By Steven H. Woolf

DOI: 10.1377/hlthaff.2017.0197
HEALTH AFFAIRS 36,
NO. 6 (2017): 984–991

COMMENTARY

Progress In Achieving Health Equity Requires Attention To Root Causes

Steven H. Woolf (swoolf@vcu.edu) is director of the Center on Society and Health at Virginia Commonwealth University, in Richmond.

ABSTRACT **Life expectancy and disease rates in the United States differ starkly among Americans depending on their demographic characteristics and where they live. Although health care systems are taking important steps to reduce inequities, meaningful progress requires interventions outside the clinic, in sectors such as employment, housing, transportation, and public safety. Inequities exist in each of these sectors, and barriers to educational attainment, higher-income jobs, and social mobility limit the opportunity of disadvantaged people to improve their circumstances. Financial institutions and other stakeholders are investing in cross-sector collaborations to remove these barriers and thereby strengthen local economies and population health. Meanwhile, recent trends suggest the need to widen the lens on health equity, to include not only the low-income residents of inner-city neighborhoods but also people in economically marginalized rural communities. Widening income inequality and stagnant wages, and their alarming health consequences, underscore the need for policies to help low-income and middle-class families and improve educational opportunities for their children.**

The life expectancy and disease rates experienced by Americans often vary substantially, depending on race or ethnicity, socioeconomic status, and geography. Health status is poorer for Americans with less income, education, and social mobility and for people of color.[1] On average, members of these disadvantaged groups experience shorter lives and higher rates of disease, injury, and disability. These disparities exist from life's beginning—for example, black infants are more than twice as likely as white infants to die before their first birthday—to life's end, which comes earlier for disadvantaged people.[2] Rates of premature death are higher in these populations, often because of delayed detection and inadequate care of chronic diseases such as diabetes, cardiovascular disease, and cancer.[2]

The higher costs of health care associated with the excess disease burden among vulnerable populations are of growing concern to payers and employers.[3,4] The Federal Reserve has warned that health disparities threaten the US economy.[5] The imperative to address disparities, on both fiscal and moral grounds, has fueled wide-ranging public health and clinical initiatives to close the gap. The health care community has focused on reducing disparities in clinical outcomes by adopting new strategies such as systematically recording race and ethnicity data to help measure disparities, adopting guidelines to reduce inconsistencies in health care, and conducting research on new ways to reduce inequities. These efforts have not always yielded better health outcomes,[6] however, largely because health disparities often originate from conditions outside the clinic.[7]

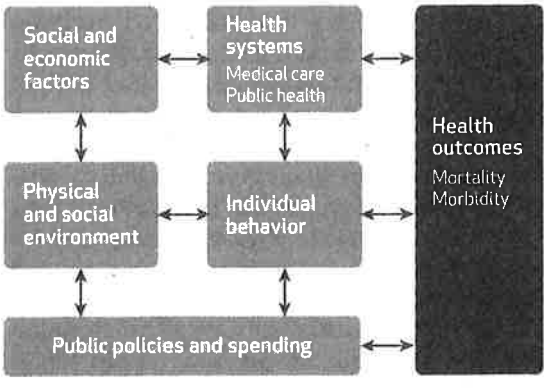
This article examines the root causes that shape health outcomes and the role of public policy in creating opportunities for better health and well-being. The focus is on achieving equity, not equality. One is a moral and fiscal imperative; the other is impossible. Because life choices, chance, and providence bring fortune and misfortune, no society can promise equal outcomes, and inequalities are inevitable. Furthermore, unequal health outcomes are not inherently unjust: They can arise from biology, personal choices, or chance. This article is about health inequity, defined as "disparities in health and its determinants that adversely affect excluded or marginalized groups."[8(p2)] As explained by Paula Braveman and Sofia Gruskin, health inequities "systematically put groups of people who are already socially disadvantaged (for example, by virtue of being poor, female, and/or members of a disenfranchised racial, ethnic, or religious group) at further disadvantage with respect to their health."[9(p254)]

What Causes Health Inequities?

