 235 and accompanying text. Nevertheless, weak financial incentives make it less likely

payment reforms motivate providers to address SDHs therefore depends on the likelihood, magnitude, and timing of any financial rewards to providers. Unfortunately, for the reasons discussed below, the financial incentives under the current payment reform models limit the type of SDH initiatives providers will pursue.

As discussed previously in Part III.A.1, the ACA ushered in new payment models that reward providers who improve their patients' health and lower costs while penalizing those who fail to do so. These new payment models thus allow providers to financially realize some of the benefits of SDH initiatives that successfully address the root causes of poor health. While these financial incentives have already motivated some providers to give greater attention to SDHs, often the rewards and penalties are too low to induce health care providers to invest in many of the promising approaches to SDHs.²⁰⁸

To illustrate, assume that under a state's Medicaid shared savings program, ACOs that successfully lower per capita costs for their Medicaid patient population receive 50% of the savings accruing to the state from reduced Medicaid spending.²⁰⁹ Assume further that each \$1 spent on providing permanent supportive housing for homeless Medicaid patients reduces Medicaid spending by \$1.50. Under this example, permanent supportive housing increases social welfare, because the benefits of the program exceed its costs. Yet from the perspective of the ACO, such an investment would not be cost-effective; for each \$1 the ACO spends on permanent supportive housing it would receive a shared savings bonus of only 75 cents—

providers will invest in activities addressing the social determinants of health.

208. See CRAWFORD ET AL., *supra* note 29, at 9 (stating that shared savings is unlikely to incentivize ACOs to adopt population health activities); Casalino et al., *supra* note 205, at 824 (“[M]ost existing ACO contracts have relatively small financial incentives for improving the quality and controlling the cost of health care, so the return on investments in improving geographic population health is likely to be small.”).

209. Under the Medicare Shared Savings Program, ACOs participating in the one-sided model can share up to 50 percent of the savings generated for the Medicare program, and ACOs participating in the two-sided model can share up to 60 percent of any savings. See CTRS. FOR MEDICARE & MEDICAID SERVS., METHODOLOGY FOR DETERMINING SHARED SAVINGS AND LOSSES UNDER THE MEDICARE SHARED SAVINGS PROGRAM 6 (2014), https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/sharesavingsprogram/Downloads/ACO_Methodology_Factsheet_ICN907405.pdf (describing CMS's methodology for determining shared savings).

50% of the \$1.50 savings generated for the state Medicaid program. Consequently, the Medicaid ACO may choose not to invest in permanent supportive housing despite its being an effective and efficient approach to improving patients' health.²¹⁰

The limited scope of benefits captured by the new payment models' performance metrics also contributes to providers' underinvestment in cost-effective SDH interventions. As explained previously, the new payment models typically link a provider's reimbursements to their performance on various quality and cost metrics, with higher-scoring providers receiving higher payments and lower-scoring providers receiving reduced payments.²¹¹ The performance metrics, however, do not broadly capture improved health across a geographic community.²¹² Rather, the quality metrics only measure the health status of a provider's patients, while the cost metrics reflect aggregate medical spending across the provider's patient panel.²¹³ This encourages a provider to narrowly focus on the health and treatment costs of its patient population,²¹⁴ as improvements in other individuals' health have no impact on a provider's performance scores and reimbursements.²¹⁵

As a result, providers have no business reason to take into account the benefits of SDH initiatives that accrue to individuals who are not

210. *See id.*

211. *See supra* Part III.A.1.

212. *See* Noble & Casalino, *supra* note 168, at 1119.

213. *See* Nicholas W. Stine & Dave A. Chokshi, *Opportunity in Austerity—A Common Agenda for Medicine and Public Health*, 366 *NEW ENG. J. MED.* 395, 396 (2012) (noting that “ACOs are held accountable only for patients already in a particular health care system,” and not for all people in the community); Noble & Casalino, *supra* note 168, at 1119 (observing that the thirty-three metrics adopted under the Medicare Shared Savings Program do not have a link to geographic population health).

214. *See* Casalino et al., *supra* note 205, at 825–26 (ACOs have incentives to “control the cost and improve the quality of care only for their attributed patients, not for the entire population of their geographic area”). Indeed, for providers the term “population health” means their “panel of patients,” whereas for public health professionals the term means “the entire population living in a geographic area.” *See* CRAWFORD ET AL., *supra* note 29, at 3 (discussing how payors, providers, and public health professionals view the term “population health”); Edie E. Zusman et al., *Moving Toward Implementation: The Potential for Accountable Care Organizations and Private-Public Partnerships to Advance Active Neighborhood Design*, 69 *PREVENTATIVE MED.* S98, S100 (2014) (discussing the contrasting uses of the term “population health” by the ACA and public health).

215. *See* Noble & Casalino, *supra* note 168, at 1119 (commenting that metrics with no clear link to the geographic population's health “gives ACOs little incentive to focus on the health of everyone in the communities in which they are located”).

their patients.²¹⁶ For example, a provider may discount or ignore the benefits to nonpatients from establishing a farmers market or expanding available green space. This may lead to an underinvestment in cost-effective SDH initiatives, particularly community-level initiatives that positively affect non-patients.²¹⁷ Instead, providers likely will favor SDH interventions tailored to the provider's individual patients, such as addressing home conditions that aggravate health conditions, helping patients enroll in public assistance programs like SNAP, arranging transportation to and from medical appointments, and counseling patients about disease management and prevention.²¹⁸

The new payment models' performance metrics not only fail to capture the health benefits to nonpatients, they also exclude non-health benefits.²¹⁹ For example, SDH initiatives that improve housing conditions and nutrition not only improve health but also may increase school attendance rates and worker productivity.²²⁰ Yet,

216. See Edie E. Zusman et al., *supra* note 214, at S100 (stating that because the ACA's payment reforms are focused on an ACO's patient panel, "[t]his may limit the activities the ACO is willing to undertake if the immediate goal is to realize short-term cost savings within the specific population"); Marc N. Gourevitch et al., *The Challenge of Attribution: Responsibility for Population Health in the Context of Accountable Care*, 102 AM. J. PUB. HEALTH S322, S322 (Supp. 3, 2012) (finding that in areas where no ACO is a dominant provider, such as urban areas, the population-level interventions undertaken by ACOs for their patients are unlikely to align with the broader geographic community that is the focus of public health).

217. Dominant providers who have a large market share may have economic incentives to adopt community-level SDH programs, as most of the individuals benefiting from such interventions will be patients of the provider. Cf. Gourevitch et al., *supra* note 216 ("In some rural or suburban areas where a single ACO may be dominant, the ACO's prevention and disease management efforts might naturally align with population health improvement programs . . ."); Glen P. Mays & F. Douglas Scutchfield, *Improving Public Health System Performance Through Multiorganizational Partnerships*, 7 PREVENTING CHRONIC DISEASE A116, at 3 (2010) ("Organizations that serve large segments of the community have strong incentives for partnership [with public health organizations] because they stand to gain large shares of any public goods produced through collective action.")

Perhaps providers could overcome this externality problem by forming partnerships where they collectively address SDHs, such as jointly investing in a farmers market or new green spaces. In practice, however, providers who view themselves as competitors (and who may fear antitrust enforcement) may be hesitant to engage in collective action, a problem that may be aggravated by free rider concerns.

218. See BUTLER, GRABINSKY & MASI, *supra* note 159, at 6, 7, 9, 10.

219. See *id.* at 13 (commenting that health care outcome measures do not capture certain benefits to households and the community, such as rising employment or school attendance rates stemming from improvements in housing or nutrition).

220. See *id.*

current performance metrics do not capture these nonhealth benefits, measuring only the quality of the medical care received and aggregate medical spending.²²¹ The benefits from SDH initiatives that extend beyond the health sector therefore have no impact on the performance scores that determine providers' reimbursements under the new payment models. Consequently, providers have no business reason to take into account these nonhealth benefits when evaluating SDH initiatives, leading to suboptimal investments in such initiatives.²²²

The timing of financial rewards or penalties also may limit the types of SDH initiatives providers pursue. Although some interventions quickly generate improvements in health, others may not produce benefits for years.²²³ For example, reducing air pollution or children's exposure to violence may not lower the incidence of chronic disease until decades into the future. This means a provider's return on investment in the form of cost-savings, bonuses, and/or higher reimbursement rates may not accrue until a future date that is well outside the planning horizon of most providers.²²⁴ Consequently, SDH interventions that do not produce health benefits until years into the future may be unattractive to providers who desire financial rewards within a short timeframe.²²⁵ Moreover, because a provider's patient population changes over time as patients move or switch to other providers, a provider may not financially benefit from long-term investments in improving the health of its current

221. *See id.*

222. *See id.* at 15–16 (evaluating the experience of Washington Adventist Hospital and its SDH initiatives and finding that if payment models do not capture the broader benefits of SDH initiatives, this results in providers holding back funding for SDH initiatives).

