Title

Community, Public Policy, and Recovery from Mental Illness

Journal

Harvard Review of Psychiatry, 26(2)

ISSN

1067-3229

Authors

Castillo, Enrico G

Chung, Bowen

Bromley, Elizabeth

et al.

Publication Date

2018-03-01

DOI

10.1097/hrp.0000000000000178

Peer reviewed

HHS Public Access

Author manuscript

Harv Rev Psychiatry. Author manuscript; available in PMC 2019 March 01.

Published in final edited form as:

Harv Rev Psychiatry. 2018 ; 26(2): 70–81. doi:10.1097/HRP.0000000000000178.

Community, Public Policy, and Recovery from Mental Illness: Emerging Research and Initiatives

Enrico G. Castillo, MD, MSHPM,
University of California, Los Angeles, David Geffen School of Medicine, Department of Psychiatry and Biobehavioral Sciences; Los Angeles County Department of Mental Health

Bowen Chung, MD, MSHS,
Center for Health Services and Society, University of California, Los Angeles, David Geffen School of Medicine, Department of Psychiatry and Biobehavioral Sciences; RAND Corporation; Los Angeles Biomedical Research Institute; Healthy African American Families II

Elizabeth Bromley, MD, PhD,
Desert Pacific MIRECC Health Services Unit, VA Greater Los Angeles Healthcare System; Center for Health Services and Society, University of California, Los Angeles, David Geffen School of Medicine, Department of Psychiatry and Biobehavioral Sciences

Sheryl H. Kataoka, MD, MSHS,
Center for Health Services and Society, University of California, Los Angeles, David Geffen School of Medicine, Department of Psychiatry and Biobehavioral Sciences, Division of Child and Adolescent Psychiatry

Joel T. Braslow, MD, PhD,
Center for Social Medicine and Humanities, University of California, Los Angeles, David Geffen School of Medicine, Department of Psychiatry and Biobehavioral Sciences

Susan M. Essock, PhD,
Division of Behavioral Health Services and Policy Research, Columbia University College of Physicians and Surgeons, Department of Psychiatry; New York State Psychiatric Institute

Alexander S. Young, MD, MSHS,
Health Services Research & Development Center of Innovation, Desert Pacific MIRECC Health Services Unit, VA Greater Los Angeles Healthcare System; Center for Health Services and Society, University of California, Los Angeles, David Geffen School of Medicine, Department of Psychiatry and Biobehavioral Sciences; RAND Corporation

Jared M. Greenberg, MD,
University of California, Los Angeles, David Geffen School of Medicine, Department of Psychiatry and Biobehavioral Sciences; Desert Pacific MIRECC Health Services Unit, VA Greater Los Angeles Healthcare System

Jeanne Miranda, PhD,
Center for Health Services and Society, University of California, Los Angeles, David Geffen School of Medicine, Department of Psychiatry and Biobehavioral Sciences; University of California, Los Angeles School of Public Health

Lisa B. Dixon, MD, MPH, and

Division of Behavioral Health Services and Policy Research, Columbia University College of Physicians and Surgeons, Department of Psychiatry; New York State Psychiatric Institute

Kenneth B. Wells, MD, MPH
Center for Health Services and Society, University of California, Los Angeles, David Geffen School of Medicine, Department of Psychiatry and Biobehavioral Sciences; RAND Corporation; University of California, Los Angeles School of Public Health

Abstract

This commentary examines the roles that communities and public policies play in the definition and processes of recovery for adults with mental illness. Policy, clinical, and consumer definitions of recovery are reviewed, which highlight the importance of communities and policies for recovery. This commentary then presents a framework for the relationships between community-level factors, policies, and downstream mental health outcomes, focusing on macroeconomic, housing, and healthcare policies; adverse exposures such as crime victimization; and neighborhood characteristics such as social capital. Initiatives that address community contexts to improve mental health outcomes are currently underway. Common characteristics of such initiatives and select examples are discussed. This commentary concludes with a discussion of providers', consumers', and other stakeholders' roles in shaping policy reform and community change to facilitate recovery.

Keywords

Recovery; Serious Mental Illness; Social Determinants of Health; Community Partnerships; Healthcare Policy; Health Disparities; Public Policy; Health Equity; Public Psychiatry; Community Psychiatry; Social Services

Introduction

Recovery is a ubiquitous, influential concept in mental health policies and services. The Substance Abuse and Mental Health Services Administration (SAMHSA) defines recovery from mental illness as a "process of change through which individuals improve their health and wellness, live a self-directed life, and strive to reach their full potential".[1] Braslow notes "three broad categories of meaning from the recovery literature: recovery as a mental health outcome; recovery as a subjective, ineffable experience; and recovery as a system of values meant to animate mental health delivery systems and clinical care".[2] Health policy and services perspectives have focused on symptom reduction and reorganizing mental health systems to become more recovery-oriented, while consumers' views on recovery often include community participation, inclusion, belonging, and well-being.[3,4] This expanded vision suggests a recovery framework that considers communities and policies that may facilitate or inhibit recovery.[5]

