Volume 13 , Issue 1, 2018

Community Development

INNOVATION REVIEW

Mental Health and Community Development

FEDERAL RESERVE BANK
OF SAN FRANCISCO

Community Development INNOVATION REVIEW

The *Community Development Innovation Review* focuses on bridging the gap between theory and practice, from as many viewpoints as possible. The goal of this journal is to promote cross-sector dialogue around a range of emerging issues and related investments that advance economic resilience and mobility for low- and moderate-income communities.

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Foreword

Laura Choi

The first time I became acutely aware of the importance of mental health was in high school, when I lost a friend to suicide. It remains one of the most defining experiences of my youth, both in terms of the immediate shock and grief, as well as what I learned by observing the reactions of others. In our tight-knit immigrant community, the prevailing response was to actively avoid the issue. At the time, I assumed everyone stayed quiet to minimize the family's shame, but looking back, I now understand that we were woefully unequipped to respond. We lacked a fundamental understanding of mental health and how to talk about mental health challenges in productive ways, largely driven by cultural stigma. We also missed a critical opportunity to change the narrative and shine a light on the importance of proactive mental health promotion.

Unfortunately, my experience is not unique. According to the most recent data, in 2016, 142,000 Americans died from alcohol- and drug-induced fatalities and suicide, the highest number ever recorded.[1] This is a tragic loss to our country, and equally alarming are the projections which estimate a 60 percent increase in these "deaths of despair" over the next ten years.[2] Former U.S. Surgeon General Dr. Vivek Murthy has spoken out about the "loneliness epidemic" and the need to elevate emotional well-being as a priority for the nation. He has pointed to the need for a shared approach, stating, "I think of these as collective problems that we have to solve with collective solutions."[3] In that spirit, this issue of the *Community Development Innovation Review* is dedicated to the topic of mental health and community development, in recognition of the field's opportunity to play a role in these collective solutions.

At first glance, mental health may seem like an unlikely topic for a community development journal. However, as the articles in this issue of the *Review* reveal, there are profound connections between poverty, place, and poor mental health. Issues like financial insecurity, housing instability, community violence, and limited economic prospects are risk factors for poor mental health–they are also the very same issues that community development seeks to address. In addition, the articles explore emerging themes in the field and their connection to mental health, such as the prevalence trauma, community resilience in the face of climate change, healthcare payment reform, and the power of arts and culture to engage and activate a community. Perhaps most importantly, the articles make the case that we all have an incentive and opportunity to play a role in improving population-level mental health.

Like an artist's initial sketch, this issue of the *Review* draws the rough outline of what we hope will become a nuanced and detailed portrait of how the fields of community development and mental health can partner to advance the well-being of low- and moderate-income communities. Although the connections are still nascent, both in concept and practice, we hope this issue sparks a conversation and encourages further exploration across both fields.

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1 Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2016 on CDC WONDER Online Database, released December 2017.

2 Trust for America's Health and Well Being Trust, "Pain in the Nation: The Drug, Alcohol and Suicide Crises and the Need for a National Resilience Strategy," November 2017.

3 Jena McGregor, "This former surgeon general says there's a 'loneliness epidemic' and work is partly to blame," *The Washington Post*, Oct. 4, 2017.

Moving Upstream to Promote Mental Health: The Role of Community Development

Laura Choi
Federal Reserve Bank of San Francisco

It's been almost a decade since the Federal Reserve Bank of San Francisco launched the Healthy Communities Initiative in partnership with the Robert Wood Johnson Foundation, and the community development field has made significant progress in that time–both in terms of widespread recognition of the impact that social determinants have on health, as well as innovative partnerships that bridge health and community development. These efforts have tended to focus on the connections between place and physical health, such as neighborhood revitalization as a strategy to improve the health of low-income communities, with a focus on reducing rates of preventable chronic disease like asthma, diabetes, and obesity. However, our efforts have been less explicit about mental, emotional, and behavioral health, which are equally important in overall health promotion. As the World Health Organization (WHO) says, "There is no health without mental health."[1] This presents an opportunity for the community development field to advance the healthy communities conversation by explicitly recognizing the relationship between mental health and physical health, and the role that social factors play in both aspects of overall well-being.

"Upstream" social factors, such as neighborhood conditions or household financial well-being, are important determinants of mental health and can influence factors such as emotional resilience, social connectedness, and self-efficacy. The pursuit of improved population health should include upstream strategies that address community conditions and their underlying structural drivers as a means of promoting good mental health. This article provides a brief introduction to the relationship between community development and mental health. The connections are complex and multifaceted, and warrant further exploration and partnership across both fields.

Understanding Mental Health

According to the WHO, "mental health is defined as a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community."[2] Notably, mental health is not simply the absence of mental illness. This is an important distinction as the terms "mental health" and "mental illness" are often used interchangeably,

1 "Mental health: strengthening our response," World Health Organization, March 30, 2018, http://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response.
2 "Mental health: a state of well-being," World Health Organization, August 2014, http://www.who.int/features/factfiles/mental_health/en/.

when in fact they describe different dimensions. Every person experiences ups and downs in their mental health, but not every person will experience symptoms of mental illness. The onset, duration and intensity of symptoms is dependent upon multiple factors, including a person's internal resilience and their access to resources that provide stability and comfort.

An estimated 1 in 5 adults lives with a mental illness (44.7 million people in 2016).[3] The financial cost, which includes mental health care expenditures as well as lost earnings and public disability insurance, was estimated to be at least $267 billion in the U.S. in 2012.[4] The World Economic Forum estimates that the global costs for mental disorders are greater than the costs of diabetes, respiratory disorders, and cancer combined.[5] In addition, the medical costs for treating patients who have concurrent chronic medical and mental health/substance use disorder conditions are two to three times higher compared to the costs for patients who don't have "comorbid" mental health conditions (the projected additional healthcare costs were estimated to be $406 billion in 2017).[6] Substance abuse disorders are a related, but distinct, category from mental disorders, and the two are often grouped under the broader umbrella term of behavioral health disorders. Substance abuse and mental health challenges often overlap; of the estimated 20.2 million American adults who had a substance use disorder in 2014, roughly 40 percent had a co-occurring mental illness.[7]

Mental health is influenced by a variety of individual attributes, environmental factors, and social and economic circumstances. As a result, people differ in their emotional resilience and "hardiness" which means that individuals experience symptoms of mental distress at varying levels in the face of stress and trauma. There are a number of risk factors that negatively impact mental health at both the individual and community levels, which have important implications across the life course (Fig. 1).[8]

Community development has the power to influence health at the population level by supporting the physical, social, and civic infrastructure that makes health possible. Achieving population-level mental health, consistent with the WHO definition, is a necessary component of achieving broader population health, and it requires approaches that go beyond a focus on individual-level clinical treatment for those struggling with mental health challenges. We have the opportunity to recognize the ways in which community-level factors influence mental health, which elevates the need for strategies that focus on prevention.

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3 "Mental Illness" National Institute of Mental Health, November 2017, https://www.nimh.nih.gov/health/statistics/mental-illness.shtml.

4 Thomas Insel, "Mental Health Awareness Month: By the Numbers," National Institute of Mental Health, May 15, 2015, https://www.nimh.nih.gov/about/directors/thomas-insel/blog/2015/mental-health-awareness-month-by-the-numbers.shtml#14.

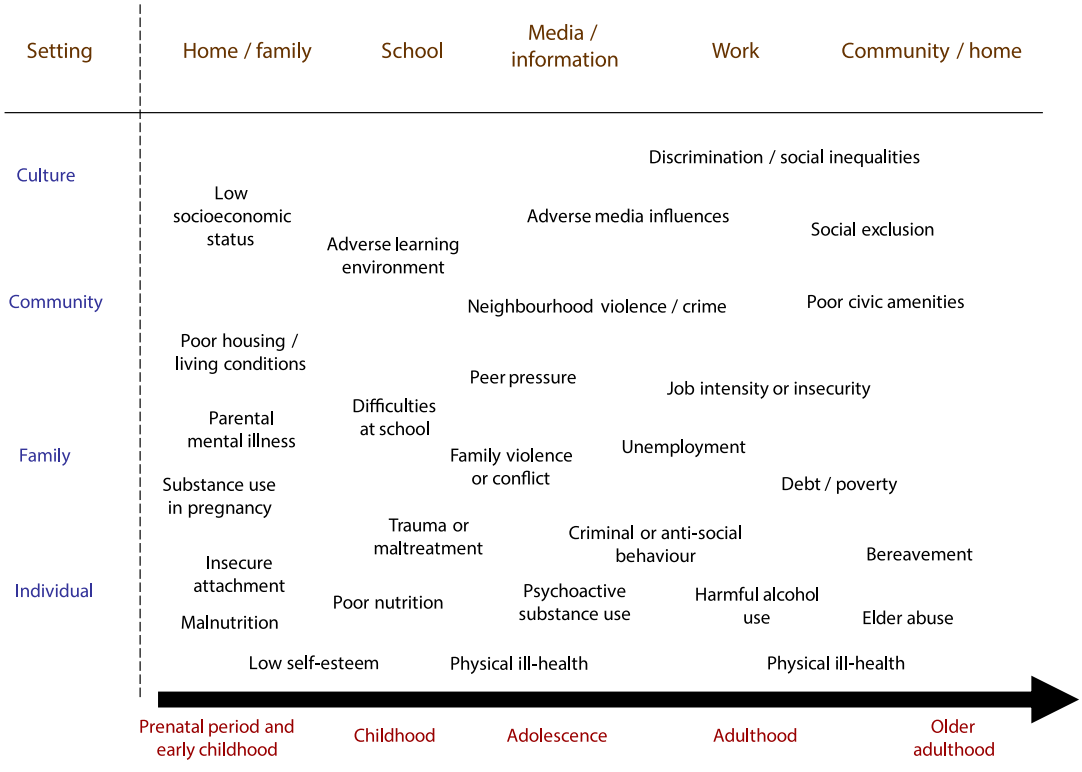
5 D.E. Bloom, et al. "The Global Economic Burden of Noncommunicable Diseases," World Economic Forum, 2011.

6 Stephen Melek, et al., "Potential economic impact of integrated medical-behavioral healthcare," Milliman, January 2018.

7 Center for Behavioral Health Statistics and Quality, "Behavioral health trends in the United States: Results from the 2014 National Survey on Drug Use and Health" (HHS Publication No. SMA 15-4927, NSDUH Series H-50).

8 "Risks to Mental Health: An Overview of Vulnerabilities and Risk Factors." World Health Organization, August 27, 2012.

Figure 1: Overview of Risks to Mental Health over the Life Course



Source: World Health Organization, "Risks to Mental Health: An Overview of Vulnerabilities and Risk Factors," August 27, 2012.

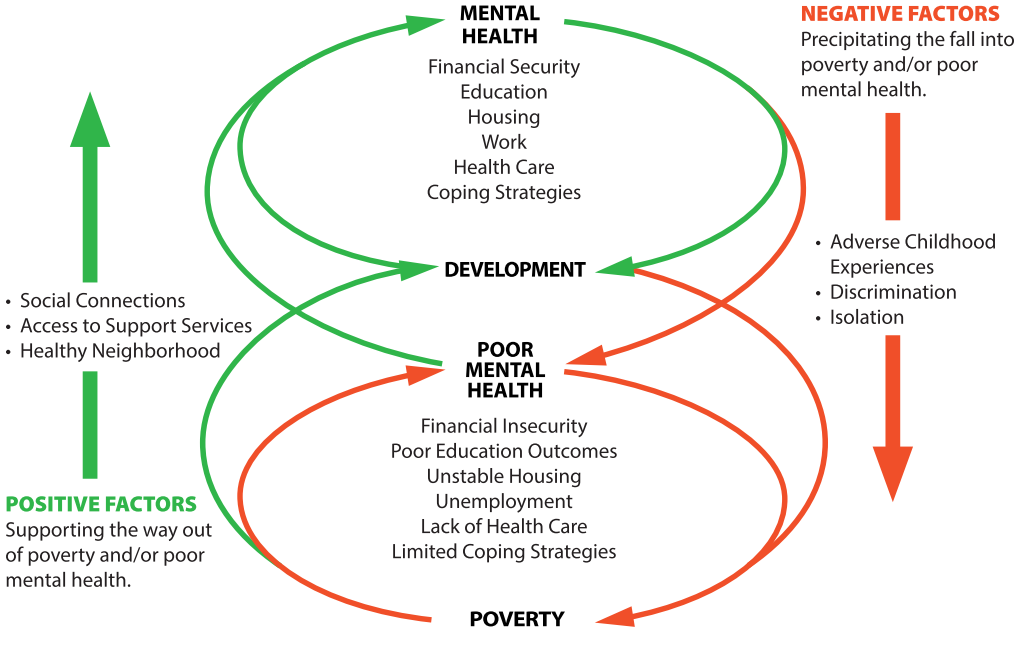
Poverty is a Driver of Poor Mental Health

Poverty itself is a major risk factor for poor mental health. Research shows that community development-related issues such as unstable housing and unemployment are connected in a complex negative cycle with poor mental health (Fig. 2).[9] There is a growing awareness of the need to explicitly address the mental health needs of low-income populations, recognizing that they are more likely to face negative risk factors such as adverse childhood experiences, social isolation and loneliness, discrimination, and detachment from academic or work achievement. These negative experiences can diminish a person's sense of control, self-efficacy, connectedness, and hope, all of which are important elements for resilience and mental health promotion. People in poverty are also less likely to have protective factors that

9 "Breaking the Vicious Cycle between Mental Ill-Health and Poverty," World Health Organization, Mental Health Core to Development Information Sheet, Sheet 1, 2007.

promote mental health, including many of the things that community development works to provide, such as stable housing, supportive community networks, and financial security. Low-income children and adults also face barriers to access to mental health services, including cost, lack of insurance, inflexible clinic hours that do not accommodate people in low-wage jobs, and long distances to services, particularly for rural patients.[10] In addition, the stigma of mental illness, combined with the stigma of poverty, can also act as a barrier to accessing mental health care.

Figure 2: Positive and Negative Factors that Influence Mental Health



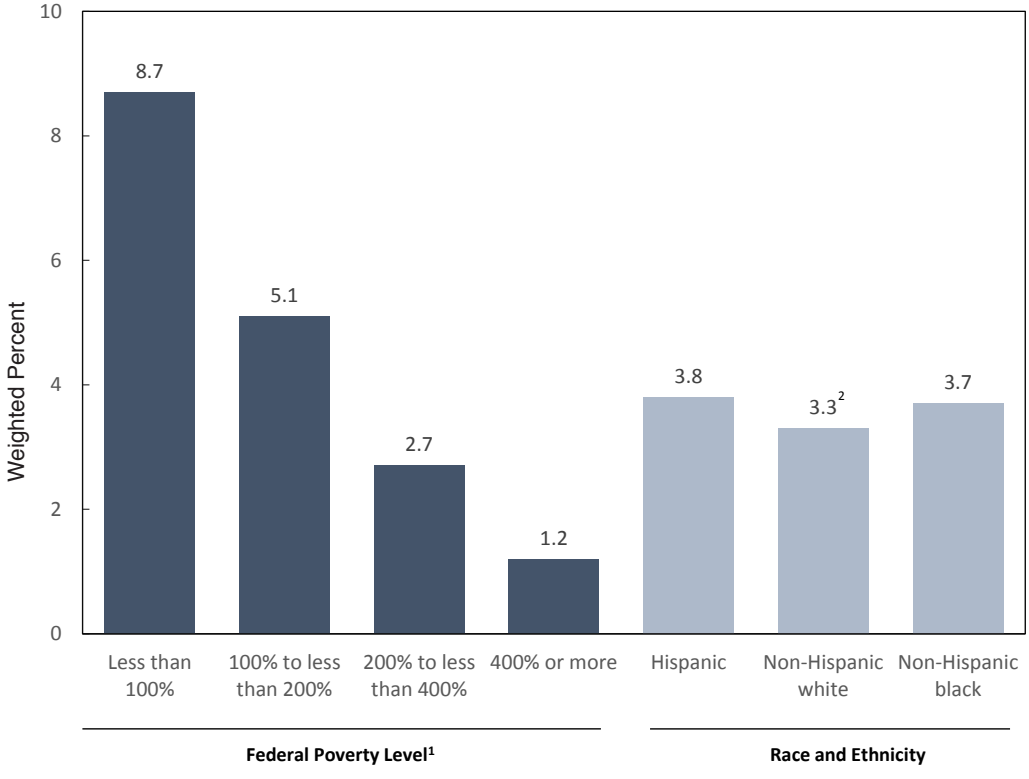
Source: Adapted from World Health Organization

Although researchers are still debating the causal pathways between poverty and poor mental health, it is clear that the two are closely linked. For example, data from the Center for Disease Control's National Health Interview Survey reveal that having less income increases the likelihood of having "serious psychological distress," defined as being severe enough to cause moderate-to-serious impairment in social, occupational, or school functioning and to require treatment (Fig. 3).[11] People below the federal poverty line were more than seven times more likely to have severe psychological distress than their well-to-do peers.

10 Stacy Hodgkinson, et al., "Improving Mental Health Access for Low-Income Children and Families in the Primary Care Setting," *Pediatrics* 139, no. 1 (2017).

11 Judith Weissman, et al. "Serious Psychological Distress among Adults: United States, 2009-2013," National Center for Health Statistics Data Brief, No. 23, May 2015.

Figure 3: Percentage of adults with serious psychological distress, by income and by race and ethnicity: United States, 2009-2013

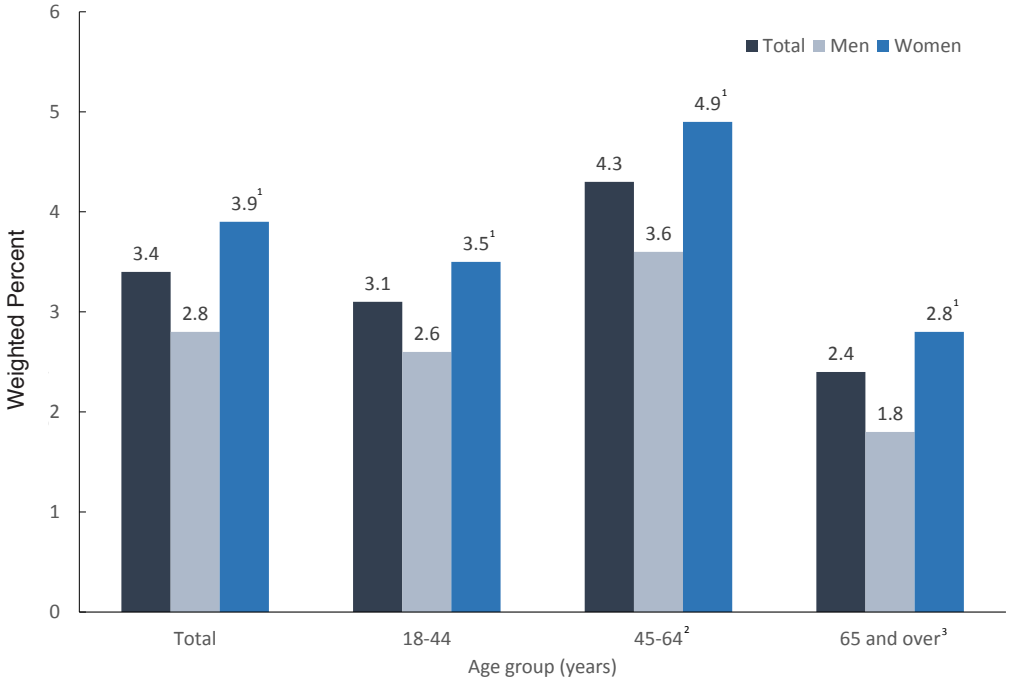


Source: CDC/NCHS, National Health Interview Survey, 2009-2013
Notes: (1) Significant decreasing linear trend by poverty level;
(2) Significantly lower than for other races and ethnicities.

Mental Health is Essential to Achieving Equity

The data also reveal that demographic dimensions such as gender and race play a role. Serious psychological distress affects 3.3 percent of non-Hispanic white adults, which is significantly lower than the rate for non-Hispanic blacks and Hispanics, at 3.7 percent and 3.8 percent respectively (Fig. 3). In addition, in every age group, women were more likely to have serious psychological distress than men (Fig. 4). Considering the intersection of race, gender, and income, and the negative impacts of structural discrimination, the data suggest that low-income people of color, and in particular low-income women of color, may need particular attention when it comes to mental health promotion.

Figure 4: Percentage of adults with serious psychological distress, by sex and age: United States, 2009-2013



Source: CDC/NCHS, National Health Interview Survey, 2009-2013
Notes: (1) Significantly higher percentage of women with serious psychological distress than men;
(2) Significantly higher percentage with serious psychological distress than other age groups;
(3) Significantly lower percentage with serious psychological distress than other age groups.

Mental Health Matters for Community Development

Mental health promotion across the life course is critical for supporting the economic resilience and mobility of low-income people, a key aim of community development efforts. For example, there is clear evidence that poor mental health is associated with reductions in labor force participation and employment.[12] It is also both a consequence of and risk factor for unemployment.[13] Mental health problems among children have a severe negative impact on educational outcomes, which can limit future economic wellbeing. Approximately 50

12 Pinka Chatterji, Margarita Alegria, and David Takeuchi, "Psychiatric Disorders and Labor Market Outcomes: Evidence from the National Comorbidity Survey-Replication," *Journal of Health Economics* 30, no. 5 (2011): 858–868.

13 Sarah Olesen, et al., "Mental health affects future employment as job loss affects mental health: findings from a longitudinal population study," *BMC Psychiatry* 13, no. 144 (2013).

percent of students age 14 and older who are living with a mental illness drop out of high school, which is the highest dropout rate of any disability group.[14] Among children ages 6-17 years old who were defined as needing mental health services, nearly 80 percent did not receive mental health care.[15] Perhaps most critically, adverse childhood experiences, which include abuse, neglect, having an incarcerated household member, or substance misuse within the household, are risk factors for poor mental health and have been linked to a number of negative health and well-being outcomes, including risky health behaviors, chronic health conditions, and early death.[16]

The broader issue of behavioral health, which includes substance use disorders, also has major implications for communities and the economy. Federal Reserve Chairman Jerome Powell discussed the opioid crisis during a recent appearance before a Senate committee, stating "It's having a terrible human toll on our communities and also it matters a lot for the labor force participation rate and economic activity in our country."[17] A recent study by the Trust for America's Health and Well Being Trust reports that in 2016, the most recent year of data available, 142,000 Americans died from alcohol- and drug-induced fatalities and suicide, the highest number ever recorded.[18] The economists Angus Deaton and Anne Case have suggested that the dramatic rise of these "deaths of despair," which are increasing in all parts of the country and at every level of urbanization, are accompanied by a measurable deterioration in economic and social wellbeing, which has become more pronounced for each successive birth cohort.[19]

Cross-Sector Partnerships as a Way Forward

In his recent book *Lost Connections*, journalist Johan Hari synthesizes decades of social and behavioral science and medical research and finds that poor mental health is driven by a range of factors outside of individual genetic and biochemical factors, which include:[20]

- Disconnection from meaningful work
- Disconnection from other people
- Disconnection from childhood trauma

14 U.S. Department of Education, Twenty-third annual report to Congress on the implementation of the Individuals with Disabilities Education Act, Washington, D.C., 2001.

15 S. Kataoka, L. Zhang, and K. Wells, "Unmet need for mental health care among U.S. children: variation by ethnicity and insurance status," *American Journal of Psychiatry* 159, no. 9 (2002): 1548-55.

16 "Adverse Childhood Experiences" Centers for Disease Control and Prevention, April 1, 2016, https://www.cdc.gov/violenceprevention/acestudy/index.html

17 Jeff Cox, "Opioid addition is keeping a high percentage of people out of the workforce, Fed chairman says," CNBC, July 17, 2018, https://www.cnbc.com/2018/07/17/opioid-addiction-is-keeping-a-high-percentage-of-people-out-of-the-wor.html

18 "Pain in the Nation Update: Deaths from Alcohol, drugs, and suicide reach the highest level ever recorded," Trust for America's Health and Well Being Trust, February 2018.

19 Anne Case and Sir Angus Deaton, "Mortality and morbidity in the 21st century," Brookings Papers on Economic Activity, https://www.brookings.edu/bpea-articles/mortality-and-morbidity-in-the-21st-century/

20 Johann Hari, *Lost Connections: Uncovering the Real Causes of Depression– and the Unexpected Solutions* (New York: Bloomsbury, 2018).