223. *See* Casalino et al., *supra* note 205, at 864.

224. *See id.* at 212 (stating that SDH investments “may not produce benefits for many years,” and that this “is far outside the planning horizon of hospital and medical group leaders”); Ingram, Scutchfield & Costich, *supra* note 116, at 842 (reporting that survey respondents noted that the long time horizons for a return on investment under the public health model is inconsistent with the orientation of ACOs toward “shared savings in a relatively short time frame”); *cf.* Mays & Scutchfield, *supra* note 217, at 2–3 (explaining that long time lags before the benefits of provider-public health partnerships materialize weakens the economic incentives to engage in such partnerships, “especially for investor-owned organizations that operate under short-term financial expectations”).

225. *See supra* note 176.

patients.²²⁶ Providers, therefore, may favor SDH initiatives with more immediate benefits, such as addressing housing conditions that aggravate asthma, leaving long-term determinants of health unaddressed.

Uncertainty as to which strategies are most effective and efficient also may deter providers from pursuing SDH interventions. Before investing in programs that target the root causes of poor health, providers may want assurance that their investments will yield improvements in health outcomes and reduced spending.²²⁷ Unfortunately, our understanding of which SDH interventions actually improve health and which are most cost-effective is limited.²²⁸ The absence of evidence as to whether investments in SDH programs will yield a positive return on investment may make some providers leery of such investments.²²⁹ In particular, providers may be reluctant to serve as social laboratories testing innovative approaches for addressing SDHs despite having the flexibility to do so.²³⁰

Finally, current payment methodologies often penalize providers whose interventions successfully ameliorate the social, environmental, and behavioral causes of poor health. By definition, cost-effective SDH interventions are cost-effective because they reduce future medical costs by lowering the incidence of disease and

226. See Noble & Casalino, *supra* note 168, at 1119 (stating that, since patients attributed to an ACO may change annually, ACOs have little incentive to focus on “long-term determinants of health in the patients for whom they are accountable in the present”); Edie E. Zusman et al., *supra* note 214, at S100 (“[B]ecause health plan membership changes over time, some ACO leadership may feel that it is not cost-effective to invest in longer-term behavior change strategies.”).

227. See KELLY DEVERS ET AL., THE HENRY J. KAISER FAMILY FOUND., INNOVATIVE MEDICAID INITIATIVES TO IMPROVE SERVICE DELIVERY AND QUALITY OF CARE 18 (2011), <https://kaiserfamilyfoundation.files.wordpress.com/2013/01/8224.pdf> (summarizing the comments of a workgroup participant who emphasized that stakeholders, including providers, “want[] to know that their investment is resulting in the desired short and long-term quality and cost results”).

228. See MCGOVERN, MILLER & HUGHES-CROMWICK, *supra* note 41, at 7–8 (“[There] is the need for more robust data on what produces health, and the effectiveness of interventions that work through health determinants to produce health”); Braveman, Egerter & Williams, *supra* note 25, at 389 (“[W]e know little about effective ways to address social factors to improve health and reduce health disparities”).

229. Cf. BUTLER, GRABINSKY & MASI, *supra* note 159, at 13 (“The difficulty of identifying a specific and complete [return on investment] dollar amount can make it hard for a hospital’s chief financial officer to justify population investments.”).

230. See *id.*

decreasing medical emergencies.²³¹ For example, eliminating mold and other environmental irritants reduces emergency room visits and medical complications among asthmatics.²³² Yet lower demand for medical care means a loss of revenue for providers paid in whole or in part based on the volume of care provided, that is, providers paid under the fee-for-service.²³³ Providers paid under capitation or global budgets similarly may fear that reduced demand for medical care will translate into lower revenue for them, because reduced demand may lead payors to lower their capitated payment amounts or global budgets.²³⁴ Providers who invest in SDH initiatives therefore risk lower revenues should they successfully reduce the need for their services.

This discussion is not meant to suggest that providers' decisions on whether and in what manner to address SDHs are influenced solely by the financial incentives created under the new payment models. Other business considerations also may influence a providers' decision to invest in a SDH initiative, such as visibility that confers reputational or political advantages.²³⁵ And many health

231. See *supra* notes 67–68 and accompanying text.

232. See Crossley, *supra* note 107.

233. See BUTLER, GRABINSKY & MASI, *supra* note 159, at 16–17 (stating that hospitals' strategies to address population health needs generally are not sustainable under fee-for-service, because preventing the need to seek care at the hospital or its emergency department “directly reduce[s] business and revenue for the hospital”); Mays & Scutchfield, *supra* note 217, at 2 (commenting that public health partnerships between providers and others that “increase the reach of underused but cost-effective clinical preventive services”—for example, vaccinations or family planning services—and “increase implementation of and compliance with nonclinical public health programs and policies”—like environmental changes that promote nutrition and physician activity—may cause some physicians and hospitals to lose revenue from reduced need for medical care). Some providers, particularly nonprofit hospitals, may realize some savings from SDH programs due to declining demand for uncompensated care among uninsured populations. See Mays & Sutchfield, *supra* note 217, at 3. As noted in Part III, however, the demand for uncompensated care has declined as the uninsured population has shrunk following implementation of the ACA. Consequently, the savings from SDH programs accruing to providers of uncompensated care may be insufficient to off-set their loss of revenue from insured populations whose health improves.

234. Cf. BUTLER, GRABINSKY & MASI, *supra* note 159, at 16 (noting the concerns of Washington Adventist Hospital (WAH), which is paid under Maryland's global budgeting initiative, that “if the hospital does a particularly good job in reducing the volume of admitted patients, then the state may press for a lower budget for WAH in subsequent years”).

235. See Mays & Scutchfield, *supra* note 217, at 2 (stating that the economic incentives that motivate organizations to pursue SHD initiatives include “achiev[ing] visibility and recognition that confers a political or marketing advantage”).

care organizations, particularly nonprofits, are guided in part by an altruistic desire to improve the health of their patients and communities.²³⁶ Nevertheless, all providers, even nonprofit organizations, must ensure that their enterprises remain economically viable. The financial incentives under the payment reform models therefore play a major role in shaping providers' SDH investment decisions.

In sum, although recent payment reforms clearly push the health care system to expand its focus beyond the clinical setting and address the root causes of poor health, the types of SDH initiatives pursued by providers will be of limited range. Specifically, providers will likely focus their attention on SDH initiatives known to produce significant near-term improvements in the health of the providers' patient population. Less appealing to providers are SDH initiatives that yield health benefits far into the future and innovative SDH initiatives with uncertain payoffs. Providers also are likely to underinvest in SDH initiatives that yield positive externalities, namely improving the health of individuals who are not the providers' patients and nonhealth related benefits such as higher worker productivity.

2. Incentives for Tax-Exempt Hospitals

As discussed in Part III.A, many public health professionals and scholars believe the new CHNA requirements will prompt tax-exempt hospitals to satisfy their community benefit obligations by addressing SDHs. Indeed, examples of hospitals doing just that are easily found. Yet, asking hospitals to address their community's SDHs "is truly asking something new of most hospitals,"²³⁷ and it is not clear that the CHNA requirements in practice will induce most tax-exempt hospitals to make this shift.²³⁸

236. *See id.* (stating that while organizations may contribute voluntarily to SDH initiatives for economic reasons, "[m]any organizations also may have noneconomic motives to contribute, such as an altruistic mission to improve health and social welfare").