This commentary examines the role of communities—places, contexts, relationships—and public policies in the definition and advancement of recovery from mental illness for adults. Although the authors are aware of the importance of recovery as a concept for individuals with substance use disorders and for children, adolescents, and transitional-age youth, we

felt those topics warranted a separate discussion tailored to those groups.[6–8] This paper begins by outlining the concepts of both recovery and community and then reviews evidence on the influence of public policies and community contextual factors on outcomes for people with mental illness. Lastly, this paper considers emerging community-level interventions and discusses potential roles for mental health providers and other stakeholders in community coalition-building and community action.

I. Individual vs. Collective Definitions of Recovery

While a pervasive concept, there is no universally accepted definition of recovery. This commentary recognizes that, for some, recovery is an ongoing process, while for others it involves the achievement of functional goals or symptom reduction[9]. Definitions can differ depending on discipline and perspective, such as clinical, policy, advocacy, and personal/individual. These definitions reflect diversity in values and perspectives: advocacy and political views, perceived importance of mental health services, domains of experience deemed to promote recovery, and individual versus collective views on achieving and maintaining recovery. This section will begin with a frequently cited individualistic definition of recovery and highlight alternate definitions that emphasize the roles of community and relationships.

The 2003 New Freedom Commission on Mental Health was a pivotal document that adopted recovery as the core principle of federal mental health policy.[10] The New Freedom Commission defines recovery as “the process in which people are able to live, work, learn, and participate fully in their communities. For some individuals, recovery is the ability to live a fulfilling and productive life despite a disability. For others, recovery implies the reduction or complete remission of symptoms”[page 5].[10] Michael Hogan, Chair of the Commission, comments on recovery as an assertion of consumer “self-awareness and a sense of empowerment” [page 1469].[11] In the New Freedom Commission’s definition, individuals define their own recovery and direct the means toward its achievement.

In contrast, collective definitions acknowledge that recovery is facilitated, obstructed, or otherwise influenced by contexts. If recovery means the ability “to live, work, learn, and participate fully in one’s community,” as in the New Freedom Commission’s definition above, its realization will differ depending on one’s community, including what resources are available.[10] A community with fewer educational, employment, social, and other opportunities may impede individuals’ recoveries as compared to communities with greater resources. For example, SAMHSA’s 2004 definition of recovery emphasizes community as one of four dimensions of recovery, stating “communities have strengths and resources that serve as a foundation for recovery” [page 7].[1,12] SAMHSA further asserts, “Communities have responsibilities to provide opportunities and resources to address discrimination and to foster social inclusion and recovery” [page 7].[1] The importance of social networks and community supports to facilitate recovery is echoed in other advocacy, research, and international definitions of recovery.[9,13–15] Whereas clinical definitions of recovery typically focus on reduction of symptoms and disability, consumer definitions often focus on the social dimensions of recovery, such as inclusion, integration, connectedness, and meaningful relationships.[3,4]

Similarly, social science insights from medical anthropology and disability studies emphasize individuals' interrelationship with their social contexts. The social model of disability, the capabilities approach to recovery, and studies of structural stigma describe how social and institutional structures and processes can influence recovery.[16–18] These frameworks explain the means by which social, cultural, and political responses to those with mental illness can reduce opportunities for recovery and social participation.[19,20] Using these frameworks, scholars have traced the ways that biomedical and legal institutions are complicit in stigmatizing people with mental illnesses.[21,22] Hopper writes, "If disability's social reality – the viable identities and real prospects available to afflicted persons – is determined as much by the rules and resources applied to difference as by any underlying impairment, then restoration and repair become social projects not merely treatment regimens. They require interventions into common meaning-making as well as material provisions of housing and work. Such socio-cultural accommodations enlarge the realm of the possible and transform the meaning of injury."[16]

Definitions of recovery emerging from the lived experiences of consumers of mental health services and allies have important political roots.[23] For many, recovery carries political meanings focused on redefining mental illness, changing cultural attitudes about people with mental illness, and altering service delivery. This paper does not aim to represent all recovery meanings and intentionally approaches recovery through a social-ecological lens, focusing on multi-sector and policy contributors to individuals' well-being and resilience. Consistent with previously described collective definitions of recovery, consumer definitions prioritize social, community, and political contexts to realizing recovery goals. Hence, it is important to have a clear framework for these determinants of mental health and recovery.

II. Defining Community and Community-level Determinants of Mental Health

Community has been broadly conceptualized in three ways: 1) spatial or geographic units, 2) units of patterned social interaction, and 3) symbolic units of collective identity.[24] Community, therefore, can refer to shared spaces (e.g., counties, neighborhoods) or shared activities and identities (e.g., culture, occupation, sexual orientation, or gender identity). Community contributions to health are intuitively accepted areas of research and intervention in public health and clinical practice in other medical specialties. Notable examples include food deserts and obesity, air quality and asthma, and neighborhood chronic stressors (e.g., violence) and hypertension[25–27].