Health inequities, like health itself, are shaped by multilevel socioecological influences (Exhibit 1).[10,11] These influences include health care and individual behavior, which in turn are shaped by the physical and social environment and the social and economic resources of individuals and households. These four domains are influenced by macrostructural conditions set by society, such as public policies, social values, and spending. These social determinants of health are complex, interrelated systems, and thus the causes of health inequities cannot be reduced to simplistic explanations.[12,13] For example, some people mistakenly assume that health inequities derive entirely from the failure to take responsibility for one's own health, but health behaviors are often products of one's environment.[14]

EXHIBIT 1

Socioecological determinants of health and health outcomes



SOURCE Adapted from Woolf SH, Aron L, editors. U.S. health in international perspective (Note 11 in text).

The physical and social environments in which people live determine whether they can optimize their health and that of their children. Children cannot get daily exercise if the streets are unsafe or their neighborhoods lack playgrounds, parks, or other forms of green space.[15] Good health requires access to high-quality housing and transportation, clean air and drinking water, and stores that sell healthy food.[7,10] The best intentions might not be enough when one's neighborhood has high crime rates, a plethora of fast-food outlets and liquor stores, or shortages of health care providers and clinical facilities.[14,15]

The social and economic characteristics of individuals and households, in turn, determine whether people can afford to maintain healthy behavior; obtain health care; or live in a neighborhood with good housing, clean air, and green space.[7,10,11] In today's knowledge economy, income and net worth (assets) depend on getting a good education, and access to education—from preschool to college and professional school—is more limited for people with lower incomes.

Macrostructural conditions, such as public policies and spending, have intricate interrelationships with all of the above influences, from health care to socioeconomic status and the environment.[10,11] For example, tax policies affect funding for local services such as public transit, and business decisions affect the local economy and labor market. Social policies and values, such as racial prejudice, can also perpetuate health inequities.[16–18]

The legacy of discrimination is evident in America's cities, where historical policies (for example, redlining, which denied or limited financial services such as home mortgages to certain neighborhoods based on their racial or ethnic composition) and urban landscape features (such as highways, which often divided and displaced communities of color) have isolated low-income neighborhoods and perpetuated concentrated poverty.[19,20] Residents of urban and rural communities, caught in a cycle of multigenerational poverty and limited social mobility, are often unable to help their children achieve higher socioeconomic status.[21,22] The desperation to find economic resources can fuel crime.[23] Some victims of trauma and oppression act out in violence or self-medicate with alcohol or drugs. Members of racial or ethnic minority groups are more likely than whites to be arrested, prosecuted, and incarcerated.[24] Inmates with children often leave them behind with single parents—who, on average, experience increased

poverty and social immobility.[16]

Communities beset with these problems can be unattractive to businesses, industry, and investors, which can further exacerbate the cycle of poverty. Disinvestment contributes to unemployment, housing blight, homelessness, and inadequate transportation services.[19,20] Low property values weaken public schools, which makes it more difficult for children to obtain the education they need to escape these conditions.[25]

Discussions of equity are focusing increasingly on opportunity.

The Role Of Health Care In Reducing Inequity

Health care is a necessary but insufficient prerequisite for health equity. Health care is, of course, indispensable: Good health requires access to preventive and therapeutic health care services, from immunizations and prenatal care to treatments for chronic diseases. This in turn requires access to providers and health insurance coverage. Policies to make high-quality health care available to patients of all backgrounds are essential to health equity. However, even the best medical care cannot abolish health inequities: Only 10–20 percent of health outcomes are determined by health care access and quality.[26] This explains why patients continue to experience health inequities, even in health systems such as Kaiser Permanente—where all members have similar access to providers and services.[27]

Increasingly, health care systems are turning to the community to find more impactful strategies to achieve health equity.[28] Health reforms such as those instituted under the Affordable Care Act have made health care systems more accountable for population health and have created economic incentives to address the conditions responsible for higher disease rates and overuse of health care services among vulnerable populations.[29] Many health care systems are intensifying efforts to identify patients with social needs, such as unstable housing or food insecurity, and to help them get assistance.[30] For example, some systems are staffing hospitals, emergency departments, and clinics with social workers or case managers or are referring patients with social needs to social service agencies or community organizations for assistance.[31] Commercial payers are also getting involved. For example, UnitedHealthcare has invested in a program in Phoenix, Arizona, to help low-income residents obtain social services.[32] In addition, the Centers for Medicare and Medicaid Services is testing the Accountable Health Communities Model, in which health care systems are systematically identifying and addressing the social needs of patients.[33]

But the health care sector can only do so much to address social problems. Health care institutions and providers, however deep their commitment to helping patients in need, face daunting economic challenges in today's unstable health care marketplace. Slim operating margins leave health care institutions with limited resources to invest in community programs, and physicians are generally not reimbursed, trained, or given the time to help patients solve social and economic problems. More can be done to address this deficit, but ultimately the health care system lacks the authority to alter the deep-seated social and economic conditions that affect population health.