- Disconnection from status and respect
- Disconnection from the natural world
- Disconnection from a hopeful or secure future

Reflecting on these drivers of poor mental health, it becomes clear that the community development field has a meaningful role to play in addressing these root causes. The community development and mental health fields have a critical opportunity to work together and leverage each other's strengths to support the mental health of low-income communities. This can include:

- Expanding trauma-informed practices, including critical interventions for young children
- Considering mental health promotion in community design, which includes community gathering spaces and natural elements
- Interventions that increase social connections and foster a sense of belonging
- Community violence prevention efforts
- Partnering to offer community-based mental health and behavioral health services
- Developing community-driven mental health campaigns and arts and cultural strategies to reduce stigma and shame
- Raising awareness of mental health issues among front line staff and providing resources such as training on mental health first aid

As social innovator Liz Ogbu says, "When we work in low-income communities, we tend to focus on need because the lack of resources is so readily apparent and visible. We don't focus enough on aspiration. In fact, having an aspiration is a luxury we rarely ascribe to poor people, but they're human; they have hopes and dreams."[21] Ultimately, this work is about ensuring that every community can be a place of healing and connectedness, where aspiration is a given, and building hope for the future is as central to our field as building housing.

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21 "Design, Culture, and Complex Problems: Q&A with Liz Ogbu," SPARCC, https://www.sparcchub.org/2017/10/30/design-culture-and-complex-problems-qa-with-liz-ogbu/

The Mental Health Imperative: Learning from History and Innovating Forward

Benjamin F. Miller and Tyler Norris
Well Being Trust

Mental health is one of the most important, yet often siloed aspects of health. While 1 in 5 people will experience a mental health disorder in their lifetime,[1] and all of us are impacted to some degree, mental health is consistently left on the sidelines when the nation looks to redesign the health care system and increase community well-being. Yet outside of health care delivery, our communities present the most important factors and conditions that both prohibit and enable good mental health and well-being.[2] Simply put, where we live can have a more substantial impact on our mental health and well-being than access to clinical care.[3] For people to reach their fullest potential, leaders from all sectors must recognize that the current course of policy and investments in our nation is not leading us in a direction that lands at the desired destination. For example, it is projected that 2 million lives will be lost over the next decade, a 100 percent increase over the last decade, due to drugs, alcohol, and suicide[4] – lives lost due to despair, loneliness, and isolation[5] – it is the time put into action evidence-based community solutions to change this trajectory.[6] To chart a successful path forward, policymakers and community leaders must take a systems lens and provide thoughtful leadership, strategic community investment, and a comprehensive vision of health that includes mental, emotional, and social health.

Like many other health conditions, mental health can play a role in how people cope with stress or manage day to day activities. The causes of mental health are multifaceted and include combinations of biology, life experience, or family history.[7] The World Health Organization rightly includes mental health as one component of their definition of health: "Health is a state of complete physical, mental and social well-being and not merely the

1 Steel Z, Marnane C, Iranpour C, et al. The global prevalence of common mental disorders: a systematic review and meta-analysis 1980–2013. *International Journal of Epidemiology*. 2014;43(2):476-493.
2 Robinson LR, Holbrook JR, Bitsko RH, et al. Differences in Health Care, Family, and Community Factors Associated with Mental, Behavioral, and Developmental Disorders Among Children Aged 2–8 Years in Rural and Urban Areas – United States, 2011–2012. MMWR Surveillance Summer 2017: Centers for Disease Control and Prevention 2017.
3 Robert Wood Johnson Foundation. Does where you live affect how long you will live? 2017; https://www.rwjf.org/en/library/interactives/whereyouliveaffectshowlongyoulive.html. Accessed September 1, 2018.
4 Segal LM, De Biasi A, Mueller J, May K, Warren M. "Pain in the Nation: The drug, alcohol, and suicide crises and the need for a national resilience strategy." Trust for America's Health 2017.
5 Case A, Deaton A. "Mortality and Morbidity in the 21st Century." Brookings Institute;2017.
6 Auerbach J, Miller BF. Deaths of Despair and Building a National Resilience Strategy. *Journal of Public Health Management and Practice*. 2018; 24(4):297-300.
7 United States Department of Health and Human Services. What is mental health? 2018; https://www.mentalhealth.gov/basics/what-is-mental-health. Accessed August 3, 2018, 2018.

absence of disease or infirmity."[8] Yet, when other health care experts discuss the issues, they tend to focus on a continuum of services often associated with mental health.[9] For the purpose of this article, we will use a variation from the United States Department of Health and Human Services that describes mental health as being inclusive of emotional, psychological, and social well-being, which can directly affect the ways people think, feel, and act.[10] This definition clearly points to the central role that upstream social factors play in promoting mental health, demonstrating the important opportunity for the community development field to become a core partner in the work.

According to the National Institutes for Mental health, in 2016, 44.7 million adults in the United States were living with a mental illness, including serious mental illness.[11] This breaks down to one in five for any mental illness and one in 25 for serious mental illness. Compared to type II diabetes (9.4 percent of the population in 2015 or 30 million people) or cancer (38 percent diagnosed at some point their lifetime), mental illness is a common health condition most people will experience either directly or indirectly. While mental health disorders can and do affect people of all ages and stages of life, symptoms of many common mental health disorders emerge in early adolescence and teenage years, with some emerging as early as 11 years old (in the case of behavioral disorders) and six years old (anxiety disorders).[12] One study examined a national sample of adolescents, finding that approximately one out of every four or five would meet criteria for a mental health disorder with severe impairment across their lifetime.[13] That mental health disorders arise at such young ages highlights the need – and opportunity – to address mental health issues early, before any problems become more severe. Identifying and treating mental health problems early in life can not only delay further onset of symptoms for the individual, but also minimize family and community disruption.[14]

8 World Health Organization. Mental health: A state of well-being. 2018; http://www.who.int/features/factfiles/mental_health/en/. Accessed August 1, 2018, 2018.

9 Miller BF, Gilchrist EC, Ross KM, Wong SL, Green LA. Creating a Culture of Whole Health: Recommendations for Integrating Behavioral Health and Primary Care. Eugene S. Farley, Jr. Health Policy Center, University of Colorado School of Medicine 2016.

10 United States Department of Health and Human Services. What is mental health? 2018; https://www.mentalhealth.gov/basics/what-is-mental-health. Accessed August 3, 2018, 2018.

11 National Institute of Mental Health. Mental Illness. 2018; https://www.nimh.nih.gov/health/statistics/mental-illness.shtml. Accessed August, 3 2018, 2018.

12 Merikangas KR, He J, Burstein M, et al. Lifetime Prevalence of Mental Disorders in US Adolescents: Results from the National Comorbidity Study-Adolescent Supplement (NCS-A). *Journal of the American Academy of Child and Adolescent Psychiatry*. 2010;49(10):980-989.

13 Ibid.

14 Press NA. National Research Council (US) and Institute of Medicine (US) Committee on the Prevention of Mental Disorders and Substance Abuse Among Children, Youth, and Young Adults: Research Advances and Promising Interventions. https://www.ncbi.nlm.nih.gov/books/NBK32775/ 2009.

A fractured history

Fragmentation in health care has made addressing mental health disorders challenging.[15] Driven by the ongoing separation of mental health from the rest of health care, people and families are forced to work harder to get the care they need. Historically, mental health in the United States has been kept apart from physical health in almost every conceivable way possible. There have been separate mechanisms to finance mental health,[16] train mental health clinicians,[17] and deliver mental health care.[18] The first major piece of federal mental health legislation, the Community Mental Health Act signed by President John F. Kennedy in 1963, was intended to create 1,500 new community mental health centers to bring people with mental illness out of state psychiatric hospitals and back into the community. The reasons for this legislation were sound – the state hospitals were often understaffed, underfunded, and criticized for their poor conditions and patients' rights violations – but the consequences were unintended. The dollars that were intended to go to community mental health never truly materialized, creating an underfunded and often inadequate system of care.[19] And, unfortunately, health care and communities were not ready for an entirely separate system of care. But this was only one piece of a much larger mental health puzzle.

Further exacerbating the problem, "traditional" health care never truly embraced mental health, but rather kept it as distinct and different. This in part was due to the longstanding historical structures that had been in place, but also because of how communities responded when issues around mental health were raised. Stigma – a reluctance to talk about or work on anything related to mental health, due to pervasive cultural beliefs of mental illness as a character flaw or weakness[20] – kept mental health isolated.[21] This stigma persists quite heavily still today, and, in many ways, is worsened by the structures society has placed around mental health. As a separate system grew around mental health and substance use disorders, both medical professionals and the broader community, which includes those who have mental

15 Miller BF. When Frontline Practice Innovations Are Ahead of the Health Policy Community: The Example of Behavioral Health and Primary Care Integration. *The Journal of the American Board of Family Medicine*. 2015; 28(Supplement 1):S98-S101.

16 Hubley SH, Miller BF. Implications of Healthcare Payment Reform for Clinical Psychologists in Medical Settings. *Journal of Clinical Psychology in Medical Settings*. 2016; 23(1):3-10. Kathol RG, Butler M, McAlpine DD, Kane RL. Barriers to Physical and Mental Condition Integrated Service Delivery. *Psychosom Med*. 2010;72(6):511-518. Miller BF, Ross KM, Davis MM, Melek SP, Kathol R, Gordon P. Payment Reform in the Patient-Centered Medical Home: Enabling and Sustaining Integrated Behavioral Health Care. *American Psychologist* 2017;72(1):55-68.

17 Blount A, ed *Integrated primary care: The future of medical and mental health collaboration*. New York: Norton; 1998. Blount A, Miller BF. Addressing the workforce crisis in integrated primary care. *Journal of Clinical Psychology in Medical Settings*. 2009;16:113-119.

18 Miller BF. When Frontline Practice Innovations Are Ahead of the Health Policy Community: The Example of Behavioral Health and Primary Care Integration. *The Journal of the American Board of Family Medicine*. 2015;28(Supplement 1):S98-S101. Blount A, Bayona J. Toward a system of integrated primary care. *Families Systems Medicine*. 1994;12:171-182.

19 Hubley SH, Miller BF. *The History of Fragmentation and the Promise of Integration: A Primer on Behavioral Health and Primary Care* In: Maruish M, ed. New York: Taylor and Francis; 2017.

20 Nakane Y, Jorm AF, Yoshioka K, Christensen H, Nakane H, Griffiths KM. Public beliefs about causes and risk factors for mental disorders: a comparison of Japan and Australia. *BMC psychiatry*. 2005;5:33-33.

21 Goldberg DS. On Stigma & Health. *The Journal of Law, Medicine & Ethics*. 2017;45(4):475-483.

health needs, have come to accept that mental health care is isolated from "traditional" health care, reinforcing the societal stigma around mental illness. From things as simple as showing up to a primary care physician and being told that they needed to seek help for their depression elsewhere, to coming forward to work colleagues only to be treated as if something was wrong with them, both the separation of health care and pervasive stigma made accessing mental health care incredibly difficult. These barriers add to the challenges low-income communities already face with access and affordability and help explain why people are not seeking care when they may need it most.[22]

Current context: The cost

Between 2015-2016, 142,000 lives were lost to drugs, alcohol, or suicide. Depression remains the worldwide leading cause of disability, costing the United States about $210 billion a year.[23] Despite the prevalence of depression, primary care practices in the country only screen for depression around four percent of the time.[24] Even if they do screen, a further two-thirds of primary care physicians could not get their patients access to mental health or substance use services.[25] It comes as no surprise, then, that only 4 in 9 people who need mental health services received care, and 1 in 10 people with an identified substance use disorder received needed treatment at a specialty facility in 2016.[26] Lack of treatment is one piece of ever-rising costs, but the cost of chronic disease in combination with mental health problems is also a significant cost driver.[27] These data, and the broader argument for integration, are in part why actuaries estimate the value and benefit of integrating care, i.e., bringing mental health and medical care together, to be in the billions for both public and private payers.[28] Not only is there a value proposition naturally built into promoting population level mental health, there are also profound societal benefits that require a broader system lens to understand.

22 Cunningham PJ. Beyond parity: Primary Care Physicians' Perspectives on Access to Mental Health Care. *Health Affairs*. 2009;28(3):w490–w501. VanderWielen LM, Gilchrist EC, Nowels MA, Petterson SM, Rust G, Miller BF. Not Near Enough: Racial and Ethnic Disparities in Access to Nearby Behavioral Health Care and Primary Care. *Journal of health care for the poor and underserved*. 2015;26(3):1032-1047. Young RA, DeVoe JE. Who Will Have Health Insurance in the Future? An Updated Projection. *The Annals of Family Medicine*. 2012;10(2):156-162.

23 Greenberg PE, Fournier AA, Sisitsky T, Pike CT, Kessler RC. The economic burden of adults with major depressive disorder in the United States (2005 and 2010). *J Clin Psychiatry*. 2015;76(2):155-162.

24 Ayse Akincigil, Elizabeth B. Matthews. National Rates and Patterns of Depression Screening in Primary Care: Results From 2012 and 2013. *Psychiatric Services*. 2017;68(7):660-666.

25 Cunningham PJ. Beyond parity: Primary Care Physicians' Perspectives on Access to Mental Health Care. *Health Affairs*. 2009;28(3):w490–w501.

26 Segal LM, De Biasi A, Mueller J, May K, Warren M. "Pain in the Nation: The drug, alcohol, and suicide crises and the need for a national resilience strategy." Trust for America's Health 2017.

27 Kathol RG, deGruy F, Rollman BL. Value-Based Financially Sustainable Behavioral Health Components in Patient-Centered Medical Homes. *The Annals of Family Medicine*. 2014;12(2):172-175.

28 Melek S, Norris D. Chronic conditions and comorbid psychological disorders. Milliman 2008; Melek SP, Norris DT, Paulus J. Economic Impact of Integrated Medical-Behavioral Healthcare: Implications for Psychiatry, 2015

A way forward: Systems lens

One of the most common misperceptions about health care is that there is a system. As Hamilton Moses and his co-authors described, "US health care is not a system, as it is neither coordinated by a central entity nor governed by individuals and institutions that interact in predictable ways."[29] Thus, efforts to address mental health problems with new solutions must begin by acknowledging the fundamental need to develop a coordinated system that is able to be responsive to innovation and the growing evidence base of what works.

Intentionally investing in health requires a more comprehensive understanding of what matters for health and bringing together multiple sectors simultaneously to do their part in creating outcomes. From a clinical perspective, perhaps one of the most promising first steps is to create a true system of care that can identify need, provide treatment, coordinate care across those providing treatment, measure outcomes, and follow up. The current "system" (or lack thereof) typically addresses one of these elements, drastically mitigating any impact.[30] From a community perspective, this is about connecting all the dots – and treating health as a byproduct of community conditions, not simply a care intervention. To be effective, communities must tie together more seamlessly–the multiple sectors who often do not see their work as directly impacting health outcomes. Further, defragmenting the silos across community (e.g. housing, transportation, education, early childhood, job creation), can create an environment where upstream and downstream factors are addressed simultaneously.[31] This requires thoughtful dose-sufficient investment with a systems lens and, most importantly, strategic leadership focused on creating and sustaining the conditions for intergenerational well-being.[32]

A way forward: Leadership

There have been numerous publications on the evidence behind how leadership hastens social change.[33] Like the "community quarterbacks" David Erickson and others have written about, leaders in the arena of mental health and well-being need to be able to look across a wide field: physical and mental, clinical and community.[34] Leaders from across the health continuum need to understand that while a fully functioning and integrated health "system"

29 Moses H, III, Matheson DM, et al. The anatomy of health care in the united states. *JAMA*. 2013;310(18):1947-1964.

30 Institute of Medicine. *Crossing the quality chasm: A new health system for the 21st century.* Washington, D.C.: National Academy Press; 2001.

31 Federal Reserve Bank of San Francisco. Building on what works: Cross-sector community development, *Community Development Investment Review* 12, no. 1, 2017.

32 Well Being Trust. Well Being Legacy. 2018; https://www.wellbeinglegacy.org/. Accessed July 29, 2018. Mclean J, Norris T. Building a Market for Health: Achieving Community Outcomes Through a Total Health Business Model. In: Federal Reserve Bank of San Francisco, ed. *What Matters: Investing in Results to Build Strong, Vibrant Communities*. Federal Reserve Bank of San Francisco and Nonprofit Finance Fund; 2017.

33 Flores AL, Risley K, Quintana K. Developing a Public Health Pipeline: Key Components of a Public Health Leadership Program. *Prev Med Community Health*, 2018. Petrie DA, Swanson RC. The mental demands of leadership in complex adaptive systems. *Health Manage Forum*, 2018.

34 Federal Reserve Bank of San Francisco. Building on what works: Cross-sector community development, *Community Development Investment Review* 12, no. 1, 2017.

may not exist, the many issues they face are taking place in a larger, interconnected web–a "field of fields"–that includes factors outside the traditional bounds of health. And they need to rise to that challenge.

A first step to achieve a more fully realized vision for health is to connect mental health and well-being with community development. This step begins with a vision for health that does not isolate mental health and treat it as somehow different, but rather, fully embraces it as central to health. It will then require leaders who are willing to work to achieve that vision, regardless of the challenges they face.[35]

Leaders throughout our communities should embrace a systems lens and align practices, policies, and investments with what research demonstrates is best for overall well-being, which includes the community development field's collective efforts. Businesses, banks, community-based organizations, universities, civic groups, places of worship–a community's institutions–must work to align their internal practices around mental health and well-being, just as local, state, and federal policymakers look to align their public policies. And finally, investors across asset classes must align their investments into programs and initiatives that can help create the community conditions for mental health and well-being. We each inherited someone else's legacy–this is about leaving behind our legacy–one that has prioritized community and well-being.

A way forward: Strategic community investment

Public health practitioners have long advocated for communities to address not just the health care people receive, but also the underlying conditions that create health: healthy environments; good education; access to fresh, healthy foods; quality affordable housing; economic opportunity; and strong social connections, among others. The very same conditions underlie mental health. Furthermore, most health disparities–including mental health disparities–are often rooted in social and economic differences.[36] To truly address issues of mental health on a population level, including mental health disparities, leaders everywhere must tackle the roots of these issues: community conditions. For example, there is a direct relationship between employment and health, with every 1 percent increase in unemployment being directly related to a 3.6 percent increase in drug overdose deaths per 100,000.[37] And, where someone lives and who they live with has a direct impact on their mental health,[38] and some of these issues are exacerbated by rural and urban variables. One study found rates of depression significantly higher in rural areas compared to urban areas

35 Petrie DA, Swanson RC. The mental demands of leadership in complex adaptive systems. *Health Manage Forum*. 2018.

36 Woolf SH, Braveman P. Where Health Disparities Begin: The Role Of Social And Economic Determinants–And Why Current Policies May Make Matters Worse. *Health Affairs*. 2011;30(10):1852-1859.

37 Hollingsworth A, Ruhm CJ, Simon K. Macroeconomic conditions and opioid abuse. *Journal of Health Economics*. 2017;56:222-233.

38 Moxham L. Where you live and who live with matters: Housing and mental health, *Journal of Prevention & Intervention in the Community* 2016;44(4):247-257.

(6.1 percent to 5.2 percent, respectively).[39]

The built environment also positively and negatively impacts mental health.[40] Access to transportation and mental health clinicians is incredibly important–larger distances to mental health providers can lead to an increase in disparities for mental health.[41] And, while these examples of community conditions are critical to helping achieve optimal health and well-being, health care has been relatively slow to pursue strategies that invest in these sectors.

Change is coming: Shifting the balance of power from health care to community

Health care's business model is in the midst of a disruption. When the dominant health policy of the land requires improved outcomes, decreased cost, and enhanced patient experiences,[42] this is not business as usual–it forces decades-old business practices to shift with the current policies. The dominant model of health care is shifting from volume-based encounters (how many people did you see?) to value based arrangements (did they get better?).[43] But despite this progress in the financing of health care, we are watching life expectancy drop for the second year in a row.[44] In addition, data show how we are furthering the gaps in health disparities with drug overdose rates as just one example.[45] For our nation to solve some of these crises, to close disparity gaps and increase our life expectancy, we must collectively move beyond health care programs to a broader lens focused on community.

The current opioid crisis provides a good illustration. While, on the surface, the opioid crisis appears to be emergent, it is actually the third opioid epidemic the country has faced.[46] Each time the nation faced these crises, policy makers missed the mark. The nation's fractured take on health, separating mental health from physical health and even more broadly community from health care, has had substantial repercussions and only added to the current predicament. In fact, it is this antiquated view of the mind and the body and of the social determinants of health that keeps us from moving forward.

Just as the problem the country faces around mental health and substance use did not appear overnight, neither will the solutions appear through a few new programs or initiatives.

39 Probst JC, Laditka SB, Moore CG, Harun N, Powell MP, Baxley EG. Rural-urban differences in depression prevalence: implications for family medicine. *Fam Med*. 2006;38(9):653-660.

40 Evans GW. The built environment and mental health. *Journal of Urban Healt*h. 2003;80(4):536-555.

41 VanderWielen LM, Gilchrist EC, Nowels MA, Petterson SM, Rust G, Miller BF. Not Near Enough: Racial and Ethnic Disparities in Access to Nearby Behavioral Health Care and Primary Care. *Journal of health care for the poor and underserved*. 2015;26(3):1032-1047.

42 Berwick DM, Nolan TW, Whittington J. The Triple Aim: Care, Health, And Cost. *Health Affairs*. 2008;27(3):759-769.

43 Miller BF, Ross KM, Davis MM, Melek SP, Kathol R, Gordon P. Payment Reform in the Patient-Centered Medical Home: Enabling and Sustaining Integrated Behavioral Health Care. *American Psychologist* 2017;72(1):55-68.

44 United States Department of Health and Human Services: Centers for Disease Control and Prevention. Mortality in the United States, 2016. NCHS Data Brief. 2017(293).

45 Segal LM, De Biasi A, Mueller J, May K, Warren M. "Pain in the Nation: The drug, alcohol, and suicide crises and the need for a national resilience strategy." Trust for America's Health 2017.

46 Matthews DB. "Un-burying the lead: Public health tools are the key to beating the opioid epidemic." Brookings Institute: USC-Brookings Schaeffer Initiative for Health Policy 2018.

In times like these, when people are dying at an unprecedented rate, the nation must thoughtfully consider whether we want to invest once more in programs that address the symptoms or finally support true systems-level change that addresses the current crisis while simultaneously preparing our communities and the nation to prevent the next one.[47] Improving health in the United States requires policymakers and civic leaders to fundamentally rethink how they define and invest in health.

Let's begin to see mental health and well-being for what it is – an essential part of our health – and design and invest in a system around it that meets the needs of our families and communities. This requires us all to adopt a systems lens and provide thoughtful leadership, strategic community investment, and vision for health.

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47 Auerbach J, Miller BF. Deaths of Despair and Building a National Resilience Strategy. *Journal of Public Health Management and Practice*. 2018;24(4):297-300.

Catalyzing Community Action for Mental Health and Wellbeing

Sheila B. Savannah and Larissa J. Estes
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Our nation has elevating rates of despair, forcing us to take a broader approach to address the foundational issues driving such conditions and challenges as depression, anxiety, opioid misuse, and suicide. Community environments–the social, physical, and economic conditions in communities–have tremendous influence on the stressors that people experience in their daily lives and on the development of mental and emotional disorders. A zip code has the ability to predict whether someone is likely to suffer from a preventable illness and live a shorter life. Community environments drive higher rates of illness, injury, and mental health challenges for populations that face bias and discrimination, including people of color, those living with low incomes, immigrants, and the LGBTQ community. By improving community conditions, and pairing this with high-quality mental health services, our society can reduce the likelihood, frequency, and intensity of mental health challenges–and at the same time improve physical health outcomes.

The World Health Organization (WHO) defines mental health as "a state of wellbeing in which every individual realizes their own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to their community."[1] We use the WHO definition throughout this paper, while also recognizing that in practice the term "mental health" reflects different understandings. Clear definitions of mental health have not been standardized, and varied understandings of mental health carry divergent assumptions and implications for our collective capacity to proactively and reactively respond to the needs of the population. In general, "health" has a positive connotation; however, the term "mental health" is often conflated with mental illness, reinforcing a focus on treatment rather than an emphasis on wellbeing as a community-wide goal.

Perceiving mental health to be the sole province and responsibility of the individual diminishes our recognition of the ways community conditions create and exacerbate many mental health challenges. This perspective treats trauma, stigma, shame, and discrimination as issues an individual must solve–not as factors that are created, shaped, or exacerbated by the environment. Essentially, then, the predominant understanding of "mental health," and the resulting clinical approach, fails to underscore opportunities for primary prevention and interrupts our ability to achieve population-wide mental health and wellbeing.

Mental health and wellbeing is at the heart of thriving individuals, families, and commu-

1 World Health Organization (WHO), "Mental health: a state of well-being" (Geneva: WHO, 2014), http://www.who.int/features/factfiles/mental_heal th/en/. Accessed May 30, 2018.

nities. The WHO definition of mental health is the state that many seek to attain, and the community development sector has an important role to play in achieving this possibility across entire neighborhoods. Community development can tap into resident voices and community assets, extending its reach beyond improving the physical and economic potential of communities and supporting durable impacts that foster hopefulness, dignity, respect, and safety–helping an entire population improve.