The Model for Analysis of Population Health and Health Disparities by the Centers for Population Health and Health Disparities of the National Institutes of Health provides a framework for understanding the influence of community on mental health outcomes and disparities (Figure 1).[28] The model describes three categories of biological-environmental determinants of health disparities based on their spheres of influence relative to the individual. Distal determinants exert their influence on health at the population level, intermediate determinants at the interpersonal level, and proximal determinants at the biological level. Distal determinants include social conditions and politics, such as racial discrimination, prejudice, poverty, public policy, and stigma, as well as institutional contexts such as political, economic, and healthcare systems. Intermediate factors include physical

contexts (e.g., parks, housing quality, neighborhood safety), social contexts, and relationships (e.g., social integration, social supports). Proximal determinants include individual-level demographics, risk behaviors, and biology. Lastly the model describes biologic-environment interactions among all three levels, illustrating that factors can act at multiple levels (e.g., mental health stigma affecting economic opportunities, relationships, and biological stress processes). As a result of these interactions, the effects of a given determinant on mental health outcomes are not uniform across populations and individuals, but differ due to factors such as local culture and resources. As such, the mental health effects of certain community-level factors may be greater for vulnerable populations.

III. Community-level Factors Impacting Mental Health

The next questions are whether and to what extent community-level factors affect mental health and recovery. The following discussion focuses on distal and intermediate-level community determinants. This section is not meant to be comprehensive but rather illustrative of examples of community-level determinants that are the subject of emerging research, initiatives, and public policies. Individual-level determinants of health (proximal factors) also play an important role in recovery, but are not the focus of this commentary.

Macroeconomic Events and Economic Policies

There has been a great deal of research on the relationship between social class and its proxies (e.g., income) on health.[29] A recent analysis of US mortality records from 1999 to 2014 showed a 14.6- and 10.1-year life expectancy gap, for men and women respectively, between the 1% of the population with highest income and the 1% with lowest income.[30] Mental illness has been found to be bi-directionally related to income.[31] A population-based prospective study showed that people with incomes less than $20,000 had increased lifetime odds of having psychosis (odds ratio of 4.28) and bipolar disorder (2.56) compared to people with incomes greater than $70,000.[31] This relationship between income and mental health is complex, involving upstream macroeconomic policies, the influence of mental illness on employment and earning potential, the effects of class and income on the ability to purchase goods and services, and opportunities to alter intermediate and proximal determinants through higher income (e.g., purchasing housing in environmentally greener neighborhoods).

Two distal determinants of note are the Great Recession of 2008 and the availability of Supplemental Security Income (SSI) for disabled adults. Macroeconomic events, such as the Great Recession, have population-level effects on unemployment, income, debt, perceived financial security, and other factors. These in turn have downstream impacts on health and even mortality, with effects that may persist for years even after employment is regained.[32] A stark example of the effect of the Great Recession was described in a 2014 study that compared trends in the incidence of suicides from before (2001–2007) and after (2008–2010) the recession in Europe, Canada, and the United States.[33] The authors estimated that the Great Recession was associated with 10,000 “economic suicides,” with suicide incidence markedly increased in all regions from 2008–2010. Similar findings are seen in studies using other methods and in a recent systematic review.[34–36] In other words, recession and

population-level decrements in economic opportunities are associated with worsened mental health, increased prevalence of mental illness, and higher incidence of suicides and suicidal behavior.[36]

A second example of an economic distal determinant on mental health is SSI for adults with disabilities. SSI is a cash benefit, totaling up to $8,830.84 annually for individuals (as of 2017) depending on an asset-based sliding scale. In 2013, SSI was the sole source of income for over one-third (35.4%) of adult recipients.[37] A substantial proportion of SSI recipients still have total family incomes below the federal poverty threshold (41.9%), and most have incomes below 125% of the federal poverty level (54.2%).[37] SSI and other public cash assistance programs are important financial safety nets for many adults with mental illness, lifting some above the federal poverty level, albeit in some cases at only subsistence levels.