Shared Interest In Achieving Health Equity

Meaningful progress in addressing health inequities requires complementary policies to reduce inequities in education, employment, housing, transportation, and public safety. The decision makers with the greatest power to shape health outcomes are not health workers: Instead, they work on school boards or in municipal government, legislative bodies, housing authorities, transit agencies, or the business sector. They are employers, developers, investors, banks, philanthropists, voters, and journalists. The "health in all policies" movement[34] arose from the recognition that social policy is health policy. It calls on decision makers in all sectors to systematically consider the health consequences before making choices about policy options. It encourages policy makers to commission health impact assessments, which systematically analyze the potential health benefits and risks of policy options.[35]

But health is not the only sector committed to addressing social justice or equity concerns in public policy. Just as health varies by race and ethnicity, socioeconomic position, and geography, so do job opportunities, access to education, and social mobility. The equity movement is larger than public health. Organizations, agencies, and activists are at work in many sec-

What often comes from cross-sector dialogue is the recognition of parallel efforts by multiple sectors.

tors to ensure equitable access to affordable housing, desirable neighborhoods, a living wage, bank loans, and an unbiased criminal justice system. However, no sector alone holds the key, and each confronts the same challenge: Be they teachers, police officers, or health care providers, front-line professionals who care for vulnerable populations lament their inability to resolve core issues that are beyond their reach, such as the economic forces and societal factors that limit opportunity and perpetuate cycles of poverty.

Opportunity As A Path To Equity

Discussions of equity are focusing increasingly on opportunity, referring to the conditions that allow people to realize their full personal potential.[36] This is occurring partly because *opportunity* strikes a more positive and politically resonant note, compared to *equity*—which some critics mistake as a call for wealth redistribution or "handouts." The political left and right are more likely to agree that "the choices people make depend on the choices they have"[37] and that everyone should at least have the opportunity to be healthy and improve their life circumstances, even if success cannot be guaranteed.[38]

Creating opportunity is seen as a central pathway to improved outcomes across sectors, much as the trunk of a tree relates to its branches.[39] The tree's canopy is the well-being of Americans, and the branches are the domains that shape well-being, such as health, education, employment, income, and safety. Focused reforms that address inequities in each branch are important, but gains across sectors are best achieved at the trunk by implementing policies that promote social and economic opportunity and in the soil by addressing cultural conditions (such as institutional racism) that constrain opportunities.[40] Too often, each sector is preoccupied with urgent work at the tips of the branches—for instance, providing food security, public housing, drug counseling, and health care for those in need. But collaborative efforts across sectors to restore economic vitality in communities and bring jobs, education, and income to residents may do more to address the core issues that make those services necessary.

Cross-sector collaboration and community engagement have become vital not just for better health but for all dimensions of well-being.[41] Employers value education (because they want to recruit talented workers), and they benefit from public transportation (to get their employees to work). Schools know that children cannot succeed without stable housing, food security, and good health. And health leaders understand that meaningful improvement in population health and health equity rests on the community's success in improving the local economy, quality of schools, physical infrastructure, and social cohesion.

Exciting opportunities arise when multiple stakeholders identify aligned incentives—a shared interest in seeing their collaborations succeed—and are willing to invest economic and political capital.[41] An example of what comes from discovering such shared incentives is the recent marriage between the fields of population health and community development.[42] A movement launched in 2010 by the Robert Wood Johnson Foundation and the Federal Reserve Bank of San Francisco introduced the public health community (whose members understand how place matters to health) to community development organizations (which have worked for generations to help distressed neighborhoods).[43] Developers, banks, philanthropists, and businesses that invest billions of dollars in housing, transportation, and other community benefits are increasingly interested in the business case for investing in health.[44,45]