237. Crossley, *supra* note 107, at 57.

238. *See id.*

Advocates have high hopes that the new CHNA requirements, particularly the requirement that hospitals solicit community input, will encourage tax-exempt hospitals to do more to address SDHs.²³⁹ However, hospitals retain broad discretion in determining the significance of and prioritizing their community's health needs.²⁴⁰ Mary Crossley contends that this broad discretion "make[s] it too easy for hospitals to 'think small'" and avoid addressing the key SDHs adversely impacting their communities' health.²⁴¹ For example, a hospital may prioritize a health need that advances its business interests, such as health screenings that generate demand for the hospital's services, but is less important from a public health perspective.²⁴²

Hospitals also retain broad discretion as to how best to address the priorities reflected in their CHNA. Consequently, while some hospitals may target the root causes of poor health, others may focus on the clinical aspects of an issue, such as expanding the availability of medical services.²⁴³ For example, hospitals that prioritize premature births could respond by identifying and addressing the upstream behavioral, social, and environmental factors that contribute to premature births, such as smoking or food insecurity. But, hospitals also could address their communities' high premature birth rates by expanding related medical services, such as adding beds to the Neonatal Intensive Care Unit (NICU) and recruiting more neonatologists to the community.²⁴⁴ While increasing the availability and quality of medical care can be of great value to a community, for

239. *See supra* Part III.A.2.

240. *See* Crossley, *supra* note 107, at 69 (stating that the IRS regulations give deference to hospitals' judgment on whether a community health need is significant and should be given priority).

241. *Id.*

242. *Cf. id.* at 69–70 ("The Regulations[] . . . permit a hospital to identify as 'significant' and to prioritize a health need that, from a public health perspective on community health, may be relatively inconsequential.").

243. *See id.* 76–78 (discussing the different natures of hospitals' responses to community needs).

244. *Cf.* Steven Ross Johnson, *Obamacare Rule Has Hospitals Targeting Health Improvement*, MOD. HEALTHCARE (2014), <http://www.modernhealthcare.com/article/20140614/MAGAZINE/306149803> (comparing how Detroit's Henry Ford Health System elected to partner with community organizations to address factors contributing to infant mortality, while Chicago's Advocate Trinity Hospital chose to address its community's high rates of stroke, heart disease and cancer by investing in a primary stroke center, a second heart catheterization lab, and new radiology equipment).

some health needs, addressing nonclinical factors that undermine health is the more effective response.²⁴⁵ The CHNA regulations, however, do not prod hospitals toward the latter.

In addition, uncertainty over whether SDH programs count toward hospitals' community benefit obligations²⁴⁶ may undermine hospitals' enthusiasm for such programs. As explained in Part III, a tax-exempt hospital must annually report to the IRS its community benefit activities on Schedule H. In its definition of community benefit activities, Schedule H's instructions include charity care, health professions education, subsidized health services, research, and community health improvement,²⁴⁷ which the IRS defines as "activities or programs . . . for the express purpose of improving community health."²⁴⁸ Hospitals also must *separately* report on Schedule H their "community building activities," defined to include physical improvements, housing, economic development, community support, environmental improvements, and community health improvement advocacy.²⁴⁹ Although the Schedule H instructions state that "some" community building activities also count as community benefit activities, the IRS did not specify which community building activities also qualify as community benefit activities and which do not.²⁵⁰ This ambiguity encourages hospitals wishing to play it safe from a tax-exemption perspective to favor conventional strategies for addressing community health needs that clearly fall within the community benefit definition, such as charity care, physician recruitment, free health screenings, and health fairs.²⁵¹

245. See generally sources cited *supra* notes 25 and 29; see also *supra* Part I (discussing the significant impact of nonclinical factors on health).

246. The IRS has made clear that a hospital's CHNA obligations do not displace the community benefit standard. See Community Health Needs Assessments for Charitable Hospitals, 79 Fed. Reg. 78,954 (Dec. 31, 2014).

247. INTERNAL REVENUE SERV., INSTRUCTIONS FOR SCHEDULE H (FORM 990) (2015).

248. See *id.*

249. See *id.*

250. See *id.*

251. See Crossley, *supra* note 107, at 63 ("[C]reating [these different] reporting categories for 'community health improvement services' and 'community building activities' . . . may have sown confusion that now impedes hospitals' embrace of activities addressing broad social determinants of health.").

Studies of hospitals' initial rounds of CHNA reports suggest that, while the CHNA requirements have prodded some hospitals to "think big," for most it is business as usual.²⁵² A review of 95 Texas nonprofit hospitals' CHNA reports found that in prioritizing their communities' health needs, hospitals de-emphasized SDHs.²⁵³ Almost half of hospitals' priorities related to health systems issues, most notably increasing access to care; almost 40% of their priorities related to health conditions.²⁵⁴ Health behaviors such as smoking and poor nutrition comprised only 9% of the identified priorities, with community conditions comprising less than 5%.²⁵⁵ The authors similarly found that hospitals' strategies for addressing health priorities largely involved a continuation of existing programs, with over 70% implementing community benefits activities "as they had in the past."²⁵⁶

Among hospitals included in the Texas study, many of the hospitals' activities reflect a traditional focus on medical services, such as health fair screenings, physician recruitment, telemedicine programs, and integrated delivery systems.²⁵⁷ Only 9% of hospitals' CHNA reports revealed hospitals willing to implement strategies outside their traditional scope of activities, such as partnering with community organizations or operating a farmers' market.²⁵⁸ A study of North Carolina hospitals' CHNA reports similarly found that hospitals' implementation strategies emphasized access and quality of clinical care over SDHs,²⁵⁹ as did a study of a national sample of

252. *See id.*

253. *See* Cara L. Pennel et al., *Community Health Needs Assessment: Potential for Population Health Improvement*, 19 *POPULATION HEALTH MGMT.* (forthcoming 2016) (manuscript at 3).

254. *See id.*

255. *See id.*

256. *See id.* (manuscript at 4).

257. *See id.* (listing some hospital implementation strategies).

258. *See id.* (manuscript at 5).

259. *See* KAREN WADE & GENE W. MATTHEWS, *THE NETWORK FOR PUB. HEALTH LAW, REVIEW OF NORTH CAROLINA HOSPITALS' COMMUNITY HEALTH NEEDS ASSESSMENTS AND IMPLEMENTATION STRATEGIES* 4 (2014), https://www.networkforphl.org/_asset/r1gg6w/Network-NC-CHNA-Report.pdf (reporting that among the 116 priorities selected by the 30 hospitals in the study sample, 64 related to clinical care, 37 related to health behaviors, 7 related to both clinical care and health behaviors, 5 related to social and economic factors, and none related to the physical environment).

CHNA reports.²⁶⁰ The authors of the Texas study further concluded that half of the hospitals “did not address or did a very poor job of addressing underlying etiologies of health problems,” with only 7% doing “a good or better job of expressing an understanding of root causes of needs being addressed.”²⁶¹ Finally, the authors found that almost three-fourths of hospitals “did not address or did a very poor job of addressing social determinants of health by identifying issues influencing health or implementing strategies addressing these determinants.”²⁶²

The Texas study suggests a possible explanation for these disappointing results: most hospitals have interpreted the CHNA requirements as simply requiring hospitals to improve documentation and reporting of their community benefit activities, rather than encouraging hospitals to embrace broader population health activities.²⁶³ This in part may reflect the fact that the CHNA regulations, like the community benefit standard, do not require that hospitals’ activities actually improve community health.²⁶⁴

260. See PUB. HEALTH INST., SUPPORTING ALIGNMENT AND ACCOUNTABILITY IN COMMUNITY HEALTH IMPROVEMENT: THE DEVELOPMENT AND PILOTING OF A REGIONAL DATA-SHARING SYSTEM 65 (2014), <http://nnphi.org/wp-content/uploads/2015/08/SupportingAlignmentAndAccountabilityInCommunityHealthImprovement.pdf> (finding that among the 44 hospitals included in the study’s sample, 67% of the selected priorities fell in the clinical care category, with 26% of priorities in the health behaviors category, 6% in the social and economic factors category, and non in the physical environment category).

261. Pennel et al., *supra* note 253 (manuscript at 5). The remaining 43% of hospitals had midrange scores on the relevant criteria. *See id.*

262. *Id.*

263. *See id.* (manuscript at 6).