To our knowledge, no prospective study has measured the mental health status of individuals before and after the receipt of SSI financial payments. In 2015 a Swedish study examined participants with serious mental illness concurrently receiving both safety net mental health and social services, and government cash assistance benefits.[38] The non-randomized, prospective study had two groups: one (n = 100) received a monthly additional cash allowance of $73 for 9 months, while another (n = 38) received no cash assistance. Both groups received treatments and social services as usual. After the 9-month intervention and 7 months of follow-up, there were no significant mental health changes for the group who did not receive the allowance. The group that did receive the allowance had significant improvements in perceived quality of life and social networks, and statistically significant (but clinically modest) decreases in depression and anxiety symptom severity.[38] The causal relationship between enhancing income and improved mental health is supported by a large cluster-randomized study of an unconditional cash transfer program in Kenya (n = 1960, $20 monthly cash transfers), which showed 24 percent lower odds of depression among cash recipients compared to individuals in control communities who did not receive payments.[39]

Housing Policy and Homelessness

According to the National Epidemiological Survey on Alcohol and Related Conditions, people with mental health disorders have a substantially higher risk of homelessness compared to the general population, and people who are homeless are unusually likely to have mental health issues.[40] In 2010, the last year this national diagnostic data was reported, nearly half (46%) of over 400,000 sheltered homeless adults self-reported having serious mental illness and/or a chronic substance use disorder.[41] Broadly speaking, mental health services research has put forward two evidence-based Housing First (housing not contingent on pre-placement sobriety \ or adherence to mental health treatment) models for people who are chronically homeless with serious mental illness. The first is the scatter-site model which involves rapid placement in low-density housing, supported by outreach-based mental health services such as Assertive Community Treatment teams[42]. The second model consists of housing placement in congregate settings with on-site mental health and other services[43,44]. Numerous studies have found both models to be effective at decreasing mental health symptoms and improving quality of life, functional status, substance use outcomes, and retention in permanent housing.[44–48] The Department of Housing and Urban Development

and Veterans Affairs Supported Housing (HUD-VASH) program adopts elements of both models above. HUD-VASH has been shown to increase days housed, social contacts and the availability of emotional support, and satisfaction with relationships[49,50]. These findings suggest a causal link between specialized housing services and positive mental health outcomes for people who are homeless with serious mental illness.

Looking distally, the effects of housing policy on homelessness and mental health outcomes are seen in the juxtaposition of two urban communities. New York City has the largest and Los Angeles County the second largest number of people who are homeless in the country, 73,523 and 43,854 respectively.[51] Nearly 3 in 4 individuals experiencing homelessness in Los Angeles County are unsheltered, that is living in "places not meant for human habitation" (e.g., streets, parks).[51] By contrast, only 3.9% of people who are homeless in New York City are unsheltered.[51] This is due to multiple factors, but follows a New York State Supreme Court decision in the 1979 case of Callahan v. Carey and subsequent follow-up litigation, which established a "right to shelter" in New York City.[52] The effect of this ruling can be seen in the growth of homeless shelter beds from roughly 11,000 in 1983 to over 60,000 in 2016.[53]

Two examples of distal civic initiatives in New York and Los Angeles to improve the outcomes of individuals who are homeless with serious mental illness are the New York/New York (NY/NYIII) supported housing system and the Los Angeles County Department of Health Services' Housing for Health program. The NY/NYIII system is the largest locally funded permanent supported housing network in the country and includes housing specifically for people with serious mental illness and substance use disorders.[54] Studies of NY/NYIII residents with substance use disorders have shown improved outcomes (decreased odds of using stimulants or opiates in the past 30 days after 1 year of being housed), particularly for those living in residences with high fidelity to Housing First principles.[55] NY/NYIII housing has also been shown to lead to significant changes in public service utilization, specifically decreased emergency and acute hospital service use and decreased incarcerations.[56] Newly approved Los Angeles ballot initiatives Measures H and HHH will finance permanent supported housing to benefit the unsheltered homeless population.[57,58] The Los Angeles County Department of Health Services' Housing for Health program is an emerging initiative that uses public-private partnerships to subsidize permanent supported housing and services for individuals with chronic health conditions, including serious mental illness.[59] Preliminary results, 1-year pre- and post-placement in Housing for Health permanent supportive housing, show a 76% reduction in medical hospitalizations and a 68% reduction in emergency room visits.[60]

Healthcare Policy

At the distal level, healthcare policy has far-reaching effects on mental health beyond access to treatment. Increasing access to health insurance coverage can promote recovery. This is supported by findings from Oregon and Massachusetts that showed, respectively, that health insurance expansions lowered depression rates and improved self-reported mental health.[61,62] The Oregon Medicaid study showed that 2 years of health insurance access resulted in a 30% relative reduction in depression prevalence.[61] Possessing health insurance likely

improves mental health outcomes through pathways other than simply more treatment, such as by decreasing the financial and psychological stress of anticipated healthcare costs.[61] Relevant policy examples include health insurance expansion via the Affordable Care Act and the Mental Health Parity and Addiction Equity Act.