What often comes from cross-sector dialogue is the recognition of parallel (and often duplicative) efforts by multiple sectors, which could more wisely leverage their resources through collaboration. For example, tax law requires nonprofit hospitals to engage in community benefit activities (typically charity care, but potentially also community-building activities such as investments in housing)[46] and conduct community health needs assessments.[47,48] The Community Reinvestment Act of 1977 requires banks to identify community development opportunities in low- and moderate-income communities.[45] Often the census and demographic data examined by hospitals and public health departments to identify areas with poor health are the same data being scrutinized by bank regulators, developers, and investors to identify community devel-

opment opportunities. The disadvantaged neighborhoods identified by business mapping tools, such as market value analyses,[49] are often the neighborhoods with the greatest health inequities. Public health leaders and investors have a potential shared interest in identifying these areas and investing in housing and other social needs.

In many communities, cross-sector partnerships to address social and economic conditions are achieving collective impact by sharing resources and data.[50] These collaborations are often able to influence policy and outcomes across sectors, including health. For example, Franklin County, Massachusetts—where teen substance abuse had been a long-standing challenge—reported large reductions in tobacco, alcohol, and drug use after implementing a collective impact initiative that involved local government, businesses, schools, community organizations, clergy, parents, and teens.[41] Similar efforts are addressing early childhood issues, education reform, economic growth, and neighborhood revitalization.

In principle, the cumulative health and economic benefits when tallied across sectors can yield a more favorable return on investment than when they are measured in one sector alone. But in practice, cross-sector partnerships often falter: Common challenges include engaging all sectors—including representatives of vulnerable populations—in leadership efforts and achieving sustainabilty.[41,51,52]

Nonetheless, the business case for investing in communities is gaining traction. Impact investments, which generate returns based on social and environmental outcomes, are bringing capital to programs that have the potential to meaningfully improve living conditions, economic opportunity, and social mobility in disadvantaged communities.[53] New partners are entering the conversation as well, such as chambers of commerce and Fortune 500 companies.[54] Major employers are recognizing the need to invest in communities to improve both population health and their workers' living conditions.[55] These efforts at the trunk of the tree have the potential to advance equity in each branch. The flow of private investments into needy communities also provides a model for sustaining public health programs, which have traditionally survived from grant to grant or closed their doors when funding ended.

Widening The Health Equity Lens

Recent events, including the election of a new president, add new context to the equity agenda. The volatile 2016 presidential campaign and

New evidence and a change in the national conversation on race suggest the need for a wider framing of health equity.

events preceding it brought equity to the forefront of public consciousness. People of color, immigrants, and members of religious and sexual minority groups reacted to threats to civil rights, videos of police misconduct, and vocal expressions of discrimination directed against themselves. Voters were drawn to candidates from both parties who championed the cause of American workers and decried the concentration of wealth in the upper class.

Among the many lessons of the presidential election and the unanticipated voter turnout for Donald Trump is that white Americans, especially those in economically depressed rural communities, are also victims of inequity. A new literature has raised awareness of the long history of poverty and social marginalization endured by the descendants of Scots-Irish and other European immigrants who populated Appalachia and the Deep South, and by much of rural America.[56]

The epidemiologic literature has also drawn attention to health inequities among disadvantaged whites. Studies have shown that whites—especially those who are middle-aged, have less than a high school education, live in rural areas, or are women—have experienced a decline in life expectancy and increased mortality rates since the 1990s.[57–59] David Kindig and Erika Cheng calculated that female mortality rates from 1992–96 to 2002–06 increased in 43 percent of counties, many located in rural areas.[60] Drug overdoses, liver disease, and suicides appear to be leading contributors to rising mortality rates among whites.[57,58] Speculation is growing that these mortality trends represent deaths from despair,[61] as middle-class whites accustomed to the economic stability of the past confront a new reality of prolonged economic pressures and the inability to provide for their children.[21,22,62]

Traditionally, the health statistics of whites have served as the reference standard for measuring the scale of health disparities among racial and ethnic minorities. These epidemiologic

The consequences of policy decisions could truly be a matter of life and death for disadvantaged populations.

trends may put that practice in question. That said, the rising mortality rates of whites should not divert attention from the much higher death rates experienced by blacks and members of other minority groups, such as Native Americans. While the black-white mortality gap has narrowed, as a result of both falling rates among blacks and rising rates among whites, the probability that black Americans will reach age sixty-five remains far lower than is the case for whites.[2]