264. Crossley, *supra* note 107, at 104–105. The CHNA regulations only set forth procedural requirements for hospitals, such as the requirements to conduct a community health needs assessment, prioritize community health needs, and implement and report on strategies to address the selected community health needs. *See id.* They do not establish any performance benchmarks or other accountability measures that would require hospitals to achieve a degree of success in addressing community health needs. *See id.* Although hospitals must evaluate and report on the impact of their community health activities, Treas. Reg. § 1.501(r)-3(b)(6)(F), this may “not [be] enough to maximize opportunities for real changes in community health.” *See id.*

Weak IRS enforcement also may reinforce the status quo. The IRS’s history of lax enforcement of the community benefits standard suggests it may similarly fail to closely scrutinize hospitals’ compliance with the CHNA regulations. *See Crossley, supra* note 107, at 82 (“Realistically, though, the history of lax IRS enforcement of the community benefit standard and current reality of shrinking agency budgets suggests it is unlikely that the IRS will closely police hospitals’ compliance with whatever guidance it provides.”). Moreover, even if a hospital fails to perform its CHNA obligations, the IRS is unlikely to revoke its tax-exempt status given its historical reluctance to take this drastic step, leaving a hospital to

Obviously the CHNA requirements are a new obligation for tax-exempt hospitals, and in time, perhaps more of hospitals' CHNA-related activities will address SDHs. Yet, with today's hospitals subject to various financial pressures and regulatory obligations, understandably they "may be unlikely to do more than the bare minimum" necessary to satisfy the new CHNA requirements.²⁶⁵ In practice, then, the CHNA obligations may prompt few tax-exempt hospitals to broaden their focus beyond traditional community benefit activities and direct more resources toward upstream causes of poor health.²⁶⁶

3. Providers' Limited Capacity to Address the Social Determinants of Health

Even if the ACA reforms do, in fact, motivate providers to address the upstream causes of poor health, some commentators have questioned whether providers have the ability to do so.²⁶⁷ Improving the social, environmental, and behavioral conditions affecting the population's health requires a range of resources and competencies beyond providers' current capacity. Busy health professionals trained in the biomedical model lack the skills necessary to assess and develop strategies for addressing SDHs.²⁶⁸ Indeed, a 2011 survey of physicians found that while most believe that unmet social needs adversely impact their patients' health, physicians do not feel that

face a relatively small tax penalty of only \$50,000. *See* Treas. Reg. § 1.501(2)(2) (2015).

265. *See* Mary Crossley, *Tax-Exempt Hospitals, Community Health Needs and Addressing Disparities*, 55 *How. L.J.* 687, 701 (2012).

266. *See id.* at 701–02 (“[W]ithout meaningful prodding by the IRS, most hospitals may be unlikely to . . . widen[] their focus to include not only individual patients but population-level health needs.”).

267. *See, e.g.*, Noble & Casalino, *supra* note 168, at 1119 (questioning whether ACOs have the capabilities to be responsible for a geographic population's health); Casalino et al., *supra* note 205, at 831 (stating that ACOs and hospitals have engaged in only modest efforts to address the SDHs given their lack of capabilities, as well as weak incentives to do so); Jeff Goldsmith, *Moral Failure and Health Care Costs: Two Simplistic Spending Narratives*, *HEALTH AFF. BLOG* (Oct. 27, 2015), <http://www.healthaffairs.org/blog/2015/10/27/moral-failure-and-health-costs-two-simplistic-spending-narratives/> (asserting that progressives “overestimate the capacity of the health system to improve the health of the population”).

268. *See* ROBERT WOOD JOHNSON FOUND., *HEALTH CARE'S BLIND SIDE: THE OVERLOOKED CONNECTION BETWEEN SOCIAL NEEDS AND GOOD HEALTH: SUMMARY OF FINDINGS FROM A SURVEY OF AMERICA'S PHYSICIANS 1* (2011), http://www.rwjf.org/content/dam/farm/reports/surveys_and_polls/2011/rwjf171795.

they have the capacity to address these needs.²⁶⁹ Similarly, hospitals and other large provider organizations' core competencies relate to the provision of medical care, and not community health.²⁷⁰ Despite these challenges, some providers are well-positioned to shift their orientation beyond their clinical walls; many, however, face very real obstacles to effectively addressing SDHs.

Fundamental changes in the structure and delivery of health care have led to a surge in the number of larger organizations that have, or can develop, the capacity to address the upstream causes of poor health. Many physicians, hospitals, and other providers have concluded that forming partnerships with one another facilitates success under the emerging payment models described above.²⁷¹ Recent years thus have seen significant growth in the formation of large provider organizations, such as ACOs, integrated delivery systems, and multi-specialty physician groups.²⁷² Relatedly, an increasing number of physicians are electing to become salaried employees of hospitals or health systems, rather than practicing in solo or small group settings.²⁷³ So although not all health

269. *See id.*

270. *See* Casalino et al., *supra* note 205, at 824–25 (ACOs, hospitals, and medical groups' "core capabilities relate to the provision of medical care"); Edie E. Zusman et al., *supra* note 214 at S100 ("Hospitals and physician practices are still somewhat inexperienced with population health and community wellness programs . . .").

271. *See* Jessica Mantel, *The Myth of the Independent Physician: Implications for Health Law, Policy, and Ethics*, 64 CASE W. RES. L. REV. 455, 467–68 (2013) (describing why payment reforms that link reimbursement to outcomes, along with other industry trends, have encouraged the formation of larger, clinically integrated organizations).

272. *See* Muhlestein, *supra* note 115 (reporting on the continued expansion of the accountable care movement in 2015); SUZANNE M. KIRCHHOFF, CONG. RESEARCH SERV., R42880, PHYSICIAN PRACTICES: BACKGROUND, ORGANIZATION, AND MARKET CONSOLIDATION (2013) (describing the trend of a growing number of U.S. physicians combining their practices and affiliating with hospitals and others as "part of a broader trend toward consolidation" in the health care sector). For example, according to Leavitt Partners, a consulting firm that has tracked ACOs since 2010, from spring 2014 to spring 2015 approximately 120 organizations became ACOs, bringing the total number of ACOs to 744 from an initial count of 64 in 2011. *See* Muhlestein, *supra* note 115.

273. *See* CAROL K. KANE, AM. MED. ASS'N, POLICY RESEARCH PERSPECTIVES: UPDATED DATA ON PHYSICIAN PRACTICE ARRANGEMENTS: INCHING TOWARD HOSPITAL OWNERSHIP 1 (2015) (reporting that the percentage of physicians who are owners of their practices fell from 76.1% in 1983 to 50.8% in 2014, and that the percentage of physicians working directly for a hospital or in a practice owned in whole or in part by a hospital increased from 29% in 2012 to 32.8% in 2014); W. Pete Welch et al., *Proportion of Physicians in Large Group Practices Continued to Grow in 2009–11*, 32 HEALTH AFF. 1659, 1659 (2013) (reporting that the percentage of physicians practicing in groups of more than fifty continues to grow, increasing from 30.9% in 2009 to 35.6% in 2011).

professionals currently practice in large organizations, the trend is clear: the health care system is quickly shifting toward one dominated by larger organizations.

Larger organizations generally have, or are positioned to acquire, many of the competencies necessary to address SDHs.²⁷⁴ Larger organizations are better financed than smaller providers and therefore have more resources available to devote to their patients' nonclinical needs.²⁷⁵ Their larger workforces often include nonclinical professionals with the expertise to address patients' social needs, such as social workers, community health workers, dieticians, and even lawyers.²⁷⁶ In addition, large organizations' core capabilities typically include the ability to conduct sophisticated data analysis such as identifying health trends across patient populations or risk factors for future disease or complications.²⁷⁷ Such data analyses in

274. See generally Jacobi, *supra* note 36, at 103 (stating that large organizations such as total accountable care organizations (TACOs) have the funding and capacity to provide a broad range of services); Casalino et al., *supra* note 205, at 824 (stating that many ACOs, particularly those that include a hospital or hospital system, have considerable financial and social capital that could be used to support efforts to address socioeconomic factors that impact health).