Collective community action as part of community development is a strategy that meaningfully engages residents and community organizations to transform environmental conditions into those that promote their health, quality of life, and ability to thrive. Done intentionally, community action is work that nurtures mental wellbeing and the ability to influence the events that shape life's circumstances; it re-weaves the social connectedness among efforts in community development and embeds social justice in assuring economic vibrancy. In neighborhoods that have suffered from disinvestment and prolonged despair, this type of engagement does not degrade by asking, "What is wrong here?" Rather, community action and development moves beyond the trauma-informed question, "What happened here?" to ask the more important question, "What is the untapped potential here that can be activated?"

If intentionally leveraged, community development approaches, coupled with resident community action, can reach across multiple sectors to measurably influence mental wellbeing at a community level. The field is well positioned to leverage its expertise in community organizing, engagement, and collaboration across sectors to guide partnerships that improve the community determinants of health associated with mental wellbeing. This article describes community-level factors that influence mental health and wellbeing; it also outlines examples of how the community development sector is engaging in strategies that impact mental health and wellbeing. In addition, it highlights specific opportunities for community development to advance upstream solutions that can reduce the incidence and intensity of mental health challenges, create health and equity, and foster resilience (the ability to adapt, recover, and thrive in spite of adverse events or experiences).

Mental Wellbeing and Community Determinants of Health

There are many ways to describe communities. A community is a group of people with something in common, be it geography, history, experience, purpose, or passion. Regardless of whether community is defined by geographic boundaries or based on population characteristics, there are factors that directly impact the health and wellbeing of the entire community and influence the formation of norms, which also strongly impact health outcomes.[2] The public health approach–and, in particular, Prevention Institute's approach for exploring challenges and solutions to improving population wellbeing–describes community envi-

2 Prevention Institute, "Countering the Production of Health Inequities: A Framework of Emerging Systems to Achieve an Equitable Culture of Health." (Oakland, CA: Prevention Institute, 2016).

ronments as the social, physical, and economic conditions in communities that influence health, safety, wellbeing, and equity outcomes.[3]

The Tool for Health and Resilience in Vulnerable Communities, or THRIVE, framework offers a systematic method in accessible language for working alongside community residents and organizations to explore the factors that are impacting their health and wellbeing (Figure 1). Within a planning process, THRIVE can be instrumental in assisting groups in developing strategies to reduce mental health stressors, improve options for coping, and enhance resilience factors in a community.[4] For many people living with mental illness or experiencing mental health challenges, the community determinants that surround them can have a tremendous impact on recovery and resilience, or further deterioration of mental wellbeing.[5]

Figure 1: Tool for Health and Resilience in Vulnerable Communities (THRIVE) Framework

People
Social networks & trust
Participation & Willingness to act for the common good
Norms & culture

Place
Look, feel & safety
Getting around/Transportation
Housing
What's sold & how it's promoted
Air, water, soil
Arts & cultural expression

Equitable Opportunity
Living wages & local wealth
Education

Assessing and addressing community determinants of health can help reduce mental health stressors and enhance resilience factors across a community. Looking at the community environment through a mental health and wellbeing lens can help to identify conditions that impact mental health outcomes. For example, the "look, feel, and safety" of a place is critical. Surroundings that are appealing, well maintained, and perceived to be safe and inviting for all community residents foster mental wellbeing, whereas disinvestment

3 L. Cohen et al., "A Time of Opportunity: Local Solutions to Reduce Inequities in Health and Safety" (Oakland, CA: Prevention Institute, 2009).
4 Prevention Institute, "Back to Our Roots: Catalyzing Community Action for Mental Health and Wellbeing" (Oakland, CA: Prevention Institute, 2017).
5 Prevention Institute, "Back to Our Roots."

by public and private investors in schools and community infrastructure–whether in rural, urban, or suburban areas–contributes to feelings of hopelessness and impacts feelings of self-worth. Another community determinant is "getting around," or the availability of safe, reliable, accessible, and affordable means of transportation. Engaging in walking and biking can help improve mood and reduce anxiety and depression; at the same time, the realities and perceptions of geographic isolation or lack of safety do the opposite. Addressing the community determinants of health is key to helping communities navigate adversity, restore assets, and assure they have the opportunity to flourish. Structural drivers, such as bias, discrimination, and concentrated poverty, shape these determinants at the community level, pointing to interventions that address and redress such conditions.[6,7] Mental health and well-being is created and reinforced by the same community environments that the community development sector seeks to transform.

Communities of color and communities with concentrated poverty often face the compounding challenges of the physical/built environment (e.g., poor housing stock, deterioration of infrastructure, toxic land use, inadequate availability of affordable healthy food and transportation options) and limited equitable opportunity (e.g., quality education and employment opportunities that provide a living wage). These challenges contribute to geographic concentration of higher levels of chronic illness, exposure to violence, substance misuse, mental health challenges, trauma, and multigenerational poverty.[8] Ensuring intentional engagement that advances a community's own priorities into the neighborhood development process can support mental wellbeing, foster stability, preserve the cultural heritage of communities, and mitigate large-scale displacement of residents.

Pillars of Wellbeing

Prevention Institute's work with the Making Connections for Mental Health and Wellbeing initiative[9] has led to the identification of a set of value-based characteristics that must be taken into consideration, alongside the community determinants, to build resilience to withstand stressors that can emerge through the social, political, and economic contexts of society.[10] These essential elements have been clustered into the following:

6 Prevention Institute, "Countering the Production of Health Inequities."
7 WHO and Calouste Gulbenkian Foundation, "Social Determinants of Mental Health" (Geneva: WHO, 2014).
8 Centers for Disease Control and Prevention (CDC), "Adverse Childhood Experiences (ACEs)" (Atlanta, GA: CDC, 2016), https://www.cdc.gov/violenceprevention/acestudy/index.html. Accessed April 26, 2018.
9 The Making Connections for Mental Health and Wellbeing among Men and Boys initiative, funded by the Movember Foundation, uses a gendered approach to mental health, allowing for a focus on the unique norms and experiences of men and boys in coping, help-seeking behaviors, social pressures, and social connections. We recognize that women's experiences are distinct from men's and that mental illness can affect men and women differently. Although this initiative focuses on men and boys, the pillars of wellbeing have been resonant with practitioners who focus on mental wellbeing among women and populations across the gender continuum.
10 Prevention Institute, "Back to Our Roots."

The Emerging Pillars of Wellbeing

BELONGING/CONNECTEDNESS–Feeling part of a community; a sense of acceptance; a belief that you are accepted as you are; having a place or group that is restorative or acts as a refuge

CONTROL OF DESTINY–A sense of purpose; the ability to influence the events that shape life's circumstances; the ability to make and take action; agency

DIGNITY–A sense of one's own value; the quality of being worthy of honor and respect; living in a climate of mutual respect and regard for all

HOPE/ASPIRATION–A reassuring belief that something better is possible and achievable; optimism that allows forward movement

SAFETY–The experience of security: interpersonally, emotionally, and with one's surroundings; possession of a sense of stability

TRUST–A belief in the reliability, truth, ability, or strength of self and others; the ability to count on the circumstances surrounding you

Understanding and committing to these pillars enables the community development sector to strengthen its efforts to be more specific and precise and to have a long term, multigenerational impact in protecting health and wellbeing. When intentionally embedded in community development strategies, the pillars can strengthen the community determinants to protect health, particularly for those living with mental health challenges.

For example, the community development sector's investment in affordable housing is important; however, the pillars as core values evoke that housing must also be safe to avert distress, and that the built environment in the development and its surrounding neighborhood must support dignity, belonging/connection, and trust to reinforce thriving. Healing values like the pillars can assist the community development sector with achieving its mandate to improve living conditions in underserved communities by intentionally shaping community-driven strategies to shift community culture and facilitate community transformation. Several examples across the country reflect the embedding of these values to the benefit of residents and project outcomes.

BRIDGE Housing is a nonprofit committed to ensuring that public housing residents live in high-quality buildings that meet the same standards for design and safety that residents in market-rate housing enjoy. BRIDGE's Trauma-Informed Community Building (TICB) model emerged from the need to acknowledge and address the trauma that public housing residents had experienced due to concentrated poverty, violence, low levels of education, displacement, and structural racism and isolation. More broadly, the TICB model uses pillars like belonging/connectedness, dignity, trust, and safety to improve upon traditional resident engagement by considering emotional needs and recognizing the impact of pervasive trauma. In working with residents of the Potrero Terrace and Annex public housing complex, BRIDGE began to engage them in a way that felt comfortable to them. By holding

activities in neutral spaces, and ensuring that staff was consistent, BRIDGE created localized "Zones of Safety," which helped to promote cohesion and connectedness among residents. As a result of participating in TICB activities, BRIDGE residents have improved health and safety outcomes, including reduced depression, improved self-esteem, greater feelings of happiness and relaxation, increased physical activity, a healthier diet, and maintenance of a healthy weight. Residents also reported that they felt a sense of safety while participating in the activities, even if the immediate surroundings were unsafe.[11]

People United for Sustainable Housing (PUSH Buffalo) in Buffalo, NY, is a local, membership-based community organization fighting to make healthy affordable housing a reality on Buffalo's West Side. PUSH was founded to create strong neighborhoods with quality affordable housing; decrease the rate of housing abandonment by reclaiming empty houses from neglectful public and private owners and redeveloping them for occupancy by low-income residents; and develop neighborhood leaders capable of gaining community control over the development process and planning for the future of the neighborhood.[12] PUSH explores and experiments with different models of governance and participation to fulfill the organization's vision for "community control of resources," especially as they engage tenants and develop tenant leaders who "know what they need where they live." This level of engagement and shared leadership reinforces social cohesion, trust, local wealth, and willingness to advance work for the common good.

Common Wealth Development in Dane County, WI, was founded to protect the Williamson Street neighborhood from disinvestment, concentrated poverty, and violence.[13] Common Wealth developed a three-pronged approach to create jobs in the neighborhood: business development, community development, and housing improvements. Common Wealth has renovated and rehabbed 146 properties for rent and supported families with one-on-one counseling for first-time home buyers. Common Wealth recognizes the investment in equitable opportunity through economic self-sufficiency and its capacity to simultaneously build self-esteem and self-confidence.[14] Sparked by local parents seeking support in finding employment for their children, Common Wealth established the Youth-Business Mentoring program as its core community development initiative. The program serves over 300 young people annually, training them in job searching skills and financial management. Young people are placed with area employers, who serve as mentors and participate in employment and financial management workshops, realizing multigenerational benefit. Although the development of financial knowledge (often referred to as financial literacy) is necessary, there is growing recognition that the desired outcome is more

11 E. Weinstein, J. Wolin, and S. Rose. "Trauma Informed Community Building: A Model for Strengthening Community in Trauma Affected Neighborhoods" (San Francisco, CA: BRIDGE Housing, 2014).

12 PUSH Buffalo, (Buffalo, NY: PUSH Buffalo, 2018), http://pushbuffalo.org/. Accessed May 30, 2018.

13 Common Wealth Development, (Madison, WI: Common Wealth Development, 2018), https://www.cwd.org/. Accessed May 30, 2018.

14 Clubhouse International, "What Clubhouses Do" (NY: Clubhouse International, 2016), https://clubhouse-intl.org/what-we-do/what-clubhouses-do/. Accessed April 26, 2018.

accurately described as financial wellbeing. This speaks to both the capability to navigate the financial system at an individual level, as well as ensuring that systems and policies are designed to promote widespread opportunity at the community level, such as affordable housing in thriving neighborhoods and access to transit and employment.

These efforts serve as examples of a critical shift for community development groups and coalitions to ask, "What happened here?" and "What are the strengths that can create sustainable improvements to our community?" They create an opportunity to describe common experiences and impacts and begin to work on factors that have produced trauma within entire communities.

Moving Upstream with Community Development

Exploring how the community determinants are expressed in work that focuses on mental health and wellbeing provides insight into how community development can work with other sectors to achieve mutual goals and outcomes. One of the challenges in promoting mental health and wellbeing is moving the collective mindset from solely individual treatment to upstream prevention anchored in community health—especially in communities that have experienced prolonged, multifaceted disinvestment and pervasive exposure to trauma. With expertise in leveraging funds to improve neighborhood conditions and a social justice-oriented commitment to improving outcomes for low-income communities, the community development sector is well-primed to anchor initiatives that address upstream underlying issues related to mental health and wellbeing, as demonstrated by the following examples.

The Male Engagement Network (MEN) in Boston, MA, is about making connections. Led by Local Initiatives Support Corporation Boston, MEN creates safe spaces where men of color can gather to receive and give support, learn and teach, heal and be healed. MEN's mission is to build pathways to success for men of color by focusing attention and resources on stressors that obstruct their potential. It offers activities in the Roxbury, Dorchester, and Mattapan communities of Boston that build financial health, housing stability, and mental health. With traction at the neighborhood level, shared priorities for community development, and support through the Making Connections for Mental Health and Wellbeing among Men and Boys initiative, MEN is working with its property managers to identify practices and policies that inhibit access to affordable housing and implementing changes to increase access. For example, MEN is examining how the Criminal Offender Record Information (CORI) may impact housing eligibility for individuals and families; it is working with housing management companies to examine policies on CORI and the housing application practice. MEN has also initiated workplace programs to assure that those working on its properties (maintenance and building services staff) have the opportunity to build financial health and mental wellbeing through worksite programs. Vital Village of the Boston Medical Center provides the local evaluation, a critical component to making the case for further investment in these community-driven approaches.

Kokua Kalihi Valley (KKV), a Federally Qualified Health Center that serves the diverse residents of Kalihi Valley in Honolulu, HI, is addressing the mental health and wellbeing of men and boys through the creation of a youth leadership development program nested within the Kalihi Valley Instructional Bike Exchange, better known as KVIBE. KVIBE is a natural gathering place where multiple generations of boys and young men come together to socialize and repair bikes. KVIBE was established as part of KKV's commitment to providing community-based health initiatives that honor the development of personal relationships and respect for cultural values to support physical and emotional wellbeing.[15] Through its commitment to leadership and connection to land, the young people at KVIBE have catalyzed improvements to the neighborhood's physical environment, having successfully advocated for the installation of a bike lane on a major road that was formerly unsafe to ride. By nurturing young leadership, entrepreneurial spirit, civic engagement, and healing connections within the community, KKV improves mental wellbeing in Kalihi, while also inspiring and empowering the next generation of leaders and advocates embedded in the community.

Hilltop Urban Gardens (HUG) in Tacoma, WA, is using food sovereignty—the production of healthy and culturally appropriate food through ecologically sound and sustainable methods—to strengthen authentic social connections; improve access and utilization of quality resources, such as food; and improve civic engagement among men, boys, and LGBTQ people of color.[16] By understanding the root causes of concentrations of poverty and structural oppression, HUG focuses on interrupting those root causes by concentrating on food independence, anti-displacement strategies, community building, leadership development, and interdependence through social connectivity.[17]

Engagement to assess local needs and to develop environments that support wellbeing—through direct action and advocacy on matters such as social justice, community safety, housing restoration, fair wages and workplaces, food sovereignty, improved schools, and access to healthy foods—can contribute to strengthening a sense of belonging and shared community agency. The community development sector can find ways to invest in grassroots leadership, avoid distrust and competition, and recognize that the most impacted communities are most capable of leading real solutions to restore mental health and wellbeing. In addition, the sector can facilitate the design of supportive community environments, including recognizing the impact of and mitigating resident displacement, reducing isolation, reconnecting to land, and valuing culture and traditional ecological knowledge.

15 Kalihi Valley Instructional Bike Exchange (KVIBE), (Honolulu, HI: KVIBE, 2017), http://k-vibe.blogspot.com/. Accessed May 30, 2018.

16 R. Cantu et al., "Cultivating Our Roots: Leveraging a Gendered and Cultured Lens to Advance Community Strategies to Improve Population Wide Mental Health and Wellbeing" (Oakland, CA: Public Health Institute, 2018), http://dialogue4health.org/web-forums/detail/cultivating-our-roots-leveraging-a-gendered-and-cultured-lens. Accessed May 30, 2018.

17 Hilltop Urban Gardens (HUG), "About HUG" (Tacoma, WA: HUG, 2018), http://www.hilltopurbangardens.com/about-hug/. Accessed May 30, 2018.

These examples not only highlight existing efforts to improve mental health and wellbeing in partnership with community development, but they also reveal opportunities to adapt these strategies for other communities that are experiencing similar conditions. Many health-oriented collaboratives want to work on these same strategies to improve the community determinants of health but are uncertain how or where to get started on engaging in strategies. Community development organizations are natural partners to move this work forward and can help the health sector as it seeks to foster vibrant communities.

Time of Opportunity with Natural Partners

The goal of improving mental health and wellbeing at a community level is aligned with the community development sector's origins and mission, and it builds the social capital necessary to sustain its investments. Generally speaking, the environments that community development creates and reinforces are the same neighborhood environments that support mental health and wellbeing. A supportive, thriving community—one that facilitates equitable opportunities for achieving health, wellbeing, and social mobility—is a vision that no sector or neighborhood can achieve alone. Intentionally engaging residents in processes that reflect values (pillars of wellbeing) and approaches that share leadership and extending multisector partnerships with others could further improve outcomes in community endeavors.

Finding partners with synergies in values is essential to this work. Early theorists and practitioners in the community mental health movement fed the momentum that guided both public health and community development as distinct fields of practice. Thought leaders, such as Drs. George Albee, Stephen Goldston, and Marshall Swift, emphasized that the interactions within a community environment could have a positive or negative effect on health and wellbeing, recognizing the impact of political and economic stressors in society on mental health and wellbeing.[18] Over the years, the fields of community development, public health, and community mental health have moved in parallel patterns, sometimes overlapping but most often without intentional shared outcomes. It is time to create new alignments across these sectors. As we reflect on current conditions within communities across the country, as well as the emergence of exemplary efforts, we see opportunities for community development to intentionally partner and engage with public health and community mental health. This mutually beneficial partnership will foster economic development, provide safe and affordable housing, and transform community environments to promote social connectivity and resilience through a set of equity-driven principles—purpose, people, practice, and platform.

18 S. Goldston, Concepts of Primary Prevention: A Framework for Program Development (Sacramento, CA: Office of Prevention, California Department of Mental Health, 1987).

Purpose

- Apply a health, equity, and wellbeing lens to support the fulfillment of mission
- Address bias, discrimination, and institutional and structural racism and classism
- Acknowledge the systematic production of inequities by accounting for impact of community trauma and mental health and wellbeing
- Foster connections and facilitate collaboration between people, systems, issues, and opportunities

People

- Create a shared vision that galvanizes partners and holds others accountable to mental health and wellbeing
- Lift and activate community voice, participation, and leadership
- Engage in inclusive multisector partnerships

Practice

- Develop tools and approaches that build and sustain health, equity, and wellbeing
- Train and build capacity across systems and sectors to engage in community prevention strategies

Platform

- Make the case for community strategies through communications and media
- Leverage financing and funding across sectors to support equity
- Identify existing and establish new metrics and measurement to support impact of strategies

Community development's efforts and alignment with other sectors working to impact community environments reinforce the need for community prevention strategies. Engaging in comprehensive, multisector community prevention strategies elevates the community development sector's capacity to fulfill its mission by promoting thriving community environments through improved individual, family, and community mental health and wellbeing, supporting its mission to improve the living conditions of the most vulnerable communities. Now is the time for the community development sector to actively seek these synergies to advance upstream prevention and community-driven solutions to fulfill the WHO definition of mental health–fostering resilience and supporting those who are tremendously impacted by inequities, those living with mental illness and mental health challenges, and the broader community.

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Acknowledgements

The authors received funding support by the Blue Shield of California Foundation, Well Being Trust, and the Movember Foundation. Larissa Estes co-authored this article during her tenure at the Prevention Institute; she has since become the Manager of Community Partnerships at UCSF Benioff Children's Hospital Oakland. Special thanks to Rob Baird, Alexis Captanian, Ruben Cantu, Justice Castañeda, Rachel Davis, Sonja Lockhart, and Lisa Fujie Parks for their support and guidance in the development of this contribution.

Widening Our Health Lens: Incorporating Trauma-Informed Practice into Affordable Housing

Ashlei Hurst and Doug Shoemaker
Mercy Housing California

From its very beginnings in 1981, Mercy Housing has operated at the intersection of health and housing, seeing the connection as essential to our mission of creating vibrant and healthy communities. Over the years, we have attempted to forge those connections in many ways, such as integrating health/behavioral health programming with affordable housing, developing some of the first affordable housing for people with HIV/AIDS, and operating a formal Strategic Health Care Partnership with major health care systems for over 17 years. Yet, as interesting and important as that work has been, in many ways it was just preparation for the opportunity our field now faces as we consider how to incorporate learnings about trauma and social determinants of health into our philosophy, strategy, and practices.

Like other leaders in our field, Mercy Housing recognizes that affordable housing alone cannot address all the complex problems that residents face, so we attempt to take a more comprehensive approach that integrates onsite services and community-based partnerships with quality housing. Our current programs focus on five key areas of support: 1) housing stability; 2) financial stability; 3) health and wellness; 4) youth educational and leadership programming; and 5) community engagement. Through this work and that of our colleagues, we know that affordable housing, combined with supportive programs, can improve residents' health and socio-economic status.

However, as more of our work has shifted to a focus on homelessness and public housing, it has become clear that our health lens needs to widen yet again to include the emotional and mental health needs of our residents. Working with families that have lived in distressed public housing communities or with chronically homeless families, we have been forced to think in new ways about the implications of a trauma-informed lens for affordable housing developers. As we begin to incorporate those learnings into our work, we have initiated an agency-wide effort to build a comprehensive culture of trauma awareness and sensitivity. Our initial goal is to increase our ability to provide effective trauma-informed services to low-income residents and community members, prevent retraumatization, and support residents in their recovery process.

Addressing Childhood Trauma

In 2015, Mercy Housing California (MHC) began partnering with Leataata Floyd Elementary School (LFE) in Sacramento to establish the school-based Leataata Floyd Student and

Family Community Center (LFSFCC), a program designed to help address the unmet needs of students and their families. LFE primarily serves low-income African American youth who live in the public housing communities of Marina Vista and Alder Grove, just south of Downtown Sacramento. The school has consistently been one of the lowest-performing in the Sacramento City Unified School District. LFE's disconnection from the broader community and resources is highlighted by its proximity to Crocker Riverside Elementary, a high-performing, affluent, predominantly white school in the Upper Land Park neighborhood, located just a mile away. For example, in the 2016-17 school year, 97.1 percent of students at LFE were socioeconomically disadvantaged, compared with 20.8 percent of students at Crocker Riverside.[1]

MHC first became involved with LFE in 2013 when the Sacramento Housing and Redevelopment Agency (SHRA) selected us to be part of a HUD Choice Neighborhoods Initiative planning grant for the Marina Vista-Alder Grove public housing community and local neighborhood. In partnership with SHRA, MHC organized outreach, identified community needs, and provided strategies to improve education, employment, and health. Through community meetings, youth engagement efforts, and resident surveys, MHC discovered that partnering with LFE was the most effective way to deliver services and begin to meet the many complex needs of families, as the neighborhood school was already serving as a trusted space for families to connect.

Through our intensive work with families at LFE, we found that students' behavioral health and academic challenges are directly related to their exposure to adverse childhood experiences and daily stressors of violence and concentrated poverty. Additionally, students and families are greatly impacted by systemic racism, housing segregation, and disenfranchisement. Unfortunately, these challenges are not limited to students attending LFE and impact young people in low-income communities across the country. According to the Urban Institute, "Many families living in public and assisted housing communities face extreme challenges. From juggling scarce resources to raising families in communities often devastated by violence, families report tremendous stress… At rates far higher than national averages, many families in public housing struggle with poor physical health and/or untreated depression, anxiety, trauma, or other mental health problems."[2] In addition, historical trauma due to a legacy of racism, residential segregation, and systemic oppression takes its toll on residents' emotional and physical well-being. For many young people and families, these conditions cause chronic stress and overwhelm residents' abilities to cope and hope for the future.[3]

When children have difficulty coping, they may also have difficulty excelling academically. Childhood trauma and chronic stress affect young people's developing brains and

1 Sacramento City Unified School District. 2016-2017 School Accountability Report Cards.

2 Marla McDaniel, S. Darius Tandon, Caroline Heller, Gina Adams, and Susan Popkin. "Addressing Parents' Mental Health in Home Visiting Services in Public Housing," Low-Income Working Families Initiative Brief, Urban Institute 2015.