Nonetheless, new evidence and a change in the national conversation on race suggest the need for a wider framing of health equity. The populations typically targeted in disparities research or equity initiatives, such as people of color and those in poor inner-city neighborhoods, remain urgent priorities, but worsening poverty among largely rural whites obligates greater attention to their concerns. Kindig has recently noted that whites experience health inequities in larger absolute numbers than do blacks, although relative rates are often higher among blacks.[63]

Policy solutions to address health inequities must therefore include not only strategies for cities and suburbs but also new approaches to improving the economic vitality and well-being of rural towns, farms, and ranches, where the social determinants of health take different forms. In rural areas, access to health-promoting resources is less about having a bus stop or subway line to get across town and more about finding a way to travel across county lines to reach the nearest supermarket or to traverse hundreds of miles to reach an obstetrician. In rural America, entire regions have lost opportunities for employment because of the collapse of major industries, such as tobacco farming and coal mining, and the replacement of small farms with large agribusinesses, necessitating strategies to attract new industries and jobs.

These mounting needs come at a time when programs to help the middle class and the poor, such as affordable housing and community development block grants, are under scrutiny in Washington, D.C., and state capitals.[64] Proposals to cut funding for such programs are driven not only by ideological principles but also by the rising costs of health care and entitlement programs. These budget cuts may be counterproductive: Research shows that health outcomes are superior in states that spend more on social programs than on health care.[65] Paying for health care by reducing investments in education and social and economic policies with established effectiveness poses the risk of widening income inequality and stalling progress in achieving health equity. Given the science linking these conditions to life expectancy, the consequences of policy decisions could truly be a matter of life and death for disadvantaged populations.

Conclusion

Health is about more than health care, and the same is true for health equity. Health equity is achieved not only by treating illnesses but also by addressing the physical and social environments that shape health behavior and produce disease and by creating the opportunity for vulnerable populations to build social and economic resources. Prudent investments in infrastructure and social mobility are therefore essential to public health, as they are to the overall well-being and prosperity of families and communities. Current fiscal and political pressures to pull back on these efforts have implications for human capital and the nation's economy, as well as the health and life expectancy of today's workers and their children. At this writing, the policy agendas of the White House and Congress are unclear. Although the states are promising laboratories for policy innovation, at the moment the nation's communities may offer the best environment for cultivating the cross-sector collaborations that are necessary to enhance economic opportunity, health, and equity. Health is shaped at the local level, and neighbors are often best at joining hands. ■

The author thanks Brian Smedley, executive director of the National Collaborative for Health Equity, for his helpful comments on a previous draft.

NOTES

1 Williams DR, Priest N, Anderson NB. Understanding associations among race, socioeconomic status, and health: patterns and prospects. Health Psychol. 2016;35(4):407–11.

2 National Center for Health Statistics. Health, United States, 2015: with special feature on racial and ethnic health disparities [Internet]. Hyattsville (MD): NCHS; 2016 May [cited 2017 May 4]. (DHHS Publication No. 2016-1232). Available from: https://www.cdc.gov/nchs/data/hus/hus15.pdf#specialfeature

3 Tippett R, Jones-DeWeever A, Rockeymoore M, Hamilton D, Darity W Jr. Beyond broke: why closing the racial wealth gap is a priority for national economic security [Internet]. Washington (DC): Center for Global Policy Solutions; 2014 May [cited 2017 Apr 26]. Available for download from: http://globalpolicysolutions.org/report/beyond-broke/

4 Tankersley J. Discrimination may hold back U.S. economy, report says. Washington Post. 2016 Jun 17.

5 Da Costa PN. Janet Yellen decries widening income inequality. Wall Street Journal. 2014 Oct 17.

6 Agency for Healthcare Research and Quality. 2015 national healthcare quality and disparities report and 5th anniversary update on the National Quality Strategy [Internet]. Rockville (MD): AHRQ; 2016 Apr [cited 2017 Apr 26]. (AHRQ Pub. No. 16-0015). Available from: https://www.ahrq.gov/sites/default/files/wysiwyg/research/findings/nhqrdr/nhqdr15/2015nhqdr.pdf

7 Woolf SH, Braveman P. Where health disparities begin: the role of social and economic determinants—and why current policies could make matters worse. Health Aff (Millwood). 2011;30(10):1852–9.