275. See MARK W. FREIDBERG ET AL., EFFECTS OF HEALTH CARE PAYMENT MODELS ON PHYSICIAN PRACTICE IN THE UNITED STATES xvi–xvii (2015), http://www.rand.org/content/dam/rand/pubs/research_reports/RR800/RR869/RAND_RR869.pdf (noting that physician practices must make substantive investments in infrastructure in response to emerging, alternative payment modes, and that for smaller physician practices this often means merging with larger practices or hospitals in order to access the necessary capital); AM. HOSP. ASS'N, THE OPPORTUNITIES AND CHALLENGES FOR RURAL HOSPITALS IN AN ERA OF HEALTH REFORM 1 (2011), <http://www.aha.org/research/reports/tw/11apr-tw-rural.pdf> (explaining the financial pressures on rural hospitals, including the fact that they “operate with modest balance sheets and have more difficulty than larger organizations accessing capital to invest”); JASON H. SUSSMAN & ERIC A. JORDAHL, KAUFMAN, HALL & ASSOCS., INC., A GUIDE TO FINANCING STRATEGIES FOR HOSPITALS WITH SPECIAL CONSIDERATION FOR SMALLER HOSPITALS 3 (2010), <http://www.hpoe.org/Reports-HPOE/capitalfinance12.2010.pdf> (explaining that while most hospitals face more limited capital access, including fewer borrowing options and higher cost of capital, “[t]his is especially true for smaller hospitals, which have almost always experienced a more difficult time accessing capital than larger organizations”).

276. See Shana F. Sandberg et al., *Hennepin Health: A Safety-Net Accountable Care Organization for the Expanded Medicaid Population*, 33 HEALTH AFF. 1975, 1978 (2014) (describing how Hennepin Health has established interdisciplinary teams that include social workers and community health workers); Martin et al., *supra* note 162 (describing a growing trend of including lawyers in interdisciplinary teams that broadly address patients health needs).

277. See Hacker & Walker, *supra* note 198, at 1164 (discussing how the emergence of electronic medical records will allow an ACO to “become more facile at viewing their population as a whole and identifying trends across their panel’s health . . . [and how with] adequate health information technology, systems can now examine issues such as risk for future disease, comorbidities, and quality metrics across a defined population”).

turn support the implementation of effective public health and social interventions.²⁷⁸ Thus, as the health care system continues to shift from small providers to larger organizations, providers' capacity to address SDHs also will expand.

Nevertheless, barriers remain. A 2013 survey of hospital administrators conducted by the American Hospital Association found that while many have expanded their focus to include population health, they face challenges in adequately staffing their SDH initiatives.²⁷⁹ Survey respondents identified a growing need for professionals skilled in population health management, including skills in "conducting and implementing community health needs assessments, developing community-based partnerships, and applying health information technology to population health."²⁸⁰ Unfortunately, few institutions of higher education offer courses teaching these subjects.²⁸¹ In the near-term, then, a shortage of professionals skilled in population health may limit hospitals and other provider organizations' capacity for addressing SDHs, particularly at the community level.

In contrast to large providers, smaller providers generally lack the resources to support SDH initiatives.²⁸² For example, a 2012 American Hospital Association survey of hospitals found that leaders at larger facilities are more focused on population health than those at smaller facilities, in part because the latter "typically will have neither the human capital nor the financial resources to implement overarching population health strategies in ways comparable to larger facilities."²⁸³ Small and medium-sized physician practices also are

278. Cf. CRAWFORD ET AL., *supra* note 29, at 13 ("Acquisition and use of pertinent and timely health data are critical precursors to addressing population health.").

279. See TRENDS IN HOSPITAL-BASED POPULATION HEALTH INFRASTRUCTURE, *supra* note 110, at 16–17.

280. *Id.* at 18.

281. *See id.*

282. See DEVERS ET AL., *supra* note 227 (reporting that respondents to a survey noted that "primary care practices and their staff need help in transitioning to [patient-centered medical home] models"); TAKACH & BUXBAUM, *supra* note 185, at 9 (noting that most primary care providers work in resource-limited small or medium-sized practices that will have difficulty effectively managing patients' complex health needs, "creating the need for strategies to ensure practices have the capacity to meet the needs of complex patients").

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poorly equipped to independently shift to the new models of care that address SDHs, such as the patient-centered medical home.²⁸⁴

To address the latter challenge, some states have initiated programs that help physician practices transition to the patient-centered medical home model.²⁸⁵ For example, some states are providing start-up funding to physician practices and funding interdisciplinary community health teams that support multiple physician practices.²⁸⁶ Other states, however, are providing little or no assistance to small and medium-sized physician groups seeking to transition to the patient-centered medical home model.²⁸⁷ Congress partially filled this gap with recent legislation authorizing \$20 million in annual funding for 2016–2020 for physician practices transitioning to patient-centered medical homes and other innovative models of care.²⁸⁸ Although these state and federal efforts are promising, they are unlikely to reach many physician practices and do nothing to support smaller hospitals.

Providers, both small and large, also are ill-equipped to directly address broad, structural causes of poor health. For example, while providers can help individual asthma patients address the environmental irritants in their home that aggravate their condition,

(2012), http://www.hpoe.org/Reports-HPOE/managing_population_health.pdf.

284. See TERRY MCGEENEY, BDC ADVISORS, TRANSITIONING PATIENT-CENTERED MEDICAL HOMES TO CLINICALLY INTEGRATED MEDICAL NEIGHBORHOODS: PCMHs AND MEDICAL NEIGHBORHOODS PROVIDE A PATHWAY TO CLINICALLY INTEGRATED PHYSICIAN NETWORKS AND ACCOUNTABLE CARE ORGANIZATIONS 6 (2013), http://www.bdcadvisors.com/wp-content/uploads/2015/08/Transitioning_Patient-Centered_Medical_Homes_to_Clinically_Integrated_Medical_Neighborhoods.pdf (“Many small and medium-sized physician practices lack the resources to seek [patient-centered medical home] qualification.”).

285. See DEVERS ET AL., *supra* note 227.

286. See *id.* A handful of states, including Oregon and Pennsylvania, provide start-up funds to providers transitioning to the medical home model, which can be used to hire new staff and pay for other structural changes. See *id.* In addition, at least 8 state Medicaid programs are funding interdisciplinary community health teams that support multiple primary care practices functioning as medical homes. See *id.* In these states centrally located state or regionally-based community health teams relieve primary care providers from having to each establish and fund their own interdisciplinary team to coordinate patients’ clinical and nonclinical needs. See *id.* See also TAKACH & BUXBAUM, *supra* note 185 (describing the functions of community health teams). States supporting community health teams include Alabama, Maine, Minnesota, New York, North Carolina, Oklahoma, and Vermont. See DEVERS ET AL., *supra* note 227.

287. See DEVERS ET AL., *supra* note 227.

288. See Medicare Access and CHIP Reauthorization Act of 2015, § (11)(B), Pub. L. No. 114-10, 129 Stat. 87, 110–11 (to be codified at 42 U.S.C. § 1395w-4).

they cannot address pollution or other environmental hazards that operate across a geographic area.²⁸⁹ Similarly, providers can promote exercise through individual counseling and education programs, but few have the resources to increase a community's available green spaces.²⁹⁰ Providers also can do little to improve a community's schools, upgrade its housing stock, or reduce unemployment, poverty, or crime rates.²⁹¹ Nor do providers have the legal authority to adopt and enforce public health policies, such as smoking bans and clean indoor air laws.²⁹²

The growing volume of provider-sponsored SDH initiatives reveals an emerging trend of providers moving beyond the biomedical paradigm in response to the ACA reforms discussed in Part II. Yet upon closer examination, these policy changes create weaker incentives for providers to address SDHs than first glance suggests. Moreover, the financial incentives under the new payment models encourage providers to narrowly focus on SDH initiatives that produce near-term improvements in the health of individual patients, rather than long-term improvements to the health of the broader community. Many providers also lack the capacity to address SDHs, and few on their own can effectively tackle far upstream social and environmental causes of poor health, such as pollution, poverty, and crime.

In presenting a less optimistic view of providers' growing efforts to address SDHs, this article does not mean to suggest that providers' SDH initiatives are of limited value. These efforts have a very real and positive impact on the health of many individuals, and rightly

289. See Braunstein & Lavizzo-Mourey, *supra* note 29.

290. See generally Ross C. Brownson et al., *Environmental and Policy Determinants of Physical Activity in the United States*, 12 AM. J. PUB. HEALTH 1995 (2001).