3 Emily Weinstein, Jessica Wolin, and Sharon Rose. "Trauma Informed Community Building A Model for Strengthening Community in Trauma Affected Neighborhoods," Bridge Housing, May 2014.

bodies. Trauma impacts a child's executive functioning skills, behavior, and ability to learn; however, the education system has often ignored this fact.[4] Symptoms of trauma often appear in the classroom, including defiant or aggressive behavior, an inability to focus, academic work avoidance, and difficulty cultivating healthy relationships with peers and/or adults on campus. When a child continues to display these behaviors in a school that has not adopted trauma-informed practices, the child is likely penalized, suspended, or expelled from school. According to the United States Government Accountability office, African American students, boys, and students with disabilities are disproportionally disciplined and removed from class in K-12 schools.[5] Furthermore, when a child is removed from the classroom, he or she is more likely to repeat a grade, drop out of school, and become involved in the juvenile system. Studies show that this results in decreased earning potential and poor health and wellness outcomes. The complex challenges that young people living in public or assisted housing communities face greatly impacts their educational achievement and can change their life trajectory. Therefore, it is imperative that housing providers and educators use trauma-informed practices that consider young residents' emotional needs and avoid retraumatization, which "traditional" practices may ignore or exacerbate.

Barriers to Addressing Trauma: Stigma, Shame, and Lack of Access

Marina Vista and Alder Grove are multiethnic communities, with residents identifying as African American, Latino, or Asian & Pacific Islander. In many communities of color, individuals are reluctant to discuss their mental health and seek treatment because of the stigma and shame associated with such conditions. In 2014, MHC conducted a resident needs assessment with 480 of the 759 households living in Marina Vista and Alder Grove. The assessment revealed that 25 percent of the households reported that one or more of their family members suffered from depression or anxiety, and 60 percent of those individuals did not receive appropriate care. Over the past four years, the MHC team has been working with residents to understand how the community views mental health and why many residents are reluctant to access care. Through focus groups, one-on-one interviews, workshops with youth, and surveys, our team found the following:

Lack of education–Many residents misunderstand what a mental health condition is and have difficulty identifying the signs and symptoms of a condition. Furthermore, they are not aware how mental health can affect every aspect of their lives; therefore, they do not seek support.

Stigma and shame–Many residents see depression or anxiety as a personal weakness. Residents feel they should be able to "just get over it." Therefore, many residents live in silence

4 "Trauma-Sensitive Schools Learning Modules." Wisconsin Department of Public Instruction. April 04, 2018.
5 U.S. Government Accountability Office. "K-12 Education: Discipline Disparities for Black Students, Boys, and Students with Disabilities." U.S. Government Accountability Office (U.S. GAO). April 04, 2018.

and do not seek treatment because they do not want to feel judged, rejected, or labeled.

Distrust and misdiagnosis–People of color continue to be negatively affected by discrimination in the health care system. Misdiagnoses, insufficient treatment, language barriers, and lack of cultural humility by health professionals cause distrust and prevent communities of color from seeking treatment.

Access to care–It can be difficult for families to find consistent and quality mental health care. They may have difficulty understanding their insurance benefits, obtaining consistent transportation to appointments, and finding available mental health providers that are accepting new patients. These barriers make it difficult for families to access care and may discourage them from seeking care in the future.

Strength in Partnership

Given our understanding of the impact of childhood trauma on long-term health and economic independence, it is more critical than ever for the community development field to help address these barriers and connect people to services and resources that promote mental health. Through our partnership with LFE, we have learned that when educators and housing agencies combine resources (financial resources, human capital, and best practices in the education and housing field) and offer quality services, we can mitigate some of the impacts of trauma and more effectively support young people and families. Often, school administrators and teachers have limited time and resources to tackle the challenges that students may face at home or in the neighborhood. And, although educators have direct connections with students and families and can identify students who need the most support, they have difficulty connecting youth and families with accessible services. On the other hand, housing providers are acutely aware that providing service-enriched housing can improve the health and well-being of young people and have experience bringing quality resources and programs to families and communities.

Through the LFSFCC, MHC and LFE use the safe hub of the school to provide health care navigation, mental health support, and youth empowerment programs; they also partner with various community-based organizations to bolster programs and services offered on campus. Working on campus allows MHC staff to connect with students and families in a familiar environment while providing needed services that can extend beyond the traditional hours and scope of the school system.

At the same time, LFE and MHC remain mindful of how school systems and housing providers themselves can retraumatize and ultimately impact the life trajectory of young people. Consequently, we have adopted trauma-informed strategies that enable us to create an environment that is more empathetic and understanding of the emotional needs of young people and families. We know that families in our community have difficulty accessing mental health care; therefore, we are committed to promoting healing on campus. Our strategy includes consistent professional development and coaching that focuses on youth mental health first aid and trauma-informed practices. These trainings have given us the tools

needed to identify a young person who is impacted by childhood trauma and may need mental health support. Once students are identified as needing additional support, they are referred to the school social worker or to the LFSFCC. Then, our multidisciplinary team, which includes a resident services manager, health care navigator, school-based social worker, parent liaison, school nurse, and youth engagement specialist, work together to develop a holistic care plan that will meet the various needs of the child and diminish the barriers to learning. This strategy has allowed us to create a network of support for students and families and increase the number of residents we serve.

Additionally, we infuse trauma-informed strategies into their classrooms and afterschool programs. Most important, our team is committed to cultivating safe and trusting relationships with students and families. Building positive relationships is essential for growth, development, and learning. It is a key factor in student resilience and is one of the few things that has the potential to create a buffer against the impact of adversity. We also infuse mindfulness techniques into our classrooms, implement a social emotional development curriculum during and after school, use restorative practice techniques, and help students find ways to calm and handle conflict. These strategies have helped us create a trauma-sensitive environment at Leataata Floyd.

Building Hope for the Future

In addition to working closely with educators at LFE, we found it is necessary to support students and families as they transition to middle and high school. When our students transition to larger school systems that have not adopted school-wide trauma-informed strategies, they have difficulty staying in class, meeting academic expectations, and graduating high school. Our trusting relationship with families and our partnership with the local schools allow us to advocate for the youth living in the community. Whether it's helping families understand special education designations, attending parent-teacher conferences, or meeting with teachers and administrators about the importance of adopting trauma-informed classroom strategies, we are eager to support youth and bridge the gap between school and home. Furthermore, MHC provides youth empowerment programs for students in grades 7-12. Young people who have experienced adverse childhood experiences often feel helpless and out of control; therefore, we empower students to acknowledge their value, manage their stress, and recognize their capacity to handle life's problems. The LFSFCC is a safe space for young people that offers academic support and enrichment activities and connects young people with their peers and caring adults. We have learned that one of the most important things you can do for a child who has experienced trauma is to connect him or her with a consistent and caring adult who instills hope. Child trauma expert Bruce Perry writes, "Resilience cannot exist without hope. It is the capacity to be hopeful that carries us through

challenges, disappointments, loss, and traumatic stress."[6]

At the LFSFCC, we are committed to building caring, trusting relationships with young people that instill hope. We have learned that when you give young people the appropriate supports, and connect them with consistent and caring adults, they can succeed academically and become self-sufficient young adults. This summer, we are excited to watch our students graduate high school. Kayla is one of those students. When we met Kayla in our first youth empowerment program in 2014, she was angry and admitted she was depressed. Many of her family members struggled with addiction and had trouble obtaining consistent work. Her family's instability made it difficult for her to attend school every day, and she was failing most of her high school classes. Additionally, she had difficulty managing her stress and often isolated herself from her peers and family. After a year of coming to the LFSFCC, Kayla admitted that her mother was in an abusive relationship, and she feared for her mother's life. Our team worked swiftly to support Kayla and her mother. We helped them obtain a restraining order and maintain safe housing and connected them with the appropriate mental health supports. Now, Kayla is our most consistent youth leader. Due to the support the LFSFCC provided, she reports feeling less stressed and more hopeful about her future. In June 2018, Kayla was the first person in her immediate family to graduate high school and received a full scholarship to a four-year university in New Orleans, LA.

Next Steps for the Field

Combining the knowledge, skill sets, and resources of the public education and affordable housing sectors is making us all more effective in our work. The next step for MHC, and the field as a whole, is to figure out how to apply these lessons more broadly to our work as housing providers. Our experience at LFE complements the current research, which reveals how housing instability and childhood trauma can jeopardize a child's success in school and contribute to long-lasting achievement gaps and health disparities. Helping a family to stay housed is one of the most profound activities we undertake to promote health.

MHC employs a housing stabilization model that brings together our resident services and property management staff to both support the family and ensure mutual accountability. As the term "trauma-informed" is becoming more common, we are asking ourselves, "What does a trauma-informed property operations model look like?" To start, MHC initiated a training program that is equipping staff with a trauma-informed approach. This approach aims to foster an organizational culture that prioritizes sensitivity to recovery, healing from trauma, and mental-emotional well-being. We have also begun to train our staff in self-care. Like teachers, property-based staff are often surrounded by the conditions that traumatize residents. They often spend large portions of their work day engaging with residents around

6 Bruce Perry. "Resilience: Where Does It Come From?" April 2006. http://www.scholastic.com/browse/article.jsp?id=3746847.

very difficult issues, such as community and domestic violence. As organizations, we need to help our staff with their own relationships to trauma for a variety of reasons, including staff effectiveness, turnover, and burnout.

Although these are important first steps, there are more complicated topics for the field to take on. For example: As housing agencies, what can we do to reduce the occurrence of adverse childhood experiences in our communities? To avoid retraumatizing families, we may need to rethink some of the more rule-oriented aspects of property management, such as late-rent notices and enforcement of house rules. We also need to contextualize some of this work by considering the racial dimensions of who lives in affordable and public housing. Our experience in other communities suggests that what our industry typically sees as neutral lease enforcement can be seen by residents as part of a continuum of life experiences in which people of color and low-income people are subjected to intense levels of social control. In that context, a violation of house rules is not as neutral as it may seem and may be an example of how retraumatization occurs.

These are not easy topics, and awareness alone does not resolve the tensions involved in constructing a trauma-informed operation. As MHC continues to grow our partnership with LFE in the coming years, we will apply the lessons we learn to our broader affordable housing work and explore additional evidence-based strategies that can help improve the life trajectory of young people living in affordable housing communities.

Ashlei Hurst is an Associate Director of Resident Services for Mercy Housing California. She helped found and currently oversees the school-based Leataata Floyd Student and Family Community Center (LFSFCC). In partnership with the Sacramento Unified School District, the LFSFCC provides support to low-income students and families primarily living in the nearby Marina Vista-Alder Grove public housing community. Prior to joining Mercy, Ashlei was the Director of Outreach and Community Care at Bayside Midtown Church and a teaching assistant at the University of California, Davis. She founded and directed Project Voice, a program to educate and empower young women in Sacramento. Ashlei earned her Bachelor of Arts in Social Work from California State University, Sacramento and her Master of Science in Community Development from the University of California, Davis.

Doug Shoemaker serves as President of Mercy Housing California (MHC), the largest regional affiliate of Mercy Housing, Inc. With offices in Los Angeles, San Francisco, and Sacramento, MHC develops, manages, and provides services to very-low-income seniors, families, and formerly homeless people. Since 1993, MHC has developed over 9,500 homes across 36 California counties. MHC and the Low Income Investment Fund recently co-authored "Innovative Models in Health and Housing." Prior to joining MHC, Doug was the Director of the San Francisco Mayor's Office of Housing and Community Development (MOHCD). He led various key mayoral initiatives at MOHCD, including the launch of HOPE SF, San Francisco's groundbreaking effort to revitalize five distressed public housing sites into mixed-income communities.

Arts, Culture, and Community Mental Health

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ArtPlace America

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"But the conquest of the physical world is not man's only duty. He is also enjoined to conquer the great wilderness of himself. The precise role of the artist, then, is to illuminate that darkness, blaze roads through that vast forest, so that we will not, in all our doing, lose sight of its purpose, which is, after all, to make the world a more human dwelling place." –James Baldwin

ArtPlace America (ArtPlace) is a 10-year consortium of a number of foundations, federal agencies, and financial institutions that works to position arts and culture as a core sector of comprehensive community planning and development. We do this work to help strengthen the social, physical, and economic fabric of communities. Since 2011, ArtPlace has had the honor to provide grant support to projects in communities of all sizes and contexts across the country, many of which show the ways that arts and culture can contribute to community health–whether by centering cultural identity in development projects, reducing stigma associated with addiction or mental illness, or bringing communities together around otherwise isolating or traumatic experiences and issues.

ArtPlace largely focuses it efforts around "creative placemaking," which describes projects in which art plays an intentional and integrated role in place-based community planning and development. This brings artists, arts organizations, and artistic activity into the suite of placemaking strategies pioneered by Jane Jacobs and her colleagues, who believed that community development must be locally informed, human-centric, and holistic.[1] In practice, this means representing arts and culture alongside sectors like housing, transportation, public safety, and others–with each sector recognized as part of any healthy community; as requiring planning and investment from its community; and as having a responsibility to contribute to its community's overall future.

Since 2015, ArtPlace has worked with independent researchers to investigate the intersection of arts and culture with various subfields of community development. In 2017, ArtPlace commissioned Tasha Golden, PhD candidate at the University of Louisville School of Public Health and Information Sciences, to conduct research at the intersection of the arts and public health. The goal of this research was to better understand and articulate how arts and culture can help provide solutions to public health challenges that communities–particularly low-income, immigrant, rural, indigenous, and communities of color–are facing across the United States.

Based on an analysis of dozens of projects, a literature review, and input from both arts

1 Jacobs, J., *The Death and Life of Great American Cities* (New York: Vintage Books, 1961).

and public health-sector leaders, Golden identified several domains where arts and cultural strategies are helping drive change in community health outcomes, or to the systems in which public health practitioners operate. Among these domains, what quickly stood out was the impact of creative placemaking on mental health–including stigma; trauma; community-level stress, depression, and substance use disorders; and cultural identity. Here we have taken these four categories as a frame, describing their relevance to public health and providing examples of initiatives that address them. Our findings suggest that infusing community development with creativity and collaboration stimulates the potential for unique mental health benefits that warrant continued investment and exploration.

Arts and Culture Can Reduce Stigma: One of the Fundamental Barriers to Mental Health

> *"When a vast, stifling denial in the public realm is felt by every individual yet there is no language, no depiction, of what is being denied, it becomes for each his or her own anxious predicament, a daily struggle to act 'as if' everything were normal."–Adrienne Rich*

Stigma[2] is a priority issue in public health and health promotion, because it creates powerful obstacles to health care access and to protective factors, such as education and social connection.[3] For example, when a condition or experience is not "talk-about-able," prevention and treatment information can become difficult or impossible to circulate.[4] Stigma can also lead individuals to conceal conditions or experiences by avoiding treatment and isolating themselves–which generates additional significant health consequences.[5] And because stigma silences many issues and groups, it limits public health's understanding of a given community and its health. When inadequate knowledge influences local service, resource, and funding decisions, the result may be the perpetuation of health challenges and inequities.

2 Stigma is understood in public health as "the co-occurrence of labeling, stereotyping, separation, status loss, and discrimination in a context in which power is exercised" (Hatzenbuehler, M. L., J. C. Phelan, & B. G. Link, "Stigma as a Fundamental Cause of Population Health Inequalities," *American Journal of Public Health* 103 (5) (2013): 813–21). It has also been described as "devaluing a person or group of people based on the way society views a particular attribute or characteristic" (National Alliance of State & Territorial AIDS Directors, "Addressing Stigma: A Blueprint for Improving HIV/STD Prevention and Care Outcomes for Black & Latino Gay Men" (Washington, DC: NASTAD, 2014)).

3 Stigma "thwarts, undermines, or exacerbates several processes (i.e., availability of resources, social relationships, psychological and behavioral responses, stress) that…lead to adverse health outcomes" (Hatzenbuehler, Phelan, & Link, 2013, p. 814).

4 For example, in the United States, access to comprehensive sex education has frequently been stymied by stigma related to sex and sexuality.

5 The dangers of social isolation itself have been compared to those of smoking and obesity (Cornwell, E. Y., & L. J. Waite, "Social Disconnectedness, Perceived Isolation, and Health among Older Adults," *Journal of Health and Social Behavior* 50 (1) (2009): 31–48). Among older adults, "social isolation and loneliness are associated with increased mortality" and "linked to…dementia, increased risk for hospital readmission and increased risk of falls" (Seegert, L., "Social Isolation, Loneliness Negatively Affect Health for Seniors" (2017)). Notably, social isolation related to stigma has been found to particularly affect individuals in lower socioeconomic situations (Rüsch, N., M. C. Angermeyer, & P. W. Corrigan, "Mental Illness Stigma: Concepts, Consequences, and Initiatives to Reduce Stigma," *European Psychiatry* 20 (8) (2005): 529–39).

Fortunately, arts and culture have a long history of cultivating spaces for the portrayal and discussion of challenging and stigmatized aspects of life experience. Artists, installations, and performances often take communicative risks that model or stimulate expression, action, and new norms. This can shift participants' and viewers' sense of being alone, or of being unable to articulate or share their experience.[6] This effect is evident in the 100 Stone Project in Alaska: a statewide initiative designed to raise suicide awareness. Founding artist Sarah Davies connected with 100 of the state's "most vulnerable community members," inviting them to depict their "stories of illness, trauma, grief, disability, difficult transitions, and struggle" in physical form–perhaps kneeling, reaching, arms outstretched or tight around them–while artists cast them in plaster.[7] This approach allowed residents to share their felt experience without words, which can often feel out of reach; it also generated visible representations of pain that is often unspoken and invisible.

After masks and burlap "clothing" were added, the figural sculptures were installed on the beach of Point Woronzof in Anchorage, AK–many seeming to walk or disappear into the icy waters. These haunting, personal images illustrate the potential dire consequences of physical and emotional vulnerabilities, particularly among isolated or marginalized communities. In addition to declaring the need for awareness and action, the deeply collaborative nature of 100 Stone–which involved 30 communities and over 600 volunteers, artists, and allies–also cultivated community, creativity, and resilience.

The Porch Light Initiative in Philadelphia has brought stigmatized issues into the open in communities facing mental health risks due to "neighborhood disorder and decay"[8] and other place-based risk factors. In a collaboration between Philadelphia Mural Arts and the city's Department of Behavioral Health and Intellectual disAbility Services, community members work with artists on public murals that depict experiences with mental illness. A 2015 Yale University study found that the initiative had not only successfully reduced mental health stigma among residents, but it also increased social cohesion and trust, and decreased the rate at which participants used secrecy to avoid stigmatization.[9]

6 A 2005 study revealed that "the most promising avenue" for reducing stigma was "contact combined with education" (Rüsch, Angermeyer, & Corrigan, 2005, p. 536). Because arts and culture activities and events "bring people together with a sense of purpose in a common creative endeavour" (Clift, S., "Creative Arts as a Public Health Resource: Moving from Practice-Based Research to Evidence-Based Practice," *Perspectives in Public Health* 132 (3) (2012): 120–27), they have significant potential to provide this very contact and education.

7 100 Stone, "Our Story – 100 Stone" (2018).

8 In a Yale study, Tebes et al. (2015) note that "[t]here is now clear evidence that neighborhood disorder and decay (e.g., graffiti, abandoned cars and buildings, trash, dilapidated housing, public drunkenness, street fights, etc.) increase residents' risk for psychological distress, depression, substance abuse, post-traumatic stress disorder, and a sense of powerlessness…Such neighborhoods often have higher rates of poverty, unemployment, violence, and crime…which may stigmatize the neighborhood itself…and adversely impact even the most resilient person or family" (Tebes, J. K., et al., "Porch Light Program" (Philadelphia, PA: Mural Arts Philadelphia, 2015).

9 Tebes et al., 2015.

Arts and Culture Can Help Address Trauma

"I have come to believe over and over again that what is most important to me must be spoken, made verbal and shared…" –Audre Lorde

"There is no greater agony than bearing an untold story inside you."–Maya Angelou

In addition to emphasizing stigma reduction, the public health sector is working to better understand trauma and adverse experiences–which have a staggering impact on both individuals and communities.[10] Not only have over 70 percent of individuals experienced at least one type of trauma,[11] but communities can also experience trauma as a whole–resulting from conflict, natural disasters, systemic oppression, the destruction of cultural practices, or "emotional and psychological wounds…carried across generations."[12] Adding complexity to trauma research, adverse childhood experiences (ACEs)–poverty, sexual abuse, witnessing or experiencing violence, parental separation, parental incarceration, et cetera–have been called "the nation's most basic public health problem"[13] due both to their ubiquity and their strong links to significant health concerns, such as heart disease, obesity, and substance use disorders.

Clearly, addressing trauma and ACEs at the community level will require innovative, multisector responses; many approaches to date have been initiated and enhanced through arts and culture. For example, the Breathing Lights project focuses on the combined community traumas of disinvestment and disrepair.[14] Artists illuminated the windows of hundreds of vacant buildings in Albany, Schenectady, and Troy, NY, with warm, gently pulsing light–mimicking human breathing. The idea was to infuse warmth and life into buildings that otherwise represented hopelessness, and to re-present them as livable spaces. These installations then amplified other aspects of the initiative, including "Building Reclamation Clinics" (to teach residents how to acquire vacant homes), policy roundtables (to address urban

10 SAMHSA has defined trauma as resulting "from an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or life threatening and that has lasting adverse effects on the individual's functioning and mental, physical, social, emotional, or spiritual well-being (Substance Abuse and Mental Health Services Administration, "SAMHSA's Concept of Trauma and Guidance for a Trauma-Informed Approach" HHS Publication (July 2014): 27). They further note that "communities as a whole can…experience trauma" (p. 17).

11 See Magruder, K. M., K. A. McLaughlin, & D. L. Elmore Borbon, "Trauma Is a Public Health Issue," *European Journal of Psychotraumatology* 8 (1) (2017). Trauma types identified by this study included interpersonal violence, accidents, collective violence, etc.

12 UMN, 2018. This understanding helps illuminate the persistence of health disparities that exist according to race/ethnicity, geographic location, religion, sexuality, gender identity, and more.

13 Emphasis in original; Anda, R. F., & V. J. Felitti, "Adverse Childhood Experiences and Their Relationship to Adult Well-Being and Disease: Turning Gold into Lead" (2012).

14 Pinderhughes, H., R. A. Davis, & M. Williams, "Adverse Community Experiences and Resilience" (Oakland, CA: Prevention Institute, 2015). The authors identified crumbling infrastructure, dilapidated buildings, and displacement as symptoms of community trauma. In addition to presenting their own health risks (lack of safe housing, increased toxins, lack of space for physical activity), these built-environment factors produce ongoing mental health risks, in part because they communicate neglect, lack of safety, lack of investment, and hopelessness.

blight), and a multi-city learning exchange. Since Breathing Lights' beginning in 2016, 18 percent of the installation-homes have been sold, local land banks have reported increased interest in buying or renovating buildings, and more regional leaders have committed to addressing neglect and disinvestment.

The One Poem at a Time project in the Smoketown neighborhood of Louisville, KY, addressed community trauma by challenging the negative messages and images presented to residents in daily life. Developed in 2017 by poet Hannah Drake of the Louisville-based arts agency IDEAS xLab, the initiative replaced dozens of negative and predatory advertisements on local billboards with positive photographs of Smoketown residents, combined with empowered, six-word poems written by community members. Residents then used the public nature of this initiative, and the civic engagement it generated, to advocate for policies preventing future predatory advertising in Smoketown.

Lastly, Broadway Housing Communities in upper Manhattan tackles trauma and ACEs on multiple levels through the incorporation of the arts into their developments. Their recent project in Sugar Hill offers affordable housing in a striking, mixed-use building designed by world-renowned architect David Adjaye; it brings to residents the health benefits of pleasing aesthetics and shifts the social imagination regarding supportive housing for low-income and formerly homeless residents.[15] The project also hosts the Sugar Hill Children's Museum of Art & Storytelling on the ground floor, designed to provide a stimulating space for families to share in cultural programming and to meet the educational needs of the community's youngest children. The museum's emphasis on storytelling may help reduce trauma symptoms by supporting participants in the narration and reorganization of their experiences: a process linked to increased self-efficacy, self-esteem, and health benefits ranging from improved immune function to better grades.[16] In addition, the museum's contributions to family connection, personal expression, and exploration nurture protective factors that can reduce ACEs and their impacts.

Arts and Culture Can Help Address Specific Community Mental Health Concerns

In addition to trauma, the public health sector is responding to pervasive mental health concerns, such as stress, depression, and substance use disorders. Each year, Americans report feeling more stressed, primarily from chronic sources, such as money, work, family responsi-

15 The project includes 124 apartments, ranging from studio to three-bedrooms; all of these have been leased to low-, very low- and extremely low-income families and single adults; 25 of these households came from the NYC homeless shelter system (Broadway Housing Communities (BHC), "Sugar Hill Project" (2017)).