Additionally, coordination, integration, or co-location of mental health services within primary care or other settings has the potential to enhance recovery by increasing treatment access.[63] Relevant examples include incentivizes to implement collaborative care models, the creation of behavioral health homes, and mandated models such as mental health diversion courts and assisted outpatient treatment.[64–67] A recent randomized controlled trial compared behavioral health home services (a collaboration between a community mental health center and a Federally Qualified Health Center) to usual care and showed significant improvements in quality of care (improved cardiometabolic care, increased use of preventive services) and clinical outcomes (improved blood pressure control and health-related quality of life) in the behavioral health home group after 12 months.[68]

Disparities in Exposure and Vulnerability

Turning to intermediate community-level determinants, mental health consumers experience disparities in their exposure to adverse factors such as food insecurity and housing/employment discrimination, which impact mental health.[69,70] One important adverse exposure is violence. Multiple studies have shown that people with serious mental illness are at higher risk of crime victimization.[71–76] This is in contrast to media representations that disproportionately depict people with mental illness as being violent and dangerous[77]. A study of 936 randomly selected consumers of 16 Chicago outpatient, residential, and day treatment programs found that they were 11 times more likely to be a victim of a violent crime in the past year than the general population.[71] More than a quarter of people with serious mental illness self-reported being a victim of a violent crime in the past year.[71] A more recent study followed 951 consumers for a year after a hospital discharge and found that 43% were the victim of violence during that period.[76] Exposure to victimization, in many forms, has been shown to be associated with greater depressive, anxiety, cognitive, and psychotic symptom severity in people with schizophrenia and schizoaffective disorder.[78]

Going further, a recent study focused on a predominantly low-income, city-dwelling sample (n = 615, 95% African American) and used an evidence-supported survey to measure participants' perceptions of neighborhood disorder (e.g., physical disorder as reflected by vandalism, social disorder reflected by crime). The study found that perceived neighborhood disorder predicted posttraumatic stress disorder (PTSD) symptomatology, even when controlling for individuals' childhood and adult trauma exposure. In other words, individuals developed PTSD symptoms when exposed to adverse social and physical environments. These findings are supported by other research that showed similar associations between adverse neighborhood environments (e.g., population density, household deprivation, urbanicity) and increased incidence of psychosis, mood disorders, anxiety, and substance use.[79–82] The Moving to Opportunity study showed that these adverse neighborhood effects on the mental health of adults can be reversed[83]. The study randomized some families to receive Section 8 housing vouchers and assistance to move to "low-poverty" neighborhoods.

Parents within families that moved to those neighborhoods reported significantly decreased emotional distress and depressive symptoms after 3 years, compared to parents that remained in “high-poverty” neighborhoods. The study authors theorized that this could be due to decreased neighborhood disorder and greater availability of health and social resources in “low-poverty” neighborhoods. However, the study’s findings were mixed for children, with improved depression and conduct disorder in girls, but greater rates of depression, PTSD, and conduct disorder in boys[84].

Social Capital, Collective Efficacy, and Social Cohesion

Neighborhood disadvantage has been shown to be associated with higher prevalence of mental illness, but neighborhood social capital in the forms of collective efficacy and social cohesion can positively contribute to mental health and can even be protective in the face of adverse exposures described above.[85] Social cohesion can be thought of as the level of interconnectedness in the relationships among people in a community, whereas collective efficacy is a “group’s shared belief in its conjoint capacity to intervene on a problem or issues based on shared norms and behaviors.”[86,87] The Project on Human Development in Chicago Neighborhoods (PHDCN) was a longitudinal study conducted from 1994 to 2002 that examined how neighborhood characteristics influenced individuals’ behavioral health and social outcomes.[88] One PHDCN study on depression in women who had experienced intimate partner violence found protective mental health effects of neighborhood supportive mechanisms, particularly collective efficacy and social cohesion.[87] The authors stated that this may be the result of decreased stress owing to increased social supports, enhanced feelings of control, and lower mistrust of others.[89] Neighborhood social capital has also been shown to be protective of mental health after exposure to natural disasters (e.g., Hurricane Sandy), life-threatening violence, and discrimination based on immigrant status and race.[90–93]

IV. Emerging Initiatives and Policies Impacting Community-level Determinants of Mental Health

New policies, public health initiatives, and service delivery models are intervening on intermediate and distal determinants to facilitate individuals’ mental health and recovery. Some of these changes are prompted by payment rules that acknowledge socioeconomic influences on health outcomes.[94,95] Generally, such upstream strategies have four qualities in common: they 1) address both health and social needs, 2) decrease community-level inequities in health and social opportunities, 3) incorporate cross-sector partnerships, and 4) promote community-wide values around mental wellness and recovery. These upstream initiatives recognize that community-level determinants can obstruct individuals’ recovery, and they attempt to rectify systemic factors known to perpetuate social and health inequities.

Across medical specialties and public health, upstream strategies are already underway with initiatives that fall under the rubrics of health equity, health-in-all-policies, and the social determinants of health.[94,96–106] Examples of such initiatives, both public and private, include the United Kingdom’s social impact bond “trailblazer” projects, Center for Medicare & Medicaid Innovation Accountable Health Communities, Centers for Disease Control

Community Transformation Grants, The California Endowment's Building Healthy Communities initiative, and the Robert Wood Johnson Foundation's Culture of Health.[94,107–110] These strategies have the potential to improve mental health by supporting existing community programs to address social needs, creating incentives for the formation of new networks of care, improving the built environment, and creating shared values around recovery.