8 Braveman P, Arkin E, Orleans T, Proctor D, Plough A. What is health equity? And what difference does a definition make? Princeton (NJ): Robert Wood Johnson Foundation; 2017.

9 Braveman P, Gruskin S. Defining equity in health. J Epidemiol Community Health. 2003;57(4):254–8.

10 Commission on Social Determinants of Health. Closing the gap in a generation: health equity through action on the social determinants of health. Final report of the Commission on Social Determinants of Health [Internet]. Geneva: World Health Organization; 2008 [cited 2017 Apr 25]. Available from: http://apps.who.int/iris/bitstream/10665/43943/1/9789241563703_eng.pdf

11 Woolf SH, Aron L, editors. U.S. health in international perspective: shorter lives, poorer health. Washington (DC): National Academies Press; 2013.

12 Galea S, Riddle M, Kaplan GA. Causal thinking and complex system approaches in epidemiology. Int J Epidemiol. 2010;39(1):97–106.

13 Diez Roux AV. Complex systems thinking and current impasses in health disparities research. Am J Public Health. 2011;101(9):1627–34.

14 Brownell KD, Kersh R, Ludwig DS, Post RC, Puhl RM, Schwartz MB, et al. Personal responsibility and obesity: a constructive approach to a controversial issue. Health Aff (Millwood). 2010;29(3):379–87.

15 Frumkin H. Health, equity, and the built environment. Environ Health Perspect. 2005;113(5):A290–1.

16 Williams DR, Mohammed SA, Leavell J, Collins C. Race, socioeconomic status, and health: complexities, ongoing challenges, and research opportunities. Ann N Y Acad Sci. 2010;1186:69–101.

17 Smedley BD. The lived experience of race and its health consequences. Am J Public Health. 2012;102(5):933–5.

18 Lee Y, Muennig P, Kawachi I, Hatzenbuehler ML. Effects of racial prejudice on the health of communities: a multilevel survival analysis. Am J Public Health. 2015;105(11):2349–55.

19 Massey DS, Denton NA. American apartheid: segregation and the making of the underclass. Cambridge (MA): Harvard University Press; 1993.

20 Wilson WJ. The truly disadvantaged: the inner city, the underclass, and public policy. 2nd ed. Chicago (IL): University of Chicago Press; 2012.

21 Putnam RD. Our kids: the American dream in crisis. New York (NY): Simon and Schuster; 2015.

22 Chetty R, Hendren N, Kline PM, Saez E. Where is the land of opportunity? The geography of intergenerational mobility in the United States. Q J Econ. 2014;129(4):1553–623.

23 Coates T-N. Between the world and me. New York (NY): Spiegel and Grau; 2015.

24 Travis J, Western N, Redburn S, editors. The growth of incarceration in the United States: exploring causes and consequences. Washington (DC): National Academies Press; 2014.

25 Rich M, Cox A, Bloch M. Money, race, and success: how your school district compares. New York Times. 2016 Apr 29.

26 Hood CM, Gennuso KP, Swain GR, Catlin BB. County Health Rankings: relationships between determinant factors and health outcomes. Am J Prev Med. 2016;50(2):129–35.

27 Center on Society and Health. Health care: necessary but not sufficient [Internet]. Richmond (VA): Virginia Commonwealth University, Center on Society and Health; [cited 2017 Apr 26]. (Issue Brief). Available from: http://societyhealth.vcu.edu/media/society-health/pdf/test-folder/CSH-EHI-Issue-Brief-3.pdf

28 Norris T, Howard T. Can hospitals heal America's communities? "All in for mission" is the emerging model for impact [Internet]. Cleveland (OH): Democracy Collaborative; [cited 2017 Apr 26]. Available from: http://democracycollaborative.org/sites/clone.community-wealth.org/files/downloads/CanHospitalsHealAmericasCommunities.pdf

29 Folkemer DC, Spicer LA, Mueller CH, Somerville MH, Brow ALR, Milligan CJ Jr, et al. Hospital community benefits after the ACA: the emerging federal framework [Internet]. Baltimore (MD): Hilltop Institute; 2011 Jan [cited 2017 Apr 26]. (Issue Brief). Available from: http://www.hilltopinstitute.org/publications/HospitalCommunityBenefitsAfterTheACA-HCBPIssueBrief-January2011.pdf

30 Baciu A, Sharfstein JM. Population health case reports: from clinic to community. JAMA. 2016;315(24):2663–4.

31 Berkowitz SA, Hulberg AC, Standish S, Reznor G, Atlas SJ. Addressing unmet basic resource needs as part of chronic cardiometabolic disease management. JAMA Intern Med. 2017;177(2):244–52.