16 For an introduction to the value of narrative and storytelling in addressing health and trauma, see Frattaroli, J., "Experimental Disclosure and Its Moderators: A Meta-Analysis," *Psychological Bulletin* 132 (6) (2006): 823–65; Goodson, I., & S. Gill, Critical Narrative as Pedagogy (London: Bloomsbury, 2014); Pennebaker, J. W., "Telling Stories: The Health Benefits of Narrative," *Literature and Medicine* 19 (1) (2000): 3–18,; and Menzer, M., "The Arts in Early Childhood: Social and Emotional Benefits of Arts Participation" (Washington, DC: National Endowment for the Arts, 2015), among many others.

bilities, health concerns, and the economy.[17] And although chronic stress is quite common, it is also dangerous–increasing the risk of health problems, ranging from heart disease and chronic pain to severe anxiety and depression. Meanwhile, depression was declared the leading cause of disability worldwide[18]–resulting, at its worst, in suicide, which is currently the "second leading cause of death in 15-29-year-olds."[19] Finally, addiction and substance use disorders present significant public health concerns due to their costs, multiple long-term effects, and increasing prevalence.[20] Risk factors for stress, depression, and substance use disorders include poverty, community violence, and lack of health care access–indicating the extent to which these issues are affected by place. An increasing public recognition of the importance of mental health in community well-being has led to calls for improved education, dialogue, and access to therapeutic options, which many creative placemaking projects have provided.

For example, Urban Voices on Skid Row in Los Angeles is a choral project designed for "individuals disenfranchised by homelessness, mental health issues, and unemployment."[21] Although its public performances challenge stigma related to homelessness, the project's primary goal is to provide the direct mental and physical benefits that are linked to choral singing–including reduced stress and muscle tension, improved mood, and positive social connection.[22] Similarly, the program organizer for the Mural Arts Project in New York took an explicit arts therapy view. Her goal was not only to reduce social isolation resulting from depression and stigma, but to benefit participants immediately through the healing process of artmaking itself.[23]

Finally, the Appalachian Artisan Center has launched its Culture of Recovery project in Knott County, KY, which currently ranks fifth nationwide for opioid hospitalizations. A collaboration with the nearby Hickory Hill Recovery Center, Knott County Drug Court, and Eastern Kentucky Certified Employment Program, the project uses arts engagement as a holistic approach to recovery–with activities including painting, journal-making, songwriting, luthiery, ceramics, and blacksmithing. The initiative was rooted in "evidence that

17 Note that the burden of stress can accumulate across one's lifetime and across generations (Yehuda, R., et al., "Influences of Maternal and Paternal PTSD on Epigenetic Regulation of the Glucocorticoid Receptor Gene in Holocaust Survivor Offspring," *American Journal of Psychiatry* 171 (8) (2014): 872–80), and experiences of discrimination are linked to higher levels of stress (American Psychological Association, 2016). These impacts contribute to ongoing health disparities.

18 See United Nations, "UN Health Agency Reports Depression Now 'Leading Cause of Disability Worldwide.'" (2017), and World Health Organization (WHO), "Depression: Key Facts" (2018).

19 WHO, 2018.

20 Echoing WHO's report about depression, the Substance Abuse and Mental Health Services Administration (SAMHSA) indicated that by 2020, "mental and substance use disorders will surpass all physical diseases as a major cause of disability worldwide" (SAMHSA, 2018).

21 Urban Voices Project, "Urban Voices Project – Using Music to Transform Lives" (2018).

22 See Urban Voices Project, 2018. Also, Clift (2012) found that choral singing increased participants' "sense of mental and physical well-being, even among people dealing with health and well-being challenges due to ill health, bereavement and stress in their personal lives" (p. 123).

23 Gordon, E., "The Mural Arts Project Uses Street Art to Start Conversations about Mental Illness in NYC" (2017).

building connections and expression through art can give a struggling individual a sense of purpose, direction, and achievement."[24] By combining this therapeutic-arts approach with social connections and organizational partners, Culture of Recovery positions itself to generate local cultural shifts and community-level health outcomes.

Arts and Culture Can Nurture Cultural Identity and Social Connection

The final category of mental health in which creative placemaking appears particularly promising is cultural identity—understood as a sense of self and of social connection grounded in a shared culture and history. Positive cultural identity has been shown to "protect against mental health symptoms and buffer distress prompted by discrimination,"[25] particularly among populations that have historically been marginalized or oppressed. Because of this linkage, the nurturing and sustainment of cultural identity is a critical aspect of public health and community development efforts.

Many creative placemaking projects have pursued this work via built-environment initiatives. For example, the Boston Chinatown Neighborhood Center is building an arts-based center to preserve cultural assets and cultivate connections among Chinatown residents. This is particularly vital during a time of community uncertainty due to market pressures and the accompanying potential for residential and cultural displacement.

The Heritage Arts Trail in Santo Domingo Pueblo, NM, has sought to increase economic opportunity[26] by integrating traditional native cultural identity into infrastructure and transportation plans. A large percentage of the Pueblo's residents are artists, but they lacked spaces to display and sell their work. And despite being 1.5 miles from a rail line that provides access to urban centers and economic opportunities, the Pueblo lacked pedestrian access to the station. So in 2014, plans were drawn up for a pedestrian trail that would include six artist nodes along the path for resting and lingering—and for artists to showcase traditional and contemporary art. By incorporating these nodes, the trail enhances future growth opportunities by linking them to the Pueblo's tradition of arts, craftsmanship, and entrepreneurship.

In Wisconsin, the Menominee Nation is addressing low graduate rates, high ACE scores, and historical trauma by increasingly incorporating positive cultural identity into trauma-informed education. For example, a middle school science teacher combines class units about the planting process with traditional Menominee stories, to teach students the

24 Evans, J., "AAC Project 'Culture of Recovery' Receives Funding from ArtPlace America" (2017).

25 See Shepherd, S. M., et al., "The Impact of Indigenous Cultural Identity and Cultural Engagement on Violent Offending," *BMC Public Health* 18 (1) (2018): 50. Cultural identity can also generate self-esteem and a sense of belonging, two protective factors against stress and depression (Kids Matter, 2015).

26 Economic opportunity has been shown to be "a robust, independent predictor of health." In fact, "[a]n increase in economic opportunity from the lowest to the highest quintile" in the United States was associated with "a 16.7% decrease in mortality" (Venkataramani, A. S., et al., "Economic Opportunity, Health Behaviors, and Mortality in the United States," *American Journal of Public Health* 106 (3) (2016): 478–84).

historic, cultural connections between them, their ancestors, and the earth.[27] Educators hope these connections help sustain students' interest in education while cultivating a sense of purpose and belonging. The singular capacity for creative placemaking projects to nurture positive cultural identity confirms the value of research and investment at the intersections of community development, public health, and the arts.

Next Steps: Exploration and Field-Building

"I don't believe any longer that we can afford to say that it is entirely out of our hands. We made the world we are living in and we have to make it over."–James Baldwin

To that end, we offer in closing some recommendations and opportunities for continued exploration. First, although the four mental health categories we highlighted often incorporate distinct goals and outcomes, they are deeply and intuitively connected–not only to one another, but to numerous public health priorities. This is a reflection both of the complexity and expressivity of the arts and of the holistic, social-ecological nature of health.[28] The resulting "confounding factors" can present difficulties for researchers–leaving cause and effect frustratingly out of reach. However, to us they also signal the profound potential of arts-based initiatives to help us learn and benefit from the inevitable overlap of lived experience with lived experience.

In an effort to both deepen and promote cross-disciplinary approaches to community well-being, and to build on the initial research excerpted here, ArtPlace recently launched Creating Healthy Communities: Arts + Public Health in America in partnership with the University of Florida Center for Arts in Medicine. The two-year national research initiative is designed to accelerate the collaboration of arts, public health, and community development practitioners seeking to build healthy communities in alignment with national public health goals.[29] Readers are encouraged to join and follow this initiative, contributing your vision and experience to a growing field. Meanwhile, it is our hope that the work described here ignites our collective imagination, stimulating the curiosity and creativity that fuel innovation, social progress, and equitable approaches to community-based work. The infusion of community development practice with arts and culture may help reintegrate us as individuals, community members, health care consumers, and contributors to a diverse and dynamic polity.

27 While learning about the planting process, students learn the Menominee story of "the three sisters"–corn, beans, and squash–and discuss their ancestors' knowledge of agricultural science. Readers can find more about the three sisters at https://www.theatlantic.com/sponsored/robert-wood-johnson-foundation-2015/tribes-path-to-health-heal-invisible-wounds/661/ (RWJF, 2018).

28 For example, projects like 100 Stone, designed to reduce stigma, could also urge policy-level changes related to infrastructure or community resources. Similarly, the Breathing Lights and the Santo Domingo Trail projects were originally designed to improve health by tackling housing and economic opportunity; their relevance to mental health concretizes the connections among the body, its environment, and mental health.

29 Led by a team of Center for Arts in Medicine research scholars, the initiative will bring together an inclusive array of existing initiatives and thought leaders to establish clear theoretical constructs, standardized research protocols, a framework for evidence-based practices, and an open-access research database of arts in public health resources. Visit the Creating Healthy Communities website for a list of convenings and webinars.

Jamie Hand brings a background in landscape architecture, program design, and grantmaking to her role as Director of Research Strategies at ArtPlace America, a national consortium of foundations, federal agencies, and financial institutions established to support arts-driven community planning and development across the United States. Prior to ArtPlace, Jamie worked at the National Endowment for the Arts, where she managed the Our Town grant program, the Mayors' Institute on City Design, and the Citizens' Institute on Rural Design. She also advised the Hurricane Sandy Rebuilding Task Force on the development of Rebuild by Design, after leading multiple regional-scale design competitions as Program Director at Van Alen Institute in New York City. Jamie co-edited Gateway: Visions for an Urban National Park *and began her career in the Bay Area as project manager for artist Topher Delaney. Jamie is on the board of ioby ("in our back yards") and holds degrees from Princeton University's School of Architecture and the Harvard Graduate School of Design.*

Tasha Golden's research in public health is informed by her career in the arts. As front-woman and songwriter for the band Ellery, Golden's songs have appeared in feature films, TV dramas, retail, and radio, and her debut book of poems, Once You Had Hands *(Humanist Press), was a finalist for the 2016 Ohioana Book Award. Now a doctoral candidate in public health, Golden studies the impact of the arts on stigma, advocacy, and public health inquiry and practice. She has led trauma-informed creative writing workshops for incarcerated teens since 2012 and has established a community partnership with the University of Louisville, Youth Detention Services, and Sarabande Books that offers arts programming for detained girls while advancing their voices in justice reform. Golden trains researchers and teaching artists on arts-health partnerships; she also consults for local and national organizations regarding arts-based health initiatives and program evaluation.*

Community Development and Accountable Communities for Health: New Opportunities for Mental Health Promotion

Nathaniel Z. Counts and Paul Gionfriddo
Mental Health America

Historically, mental health treatment was limited to direct clinical services for individuals with mental health conditions. Although many appreciated the importance of upstream external factors to mental health, such as community conditions, addressing these factors was not seen as the role of health care. The health care sector did the best it could with the individual during clinical visits, and the rest was left to public health, social service providers, or even politics. For example, psychotherapy sessions could work through the effects of trauma, and psychotropic medications could ameliorate related distress; however, it was considered the duty of public officials and the role of criminal justice or child welfare systems to prevent trauma from occurring.

In recent years, the lines between what is considered mental health care and what is not have begun to blur. Part of this results from the overall increase in focus on social determinants of health across all of health care–which have particular importance for mental health, as this paper explores. Part of this also results from the rise of the "recovery model." After a history of abuses, in addition to a general overreliance on institutionalization, a civil rights movement began to advance a recovery model of mental health treatment, which focused on ensuring that individuals with lived experience set their own goals for meaningful participation in community life and determined what they needed to get there.[1] The recovery model did not carry with it the notion of "cure," any more than community development activities result in a singularly defined "ideal" community, but rather was seen as a process of achieving wellness and reaching one's potential. To progress in this process, health care must engage sectors beyond the clinic walls to ensure that the desired opportunities to participate in community life are accessible, and that individuals with mental health conditions are supported in pursuing them.

Despite the obvious parallel efforts in improving the lives of communities and individuals, the health care and community development sectors have not yet extensively engaged with each other in the emerging partnerships that seek to prevent mental health conditions or

1 Substance Abuse and Mental Health Services Administration (SAMHSA), "SAMHSA's Working Definition of Recovery" (Rockville, MD: SAMHSA, 2012), https://store.samhsa.gov/shin/content//PEP12-RECDEF/PEP12-RECDEF.pdf.

promote recovery as we understand the concept today. Health care has only begun to experiment with working across sectors, and health care-community development partnerships offer the opportunity for a different and more transformative change than previous initiatives. The community development sector brings new ways to address social determinants of health and promote recovery by improving community conditions to create affordable housing, jobs, accessible recreation, retail outlets, and more robust social services, among countless other ways that public and private investments can be leveraged to produce change in communities. As a result, the community development sector could achieve profound gains in mental health, and with recent health care reform efforts, the opportunity for partnership is greater than ever.

This article explores how the community development and health care sectors can partner to improve mental health, using the specific example of the Accountable Health Communities Model. It focuses on how community development could help to address health-related social needs (HRSNs) and promote recovery by incorporating the research on mental health promotion and the expressed goals of individuals into the field's existing activities, such as lending and service delivery.

Accountable Communities for Health: Community-Wide Approaches to Mental Health

Although there are many currents in the tide of health care reform, the movement from Accountable Care Organizations (ACOs) to Accountable Communities for Health may offer an inflection point in whole-community approaches to mental health, as well as offer a critical opportunity for partnership with community development.[2] ACOs are groups of health care providers who take on financial risk for the costs of quality care of a population of individuals, with an opportunity for the providers to share in some of the savings they produce. ACOs began as a Medicare demonstration under the Affordable Care Act but have expanded across Medicaid and commercial health insurance.[3] The movement toward ACOs also set off waves of other health care alternative payment models, as Medicare, Medicaid, and commercial insurance experimented with new ways of getting away from fee-for-service and toward pay based on value.[4]

The original ACO model is limited in its ability to promote sustained reforms. When an ACO is able to achieve certain quality benchmarks while reducing costs each year, the ACO can share in some of those annual savings. Although ACOs can make health care delivery more efficient, they do not necessarily maximize human health and decrease long-term costs. The ACO model disfavors interventions that take more than a single year to generate health

2 E. S. Fisher and J. Corrigan, "Accountable Health Communities: Getting There from Here," *JAMA* 312 (20) (2014): 2093-94.

3 S. M. Shortell et al., "A Taxonomy of Accountable Care Organizations for Policy and Practice," *Health Services Research* 49 (6) (2014): 1883-99.

4 R. Rajkumar, P. H. Conway, and M. Tavenner, "CMS–Engaging Multiple Payers in Payment Reform," *JAMA* 311 (19) (2014): 1967-68.

care savings, or that improve health outcomes outside of narrow clinical quality measures. Many of the most impactful interventions in health, and especially mental health, require more than one year to show savings and change outcomes, and so further reform is needed beyond the ACO model.

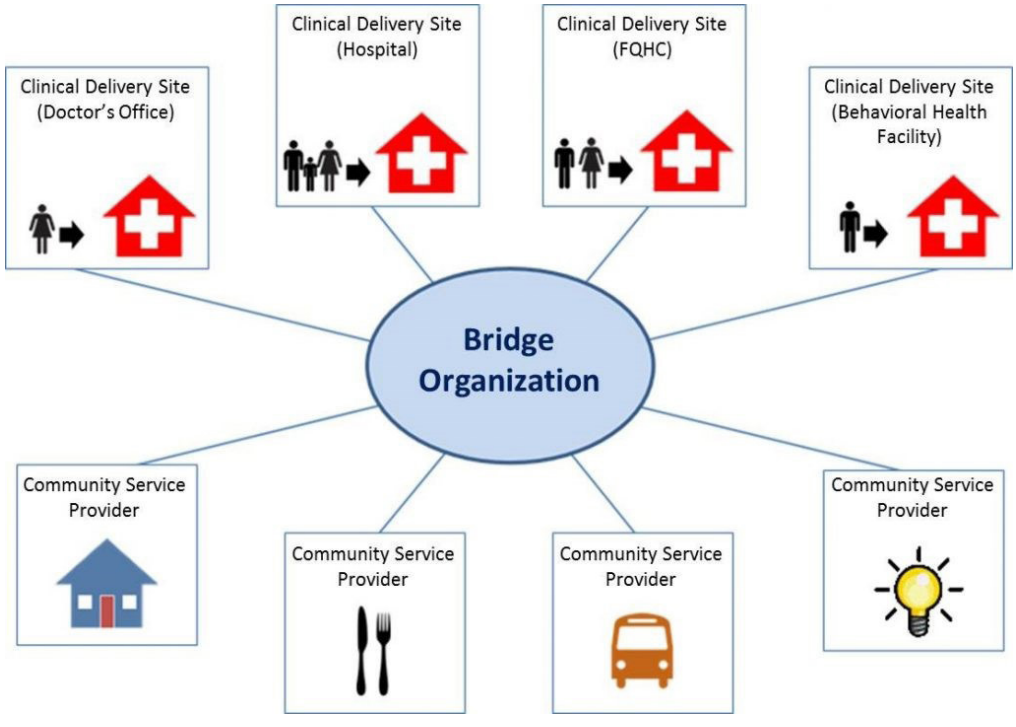
The Accountable Communities for Health model has emerged to address some of these shortcomings.[5] In this model, health care systems are positioned as a single stakeholder in a broader, more inclusive community health system developed to advance a shared vision for the community. In one specific version, the Accountable Health Community Model (AHCM), the federal government offers payments for health care providers to join with other community organizations in a collective impact arrangement (see Figure 1).[6] In an AHCM, a community integrator or "bridge organization"–a public or private entity acting as a neutral community convener–brings together both the health and non-health care stakeholders to identify community needs, set a shared vision of success, and coordinate to ensure continuous progress toward the goals. Health care providers in the AHCM screen for HRSNs–also known as social determinants of health, such as food, housing, utilities, transportation, and intimate partner violence–and the integrator or backbone makes connections to all sectors that can address the needs identified. Although the movement toward Accountable Communities for Health is still emerging and the details of the payment and delivery models are still being defined, AHCMs offer a good case study for understanding how community development as a sector could help drive the further development of healthy communities, with specific implications for the mental health of populations.

In the collective impact arrangement of the AHCMs, the community development sector plays two critical roles in improving population health, specifically mental health: (1) leveraging funds to ensure that the HRSNs of the community are met; and (2) intentionally investing in holistic, community-driven approaches to confer mental health benefits across the population.

5 M. Mongeon, J. Levi, and J. Heinrich, "Elements of Accountable Communities for Health: A Review of the Literature," *NAM Perspectives*. Discussion paper (Washington, DC: National Academy of Medicine, 2017).

6 D. E. Alley et al., "Accountable Health Communities–Addressing Social Needs Through Medicare and Medicaid," *New England Journal of Medicine* 374 (1) (2016): 8-11.

Figure 1: Accountable Communities for Health Model.



Source: D. Sanghavi and P. Conway, "Can Helping Patients' Social Needs Also Be Good for Their Health?" The CMS Blog, January 11, 2016.

The Connection Between Health-Related Social Needs (HRSNs) and Mental Health

AHCMs currently screen for a battery of HRSNs, which include housing instability, food insecurity, transportation problems, utility help needs, interpersonal safety, financial strain, employment, family and community support, education, physical activity, and disabilities.[7] Each of the HRSNs have independent effects on mental health across a population. They may affect the risk of developing a new mental health condition or developing a more challenging prognosis for an existing mental health condition. The HSRNs also have implications for the risks of children in families, including the likelihood of developing mental health conditions and the likelihood of having access to effective services when needs arise.

7 Centers for Medicare and Medicaid Services (CMS), "The Accountable Health Communities Health-Related Social Needs Screening Tool" (Baltimore, MD: CMS), *https://innovation.cms.gov/Files/worksheets/ahcm-screeningtool.pdf.*

Many of the HRSNs are related to financial strain, which directly contributes to mental health risk. It also makes accessing treatment more challenging. Studies have found, for example, that financial strain is associated with a greater likelihood of reporting mental health problems, independent of the experience of any current hardship[8] or the specific source of the economic insecurity.[9] The financial strain of parents also impacts the mental health of their children. The cumulative time spent in poverty in early childhood predicts mental health as a young adult–principally due to the increased risk of exposure to stressors and adverse events.[10] On the converse, cash transfers to individuals or families experiencing financial strain may improve mental health and decrease the likelihood of developing mental health conditions in certain populations.[11]

Specific consequences of financial strain can also pose their own risks. For example, housing insecurity and experiencing homelessness exposes individuals and families to new stressors and adverse events that increase the likelihood of developing or exacerbating a mental health condition.[12,13] On the other hand, secure access to high-quality housing is associated with improved mental health for adults[14] and children,[15] and even some improvements to housing can measurably enhance mental health.[16] Similarly, food insecurity is demonstrated to negatively impact the mental health of adults[17] and their children.[18] This is partly from financial strain, but also because of the impact of food insecurity on diet and nutrition.[19] The nutrient quality of the food can influence the mental health of adults and the developing brains of children, and research has found a direct relationship between diet quality and mental health in children and adolescents.[20]

8 K. M. Kiely et al., "How Financial Hardship Is Associated with the Onset of Mental Health Problems Over Time," *Social Psychiatry and Psychiatric Epidemiology* 50 (6) (2015): 909-18.

9 N. Rohde et al., "The Effect of Economic Insecurity on Mental Health: Recent Evidence from Australian Panel Data," *Social Science & Medicine* 151 (2016): 250-58.

10 G. W. Evans and R. C. Cassells, "Childhood Poverty, Cumulative Risk Exposure, and Mental Health in Emerging Adults," *Clinical Psychological Science* 2 (3) (2014): 287-96.

11 K. Kilburn et al., "Effects of a Large-Scale Unconditional Cash Transfer Program on Mental Health Outcomes of Young People in Kenya," *Journal of Adolescent Health* 58 (2) (2016): 223-29.

12 M. Stahre et al., "Peer Reviewed: Housing Insecurity and the Association With Health Outcomes and Unhealthy Behaviors, Washington State, 2011," *Preventing Chronic Disease* 12 (2015).

13 A. M. Lippert and B. A. Lee, "Stress, Coping, and Mental Health Differences Among Homeless People," *Sociological Inquiry* 85 (3) (2015): 343-74.

14 R. J. Bentley et al., "Housing Affordability, Tenure and Mental Health in Australia and the United Kingdom: A Comparative Panel Analysis," *Housing Studies* 31 (2) (2016): 208-22.

15 K. A. Rollings et al., "Housing and Neighborhood Physical Quality: Children's Mental Health and Motivation," *Journal of Environmental Psychology* 50 (2017):17-23.

16 A. Curl et al., "Physical and Mental Health Outcomes Following Housing Improvements: Evidence from the GoWell Study," *Journal of Epidemiology and Community Health* 69 (1) (2015).

17 C. W. Leung et al., "Household Food Insecurity Is Positively Associated with Depression Among Low-Income Supplemental Nutrition Assistance Program Participants and Income-Eligible Nonparticipants." *The Journal of Nutrition* 145 (3) (2014): 622-27.

18 C. Gundersen and J. P. Ziliak, "Food Insecurity and Health Outcomes," *Health Affairs* 34 (11) (2015): 1830-39.

19 C. W. Leung et al., "Food Insecurity Is Inversely Associated with Diet Quality of Lower-Income Adults," *Journal of the Academy of Nutrition and Dietetics* 114 (12) (2014): 1943-53.

20 A. O'Neil et al., "Relationship Between Diet and Mental Health in Children and Adolescents: A Systematic Review," *American Journal of Public Health* 104 (10) (2014): 31-42.

Outside of their contributions to financial stability, employment and education as HRSNs can also promote or undermine mental health for both adults and their children. Employment and education offer a range of benefits: potentially meaningful social roles, opportunities for social engagement and connection, structured time, and a path to build self-efficacy, identity, and a sense of value–all of which underlie mental health and development.[21] Family and community support offer fewer formal structures for similar supports with related risks for adults and children. Women's social isolation, for example, is associated with maternal depression and also mental health challenges in their children.[22,23]

Leveraging Funding to Ensure Community Needs Are Met

The ACHM's focus on these HRSNs creates profound new opportunities to improve population mental health. However, in screening for these HRSNs, the AHCM model assumes there will be a vibrant third sector in place to meet the needs identified, especially if the right stakeholders are at the table. But, for example, what if a community does not have that third sector to provide adequate supported housing, or does not have organizations devoted to addressing intimate partner violence? In some cases, there may be federal, state, or local funding available for services, but no community organization equipped to provide them. In other cases, there may be no pre-existing funding stream, although potential long-term savings (as explored further below) or political will generated by the AHCM may build interest in creating new funding streams. Although these funds may cover ongoing operating costs, startup capital or other kinds of financing may be needed for a new organization or a division of an existing organization to be able to launch and begin addressing HRSNs. These are precisely the kinds of problems the community development sector solves.