Two examples of distal policies that aim to address intermediate determinants of recovery are Social Security Act Section 1915(i) Home and Community-based Services (HCBS) and California's Mental Health Services Act (MHSA).[100,103] Section 1915(i) created an optional Medicaid benefit for services that address social determinants of health that were previously excluded from healthcare.[103] New York State incorporates HCBS designed for at-risk people with serious mental illness to directly fund services including supported employment, supported housing, peer specialists, transportation, and education supports.[96] In California, the MHSA annually funds more than $1.8 billion of new, recovery-oriented mental health programs through a one-percent tax on personal incomes above $1 million.[100] Recovery language and goals pervade the MHSA, and the act serves as a platform to increase access to recovery-oriented services and generate statewide values for mental health promotion.

County and city governments are also fertile ground for promoting community-oriented strategies that focus on distal- and intermediate-level determinants like neighborhood safety, shared community values for mental health, and social capital. The Los Angeles County Department of Mental Health's Health Neighborhoods is a county-wide initiative to improve service coordination among faith-based organizations, social services, mental health, public health, substance use treatment, and other community-based organizations in 11 under-resourced neighborhoods.[111,112] Health Neighborhoods leverage community strengths and partnerships to address intermediate and distal determinants through projects to decrease interpersonal and family violence, promote community safety, and build collective efficacy. At the city level, New York City's ThriveNYC initiative is an $850 million multi-program initiative that introduces a mental health mission across more than 20 city agencies, from transportation to public parks.[113] ThriveNYC emphasizes multi-sector partnerships, community capacity building, and shared values to address mental health and social needs. One ThriveNYC program is the Connections to Care program, a $30 million public-private partnership to integrate mental health services into community-based programs that serve low-income neighborhoods.

Large-scale, federally-funded, multi-sector programs to address mental health and social needs have been attempted before with mixed results. As one example, the $35-million Collaborative Initiative to Help End Chronic Homelessness (CICH) combined evidence-based models (Assertive Community Treatment, Housing First) with multi-sector partnerships among housing, supportive services, primary care, mental health, and substance use treatment services.[114] Compared to usual care, individuals receiving intervention services spent significantly more days housed, fewer days in jail, and received more healthcare and case management visits. No significant differences were seen, however, in physical or mental health-related quality of life, substance use, or measures of community

adjustment.[114] Also, the results of the Moving to Opportunity study, discussed above, differed among sub-groups (parents, boys, girls).[83]

The examples of CICH and the Moving to Opportunity Study illustrate that despite evidence-based and emerging interventions, many questions remain. Which distal and intermediate determinants should be prioritized for intervention to yield improved mental health and quality of life? What service delivery models are optimal, and for whom? By what combination of social (e.g., number of days housed) and health (e.g., substance use) metrics should success be defined? How can outcomes for sub-groups be supported within highly complex interventions? It is clear, however, that there is a high individual and societal cost of failing to act on the "cumulative disadvantage" of early disparities in distal and intermediate determinants, which contributes to a cascade of health and social problems that compound throughout the lifespan.[115]

A growing line of research has the potential to answer the questions above and inform new initiatives by measuring the magnitude and duration of the influence of distal and intermediate determinants on individual- and population-level outcomes.[115] This new generation of research integrates multiple modalities, from precision medicine to ethnography to population-level secondary data, to understand the mechanisms by which these determinants act on individuals' mental health and to characterize biological-environmental interactions among the full constellation of determinants.[116] New research also seeks to understand how to engage non-healthcare sectors to achieve these goals and provide new models for multi-sector partnership and community capacity-building.[117,118]

Policymakers, community leaders, healthcare providers, business leaders, consumers, advocates, and other stakeholders have opportunities to facilitate positive mental health by examining policy, social, and physical environments. Drawing on the four qualities common to the strategies described above, programs can be supported that create shared, multi-sector responsibilities to care for people with serious mental illness by concurrently addressing social and treatment needs. Additionally, policymakers can incentivize services that enhance communities' capacities and assets to support individuals' mental health outcomes, social integration, and quality of life.