32 MyCommunity Connect [home page on the Internet]. Phoenix (AZ): Chicanos Por La Causa, Inc.; c 2017 [cited 2017 Apr 26]. Available from: https://www.cplc.org/MyCommunityConnect

33 CMS.gov. Accountable Health Communities Model [Internet]. Baltimore (MD): Centers for Medicare and Medicaid Services; [last updated 2017 Apr 12; cited 2017 Apr 26]. Available from: https://innovation.cms.gov/initiatives/ahcm/

34 Rudolph L, Caplan J, Ben-Moshe K, Dillon L. Health in all policies: a guide for state and local governments [Internet]. Washington (DC): American Public Health Association; 2013 [cited 2017 Apr 24]. Available from: https://www.apha.org/~/media/files/pdf/factsheets/health_inall_policies_guide_169pages.ashx

35 National Research Council. Improving health in the United States: the role of health impact assessment. Washington (DC): National Academies Press; 2011.

36 Bernstein J. Barriers to opportunity in today's America. Washington Post. 2017 Apr 3.

37 Lavizzo-Mourey R. In it together—building a culture of health [Internet]. Princeton (NJ): Robert Wood Johnson Foundation; [cited 2017 Apr 26]. Available from: http://www.rwjf.org/en/library/annual-reports/presidents-message-2015.html