Notably, many of the effective interventions for preventing and treating mental health conditions offer substantial long-term returns on investment to state and local agencies. Effective treatment or prevention can result in less health care utilization, less grade retention and special education use, less criminal and juvenile justice involvement, and higher tax revenue from increased labor productivity. Economic modeling from the Washington State Institute for Public Policy (WSIPP), a statutorily defined and nonpartisan entity that advises Washington State on costs and benefits for different social investments, concretely demonstrates these savings.[24] For example, Communities That Care is an evidence-based system for helping communities effectively implement new interventions to prevent mental health and

21 B. O'Dea et al., "A Cross-Sectional Exploration of the Clinical Characteristics of Disengaged (NEET) Young People in Primary Mental Healthcare," *BMJ Open* 4 (12) (2014).

22 J. Eastwood et al., "Social Exclusion, Infant Behavior, Social Isolation, and Maternal Expectations Independently Predict Maternal Depressive Symptoms," *Brain and Behavior* 3 (1) (2013): 14-23.

23 S. H. Goodman et al., "Maternal Depression and Child Psychopathology: A Meta-Analytic Review," *Clinical Child and Family Psychology Review* 14 (1) (2011): 1-27.

24 E. K. Drake, S. Aos, and M. G. Miller, "Evidence-Based Public Policy Options to Reduce Crime and Criminal Justice Costs: Implications in Washington State," *Victims and Offenders* 4 (2) (2009): 170-96.

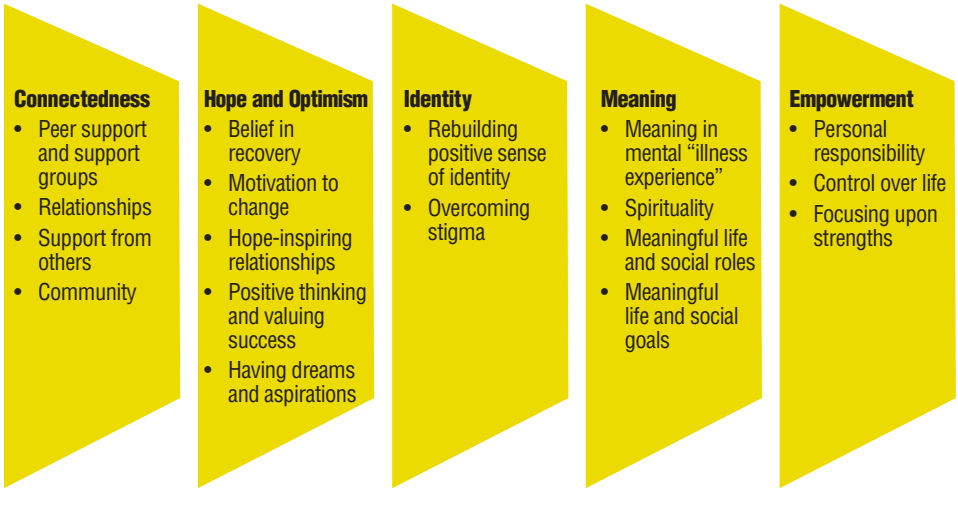
substance use conditions.[25] The approach is grounded in community-driven data that use prevention science to promote healthy youth development and improve youth outcomes. WSIPP estimates that Communities That Care, a program that costs about $593 to implement in a community, eventually results in over $3,148 of total societal benefit, including $863 of taxpayer benefit over time from reductions in criminal justice costs, decreased health care costs, and increased tax revenue.[26]

Because of the savings associated with prevention and recovery in mental health, the entities on whose shoulders these mental health care costs often fall, such as counties and states, may be willing to structure tax credits or other outcomes-based financing approaches. Such upfront financing helps the community development sector in investing or making loans as part of AHCMs and similar models to address mental health. Other members in the collective impact of AHCMs can be valuable allies in pushing for this policy change to support sustained engagement of the community development sector.

Community Development Can Promote Mental Health Recovery

Addressing the HRSNs offers the opportunity not only to mitigate risk but also to promote more positive aspects of mental health recovery. This can improve individuals' connectedness, hope and optimism about the future, identity, meaning in life, and empowerment–five constructs that flow from the concept of recovery and are often used as a framework under the acronym "CHIME."[27]

Figure 2: CHIME Framework



25 J. D. Hawkins et al., "Results of a Type 2 Translational Research Trial to Prevent Adolescent Drug Use and Delinquency: A Test of Communities That Care," *Archives of Pediatrics & Adolescent Medicine* 163 (9) (2009): 789-98.

26 Communities That Care, Washington State Institute for Public Policy, December 2017, http://www.wsipp.wa.gov/BenefitCost/Program/115.

27 M. Leamy et al., "Conceptual Framework for Personal Recovery in Mental Health: Systematic Review and Narrative Synthesis," *The British Journal of Psychiatry* 199 (6) (2011): 445-52.

Thoughtfully designed HRSN interventions can promote the CHIME constructs and profoundly impact the lives of individuals and the community as a whole. For example, parts of an intervention could be delivered by a peer, an individual who has been in a similar situation and now aids others in a staff role to ensure that they feel welcomed and supported, or could involve group-based components or assigned partners that foster opportunities to make new connections and build mutual support. Interventions could also emphasize social activities in the community that are likely to lead to new connections, such as a supported education program that helps individuals to pursue the social opportunities at their school in addition to academic success.

Similarly, interventions can promote hope by beginning with a goal-setting process grounded in an individual's personal aspirations, while maintaining a consistent emphasis on growth over time. Transitioning away from identities like "patient" or even "program participant" and toward roles like "parent," "employee," and "friend" can help build positive identity. Part of this could also involve celebrating the identity of the community and the families that comprise it, in order to reinforce the positive associations with the identities that individuals are transitioning toward. To support meaning, interventions can create opportunities for individuals to help others, such as providing real-time support to peers or delivering services to future cohorts after the individuals "graduate." As with hope, the interventions can also emphasize goal-setting that results in opportunities to help others, so that participants have a sense of making progress toward roles in the community that allow them to give back. Finally, interventions can empower individuals by reinforcing and increasing the control they have over decisions that affect their lives, including decisions about their community. For example, nutrition and exercise programs could focus on building skills and creating opportunities for individuals to achieve the goals they have set, rather than emphasizing rigid adherence to a specific regimen. Such programs could also include opportunities to participate in the design of policies that shape the food availability and walkability of their community.

The built environment also offers opportunities to promote CHIME. For example, thoughtful housing and community design can include elements that build connectedness and feelings of safety. Similarly, property management strategies could be revisited to become more empowering and contribute to positive identity. Although there is some empirical evidence about the impacts of specific layouts on aspects of mental health recovery and principles that can be applied from behavioral economics,[28] community participation in housing and community design may be essential to ensuring that the layout of housing promotes the CHIME constructs. For example, the community development sector can engage potential future residents in design-thinking to propose a layout that would optimize their social health. Investments to meet other HRSNs similarly impact the overall layout of the community and can create additional opportunities to promote CHIME through the built environment.

28 D. Halpern, *Mental Health and the Built Environment: More Than Bricks and Mortar?* (Abingdon, United Kingdom: Routledge, 2014).

Investing in Holistic, Community-Driven Approaches to Promote Mental Health

The AHCM is designed to support screening for discrete HRSNs, referrals to a community-based organization, and provision of a program or service to meet the need. However, HRSNs such as housing, employment, and transportation are not isolated needs–they are the interconnected product of social and economic forces interacting in the community. The community development sector has the opportunity to take a more holistic view of these interconnected needs and design a continuum of aligned strategies that provide unparalleled value to the AHCM.

Although the specifics will come from the needs, expertise, and creativity of the community development sector and the communities with which they partner, community-participatory and creative placemaking approaches may offer leads. In community-participatory approaches, community members–including those with mental health conditions or at risk for mental health conditions–engage in every step of the investing process in a way that is designed to promote the CHIME constructs, while producing investments that most effectively meet the needs of that particular community.[29] These could be particularly fruitful in communities experiencing persistent problems of chronic homelessness and related criminal justice contacts. For CHIME, community-participatory development can allow structured opportunities for individuals to interact, promoting connectedness; the promise of a healthier community associated with the long-term investing can build hope and optimism about the future; being a valued member of a community-participatory team can help form positive identity; engagement in a common project that will benefit others can contribute to meaning in life; and sharing in decision-making authority over the future of a community can lead to empowerment.[30] While community-participatory approaches may lead to slower turnarounds on investments, the independent effects on health and wellbeing offer immediate returns before the investment is even complete, and community insights are critical for innovations that ultimately improve outcomes.

Community-participatory approaches have particular salience in creative placemaking, where community members have the opportunity to express themselves in ways that give shape to their community as a whole, beyond any particular building or business. Tying creative placemaking investments to long-term theories of change that meet the HRSNs of the community and promote CHIME–both for the current residents and for those to come in the following years and even decades–can offer a more transformative approach to an AHCM. With leadership from the community development sector, AHCMs can evolve from a coordinated safety net to a collective impact arrangement that reflects the vision of the community and paves a path toward its future.

29 J. Buckner-Brown et al., "Using the Community Readiness Model to Examine the Built and Social Environment: A Case Study of the High Point Neighborhood, Seattle, Washington, 2000–2010," *Preventing Chronic Disease* 11 (E194) (2014).

30 J. C. Semenza, T. L. March, and B. D. Bontempo, "Community-Initiated Urban Development: An Ecological Intervention," *Journal of Urban Health* 84 (1) (2007): 8-20.

Conclusion

Accountable Communities for Health offer one way in which the community development sector can partner with health care to prevent mental health conditions and promote mental health recovery. In this approach, the community development sector can leverage funding to expand the reach of community-based organizations that seek to address the HRSNs of the population while supporting recovery. The community development sector can also focus resources to develop holistic, community-driven approaches that promote mental health. By partnering in such an arrangement as an Accountable Community for Health, the community development, health care, and other sectors can collectively offer a more transformative intervention strategy to advance population mental health.

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Equitable Community Development for Good Mental Health: A Discussion of Economic and Racial Equity in Housing

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Empirical evidence has shown that inequitable housing conditions produce health disparities.[1] More specifically, a robust body of evidence confirms that poor housing and inequitable neighborhood conditions adversely affect mental health outcomes.[2] For example, empirical evidence shows that multi-dwelling housing, compared with single dwellings, is associated with poor psychological health generally, but low-income children and children of color experience these disparities disproportionately.

This essay summarizes the research that confirms the persistent association between three adverse housing conditions and mental health inequity. The lack of affordable housing, substandard housing conditions, and residential segregation are all associated with mental health disparities. With respect to segregated housing, the focus here is placed on racial rather than economic segregation, notwithstanding the important but distinctive concerns raised by concentrated poverty. The reasons for disrupting both forms of housing isolation are similar and compelling; however, this essay zeroes in on racial segregation to address the misconception that improved mental health outcomes community-wide can be achieved without express attention to the impacts of racial injustices specifically. The second part of this essay explores the theoretical grounding that supports intervening to disrupt the relationship between poor housing and poor mental health. The essay concludes with a few examples of how community development can contribute to mental health equity.[3]

The Goal: Mental Health Equity

Health disparities are differences in which social groups that have systematically and structurally experienced social disadvantages consequently suffer worse health or greater health risks than other, more advantaged groups. In contrast, "health equity" is the ethical concept that describes the absence of unfair and unjust health disparities. Mental health equity would

1 J. Krieger and D. L. Higgins, "Housing and Health: Time Again for Public Health Action," *American Journal of Public Health* 92 (5) (2002): 758-68.

2 G. Evans, N. M. Wells, and A. Moch, "Housing and Mental Health: A Review of the Evidence and a Methodological and Conceptual Critique," *Journal of Social Issues* 59 (3) (2003): 475-500. (Dr. Gary Evans et al. provide one of the best available resources to survey the literature that documents the association between housing and mental health, though this resource should be updated.)

3 *Cf.*: N. Cytron, "Ties That Bind: Income Inequality and Income Segregation," *Community Investments* 23 (2) (2011).

mean that no population group would be forced to bear a disproportionate burden of disability and illness, or the hopelessness of being excluded from receiving the benefit of medical and scientific advances available to others to treat mental illness.[4] Thus, a goal of community development is to achieve health equity by eliminating systematic disparities in access to community-level social determinants between more and less advantaged groups.[5] Decent, stable housing, both at the individual and community level, is a social determinant of health that research indicates is key to eliminating mental health disparities.[6] Moreover, the association between mental health disparities and the community conditions in which people live are also the subject of robust and compelling empirical literature.

Evidence That Housing Inequity Is Associated with Mental Health Disparities

A range of housing and neighborhood characteristics are associated with negative affect, psychological distress, and psychiatric disorders. Three of those characteristics occur more frequently in low-income communities and communities of color, thus contributing to inequitable disparities.

Housing Affordability Affects Mental Health

The lack of affordable housing in the United States has been described as a public health crisis.[7] Housing is considered "affordable" when a household spends no more than 30 percent of its income on housing. A household that spends more than this is considered "burdened," and when a family spends more than 50 percent of its income on housing, the household is "severely burdened."[8] The evidence that unaffordability is an important housing risk factor for poor mental health suggests at least three pathways linking unaffordable housing to mental health disparities.[9] First, the prevalence of mental illness among those experiencing homelessness is well-documented, as is the overrepresentation of African Americans within this community.[10] Second, the pressure on household finances that unaffordable housing

4 "Mental Health: Culture, Race, and Ethnicity: A Supplement to Mental Health: A Report of the Surgeon General" (Chapter 1. Introduction), https://www.ncbi.nlm.nih.gov/books/NBK44246/#A997.

5 P. Braveman and S. Gruskin, "Defining Equity in health," *Journal of Epidemiology and Community Health* 57 (4) (2003): 254-58.

6 T. G. McGuire and J. Miranda, "New Evidence Regarding Racial and Ethnic Disparities in Mental Health: Policy Implications," *Health Affairs* 27 (2) (2017): 393-403; J. Ng et al., "Racial and Ethnic Disparities in Mental Health Among Diverse Groups of Medicare Advantage Beneficiaries" (CMS Data Highlight No. 11, 2017), https://www.cms.gov/About-CMS/Agency-Information/OMH/Downloads/Data-Highlight-Vol11-Dec-2017.pdf.

7 S. A. Bashir, "Home Is Where the Harm Is: Inadequate Housing as a Public Health Crisis," *American Journal of Public Health* 92 (5) (2002): 733-38.

8 M. Schwartz and E. Wilson, "Who Can Afford to Live in a Home?: A Look at Data from the 2006 American Community Survey" (Suitland, MD: U.S. Census Bureau, 2006), https://www.census.govhousing/census/publications/who-can-afford.pdf.

9 K. E. Mason et al., "Housing Affordability and Mental Health: Does the Relationship Differ for Renters and Home Purchasers?" *Social Science & Medicine* 94 (2013): 91-97.

10 M. M. Jones, "Does Race Matter in Addressing Homelessness? A Review of the Literature" *World Medical & Health Policy* 8 (2) (2016): 139-56.

imposes can adversely impact even adults and children who are housed, but it especially harms those who live at or near poverty levels. Low-income families who find housing unaffordable must make tradeoffs to make ends meet. Studies show these families are hardest hit when they include elderly members and children; these households can spend as much as 70 percent less on health care than families with affordable housing.[11] Beyond the obvious negative impact this tradeoff may have on mental health, cost-burdened households may make other tradeoffs that potentially harm mental health. A recent study has identified an important relationship between housing affordability and children's cognitive achievement.[12] Cost-burdened households also spend less on enrichment, such as toys, musical instruments, sports, and recreational equipment. As a result, researchers found that children's math and reading scores suffered in families with very high housing cost burdens, as well as in families with very low housing cost burdens. The latter group likely represents families that are living in neighborhoods with poor-quality housing and schools.[13]

A third mechanism by which poor housing may contribute to mental health disparities is stress. The stress associated with unaffordable housing goes beyond general financial hardship. Chronic stress related to housing unaffordability not only can cause anxiety individually, but the effects may reverberate through households when stress contributes to child neglect, abuse, or poor health behaviors, such as smoking. Affordable housing can have mental health benefits by offering stability and control over a family's environment, limiting the stress related to frequent moves.

Notably, the data that show the impact that a lack of affordable housing has on mental health is not limited to low-income households; an increasing number of moderate- or modest-income families are being forced to pay a disproportionate burden of their income on housing or alternatively must accept substandard conditions that are affordable. For this reason, the racialized income gaps[14] in the United States further exacerbate the mental health disparities that African Americans and Latinos are experiencing in today's housing affordability crisis.

Housing Conditions Affect Mental Health

Studies show that substandard housing conditions are positively associated with poor mental health. Studies have shown that pest infestation, mold, and dampness are associated with poor health generally and that housing quality is positively correlated with psychological well-being more specifically. The mediators for this association range from low self-

11 Joint Center for Housing Studies of Harvard University, "The State of the Nation's Housing 2018" (Cambridge, MA: Joint Center for Housing Studies of Harvard University), p. 31, www.jchs.harvard.edu/sites/default/files/Harvard_JCHS_State_of_the_Nations_Housing_2018.pdf.

12 S. Newman and C. S. Holupka, "Housing Affordability and Children's Cognitive Achievement," *Health Affairs* 35 (11) (2016): 2092-99.

13 Ibid., 2096.

14 The U.S. Census Bureau reported the following 2016 real median income data by race: non-Hispanic white ($65,041); black ($39,490); Hispanic ($47,675); see Evans, Wells, and Moch, 2003.

esteem and stigma to anxiety about structural hazards, fear of crime, and lack of control.[15] Of course, the fact that substandard housing is often found in low-income neighborhoods also means that these harms are disproportionately visited on the most underrepresented and disadvantaged populations.

Housing Segregation Affects Mental Health

Residential segregation–both economic and racial–has been linked to community health disparities.[16] Indeed, racial residential segregation has been identified as a "fundamental cause" of inequitable health outcomes that affect populations of color.[17] A fundamental cause is a basic, underlying factor that is so deeply entrenched broadly throughout systems and structures that changing upstream mechanisms that flow from it will ultimately fail to change the differential outcomes it causes. For example, racial discrimination is such a fundamental cause of segregation that even passage of the 1968 Fair Housing Act, which prohibits explicit exclusionary racial covenants, has not erased the segregation that persists in America today.[18]

When individuals perceive they have been discriminated against, research shows they experience adverse physiological responses. For example, in a study of over 4,000 older adults in Chicago, researchers found that their experiences with discrimination were associated with increased mortality risk.[19] In another study of over 3,500 African American, Mexican American, Puerto Rican, and other Latino youths, researchers found that perceived discrimination is associated with increased odds of asthma and poorer asthma control among black youths.[20] Racial discrimination is a stressor that can broadly impact mental health, producing psychological distress,[21] vulnerability to poor blood pressure control, exaggerated cardiovascular responses, chronic changes in immune and endocrine systems, and reduced protective resources.[22] Research has shown that the stress associated with the stigma of living in a segregated neighborhood can adversely affect mental health.[23] Therefore, the evidence shows that populations of color living in cities with higher rates of residential segregation experience

15 Ibid.

16 J. Weinstein et al., eds., "Communities in Action: Pathways to Health Equity" (Washington, DC: National Academies of Sciences, Engineering, and Medicine, 2017).

17 D. R. Williams and C. Collins, "Racial Residential Segregation: A Fundamental Cause of Racial Disparities in Health," *Public Health Reports* 116 (5) (2001): 404.

18 William H. Frey, "Census Shows Modest Declines in Black-White Segregation" (Washington, DC: Brookings Institution, 2015), https://www.brookings.edu/blog/the-avenue/2015/12/08/census-shows-modest-declines-in-black-white-segregation/; D. S. Massey and J. Tannen, "A Research Note on Trends in Black Hypersegregation," *Demography* 52 (3) (2015): 1025-34, doi:10.1007/s13524-015-0381-6.

19 L. L. Barnes et al., "Perceived Discrimination and Mortality in a Population-Based Study of Older Adults," *American Journal of Public Health* 98 (7) (2008): 1241-47.

20 Neeta Thakur et al., "Perceived Discrimination Associated with Asthma and Related Outcomes in Minority Youth *Chest,*" *Journal* 151 (4) (2017): 804-12.

21 Tiffany Yip et al., "Racial Discrimination and Psychological Distress: The Impact of Ethnic Identity and Age Among Immigrant and United States–Born Asian Adults," *Developmental Psychology* 44 (3) (2008):787-800.

22 Elizabeth A. Pascoe and Laura Smart Richman, "Perceived Discrimination and Health: A Meta-Analytic Review," *Psychological Bulletin* 135 (4) (2009): 531-54.

23 M. L. Hatzenbuehler, J. C. Phelan, and B. G. Link, "Stigma as a Fundamental Cause of Population Health Inequalities," *American Journal of Public Health* 103 (5) (2013): 813-21, doi:10.2105/AJPH.2012.301069.

poorer mental health outcomes.[24]

Neighborhood Conditions Affect Mental Health

Using a geographic information system (GIS), a spatial analysis tool, researchers have shown that disadvantaged neighborhoods are likely to have more retail outlets that sell alcohol, as well as more residents who are heavy drinkers.[25] Policymakers in North Carolina also use spatial analysis to identify disadvantaged communities that put children at high risk for lead contamination, a known risk factor for delayed cognitive and behavioral development.[26] Violence, another risk factor for poor mental health outcomes, is a prevalent risk factor in cities where poor and predominantly African American populations live. For example, Chicago has the highest number of homicides nationally. The Third National Survey of Children's Exposure to Violence found that over half of the 4,000 children surveyed had been exposed to one or more types of violence. This exposure to toxic stressors has been shown to have long-term adverse mental health impacts on children over their life course.

Equitable Community Development

The Theory

Ecosocial theory explains that populations biologically embody adverse exposures from ecological and societal influences.[27] That means that the physical conditions of a neighborhood or community environment influence residents' mental health outcomes. Thus, the result of economically and socially skewed environmental influences is a disparate distribution of poor mental health.[28] The good news is that ecosocial theory also suggests that community development can affect the level of justice and equity that disadvantaged families experience.

One application of ecosocial theory explains how built environments, which are socially constructed, can be thoughtfully and intentionally reconstructed to reconfigure access to resources and opportunities so that all community residents can enjoy the advantages of access. Sociologist George Lipsitz has called the geographic congruence of race, place, and power in America "the racialization of space and the spatialization of race."[29] That is to say, racially disparate mental health outcomes are related to the extent to which cities, towns, and counties are segregated by race. This is because opportunities for good mental health are spatialized. Community spaces that are relatively wealthy and white have greater health

24 C. S. Aneshensel and C. A. Sucoff, "The Neighborhood Context of Adolescent Mental Health," *Journal of Health and Social Behavior* 37 (4) (1996): 293-310.

25 E. Hood, "Dwelling Disparities: How Poor Housing Leads to Poor Health," *Environmental Health Perspectives* 113 (5) (2005): A310-17.

26 Ibid.

27 N. Krieger, "Theories for Social Epidemiology in the 21st Century: An Ecosocial Perspective," *International Journal of Epidemiology* 30 (4) (2001): 668-77.

28 N. Krieger, "Methods for the Scientific Study of Discrimination and Health: An Ecosocial Approach," *American Journal of Public Health* 102 (5) (2012): 936-44.

29 G. Lipsitz, "The Racialization of Space and the Spatialization of Race: Theorizing the Hidden Architecture of Landscape," *Landscape Journal* 26 (1) (2007): 10-23.

resources, such as recreational facilities, green open spaces, mental health care providers, and lower crime rates, while those communities that are predominantly black have fewer of these resources.

Another important application of ecosocial theory describes the practice of "community-driven design." This is a way of designing and constructing built spaces in response to social needs, but through collaboration with local residents and stakeholders and guided by local knowledge.[30] Community-driven design can focus on both building capacity within a community, as well as on building the physical environment for community members. It is a practice, moreover, that approaches development by combining local and technical expertise in the decision-making. The result is an approach to community development that focuses on equity in both process and outcome. Thus, the upshot of these theoretical approaches teaches that equalizing access to the social determinants of mental health[31] should be the priority of all equitable community development.