291. See Casalino et al., *supra* note 205, at 824 ("ACOs are composed of provider organizations (primarily hospitals and medical groups) whose core capabilities relate to the provision of medical care. Their expertise does not lie in improving housing or education, reducing poverty, changing the built environment, or leading public health initiatives."); Braunstein & Lavizzo-Mourey, *supra* note 29, at 2042 ("The root causes of poor health experienced by many who live in low-income neighborhoods—such as the lack of access to health care, limited food choices, and exposure to environmental hazards—are well documents, but often go beyond the scope of the health care delivery system.").

292. See Casalino et al., *supra* note 205, at 824 ("ACOs are not the government. They lack the legal authority that government agencies possess to intervene to improve socioeconomic factors.").

should be viewed as an encouraging development. But at present, this emerging trend is only a partial solution to America's neglect of the social, environmental, and behavioral causes of poor health. Moving forward, the challenge for policymakers will be developing policies that strengthen providers' incentives to address SDHs and enhance their capacity to do so. A comprehensive discussion of this challenge is beyond the scope of this Article. Part V, however, begins the discussion by presenting a vision for the health care system of tomorrow—Population Health Partnerships—and highlighting some of the obstacles to making this vision a reality.

V. A VISION FOR THE FUTURE: POPULATION HEALTH PARTNERSHIPS

In recognition of providers' limited capacity to address the full range of SDHs, health policy experts increasingly are calling for providers to work collectively with other sectors to improve the population's health.²⁹³ These Population Health Partnerships (PHPs), as I call them,²⁹⁴ would involve participating organizations coordinating their activities in pursuit of shared population health objectives. These objectives could include a single, specific goal, such as reducing childhood obesity, or a broad range of health concerns. In their most advanced form, PHPs would (1) assess and prioritize a population's health needs, (2) develop a collective, comprehensive strategy for addressing those needs, (3) coordinate

293. See, e.g., Casalino et al., *supra* note 205, at 829 (discussing calls for the creation of “integrator” coalitions given that ACOs and hospitals are unlikely to have the capabilities to fundamentally change the socioeconomic determinants of health); TRICIA MCGINNIS, MAIA CRAWFORD & STEPHEN A. SOMERS, A STATE POLICY FRAMEWORK FOR INTEGRATING HEALTH AND SOCIAL SERVICES 2 (2014), <http://www.sashvt.org/CommonwealthFundreport.pdf> (describing the “new vision for integrating health and social services”); Mays & Scutchfield, *supra* note 217, at 1–2 (discussing public health partnerships, where participants from across sectors collectively undertaking to promote health and prevent disease in populations); William H. Dietz et al., *An Integrated Framework For The Prevention And Treatment Of Obesity And Its Related Chronic Diseases*, 34 HEALTH AFF. 1456, 1458 (2015) (calling for integration between care delivery and multiple community systems); Stephen M. Shortell, *Challenges and Opportunities for Population Health Partnerships*, 7 PREVENTING CHRONIC DISEASE A114, 2 (2010) (advocating for community health management systems built upon partnerships between providers, local health departments, and other community organizations).

294. These cross-sector coalitions also have been called community health systems, population health organizations, accountable care communities, and accountable health communities. See Casalino et al., *supra* note 205, at 829.

participants' activities and the sharing of resources and data, and (4) evaluate the PHP's success in achieving its goals.²⁹⁵ Toward that end, the PHP would include a broad coalition of organizations in addition to health providers: local public health departments; other governmental agencies such as schools, public safety, housing, parks and recreation departments; social services organizations such as food pantries, homeless shelters; civic organizations like the YMCA, and Girls and Boys Clubs; faith-based groups; academics; payors; and business groups.²⁹⁶ By combining their expertise and resources in pursuit of shared community health goals, those participating in a PHP would collectively achieve greater improvements in health than would be possible through each acting independently.²⁹⁷

To illustrate, consider the problem of obesity. Provider-based efforts to improve diet and increase physical activity, such as patient counseling and on-site weight management programs, "will not succeed without complementary community systems that make healthier choices the default or easier option."²⁹⁸ For example, patients motivated to improve their diets and exercise more also need access to healthy food and safe places for physical activity.

Toward that end, a PHP could support a coordinated, comprehensive strategy to address a community's obesity problem that would include a range of policies and activities, such as:

295. See Shortell, *supra* note 293, at 2 (describing the function of a community health management system); Dietz et al., *supra* note 293, at 1459 (identifying the functions that the integrator of an integrated cross-sector partnership must perform). A Population Health Partnership would require the leadership of an integrator, an entity whose responsibilities would include the following: overseeing the development of the partnership's mission and agenda, coordinating the partnership's activities, supporting the sharing of data, identifying and accessing funding, managing the partnership's budget, allocated resources, and holding participating organizations accountable for their performance. See *id.* (discussing an integrator's multiple roles); Casalino et al., *supra* note 205, at 829.

296. See Dietz et al., *supra* note 293, at 1458 (listing key stakeholders); Casalino et al., *supra* note 205, at 829 (listing other sectors that address SDHs); PRIMARY CARE AND PUBLIC HEALTH, *supra* note 105, at 28 (listing community groups striving for population health improvements).

297. See Mays & Scutchfield, *supra* note 217, at 1–2 (discussing the benefits of public health partnerships).

298. Dietz et al., *supra* note 293, at 1457.

- Eliminating a community's food deserts by subsidizing new grocery stores, farmers markets, or food pantries;
- Helping individuals with food insecurity issues enroll in public assistance programs such as SNAP or connecting them with local organizations such as food pantries;
- Increasing available green spaces or recreation centers;
- Improving the safety of local parks;
- Launching a public awareness campaign that educates the community on the importance of nutrition and physical exercise; and
- Increasing students' opportunities for physical activity and healthy lunch options in schools.

Data collected by providers and others, such as patients' body mass index (BMI), could help identify the most vulnerable neighborhoods and populations, thereby ensuring that resources are targeted to those most in need. The PHP also could develop metrics to assess whether the partnership is achieving its goal of reducing obesity.

Early efforts to implement PHPs abound.²⁹⁹ For example, as discussed in Part III.B., Cincinnati Children's is working with schools, local government agencies, and community groups to address infant mortality, obesity, asthma, unintentional injuries, and early childhood development.³⁰⁰ Providers in Summit County, Ohio

299. See, e.g., Casalino et al., *supra* note 205, at 831–32 (describing “early efforts” to implement partnerships between providers, public health organizations, and other sectors); Dietz et al., *supra* note 293 (discussing examples of cross-sector partnerships to address obesity); Stephen Somers & Tricia McGinnis, *Broadening the ACA Story: A Totally Accountable Care Organization*, HEALTH AFF. BLOG (Jan. 23, 2014), <http://healthaffairs.org/blog/2014/01/23/broadening-the-aca-story-a-totally-accountable-care-organization/> (discussing the Hennepin Health Medicaid ACO and similar cross-sector partnerships); Braunstein & Lavizzo-Mourey, *supra* note 29 (highlighting examples of partnerships between the health and community development field). A 2013 survey of hospitals found that many have partnered with community and civic organizations on population health initiatives, with hospitals averaging 8.63 such partnerships. See TRENDS IN HOSPITAL-BASED POPULATION HEALTH INFRASTRUCTURE, *supra* note 110, at 12.

300. See *supra* notes 202–203 and accompanying text.

are partnering with other sectors to target the community's high rate of diabetes.³⁰¹ In addition, Hennepin Health, a Medicaid ACO in Minnesota comprised of an HMO, academic medical center, federally-qualified clinics, and the local public health department, works with homeless shelters, county jails, supportive housing providers, and others to meet the "total" needs of its patients.³⁰² While these and similar efforts certainly are a promising development, most are modest in scope and scale.³⁰³ This may be due to the various obstacles impeding the emergence of mature PHPs that fully integrate participating organizations' resources and expertise across a broad range of activities and health issues.