V. Addressing Community and Policy Contexts for Recovery

Mental health providers can focus on community contexts for recovery through clinical practice, advocacy, political activity, education, and research. To be effective, clinicians may need to understand consumers' social/community contexts and how these may impact their recovery. This could entail the use of systematic screening tools for social determinants of mental health and recovery.[119] Such screening could then be linked to interventions on risk factors, such as social isolation, which are known to obstruct recovery. Following research and policy examples described above, systems of care may consider adopting multi-sector collaborative care approaches for mental illness and building coalitions that more efficiently address upstream determinants. They may do this, for example, by including social services and community-based organizations within healthcare networks and increasing providers' expertise in systems-based practice, which is defined by the Accreditation Council of

Graduate Medical Education (ACGME) as “awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care.”[94,97,111–113,120–122]

Consumers, family members, providers, and others have the opportunity to support public policies that address distal and intermediate barriers to individuals’ recoveries. Stakeholders may look to consumer leaders and mental health advocacy organizations, such as Mental Health America and the National Alliance on Mental Illness, for information on emerging policies relevant to maximizing recovery.[15,123] Consumers and providers may also consider avenues for political engagement (e.g., voting, contacting legislators and other elected officials), as advocacy and the exercise of political rights have been described as important components of recovery for some[124,125].

Providers and other stakeholders have the ability to improve access to mental health services and address distal determinants by working to decrease stigma and increase public acceptance of those living with mental illness. Mental health educators, medical schools, graduate schools, and the ACGME have the opportunity to ensure that professional training programs increase awareness of systems-level issues in mental health treatment, adopt model curricula (e.g., systems-based practice, structural competence), and create incentives for providers to choose careers serving under-resourced communities.[121,126–128]

Science has identified distal and intermediate community-level determinants like neighborhood safety, collective efficacy, and employment opportunities that can serve as intervention targets. Moreover, mental health research has provided templates for evidence-based, multi-sector, multidisciplinary interventions to address mental health and social needs, such as the scatter-site and congregate permanent supported housing models described above. Despite this, people with serious mental illness rarely have access to a broad array of effective services, in part because of failures to implement multi-system interventions and to assure their availability and acceptability. Mental health researchers have the opportunity to work closely with policymakers and health system administrators to address this important science-to-service gap[129].

Involvement of providers and consumers in research on recovery interventions is an important area for growth. Community-partnered research approaches are designed to advance science while promoting community voice, consumer and community leadership development, and social justice in research.[118,130,131] A relevant example is Community Partners in Care (CPIC), a Los Angeles-based community-partnered participatory research study with community and consumer co-leadership in all phases.[120] CPIC included 95 programs in five sectors: social/community services (e.g., hair salons, exercise clubs, senior centers), outpatient primary care, outpatient mental health, substance use treatment services, and homeless services. Programs were randomized to two approaches to implementing expanded collaborative care networks for depression: expert training for individual programs versus multi-sector coalitions to collaborate in training and implementation. CPIC provided evidence for the superior effectiveness of the coalition approach in improving participant outcomes, relative to trainings for individual programs. CPIC and other community-

partnered research showcase the importance of diverse community and consumer voices in the science of recovery.

The preceding sections describe how policy, institutional, and interpersonal environments can either enhance or obstruct journeys to recovery. Underfunding of effective mental health care; fragmentation at the level of policy, reimbursement, and clinical services; and the legacy of deinstitutionalization and mass incarceration have reflected and reinforced stigma about people with serious mental illnesses. In response, many communities have chosen to make dramatic public investments in mental health infrastructure, as New York City has done with the nearly $1 billion investment in ThriveNYC and as California and the City of Los Angeles have done through the success of ballot initiatives like Measure H in March 2017, Measure HHH in November 2016, and the Mental Health Services Act in 2006. Moreover, windows of opportunity emerge to implement wide-ranging policy innovations to improve outcomes[132]. The initiatives described in section IV will unfold in the context of emerging federal health policy shifts. The effects of new healthcare policies on mental health outcomes, multi-sector initiatives, and recovery warrant vigilance and concurrent study. Mental health advocacy organizations, consumers, families, providers, researchers, and other stakeholders should consider ways to translate hard-earned knowledge into shared values and policy imperatives for the well-being of people with mental illness.

Conclusion

Communities can contribute to positive mental health. Box 1 summarizes some ways for mental health stakeholders to take action on community and policy-level determinants of recovery and positive mental health. This commentary urges a broad examination of the aspects of community life that contribute to mental health. As outlined above, consumer definitions, research, emerging initiatives, and innovative policies suggest the importance of distal and intermediate determinants to positive mental health. Complicating individualistic frameworks of recovery, this commentary urges the development of collective responsibility for mental health and an examination of the community experiences and structural environments of people with serious mental illness. Further dialogue and culture change is needed to impel broader public policy reform and intentional efforts at community change and capacity-building. Following emerging policies, such reforms can build on community assets, strengthen coalition-building across healthcare and social/community sectors, and attend to issues of equity.