38 Haidt J. The righteous mind: why good people are divided by politics and religion. New York (NY): Pantheon Books; 2012.
39 The Opportunity Agenda. Vision, values, and voice: a communications toolkit [Internet]. New York (NY): The Agenda; [cited 2017 Apr 26]. Available for download from: http://toolkit.opportunityagenda.org/
40 Jones CP. Levels of racism: a theoretic framework and a gardener's tale. Am J Public Health. 2000; 90(8):1212–5.
41 Towe VL, Leviton L, Chandra A, Sloan JC, Tait M, Orleans T. Cross-sector collaborations and partnerships: essential ingredients to help shape health and well-being. Health Aff (Millwood). 2016;35(11):1964–9.
42 Pastor M, Morello-Frosch R. Integrating public health and community development to tackle neighborhood distress and promote well-being. Health Aff (Millwood). 2014;33(11):1890–6.
43 Federal Reserve Bank of San Francisco, Low Income Investment Fund. Investing in what works for America's communities: essays on people, place and purpose [Internet]. San Francisco (CA): Federal Reserve Bank of San Francisco; 2012 [cited 2017 Apr 26]. Available for download from: http://www.frbsf.org/community-development/publications/special/investing-in-what-works-american-communities-people-place-purpose/
44 Edmonds A, Braveman P, Arkin E, Jutte D. Making the case for linking community development and health: a resource for those working to improve low-income communities and the lives of the people living in them [Internet]. Berkeley (CA): Build Healthy Places Network; [cited 2017 Apr 26]. (Issue Brief). Available from: http://www.buildhealthyplaces.org/content/uploads/2015/10/making_the_case_090115.pdf
45 Blum ES. Healthy communities: a framework for meeting CRA obligations [Internet]. Dallas (TX): Federal Reserve Bank of Dallas; 2014 Mar [cited 2017 Apr 26]. Available from: https://www.newyorkfed.org/medialibrary/media/outreach-and-education/cra/reports/DallasFed-Healthy-Communities-CRA-Framework.pdf
46 James J. Health Policy Brief: nonprofit hospitals' community benefit requirements. Health Affairs [serial on the Internet]. 2016 Feb 25 [cited 2017 Apr 26]. Available from: http://www.healthaffairs.org/healthpolicybriefs/brief.php?brief_id=153
47 Rosenbaum S, Kindig DA, Bao J, Byrnes MK, O'Laughlin C. The value of the nonprofit hospital tax exemption was $24.6 billion in 2011. Health Aff (Millwood). 2015;34(7):1225–33.
48 Association of State and Territorial Health Officials. Community health needs assessments [Internet]. Arlington (VA): ASTHO; [cited 2017 Apr 26]. Available from: http://www.astho.org/Programs/Access/Community-Health-Needs-Assessments/
49 Reinvestment Fund. Market value analysis [Internet]. Philadelphia (PA): The Fund; [cited 2017 Apr 26]. Available from: https://www.reinvestment.com/policy-solutions/market-value-analysis/
50 Kania J, Kramer M. Collective impact. Stanford Social Innovation Review [serial on the Internet]. 2011 winter [cited 2017 Apr 26]. Available from: http://www.nist.gov/ineap/upload/2011-Stanford-Article.pdf
51 Brown P, Fiester L. Hard lessons about philanthropy and community change from the Neighborhood Improvement Initiative [Internet]. Menlo Park (CA): William and Flora Hewlett Foundation; 2007 Mar [cited 2017 Apr 26]. Available from: www.hewlett.org/wp-content/uploads/2016/08/HewlettNIIReport.pdf
52 Hearld LR, Bleser WK, Alexander JA, Wolf LJ. A systematic review of the literature on the sustainability of community health collaboratives. Med Care Res Rev. 2016;73(2):127–81.
53 Low Income Investment Fund. Monetizing the value of social investments: the Low Income Investment Fund's approach to impact assessment [Internet]. San Francisco (CA): The Fund; 2014 Jun [cited 2017 Apr 26]. Available from: http://www.liifund.org/wp-content/uploads/2014/06/8page_liif_hiRes.pdf
54 Clinton Foundation [Internet]. New York (NY): The Foundation. Press release, GE, CHMI, Mayor Parker, and partners announce initiative to improve health in Houston; 2013 Jul 15 [cited 2017 Apr 26]. Available from: https://www.clintonfoundation.org/main/news-and-media/press-releases-and-statements/ge-chmi-mayor-parker-and-partners-announce-initiative-to-improve-health-in-houston.html
55 Institute of Medicine. Applying a health lens to business practices, policies, and investments: workshop summary. Washington (DC): National Academies Press; 2016.
56 Isenberg N. White trash: the 400-year untold history of class in America. New York (NY): Viking; 2016.
57 Case A, Deaton A. Rising morbidity and mortality in midlife among white non-Hispanic Americans in the 21st century. Proc Natl Acad Sci U S A. 2015;112(49):15078–83.
58 Shiels MS, Chernyavskiy P, Anderson WF, Best AF, Haozous EA, Hartge P, et al. Trends in premature mortality in the USA by sex, race, and ethnicity from 1999 to 2014: an analysis of death certificate data. Lancet. 2017;389(10073):1043–54.
59 Snyder SE. Urban and rural divergence in mortality trends: a comment on Case and Deaton. Proc Natl Acad Sci U S A. 2016;113(7):E815.
60 Kindig DA, Cheng ER. Even as mortality fell in most US counties, female mortality nonetheless rose in 42.8 percent of counties from 1992 to 2006. Health Aff (Millwood). 2013;32(3):451–8.
61 Khazan O. Middle-aged white Americans are dying of despair. Atlantic [serial on the Internet]. 2015 Nov 4 [cited 2017 Apr 26]. Available from: https://www.theatlantic.com/health/archive/2015/11/boomers-deaths-pnas/413971/
62 Gabler N. The secret shame of middle-class Americans. Atlantic [serial on the Internet]. 2016 May [cited 2017 Apr 26]. Available from: https://www.theatlantic.com/magazine/archive/2016/05/my-secret-shame/476415/
63 Kindig D. Population health equity: rate and burden, race and class. JAMA. 2017;317(5):467–8.
64 Office of Management and Budget. America first: a budget blueprint to make America great again [Internet]. Washington (DC): Government Publishing Office; [cited 2017 Apr 26]. Available from: https://www.gpo.gov/fdsys/pkg/BUDGET-2018-BLUEPRINT/pdf/BUDGET-2018-BLUEPRINT.pdf
65 Bradley EH, Canavan M, Rogan E, Talbert-Slagle K, Ndumele C, Taylor L, et al. Variation in health outcomes: the role of spending on social services, public health, and health care, 2000–09. Health Aff (Millwood). 2016;35(5):760–8.