Current payment reforms and CHNA policies may do too little to nudge providers to join PHPs. For the reasons discussed in Part IV.A., the financial incentives under current payment reforms simply may be too weak to entice providers to participate in a PHP's broad scale, community-level initiatives. Among tax-exempt hospitals, uncertainty over whether the IRS would count a hospital's participation in collaborative efforts as a community benefit activity "may [further] sap a hospital's enthusiasm" for PHPs,³⁰⁴ particularly if the collaboration benefits individuals outside the geographic area used by the hospital for meeting its community benefit standards. Tax-exempt hospitals face additional legal uncertainty if their specific contribution to the PHP departs from traditional forms of

301. See AUSTEN BIOINNOVATION INST. IN AKRON, HEALTHIER BY DESIGN: CREATING ACCOUNTABLE CARE COMMUNITIES: A FRAMEWORK FOR ENGAGEMENT AND SUSTAINABILITY (2012), <http://faegrebdc.com/webfiles/accwhitepaper12012v5final.pdf>.

302. See Somers & McGinnis, *supra* note 299 (discussing Hennepin Health); CRAWFORD ET AL., *supra* note 29, at 9.

303. See CRAWFORD ET AL., *supra* note 29, at 6 ("Few models exist that successfully integrate clinical health care with social, public health, and/or community-based interventions like housing assistance, food access, early childhood education, and environmental protection."); Somers & McGinnis, *supra* note 299 ("[F]ew [Medicaid ACOs] are close to achieving the scope of services combined with the depth of financial responsibility needed."); Mays & Scutchfield, *supra* note 217, at 1 ("We found that the types of partnerships likely to have the largest and most direct effects on population health are among the most difficult, and therefore least prevalent, forms of collaboration. High opportunity costs and weak and diffuse participation incentives hinder partnerships that focus on expanding effective prevention programs and policies.")

304. See Crossley, *supra* note 107, at 105-106.

community benefit, such as collecting and analyzing data in support of the PHP's activities.³⁰⁵

Cultural barriers also may hinder the development of mature PHPs. The business considerations that influence many providers may not mesh with the public service orientation of government agencies and community organizations.³⁰⁶ Moreover, relative to provider-based SDH initiatives, PHPs are “messier,” and providers may be reluctant to cede some control to other collaborators.³⁰⁷ In addition, providers who view themselves as competitors may be less than enthusiastic about participating in PHPs involving multiple providers. Mary Crossley also has noted that hospitals commonly view aspects of their community benefit programs as proprietary information, and this “competitive mindset” may make them unwilling to share information as part of a PHP.³⁰⁸ Providers' general reticence to share information considered proprietary likewise may diminish their willingness to collaborate with other sectors, including the public health sector.³⁰⁹ The PHP's internal financing arrangements also must ensure that any cost savings or financial rewards derived from the participating organizations' collective efforts are allocated across all organizations; otherwise, some organizations will not have sufficient resources to cover their costs or

305. *See id.*; *see also* Janet Corrigan, Elliott Fisher & Scott Heiser, *Hospital Community Benefit Programs*, 313 JAMA 1211, 1211–12 (2015) (noting that ambiguities as to the requirements under community benefit laws and regulations, particularly regarding which community building investments count as community benefits, may be barriers to regional coordination).

306. *Cf.* Ingram, Scutchfield & Costich, *supra* note 116, at 842 (stating that among the cultural and practical barriers to ACO-public health partnerships cited by respondents surveyed by the authors, “the most commonly cited barrier was the business orientation of the accountable care organization model”).

307. *See* Crossley, *supra* note 107, at 105–106 (discussing hospitals' reluctance to engage in collaborative efforts as part of meeting their CHNA obligations).

308. *See id.* at 104. Crossley's concerns find support in attempts to establish regional health information exchanges that allow for sharing of electronic patient data across providers, with many efforts hindered by providers' reluctance to share patient data with competing providers. *See* Julia Adler-Milstein, David W. Bates & Ashish K. Jha, *U.S. Regional Health Information Organizations: Progress and Challenges*, 28 HEALTH AFF. 483, 489 (2009) (reporting that approximately 40 percent of regional health information organizations (RHIOs) identified “stakeholder concerns about competition” as both a planning and operational barrier to the development of RHIOs); Joy M. Grossman, Thomas S. Bodenheimer & Kelly McKenzie, *Hospital-Physician Portals: The Role of Competition In Driving Clinical Data Exchange*, 25 HEALTH AFF. 1629, 1634–35 (2006) (explaining how competition has been a barrier to communitywide data sharing).

309. *See* Crossley, *supra* note 107, at 104.

will have little economic incentive to continue their participation in a PHP.³¹⁰ Reaching accord on this issue among participating organizations, however, may prove challenging.³¹¹

On a more practical level, successful PHPs require a shared infrastructure that supports exchanging data across participating organizations and tracking of health outcomes.³¹² Sharing data can enhance each participating organization's performance of its respective functions.³¹³ For example, receiving clinical data from providers could support public health departments in their surveillance activities, including identifying chronic disease trends suggesting a need for public health interventions.³¹⁴ Providers seeking to link their patients with community resources would benefit from access to real-time information on the assistance available through local social services organizations and tracking their patients' encounters with these organizations.³¹⁵ And having access to relevant medical information, such as current medications, could help homeless shelters and other social services organizations better serve their clients.³¹⁶ Unfortunately at present various barriers impede cross-sector data sharing, including concerns about the security and privacy of individual data, fear of violating federal and state privacy laws, incompatible data systems, limited information technology capability among social services and community

310. See Elliott S. Fisher & Janet Corrigan, *Accountable Health Communities: Getting There from Here*, 312 JAMA 2093, 2093 (2014).

311. *Cf. id.* (noting that savings accrue to providers under new payment reform models, and that “[i]t is far from clear how or if the reallocation to support needed investments in public health or social services will occur”).

312. See MCGINNIS, CRAWFORD & SOMERS, *supra* note 293, at 1 (a necessary component for an integrated system of health and social services is “quality measurement and data-sharing tools to track outcomes and exchange information”); PRIMARY CARE AND PUBLIC HEALTH, *supra* note 105, at 5–6 (an essential component of successful integration of primary care and public health is “the sharing and collaborative use of data and analysis”).

313. See PRIMARY CARE AND PUBLIC HEALTH, *supra* note 105, at 74.

314. See *id.* at 30 (discussing the benefits of public health agencies incorporating data from providers).

315. See Oanh Kleu Nguyen, et al., *Envisioning a Social-Health Information Exchange as a Platform to Support a Patient-Centered Medical Neighborhood: A Feasibility Study*, 30 J. GEN. INTERNAL MED. 60, 65 (2015) (discussing the purposes for which data may be exchanged across sectors).

316. See *id.*

organizations, and concerns about inadequate workforce training in data privacy and security at nonprovider organizations.³¹⁷

Finally, PHPs require financing mechanisms that support building and sustaining the necessary infrastructure and reward all partnership participants for improvements in the community's health. PHPs often rely on government and foundation grants to fund their start-up costs.³¹⁸ However, because grants, by their nature, are time-limited, sustaining a PHP requires alternative sources of continuous, dependable revenue streams.³¹⁹ Ideally these alternative financial arrangements also would reward PHPs that improve their community's health—and perhaps penalize those who do not—because the potential for financial rewards creates stronger incentives for providers to participate in PHPs. At present, few sustainable funding models have been put into practice,³²⁰ although commentators have proposed various financing mechanisms for PHPs.³²¹ For example, a PHP that successfully reduces its

317. *See id.* at 63–65; PRIMARY CARE AND PUBLIC HEALTH, *supra* note 105, at 26; CRAWFORD ET AL., *supra* note 29, at 14.

318. *See* Casalino et al., *supra* note 205, at 832 (“Government and foundation grants can help fund the start-up costs of population health organizations . . .”). An emerging alternative funding mechanism for a PHP's start-up costs is social impact bonds (SIBs). *See* BUTLER, GRABINSKY & MASI, *supra* note 159, at 15. With SIBs, private investors provide funding to a public agency in support of specific initiatives. *See id.* Whether and to what extent the private investor receives back its investment and a return on investment is tied to whether measurable social outcomes are achieved. *See id.*

319. *See* Casalino et al., *supra* note 205, at 832 (explaining that although grants can cover start-up costs, cross-sector population health partnerships can only succeed if “sustainable—that is, [they] have reliable ongoing sources of funding”); ALPER & BACIU, *supra* note 72, at 9 (“We need to move beyond grants and short-term appropriations and move to dependable formula sources . . .”) (quoting David Kindig).