The Practice

Effective solutions to improve mental health for all and narrow unfair and unjust mental health disparities will require investment in the social determinants of health. Collaborations among community developers and behavioral health specialists provide a particularly promising approach to these problems. Community partnerships that incorporate trauma-informed strategies can reduce social isolation, especially for seniors and children, by leveraging technology and supportive housing environments.[32] Mercy Housing California partners with a school district and housing authority administrators to provide mental and behavioral health services for children, youth, and their families onsite in public housing settings (for more information, see the article by Hurst and Shoemaker in this issue). A student and family community center also provides enrichment activities that this population of children would otherwise lack. The National Housing Partnership Foundation of nonprofit developers is addressing the cumulative effects of poor physical health, memory loss, and loneliness among seniors by leveraging technology to mitigate the effects of social isolation in Washington, DC, and Baltimore. The creative use of technology through multiple senior residential apartment complexes gives seniors access to music, medical reminders, and other voice-assisted services. Multifamily housing projects on the South Side of Chicago are affecting the lives of underserved residents through a neighborhood redevelopment process that includes services to address the impact of toxic stress due to poverty and violence throughout the Woodlawn Neighborhood. There, residents collaborate with

30 B. B. Wilson *Resilience for All: Striving for Equity Through Community-Driven Design* (New York: Island Press, 2018).

31 World Health Organization (WHO) and Calouste Gulbenkian Foundation, "Social Determinants of Mental Health" (Geneva, Switzerland: WHO; Lisbon, Portugal: Calouste Gulbenkian Foundation, 2014), apps.who.int/iris/bitstream/handle/10665/112828/9789?sequence=1

32 See Stewards of Affordable Housing for the Future, SAHF Mental and Behavioral Health Profiles, https://sahfnet.org/sites/default/files/uploads/sahf_mental_and_behavioral_health_case_studes.pdf.

partners to run a faith-based center for family development called "I AM ABLE." The center is located in a central neighborhood where residents meet regularly and have access to a broad network of services that address the impacts of trauma and violence by screening for and supporting needs–"from finance to romance"–through an intervention called "TR^{4}IM" (the Trauma Response, Recovery, Reduction, and Removal Intervention Movement).[33] In all three of these examples, community development means much more than expanding buildings and spaces; it serves as an indispensable tool for addressing complex urban problems through meaningful collaboration. More examples may be found in Barbara Brown Wilson's book, *Resilience for All: Striving for Equity Through Community-Driven Design.*

Conclusion

The data, theory, and practical examples discussed in this essay all point to the role that innovative community development could play in addressing mental health inequity. In particular, the community development sector has the opportunity to more intentionally promote mental health equity through its existing activities, which could be strengthened by pursuing partnerships with the mental and behavioral health sector. With a targeted focus on increasing accessibility to social resources, affordability, and the quality of housing available to low- and modest-income populations and populations of color, community development could significantly reduce the nation's mental health disparities.

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33 See http://www.tr4im.org/what-we-do/.

Mental Health, Climate Change, and Community Development: Strengthening Core Capabilities to Promote Community Resilience

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Climate change-related events, such as floods, hurricanes, wildfires, heat waves, and droughts, create cascading cycles of acute and chronic stress as they devastate communities. The direct and indirect impacts of climate change and their associated stressors affect physical and emotional health. In response to a worldwide increase in extreme climate events, governments, foundations, scientific research institutes, and business coalitions have sponsored comprehensive initiatives to address the impact of climate change on the health of communities.[1,2] The expertise and contributions of community development are featured in each of these initiatives. Community development has emerged as central to addressing the disruption of economic, social, and physical capital caused by extreme climate events.

This article explains how and why climate-related extreme weather events impact mental health, the restorative relationship between mental health and social capital, and the critical importance of social capital to other disaster-related community investments. We end with an exploration of community development's unique role in building the economic, social, and physical capital that increases community resilience to climate-related events.

The Impact of Climate Change on Communities

Scientists describe the weather as "short-term atmospheric conditions." In contrast, "climate" describes how the atmosphere behaves over long periods of time.[3] Over the past decade, and certainly since Hurricane Katrina in 2005, the nation has witnessed how extreme

1 A. Chandra, A. Charles, P. Hung, A. Lopez, A. Magana, Y. Rodriguez, M. Williams. "Resilience Builder: Tools for Strengthening Disaster Resilience in Your Community" (Santa Monica and Los Angeles, CA: RAND Corporation and Los Angeles County Department of Public Health, 2015), http://www.laresilience.org/documents/resilience-builder.pdf.

2 A. Crimmins et al., "The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment," (Washington, DC: U.S. Global Change Research Program, 2016), http://dx.doi.org/10.7930/J0R49NQX.

3 NASA, "What's the Difference Between Weather and Climate?" (Washington, DC: NASA, 2005), https://www.nasa.gov/mission_pages/noaa-n/climate/climate_weather.html.

weather disrupts normal patterns of everyday life. Each year, more communities across the country are experiencing extreme climate events, which stretch out over longer periods of time. The Atlantic hurricane season now runs for six months of the year. In the West, wildfire season in the 1970s was five months long; by 2016, it lasted eight months of the year.[4] California, for example, has not seen a month without wildfires since 2012.

Climate events can be sudden, such as hurricanes, floods, wildfires, and heat waves, or they can be gradual, such as rising sea levels, changes in the life cycles of ticks and mosquitoes, and decreases in crop viability. These climate change disruptions and the chronic stress they produce can exacerbate such health issues as asthma, Lyme disease, cardiovascular conditions, and mental health challenges. Everyone is vulnerable to the impact of climate events. The disruption they cause systemically changes the built environment, economics, and emotional health of the community.

However, some populations are more vulnerable than others and will bear more of the burden as a result. For instance, inequities in recovery trajectories are more deeply felt by residents of neighborhoods in economically stressed areas, and in some communities of color. One example is the health impact of heat waves. In Fresno County, CA, African Americans were 8.6 times more likely and Latinos were 4.5 times more likely than whites to reside in high-risk areas that include "heat islands."[5] The heat island effect is found where structures are predominantly made from concrete, the majority of public spaces are covered in asphalt that absorbs heat, and there is a minimal amount of tree canopy. Chronic stressors tend to show up in clusters, and so the neighborhoods where low-income residents are less likely to have air conditioning are often the same neighborhoods whose residents are more likely to have multiple chronic conditions, which puts them at higher risk of heat-related illness.[6, 7] This example reminds us how climate events exacerbate existing inequities, such as inadequate employment opportunities, substandard housing, crumbling infrastructure, and lack of access to healthy food, parks, and clean air, that have already caused chronic mental and physical health challenges.

In 2018, Dr. Lucy Jones, a veteran seismologist, wrote a candid and hopeful reflection on how natural disasters shape communities and what can be done to manage their impact. In *The Big Ones,* she writes that "although natural hazards are inevitable, human catastrophes are not."[8] Her observation reminds us of how community development is well-positioned to work with stakeholders to build infrastructure that will not only change the immediate

4 A. Kenward, T. Sanford, and J. Bronzan, "Western Wildfires: A Fiery Future," *Climate Central* (June 2016).

5 S. Shonkoff et al., "The Climate Gap: Environmental Health and Equity Implications of Climate Change and Mitigation Policies in California–A Review of the Literature". *Climatic Change* (2011) 109 (Suppl 1):S485–S50 DOI 10.1007/s10584-011-0310-7

6 P. English et al., "Racial and Income Disparities in Relation to a Proposed Climate Change Vulnerability Screening Method for California," *International Journal of Climate Change: Impacts & Responses* 4 (2) (2013).

7 C. J. Gronlund, "Racial and Socioeconomic Disparities in Heat-Related Health Effects and Their Mechanisms: A review," *Current Epidemiology Reports* 1 (3) (2014): 165-73.

8 Dr. L. Jones, *The Big Ones: How Natural Disasters Have Shaped Us (and What We Can Do About Them)* (New York: Doubleday, 2018).

impact of disaster but also improve quality of life before, after, and despite climate-related events. Dr. Jones and others remind us that when physical and economic infrastructure disappears, the quality of survival and recovery depends on the strength of the pre-existing social infrastructure. This insight suggests priorities for strategies that will lessen the impact of climate events on communities.

Chronic Stress from Climate Events Impacts Mental Health

The World Health Organization (WHO) recognizes that "there is no health without mental health."[9] The most prevalent chronic physical illnesses, such as cardiovascular disease, diabetes, and high blood pressure, are significantly associated with common mental health challenges, such as anxiety and depression.[10] Increasingly, scholarship is finding a link between chronic stress, physical ailments, and mental health.[11] Our physical bodies and our emotions have an intense symbiotic relationship not only with each other, but also with the social and economic environment that surrounds us.

Everyone is born with a unique "emotional geography," which includes strengths and weaknesses in temperament and resilience that help and hinder our ability to interpret and interact with the world. Central to mental health is self-efficacy, which is the experience of having "mastery" or "what it takes" to engage with and manage day-to-day life.[12] Each person's emotional geography is highly responsive to environmental and behavioral stimuli. This responsiveness is significant because everyone faces different social, economic, and physical environments that influence their physical safety and emotional health. These environments, ranging from very challenging to supportive, interact with our emotional geography and influence our daily experience of self-efficacy and, ultimately, mental health.

The WHO defines a population-based disaster, such as a climate event, as "a serious disruption of the functioning of a community or a society causing widespread human, material, economic, or environmental losses which exceed the ability of the affected community or society to cope using its own resources."[13] With this in mind, climate events first impact mental health through immediate experiences of loss and losing control–for instance, witnessing the disappearance of entire neighborhoods, or experiencing the personal loss of homes, jobs, access to water, food, electricity, and health. This level of stress can impact

9 World Health Organization (WHO), "Mental Health: Facing the Challenges, Building Solutions." Report from the WHO European Ministerial Conference (Copenhagen, Denmark: WHO Regional Office for Europe, 2005).

10 K. M. Scott, "Depression-Anxiety Relationships with Chronic Physical Conditions: Results from the World Mental Health Surveys," *Journal of Affective Disorders* 103 (1-3), (2007) 113–120. https://doi.org/10.1016/j.jad.2007.01.015

11 B. S. McEwen, "Neurobiological and Systemic Effects of Chronic Stress," *Chronic Stress* (Thousand Oaks, CA) 1 (2017).

12 A. Bandura, "Self-Efficacy." In *Social Foundations of Thought and Action: A Social Cognitive Theory* (Englewood Cliffs, NJ: Prentice-Hall Inc., 1986), 390-449.

13 P. Koob, "Health Sector Emergency Preparedness Guide" (Geneva, Switzerland: World Health Organization, 1998).

mental health during the months and years following the climate event. For some people, experiencing the chronic stress of a deeply disrupted physical, social, and economic environment can be heightened by knowing that the threat of Category 4 hurricanes, wildfires, or heat waves may return seasonally to their neighborhood or to a neighboring community. The post-traumatic stress endured by survivors can be challenging.

The chronic stress of preparing for, coping with, and recovering from climate change events, experienced directly or indirectly, can create mental health impacts that range from transient distress to longer-term symptoms. Symptoms of anxiety, depression, or post-traumatic stress disorder (PTSD) can appear immediately or gradually (months or years later).[14] Populations who are vulnerable to the mental health impacts of climate events include: first responders and emergency workers; the elderly; children and youth; people with a physical disability, a mental health challenge or addiction; pregnant women; people who are institutionalized; and people with low-incomes or those experiencing homelessness.

Yet the onset, duration, and intensity of mental health symptoms for any one person is often determined by their resiliency and hardiness, combined with the availability of resources in their environment, such as a safe community and access to affordable housing, income, transportation, healthy food, and positive social ties.[15] Mental health, like physical health, is socially produced. Vulnerability to the health consequences of climate events is heightened when people experience economic, political and social inequities.[16]

Research demonstrates that positive social support is an essential factor in building and maintaining physical and mental resilience for people in all states of health–from robust to highly symptomatic.[17] Social support is developed in the context of meaningful roles within social or family groupings and within communities. Community development initiatives create the social and physical "spaces" where positive social support can develop for people from diverse socio-economic backgrounds. Examples include neighborhoods, schools, places of worship, public markets, and parks, as well as events and activities that bring people together, such as community planning projects, festivals, and sporting and arts events.

Research from Katrina, Irma, and other disasters has shown that the majority of "just-in-time" emotional support comes from neighbors, family, and volunteers who share resources and stories. Peer support has been shown to be effective in helping survivors make meaning of tragic experiences, and it tends to take a trauma-informed approach, which shifts the conversation from "What's wrong with me?" to "What happened to me?" This shift reduces self-stigma and leaves room to engage with the survivor's internal strengths

14 Chapter 7 Behavioral Health. Institute of Medicine. 2015. *Healthy, Resilient, and Sustainable Communities After Disasters: Strategies, Opportunities, and Planning for Recovery.* Washington, DC: The National Academies Press. doi: 10.17226/18996

15 M. Compton and R. Shim, "The Social Determinants of Mental Health" (Washington, DC: American Psychiatric Association, 2015).

16 J. Allen et al., "Social Determinants of Mental Health," *International Review of Psychiatry* 26 (4) (2014): 392-407, http://dx.doi.org/10.3109/09540261.2014.928270.

17 D. Umberson and J. K. Montez, "Social Relationships and Health: A Flashpoint for Health Policy," *Journal of Health and Social Behavior* 51 (S) (2010): S54-S66.

and gifts needed to mobilize healing. Although professional help aids in recovery after a disaster, the anchor for healing often lies within the stories shared by the community that survived the climate event.[18]

Mental health recovery, as understood within the public mental health community, acknowledges that people can learn how to manage mild, moderate, and severe challenges while continuing to live a meaningful life. The motivation and willingness to work through challenges is anchored in hope.[19] Healing trajectories are dependent upon the level of social and financial resources held at the personal and community level, combined with past experience of traumatic events. Populations who exist at the vulnerable end of the social gradient during the climate event will be at risk for poor outcomes. With enough resources, however, most residents who experience mental health challenges from climate events will, over time, show a stable trajectory of emotional healing.[20]

Yet, it is also recognized that people who have faced adversity can also be the ones who have developed the mastery and the social networks required to survive the initial traumatic shock of the climate event. Having experience with living under conditions of scarcity, uncertainty, and powerlessness, while maintaining a positive sense of self-efficacy, is a skill that supports survival during and immediately after a trauma. Community survival, as defined earlier in this section by the WHO, is dependent upon recognizing and leveraging the core strengths of all community members to build social, physical, and economic capital for the entire community.

Community Resilience and Social Capital

In 1897, French sociologist Emile Durkheim introduced the concept of social capital in a classic study that elevated the importance of social forces on health. Durkheim observed that suicide rates stayed high even as people entered and left communities. He concluded that the social organization of groups affects patterns in suicide rates.[21] Current research suggests that the resilience of individuals interacts dynamically with community resilience[22] and that a community's resilience is anchored in access to human, political, economic, and social capital.[23] This has important implications for community development strategies developed to address the impact of climate events.

18 R. L. Hawkins and K. Maurer, "Bonding, Bridging and Linking: How Social Capital Operated in New Orleans Following Hurricane Katrina," *British Journal of Social Work* 40 (6), (2010): 1777-93.

19 S.J. Onken, J.M. Dumont, P. Ridgway, D.D. Dornan, R.O. Ralph, "Mental Health Recovery: What Helps and What Hinders? Phase II Technical Report" (Alexandria, VA: National Technical Assistance Center for State Mental Health Planning, National Association of State Mental Health Program Directors, 2002).

20 G. Bonnano. "Loss, Trauma and Community Resilience- Have We Underestimated the Capacity to Thrive After Extremely Adversive Events?". Copyright 2004 by the American Psychological Association, Inc. 59(1) 20–28 DOI: 10.1037/0003-066X.59.1.20

21 E. Durkheim, *Suicide: A Study in Sociology* (Glencoe, IL: Free Press, 1951).

22 J. W. Smith, D. H. Anderson, and R. L. Moore, "Social Capital, Place Meanings, and Perceived Resilience to Climate Change," *Rural Sociology* 77(3), (2012): 380-407.

23 M. Emery and C. Flora. "Spiraling Up: Mapping Community Transformation with Community Capitals Framework," *Community Development* 37 (1) (Spring 2006).

Conversations about how community development can build the community resilience required to manage climate events typically take one of two paths. The first path suggests how the individual or community can return to the status quo that existed before the disaster by improving skills, knowledge, and resources. This strategy may be a good fit for social, economic, or physical environments that are predictable. However, returning to a status quo runs the risk of replicating the vulnerabilities that may have caused the inequitable impacts of the climate event. The second path focuses on how the disaster or trauma provides an opportunity to reevaluate the circumstances that created these inequities and to develop the knowledge, skills, and resources required to redesign the community. This second path, sometimes called "bouncing forward," asks us to "eradicate the inequities that magnify vulnerability to disaster, and to distribute opportunities more fairly—so that all people have a chance to adapt and thrive in a fast-changing world."[24]

This second pathway is based on a framework called socio-ecological resilience.[25] This framework views communities as "complex adaptive systems" that expand, stabilize, and deconstruct within dynamic environments. Cascading physical, social, and economic events create the preconditions for this growth cycle to repeat over and over again.[26] When applied to disaster management, this framework recognizes that community resilience also rises and falls in adaptive cycles.[27] For instance, communities in a growth phase adapt easily to change. Gradually, resources are locked into arrangements that become rigid. The rigidity causes the system to break down under financial, social, or environmental pressures (such as a climate event), which begin another regenerative cycle.

Awareness of this community growth cycle can help us design systems that will maintain flexibility in the face of pressure. The socio-ecological resilience perspective includes a toolbox containing effective strategies for community development. One principle, for instance, is redundancy, which ensures the availability of options when a disaster disrupts the accessibility of community resources. Examples might include encouraging many kinds of transportation (e.g., cars, bikes, walking paths, and light rail) or a distributed energy grid to preserve community mobility or access to electricity.

Community resilience to the impact of climate change is dependent on the dynamic interplay between social capital and physical and economic resources. Similarly, the degree of an individual's resilience to mental health stressors results from the interplay of personal social capital, physical and economic resources, combined with one's own self-efficacy or "mastery." With this in mind, the next two sections will illustrate how community develop-

24 Island Press and The Kresge Foundation, "Bounce Forward: Urban Resilience in the Era of Climate Change." Strategy paper (Washington, DC, and Troy, MI: Island Press and The Kresge Foundation, 2015).

25 S. Davoudi, "Resilience: A Bridging Concept or a Dead End?" *Planning Theory & Practice* 13 (2) (2012): 299–333.

26 B. Walker and D. Salt, *Resilience Thinking: Sustaining Ecosystems and People in a Changing World* (Washington, DC: Island Press, 2006).

27 A. Cavallo and V. Ireland, "Preparing for Complex Interdependent Risks: A Systems Approach to Building Disaster Resilience" Prepared for the Global Assessment Report on Disaster Risk Reduction (Geneva, Switzerland: United Nations Office for Disaster Risk Reduction, 2015).

ment strategies affecting social, physical, and economic capital can be leveraged to produce mental and physical health.

Learning from National Experiences

Below are four observations about the contribution of social capital to community resilience and mental health based on the United States' national experience with the past 15 years of extreme climate events.

Social, Economic, and Political Capital Builds Health in the Face of Disasters

Between 2005 and 2010, the Gulf Coast communities of Texas, Mississippi, Louisiana, Alabama, and Florida experienced significant trauma from multiple climate events and disasters. University researchers based in these communities worked with survivors to identify the adaptive capacities that might help residents reduce the impact of disaster-related chronic stressors on their health. This research produced a Resilience Action Framework that identified a range of community-based resources linked to survival and recovery. These resources included human capital (physical health, self-efficacy, emotional regulation); community capital (social networks, human services, spiritual communities); economic capital (savings, job stability, credit); and political capital (relationships with community leaders).[28]

In 2015, the U.S. Department of Homeland Security Mitigation Framework Leadership Group (MitFLG) was established to respond to national disasters by developing guidance that would build a culture of preparedness by addressing risk and resilience.[29] MitFLG's aim as an interagency council was to suggest how federal and state resources might align to support local, community resilience by "building and protecting the public and private assets and services that assure sustainability, livability, and equal access for all." In alignment with community participatory engagement principles, the original report was developed through a literature review and a national stakeholder process. The effort produced a taxonomy of community resilience indicators. The June 2016 findings from this report suggest seven categories of community development investment that will foster resilience in communities threatened by a catastrophic event. These seven categories, identified by MitFLG as "core capacities," are featured in the final section of this article.

28 D. Abramson, L. Grattan, B.Mayer, C. Colton, F. Arosemena, A. Rung, "Resilience Activation Framework: A Conceptual Model of How Access to Social Resources Promotes Adaptation and Rapid Recovery in Post-Disaster Settings," *Journal of Behavioral Health Services Research* 42 (1) (2015): 42-57.

29 U.S. Department of Homeland Security Mitigation Framework Leadership Group (MitFLG), "Community Resilience Indicators." In *National Preparedness Goal Alignment -Alignment to a Community Resilience Indicator Categorization Taxonomy* (Washington, DC: MitFLG, 2016), 8-15.

Social Capital Mitigates the Impact of Climate Events

Several studies demonstrate how social capital is essential to survive severe climate events, rebuild lives, and reconstruct communities.[30] In his study of New Orleans families, Robert Hawkins found that leveraging social capital brought residents peace of mind that was based on their identification as part of the community. Even as the physical infrastructure disappeared with wind and water, residents' felt sense of "place" was held in the personal relationships negotiated using social capital.[31]

The best chances for survival, across the social gradient, lie in combining three types of social capital. First, connecting with a network of people who are similar (bonding social capital) was critical to engage immediate support and build resiliency. Second, building relationships with people who are dissimilar (bridging social capital) provided access to new ideas and resources by connecting across geographic, social, cultural, and economic lines. Finally, relationship-building with people and organizations who have authority (linking social capital) is critical to solving systemic problems faced by residents. Examples of linking social capital include government agencies, foundations, or universities that can support initiatives and programs designed to solve such challenges as housing, transportation, communications, and food safety. Additional research found that bonding capital and bridging capital were resources that reversed the downward spiral of loss after a disaster by giving residents opportunities to reconnect with meaningful roles in the community.[32]

Build Positive Social Networks Before the Climate Event Occurs

Creating ties with neighbors and knowing the name of the block captain or local fire chief can be more important in surviving a crisis than depending solely on stored provisions of food and water in one's home. For this reason, resilience must be based on forming strong social networks with entities that will participate in the response and recovery effort.[33] These social networks include community-based organizations, faith-based organizations, block associations, and other neighborhood-level groups. Building resiliency involves fostering neighbor-to-neighbor ties and encouraging multisector partnerships between government, business, and community organizations. Finally, community resilience also depends on incorporating equity and social justice considerations into preparedness planning–engaging residents in planning and making support services accessible to everyone, particularly the most marginalized residents.[34]

30 K. Brown and E. Westaway, "Agency, Capacity and Resilience to Environmental Change: Lessons from Human Development, Well Being and Disasters," *Annual Review of Environmental Resources* 36 (1), (2011): 321-42.

31 Ibid. R. L. Hawkins and K. Maurer, 2010.

32 Ibid. M. Emery and E. Flora 2006.

33 D. P. Aldrich and M. A. Meyer, "Social Capital and Community Resilience," *American Behavioral Scientist*. Published online 1 October 2014 . DOI: 10.1177/0002764214550299

34 Ibid., r A. Chandra, A. Charles, P. Hung, A Lopez, A. Magana, Y. Rodriguez, M. Williams. 2015

Build Community Resilience and Mental Health by Engaging Residents in the Development of Economic, Political, and Physical Capital

Mobilizing communities to plan for or recover from climate events initiates a virtuous cycle of sharing stories of resilience while engaging in problem solving and implementing solutions.[35] Pre- and post-disaster community planning offers opportunities for residents to strengthen their attachment to each other and to their community as a shared social space. For instance, the physical layout of neighborhoods and housing complexes impacts the creation of social capital. One pathway to resident involvement is sharing decision-making power over the design of communities and their architectural structures before a climate event occurs.

Successful community building involves rediscovering and mobilizing resources already present in the community, including the skills, knowledge, and experience of all residents; the power of voluntary associations; and the assets present in the physical infrastructure of the community and in the local economy. Relationship-driven planning frameworks, like assets-based community development,[36] can be used to connect residents with the strengths of their community–with the goal of building social capital to protect both mental health and community resilience.[37]

Building Community Resilience: A Good Fit for Community Development

The U.S. Department of Homeland Security Mitigation Framework Leadership Group (MitFLG), the federal interagency council mentioned in the previous section, developed a Community Resilience Indicator Taxonomy. This taxonomy outlines the building blocks required to marshal federal, state, and community resources to build a culture of preparedness in the face of disasters. MitFLG identified a set of "core capabilities" that are "intrinsic community functions critical for absorbing, rebounding, and adapting to hazard risks; reducing long-term vulnerabilities; and enabling post-disaster community recovery and redevelopment."[38] These core capabilities are already a part of the community development toolkit. The list below includes examples of how investments in core capabilities build the community resilience required to meet the challenge of climate events. This framework resonates with the "bounce forward" concept of improving community living conditions and social capital before and despite climate-related events.