320. *See* PRIMARY CARE AND PUBLIC HEALTH, *supra* note 105, at 34 (“[T]he sustainability and scalability of models of [cross-sector] integration have been lacking. The key task now is to focus on the challenge of sustainable implementation of community-based models of primary care and public health integration. Critical elements for this take are providing sustains resources and incentives for these models . . .”).

321. Long-term funding models for PHPs include:

- Population-level shared savings, where the PHP would be subject to a community-wide population health budget and would receive a portion of any savings its members' collected efforts generate for payors.
- Similar to pay-for-performance payment methodologies, rewarding a PHP for meeting community-wide population health targets, such as reducing obesity, reducing hospital readmissions, or lowering premature birth rates. This could be linked to shared savings payments made to a PHP under a population-level shared savings program, with the level of shared savings adjusted upward (or downward) for meeting (or failing to meet) community-wide population health targets.

community's hospital admissions rate could be rewarded with a share of the resulting savings for the Medicare and state Medicaid programs, with the PHP then allocating the bonus across participating organizations.³²²

To make the PHP vision a reality, policymakers must put in place policies and infrastructure that would support providers and other organizations combining their resources and expertise across a broad range of population health activities.³²³ Fortunately, a handful of states have begun to do just that.³²⁴ For example, Oregon's state Medicaid program has established regional Coordinated Care Organizations (CCOs)—partnerships among providers, local public health departments, community members, and other stakeholders that have a global budget and are accountable for the cost and quality of care provided to Medicaid beneficiaries.³²⁵ In Minnesota, Medicaid ACOs known as Integrated Health Partnerships are expected to develop coordinated service delivery models that address SDHs at the community level.³²⁶ And in Colorado, policymakers are working toward “a future in which most care for most Coloradans will be provided through coordinated systems of care that integrate physician and behavioral health services and connect public health agencies,

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- Payors such as Medicare and Medicaid directly paying for nonclinical programs that address social determinants of health, such as housing services.
 - Capitated payments that would be used by the PHP to purchase both clinical and nonclinical services for patients.

See Casalino et al., *supra* note 205, at 830 (describing risk-adjusted community-wide population health budgets); Ingram, Scutchfield & Costich, *supra* note 116, at 842 (discussing global payment models); BUTLER, GRABINSKY & MASI, *supra* note 159, at 14 (suggesting that the federal government grant Medicaid waivers that would allow state Medicaid programs to use their funds for services such as housing and education); MCGINNIS, CRAWFORD & SOMERS, *supra* note 293, at 5 (discussing different payment models); Shortell, *supra* note 293, at 1 (proposing risk-adjusted population-wide payments).

322. See, e.g., Casalino et al., *supra* note 205, at 831 (describing risk-adjusted community-wide population health budgets); CRAWFORD ET AL., *supra* note 29, at 5 (describing a population-level shared savings model).

323. See Braunstein & Lavizzo-Mourey, *supra* note 29, at 2049 (“The challenge is to move to more-integrated systems that can support broad-scale accomplishments and that will be energized by shared learning and strengthened by connections across people, projects, and evaluation and research activities.”).

324. See CRAWFORD ET AL., *supra* note 29, at 10 (describing Oregon's CCOs); *About Coordinated Care Organizations*, OR. HEALTH AUTH., <https://cco.health.oregon.gov/Pages/AboutUs.aspx>.

325. See *id.*

326. See *id.* at 9 (describing Minnesota's ACO demonstration).

clinical care delivery systems and community organizations to achieve population health goals.”³²⁷ At the federal level, the Center for Medicare and Medicaid Services supports state and local demonstration projects that test “new financing models that allow for savings from upstream interventions that address social determinants of health to be shared across health care providers and agencies delivering social services.”³²⁸ CMS also recently announced a new grant initiative to test collaborations between providers and other sectors, which CMS refers to as the “Accountable Health Communities Model.”³²⁹ In addition, the Office of the National Coordinator, U.S. Department of Health and Human Services has begun examining whether policy changes are needed to support cross-sector data sharing among organizations participating in PHPs.³³⁰ The knowledge gained from these early initiatives can be used to develop policies that support the successful implementation of mature PHPs across the nation.

CONCLUSION

Despite growing recognition that social, environmental, and behavioral factors profoundly impact an individual’s health, policymakers are unlikely to increase public funding for programs that directly address the social determinants of health. Fortunately, the health care system has begun to fill this void. In response to various reforms enacted under the Affordable Care Act, health care providers are paying more attention to the social determinants of

327. CORRIGAN & FISHER, *supra* note 185, at 6.

328. Dietz et al., *supra* note 293, at 1460. For a description of the grants awarded by CMS, see generally *State Innovation Models Initiative: General Information*, CTRS. FOR MEDICARE & MEDICAID SERVS., <https://innovation.cms.gov/initiatives/state-innovations/> (last visited Feb. 5, 2016).

329. See *Accountable Health Communities Model*, CTRS. FOR MEDICARE & MEDICAID SERVS., <https://innovation.cms.gov/initiatives/AHCM> (last visited Feb. 5, 2016) (announcing grants to test the Accountable Health Communities Model).

330. On June 2, 2015, the Office of the National Coordinator’s Advanced Health Models and Meaningful Use Workgroup held a public hearing exploring these issues. See *Policy: Advanced Health Models and Meaningful Use Workgroup Public Hearing*, HEALTHIT (Sep. 8, 2015), <https://www.healthit.gov/facas/calendar/2015/06/02/policy-advanced-health-models-and-meaningful-use-workgroup-public-hearing>.

health. Many providers have adopted innovative approaches that address nonclinical conditions that contribute to poor health, such as patient-centered medical homes, medical legal partnerships, and helping patients procure public benefits and community-based support.

Thus far, these efforts have been modest.³³¹ With the traditional biomedical paradigm deeply ingrained in the current medical culture, many providers have not yet expanded their orientation to include the social determinants of health. Among those who have, most are at an early point on the learning curve.³³² Moreover, providers' efforts to address the social determinants of health are narrowly focused on interventions that produce near-term improvements in the health of individual patients. This is not surprising, as providers at present generally lack the incentives and capacity to take primary responsibility for improving the long-term health of the broader population residing in their geographic areas.

With much to be gained from providers addressing the social determinants of health, regulators must do more to strengthen providers' incentives and capacity to do so. As an initial step, regulators should adopt policies that push more providers to address their individual patients' most pressing nonclinical needs. For example, the Medicare and Medicaid programs could adopt payment methodologies that reward concrete actions that address the social determinants of health, such as paying bonuses to providers who assist their asthmatic patients with eliminating mold and other risk factors in their homes. The federal government and states also could expand current programs that support providers transitioning to patient care models that address both clinical and nonclinical needs, such as the patient-centered medical home. Providers likewise would

331. See Casalino et al., *supra* note 205, at 830 (“Overall, serious efforts by ACOs and hospitals to have an impact on the socioeconomic determinants of health appear to be modest.”).

332. See ALPER & BACIU, *supra* note 72, at 14 (commenting that hospital are “still early on the learning and action curve” with respect to practices that involve investing in population health); Noble & Casalino, *supra* note 168, at 1119 (noting that “[m]any ACOs appear to interpret their responsibility for population health in medical terms—that is responsibility to provide preventive care for all their patients and care management for their patients with serious chronic diseases,” and that this “falls far short of working to improve the health of the population in a geographic area”).

benefit from publicly funded research that helps them identify most efficient and effective ways to ameliorate the social impediments to good health.

Ultimately, providers will find greater success in addressing the social determinants of health if they join Population Health Partnerships—coalitions among organizations from different sectors working collaboratively to improve their communities' health. Unfortunately, various challenges impede the development of Population Health Partnerships, including a lack of both sustainable financing models and infrastructure supporting the electronic exchange of data across sectors. Health policy analysts must develop a deeper understanding of these challenges and adopt policies that lower the barriers to Population Health Partnerships.

The emerging trend of providers addressing the social determinants of health is a promising development that should be celebrated. But if the United States wishes to effect long-lasting, meaningful improvement in the population's health, the health care system eventually must evolve from one centered around providers diagnosing and treating patients to one that fully integrates the medical, public health, and social services sectors. This health care system of the future would not only meet patients' immediate medical needs, but also would advance the population's health by addressing the root causes of poor health.