35 Ibid. D. Abramson L. Grattan, B. Mayer, C. Colton, F. Arosemena, A. Rung ,2015.

36 J. P. Kretzmann and J. L. McKnight, "Discovering Community Power: A Guide to Mobilizing Local Assets and Your Organization's Capacity" A Community-Building Workbook from the Asset-Based Community Development Institute, School of Education and Social Policy (Evanston, IL: Northwestern University, 2004).

37 K. Ebi and J. Semenza, "Community-Based Adaptation to the Health Impacts of Climate Change," *American Journal of Preventive Medicine* 35 (5) (2008).

38 Ibid.s. U.S. Department of Homeland Security Mitigation Framework Leadership Group (MitFLG), "Community Resilience Indicators." 2016

Core Capability 1: Housing

- Improved quality (weatherization, energy efficiency) mitigates the impact of climate events
- Increased affordability reduces financial insecurity and strengthens emotional resilience; expanded availability of housing improves resilience when climate events cause housing disruptions
- Implement anti-displacement policies before community improvements are made to mitigate residential displacement (which harms physical and mental health and decreases community ties)

Core Capability 2: Planning

- Integrated land use/development policies and financing mechanisms that plan for climate disruptions and help develop long-term strategies for protecting communities
- Healthy retail uses including grocery, keeping "eyes on the street" through appealing public spaces and improving safety will increase mental health and healthy behaviors

Core Capability 3: Environmental Health

- Share land use decision-making with communities (zoning and siting), particularly low-income communities and communities of color that are more likely to be exposed to environmental toxins
- Incentivize green building and use of non-toxic materials; adopt municipal policies shifting to renewable energy and clean transportation

Core Capability 4: Economic Development & Recovery

- Policies that increase income and strengthen the safety net, build adaptive capacity to prepare for, respond to, and recover from disasters
- Promote quality full-time jobs with benefits, local hiring, and small business development, as employment can provide economic security, self-esteem, and social cohesion, which strengthens mental health and builds resilience to climate change impacts

Core Capability 5: Infrastructure

- Design streets for connectivity and build redundancy for critical infrastructure such as transportation, water supplies, and electricity
- Prioritize infrastructure for walking, cycling, transit and universal design to improve health and resilience
- Zoning and building codes with high standards for withstanding climate impacts

Core Capability 6: Natural Resources

- Invest in green infrastructure, such as greywater systems, low impact development and community greening to improve physical and mental health
- Create plans, zoning codes and development standards that foster and preserve natural infrastructure and greening

Core Capability 7: Social Capital

- Create spaces for social interaction (e.g. parks, trails, gardens and public markets) which is critical to community resilience capacity. Isolation increases vulnerability to climate impacts and mental health impacts
- Create inclusive events and services that facilitate social networks and trust, which empower people to help one another after a major climate event and connect to critical recovery services

Conclusion

Due to past inaction in reducing greenhouse gas emissions, many climate-related events are inevitable. This upending of natural systems creates unexpected devastation and chronic stress across our nation and the world. To restate Dr. Lucy Jones's wise observation however, human catastrophes can still be avoided. The rich expertise of community development, and its ability to contribute to the core capacities of community resilience is central to this message of hope.

Community development practitioners can reduce harm and build mental health in the face of climate events by creating the conditions for human settlements to "bounce forward." Averting human catastrophe is possible when the gifts and strengths of all residents are engaged in the development of strategies that build social capital and reduce inequities–in service of community resilience.

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Building a Mental, Emotional, and Behavioral Health "Community of Solution" in Rural Colorado

Jack M. Westfall, Maret Felzien, and Linda Zittleman
High Plains Research Network, University of Colorado Department of Family Medicine

Eastern Colorado, like most of rural middle America, is flyover country, recognized only by the corn circles of center-pivot irrigation, the smells of confined cattle operations, or the small concentrations of lights at night seen from 30,000 feet. Many think of this as the last place on earth to live. But this place also has tremendous strengths and assets, including a willingness to come together to find solutions and a desire to always learn more. The people of rural Colorado are resourceful and curious–curious how to make corn grow with less water, how to breed cattle with the best lean-to-fat ratio, and how to live healthier lives with fewer health care resources.

The High Plains Research Network Community Advisory Council is one example of this curiosity, desire to learn, and pursuit for ways to help their communities. The High Plains Research Network (HPRN), established in 1997 and housed at the University of Colorado Denver Department of Family Medicine, is an integrated network of 54 primary-care practices, 16 hospitals, 150 providers, and the communities in all 16 counties of eastern rural and frontier Colorado. The network covers over 30,000 square miles and includes approximately 150,000 Coloradoans, 30 percent of whom are Hispanic. The HPRN is guided by the Community Advisory Council (C.A.C.), a group of local farmers, ranchers, teachers, students, small business folks, and retirees. This group is critical to ensuring that the work of the HPRN meets the communities' needs.

Several years ago, the HPRN C.A.C. identified mental health as a priority health issue. Members experienced loss of youth and elderly farmers to suicide, the frustration of seeing loved ones develop and suffer from severe mental health conditions, and the slow toll of dysthymia (mild but chronic depression) and increased anxiety. Research also says residents in eastern Colorado have worse mental health outcomes; in the HPRN region, the average number of days of poor physical or mental health experienced by adults that kept them from performing their usual activities is higher than for the rest of the state.[1] Proportionately, fewer physicians and psychologists are available in eastern Colorado than the rest of Colorado. Fifteen of the 16 counties the HPRN clinics serve are officially designated Health Professional Shortage Areas (meaning there is a shortage of primary care and mental health care), and 12 counties are Medically Underserved Areas (too few primary care providers,

1 Colorado Department of Public Health and Environment, "Health Indicators," https://www.colorado.gov/pacific/cdphe/colorado-health-indicators /. Accessed July 2018.

high infant mortality, high poverty, or a high elderly population).[2] This combination of data and lived experience launched mental health to the top of the C.A.C.'s list of health issues needing urgent attention and seriously committed, creative, and multidisciplinary people.

The "community of solution" concept was first introduced in the 1966 Folsom Report and recognizes the critical links between communities, public health, and primary care.[3] Communities of solution move beyond jurisdictional boundaries and promote community-led initiatives that improve population health.[4] This article describes how a unique participatory collaboration between the residents, primary care practices, and practice-based researchers at the University of Colorado has led to a community of solution working to address mental, emotional, and behavioral health needs in eastern Colorado.

Community-Based Approaches for Supporting Rural Mental Health

Like any avid farmer or rancher, the HPRN C.A.C. recognized the need to become more educated and learn as much as possible about this broad field of mental health to help it determine what could be done. Propelled by this interest and supported by the University of Colorado Department of Family Medicine, the HPRN embarked on a multiyear endeavor to identify and improve access to mental health services and prevent mental, emotional, and behavioral health problems. The C.A.C. met with five different experts in the field over 18 months to learn about major mental illnesses, policy issues, and integrated behavioral health care (the practice of integrating behavioral health services into primary care). Members learned about the broad scope of mental health issues; they also delved into narrower topics of suicide prevention, substance use disorder, prevention in early childhood, and Mental Health First Aid, a course on responding to signs of mental illnesses, substance use disorders, and crisis situations. After much discussion and contemplation of what they could and could not impact, the community members decided not to focus on one particular condition (like depression) or even one particular group of people (like older, male farmers, who have the region's highest suicide rates). Instead, they were driven to address the broad range of the community's mental, emotional, and behavioral health needs. Extensive community research identified unexpected opportunities for helping people recognize early precursors and prevent mental, emotional, and behavioral health problems.

2 Health Resources and Services Administration, U.S. Department of Health and Human Services, https://www.colorado.gov/pacific/cdphe/shortage-area-maps-and-data. Accessed July 2018.

3 National Commission on Community Health Resources (NCCHS), "Health Is a Community Affair." Report (Cambridge, MA: Harvard University Press, 1966).

4 K.S. Griswold, S.E. Lesko, J.M. Westfall; Folsom Group, "Communities of Solution: Partnerships for Population Health," *Journal of the American Board of Family Medicine* 26 (3) (May-June 2013): 232-38.

The COMET Program

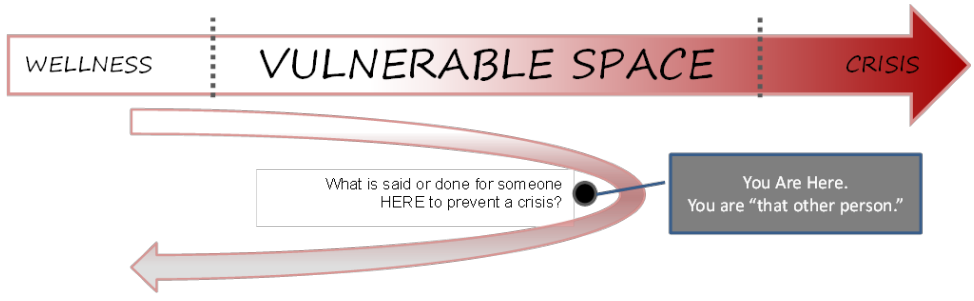
A local young man was tending bar in small-town Colorado. On a July afternoon, one of his customers was a guy from a harvest crew traveling through, following the wheat crop from Texas to North Dakota. As the bartender worked, he learned that the patron was despondent, depressed, and suicidal. The young bartender had no knowledge of what to do, what to say, or how to help.

A major process the HPRN C.A.C. sought to improve was the path people could take to access mental health care and support. However, they and HPRN leadership could not identify guidelines around this specific step, especially information that resonated with their communities. The group turned to the method of appreciative inquiry (AI)–an exploration of the strengths and opportunities that exist within an organization or network. It wanted to hear directly from local residents about successful steps they had taken to obtain, or to help provide others with, various forms of mental, emotional, and behavioral health support and care.

Back to the young man. He became a member of the HPRN C.A.C. Over time, he went on to college to study aeronautical engineering. Data obtained through the AI method revealed to him and the rest of the group that many of these elements of successful solutions took place in the community–outside of hospitals, clinics, or therapists' offices. Places for initiating mental health support and providing services might be the golf course, one's own home, a parking lot, or the hardware store. These conversations might be with a friend, an acquaintance, or just someone who noticed something was not quite right. In many cases, the conversation was not with someone closest to the person in need. Through AI, the C.A.C. discovered the important role this "other person" plays in prompting a conversation about mental health–and that almost anyone can be this person. The C.A.C. was challenged to be that "other person," and in turn wanted to challenge its communities to do the same when the opportunity arose.

The C.A.C. created a visual for what the AI data had revealed, illustrating the role of this "other person" impacting the trajectory of mental illness (see Figure 1). Looking at the diagram, the young engineer declared that this is exactly how NASA launches spaceships and rovers into deep space. The Mars Rover was not shot up directly toward Mars. Instead, it used "gravity assist" to first head toward the moon and then used the moon's gravity to slingshot around the moon, dramatically changing its trajectory and sending it along a new path toward its destination–Mars. Similarly, the "other person" alters another's path away from crisis and toward recovery and health. Changing Our Mental and Emotional Trajectory (COMET) activates people to become the "other person." This intervention can alter the vulnerable person's trajectory, build resilience, and encourage professional care. The approach supports fellow community members to experience fewer and less severe mental, emotional, and behavioral health problems.

Figure 1—Trajectory of Mental Illness



Being the "other person" does not require technical mental health language. Rather, this crucial shift requires being prepared to initiate a conversation. The C.A.C. was acutely aware that many people feel inadequately prepared to respond to someone's mental, emotional, or behavioral health problem, despite a desire to help. Having learned of the Patient Health Questionnaire (PHQ) used in clinical settings, the C.A.C. created a natural, five-question conversation guide that could be used by anyone to be the "other person." These became the Conversational Gravity Assist (see Figure 2).

Figure 2—Conversational Gravity Assist

1. "How are you? No really, how are you?"
2. "You don't seem like yourself."
3. Observation of mood or behavior. ("I haven't seen you at bowling for a few months" or "You seem down.")
4. Question about family or social life. ("How are things at home/work/school?")
5. Invitation to engage. ("Would you like to talk about it?")

Imagine that while walking to your car after work, you see a coworker who has not quite been herself recently. The standard, "How are you?" is not enough, so you include the second half of that question: "How are you really?" Second, you add an observation that you have made about her mood or behavior. "I noticed you weren't at the football game last week; is everything going OK?" Or you might ask a question about family or social life: "I know John just went to college; how are you doing with that?" Now, you may have an opportunity to invite the person to engage by sharing with her that you have gone through something similar and by talking about how you overcame it. You might think that you have no idea how to help this person, but you do know a therapist who works at the local integrated

primary care clinic. Or you might want to talk more later and invite the person to grab coffee with you this week and continue chatting. The Conversational Gravity Assist is designed to be flexible so that it can be used by any "other person" in any safe venue. It includes several suggested questions for each item (1-5). COMET uses the Conversational Gravity Assist to help community members build resilience, seek professional care, and live with fewer and less severe mental, emotional, and behavioral health problems. COMET is powerful because it uses evidence-based programs and techniques, along with strong community engagement. It gives people permission to ask, be asked, lean in to a possible mental health situation with easy and natural questions, and strengthen the community fabric.

IT MATTTRs™ Colorado

The HPRN staff regularly visit the practices and communities across eastern Colorado. Each of the 55 primary care practices has its own unique culture–from the small house clinic to the new 10-exam-room clinic. Some clinics are next door to the hospital; others are 40 miles from the closest health care facility. In the early 2010s, HPRN began hearing about the problem with narcotics. The typical story was of the 50-year-old patient with recurrent knee pain who had surgery in the city and came back to the rural clinic a month later for more Percocet. The clinics did not have adequate treatment for this new wave of opioid use disorder (OUD). Simply not writing another prescription too often led patients to find opioids elsewhere, including low-cost, black-tar heroin. People were dying from opioid overdoses. The network leaders heard this refrain over and over. When the Agency for Health Research and Quality released a grant application to increase rural primary care practices' capacity to treat OUD, the HPRN submitted a full-throated proposal for rural Colorado and was one of five entities in the country to receive funding for this innovative work.

The HRPN C.A.C. immediately engaged in the project. To get the project started, the C.A.C. used the Boot Camp Translation process[5,6] to translate the complex medical jargon used in evidence-based guidelines by the Centers for Disease Control and the Substance Abuse and Mental Health Services Administration into understandable, actionable messages and creative materials to change the conversation around OUD and medication-assisted treatment in their communities. The language they used to discuss the issue set the tone for a practice-based curriculum for their local primary care providers and behavioral health providers. Implementation of Technology Medication Assisted Treatment Team Training for Rural Colorado (IT MATTTRs™ Colorado) was taking shape.

Led by the community-academic partnership, IT MATTTRs™ Colorado includes: 1) support for physicians, nurse practitioners, and physician assistants to receive formal Drug

5 N. Norman et al., "Boot Camp Translation: A Method for Building a Community of Solution," *Journal of the American Board of Family Medicine* 26 (2013): 254-63.

6 J.M. Westfall et al., "Reinventing the Wheel of Medical Evidence: How the Boot Camp Translation Process Is Making Gains," *Health Affairs* 35 (4) (2016).

Enforcement Administration (DEA) training on the use of buprenorphine for medication-assisted treatment of opioid dependency and waiver to prescribe; 2) onsite training for the whole primary care practice (providers and staff) in team-based care for their patients suffering from OUD, calling out the fact that everyone in the practice has a role–front-desk staff, nurses, medical assistants, prescribers, administrators, and billing staff; and 3) community education and action intervention to increase awareness, inform community members, and provoke action to support and enhance the impact of the new resources becoming available in practices. This includes using the language and communication tools developed with the Boot Camp Translation process, such as drink coasters in bars and restaurants; a series of posters; inserts for church bulletins and sports programs; pharmacy bags; library bookmarks; movie theater trailers; and stories in local newspapers (see Figure 3).

Figure 3–IT MATTTRs™ "Have You Met MAT?"
Community Education and Action Intervention Materials

Communities and practices responded. Almost 30 providers have completed training in prescribing buprenorphine for OUD, and 16 received their waiver from the DEA to prescribe buprenorphine for OUD. Over 20 practices signed up for the IT MATTTRs™ team training and practice support to deliver medication-assisted treatment for OUD. The C.A.C. delivered materials to local restaurants, bars, churches, community organizations, pharmacies, and schools. While the implementation and evaluation work in eastern Colorado continues, other practices and organizations in the state and around the country have heard about the IT MATTTRs™ program. With additional state and federal funding, IT MATTTRs™ has expanded throughout Colorado, including training 45 additional practice facilitators to deliver the curriculum to 70 additional primary care practices in rural and urban communities. Additionally, groups in Montana, North Carolina, and California are preparing for IT MATTTRs™ curriculum trainings and exploring the "Have You Met MAT?" community intervention. Rural communities working together can build a local community of solution that just might be a solution in other places as well.

UPSTREAM! Together and the MEB Box™ Program

UPSTREAM! Together aims to prevent mental, emotional, and behavioral health problems through a community-based participatory approach. The HPRN is one of three UPSTREAM! Together pioneer communities. With 20 years of experience on the high plains of Colorado, extensive community relationships, and deep local knowledge and expertise, HPRN led the exploration of how northeast Colorado can move forward to prevent mental, emotional, and behavioral problems by focusing on youth. Over an eight-month period, the HPRN UPSTREAM! Together Community Council, comprised of C.A.C. and other community experts, completed a rigorous Boot Camp Translation. It established a shared understanding of the science underlying the prevention of mental, emotional, and behavioral (MEB) health problems, settled on MEB as a usable acronym to help normalize discussion about its health aspirations, and prioritized a focus and strategy for prevention. The result was the MEB Box™ Program.

The MEB Box™ Program aims to create a culture where MEB health is woven into the community fabric as part of conversations, public health and clinical care, school life, city and county funding, and organizational and public policy. Specifically, the MEB Box™ Program takes a universal prevention approach to support and enhance positive relationships through social connections and prosocial behaviors, teach emotional regulation, and support and encourage early cognitive development. The goal is to provide children and their caregivers with tools, resources, and supports so that every child may reach adulthood unencumbered by mental, emotional, and behavioral health problems.

The MEB Box™ Program includes an actual physical box delivered to children and families at key developmental stages via a curriculum that uses elements of evidence-based programs and strategies to engage youth and caregivers. MEB Boxes have been tailored

to meet different MEB needs across the life course. The Boxes will hold age-appropriate messages and information, personal treasures, and local resource contacts and will serve as an enduring, tangible reminder of the importance of MEB health. Each Box will include the program messages generated by the HPRN UPSTREAM! Advisory Council: 1) Mental, emotional, and behavioral health problems are common. Everybody in the community is affected; 2) MEB Problem is the new name, 3) MEB health problems can be prevented; 4) Prevention and early help are available in your MEB Box™; and 5) Get your MEB Box™ today! The MEB Box™ Program is a mechanism to focus community members' attention, generate conversations about preventing MEB problems, and disseminate crucial messages for individuals and communities.

The MEB Box™ Program includes the MEB Baby Box™, which is disseminated through a local home visitation program; it provides parents with educational and support tools necessary for a thriving baby. MEB issues are common in adolescents, but even more common are the precursors in the years leading up to adolescence.[7] The Tween MEB Box™ is a direct response to a detailed Northeast Colorado Child Health Care Capacity and Needs Assessment.[8] This assessment identified resources that support child health and wellness in the region but also identified a lack of strong community culture supporting childhood health. The Tween MEB Box™ will provide every fifth-grade student with conversation tools, resilience tools, apparel, personal items for the child and parents, and local resources. The Tween MEB Box™ is delivered with a six-month curriculum that includes education around MEB and its prevention. Programs that facilitate parent-child communication have been shown to improve the quality of parent-child relationships and serve as protective factors to adverse problems, such as adolescent risky behaviors, poor academic achievement, and low self-esteem.[9,10] Since communication practices are modifiable behaviors,[11] the curriculum will include tools, information, and interactive, evidence-based components for students, families, and teachers to develop practical strategies and communication skills for how to talk about MEB health. The curriculum will be delivered at "Get your MEB Box" events in partnership with schools.

Next steps for the MEB Box™ Program include the development of the Kinderbox MEB Box™, the Teen MEB Box™, and the Graduate MEB Box™ and curricula. HPRN is working closely with local agencies to anchor this MEB problem-prevention work in long-

7 K.R. Merikangas et al., "Lifetime Prevalence of Mental Disorders in U.S. Adolescents: Results from the National Comorbidity Survey Replication–Adolescent Supplement (NCS-A)," *Journal of the American Academy of Child & Adolescent Psychiatry* 49 (10) (2010): 980-89.

8 J. Westfall et al., "Northeast Colorado Child Health Care Capacity and Needs Assessment." Conducted for the Caring for Colorado Foundation (Denver, CO: Caring for Colorado Foundation, 2014).

9 V. Guilamo-Ramos et al., "Parental Expertise, Trustworthiness, and Accessibility: Parent-Adolescent Communication and Adolescent Risk Behavior," *Journal of Marriage and Family* 68 (5) (2006): 1229-46.

10 S.K. Riesch, L.S. Anderson, and H.A. Krueger, "Parent-Child Communication Processes: Preventing Children's Health-Risk Behavior," *Journal for Specialists in Pediatric Nursing* 11 (1) (2006): 41-56.

11 S.K. Riesch et al., "Effects of Communication Training on Parents and Young Adolescents," *Nursing Research* 42 (1) (1993).

standing, local organizations serving their target population to ensure sustainability for years to come. The HPRN community-academic-clinical collaboration is poised to make a large and enduring difference in the health of Northeast Colorado.

Building Rural Communities of Solution

Rural communities do not have the same amount and types of resources that urban communities have. This means they do not have the same level of access to health care, behavioral health, and substance-use treatment as might be found in urban communities. However, rural communities have solutions and resourcefulness. With support from academic and philanthropic partners, they can build successful, evidence-based programs that are meaningful and locally relevant. Rural partnerships like the HPRN and its C.A.C. are successfully linking primary care, behavioral health, public health, and community organizations to build local communities of solution to address their local health needs. Rural community developers across the country can harness the wisdom and capacity of local communities of solution to help strengthen the mental, emotional, and behavioral health of individuals and families.

Jack M. Westfall is a family physician in search of rural goodness. He grew up in a small town on the windy plains of eastern Colorado. After attending medical school at the University of Kansas, he completed his family medicine residency at Rose Hospital in Denver and joined the faculty in the University of Colorado Department of Family Medicine. With support from the Robert Wood Johnson Foundation, he started the High Plains Research Network (HPRN), a community- and practice-based research network in eastern Colorado that continues to address health issues important to the communities. Jack firmly believes that access to health care is a right, and he works fervently to integrate primary care, behavioral health, and community organizations into local communities of solution. He spent 2.5 years as the chief medical officer for the Colorado HealthOP nonprofit cooperative, and he brings rural health policy and patient engagement experience to his work.

Maret Felzien, a native of northeastern Colorado, is the Associate Professor of Reading at the local two-year college, Northeastern Junior College. Maret and her husband, Ned, also help operate the Felzien family dry-land farm and cattle ranch. She became involved in community-based participatory research when she joined the Community Advisory Council (C.A.C.) for the High Plains Research Network (HPRN) in 2003. For 15 years, this group has worked to translate research into locally relevant knowledge and programs to improve the health of the region. She is a co-investigator for the PCORI-funded Patient and Clinician Engagement (PaCE) Eugene Washington grant. More recently, she began her term for the North American Primary Care Research Group (NAPCRG) Board as the first North American patient representative. Maret has a bachelor's from Colorado State University and a master's from the University of New Mexico in Adult and Multicultural Education.

Linda Zittleman is a Senior Instructor at the University of Colorado School of Medicine and the co-director of the High Plains Research Network (HPRN), a practice-based research network in eastern Colorado. She is also a staff member at the Colorado Clinical and Translational Sciences Institute. She has extensive experience working with the rural practices and communities on a range of studies, as well asexperience helping design and manage multisite, multimethod research projects. The work she does with HPRN aims to provide connections between clinical practice and the broader community, linking primary care, behavioral health, and public health into a rural "community of solution." She coordinates the HPRN Community Advisory Council (C.A.C.), composed of local farmers, ranchers, schoolteachers, and others who participate in all aspects of the HPRN, establishing long-term relationships and developing community- and practice-based interventions. Ms. Zittleman helped develop the Boot Camp Translation (BCT) process, co-authored the BCT Guidebook, and trains community members and researchers in the process. Linda was born and raised in rural Wisconsin and lives in Denver.

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