Box 1

Summary of Considerations for the Mental Health Provider: Taking Action on Community and Policy Determinants of Recovery and Positive Mental Health

1. Mental health providers engage in systems-based practice
2. Mental health educators provide training in systems-based practice and social determinants of mental health

3. Mental health leaders create and support formal research and policymaking roles for consumer and community member input
4. Mental health researchers conduct research to better understand how social determinants affect individuals' mental health outcomes
5. Mental health researchers develop new evidence-based, multi-sector models of care to address health and social needs, in partnership with communities
6. Mental health policymakers create incentives for trainees to enter careers in public-sector/community mental health
7. Mental health policymakers, researchers, and other stakeholders support new policies and initiatives that include the following qualities, in line with existing local, state, national, and international programs:
    a. Address both health and social needs for those with serious mental illness and substance use disorders
    b. Decrease community-level inequities in health and social opportunities
    c. Promote multi-sector partnerships with healthcare systems
    d. Promote collective efficacy and responsibility for mental health recovery

Addressing upstream determinants at community and policy levels is challenged by domains of influence and funding streams that are often far outside of healthcare, but this is starting to change. Policies, programs, and service delivery models are emerging across the country that address upstream inequities in health and social opportunities, include cross-sector partnerships, and create shared values around mental health and recovery.

In accordance with a public health perspective on recovery, "the limits of the clinical encounter do not represent the end of the story of how to address social determinants but the beginning."[133] A new generation of mental health research and policies has the potential to change the trajectory of entire communities. To understand what would improve recovery, the field must listen to communities. To effect change, the field must have the courage to follow communities' agendas.

References

1. Substance Abuse Mental Health Services Administration. SAMHSA's working definition of recovery: 10 guiding principles of recovery.
2. Braslow JT. The manufacture of recovery. Annual review of clinical psychology. 2013; 9:781–809. DOI: 10.1146/annurev-clinpsy-050212-185642
3. Jose D, Ramachandra, Lalitha K, Gandhi S, Desai G, Nagarajaiah. Consumer perspectives on the concept of recovery in schizophrenia: A systematic review. Asian journal of psychiatry. 2015; 14:13–18. DOI: 10.1016/j.ajp.2015.01.006 [PubMed: 25703654]
4. Windell D, Norman R, Malla AK. The personal meaning of recovery among individuals treated for a first episode of psychosis. Psychiatric services. 2012; 63(6):548–553. DOI: 10.1176/appi.ps.201100424 [PubMed: 22508473]

5. National Academies of Sciences, Engineering, and Medicine. Measuring Recovery from Substance Use or Mental Disorders: Workshop Summary. 2016
6. Cavanaugh, D., Goldman, S., Friesen, B., Lan Le, M. Designing a Recovery-Oriented Care Model for Adolescents and Transition Age Youth with Substance Use or Co-Occurring Mental Health Disorders. Vol. 20. Rockville, MD: Substance Abuse and Mental Health Services Administration, USDHHS; 2009. p. 20Retrieved from http://gucchdtacenter georgetown edu/resources/Recovery_Report_Adolescents
7. National Academies of Sciences, Engineering, and Medicine. Committee on National Statistics and Board on Behavioral, Cognitive, and Sensory Sciences, Division of Behavioral and Social Sciences and Education. Measuring Serious Emotional Disturbance in Children: Workshop Summary. Washington, DC: National Academies Press (US); 2016.
8. el-Guebaly N. The Meanings of Recovery From Addiction. Journal of Addiction Medicine. 2012; 6(1):1–9. DOI: 10.1097/ADM.0b013e31823ae540 [PubMed: 22124289]
9. Whitley R, Drake RE. Recovery: a dimensional approach. Psychiatric services. 2010; 61(12):1248–1250. [PubMed: 21123410]
10. New Freedom Commission on Mental Health. [Accessed October 17, 2016] Achieving the Promise: Transforming Mental Health Care in America. Final Report. http://govinfo.library.unt.edu/mentalhealthcommission/reports/FinalReport/downloads/FinalReport.pdf. Published 2003
11. Hogan MF. New Freedom Commission report: the President's New Freedom Commission: recommendations to transform mental health care in America. Psychiatric services. 2003; 54(11): 1467–1474. DOI: 10.1176/appi.ps.54.11.1467 [PubMed: 14600303]
12. Substance Abuse and Mental Health Services Administration. National Consensus Statement on Mental Health Recovery. Rockville, MD: US Department of Health and Human Services, Substance Abuse and Mental Health Services Administration; 2004.
13. UK Mental Health Foundation. [Accessed October 17, 2016] What supports recovery?. https://www.mentalhealth.org.uk/a-to-z/r/recovery. Published 2016
14. Mental Health Advocacy Coalition of New Zealand. Destination: Recovery Te Ünga ki Uta: Te Oranga. doi:https://www.mentalhealth.org.nz/assets/Our-Work/Destination-Recovery-FINAL-low-res.pdf
15. National Alliance on Mental Illness. [Accessed October 16, 2016] Public policy platform of the National Alliance on Mental Illness: Twelfth Edition. http://www.nami.org/getattachment/Learn-More/Mental-Health-Public-Policy/Public-Policy-Platform-(6).pdf. Published September 2016
16. Hopper K. Rethinking social recovery in schizophrenia: What a capabilities approach might offer. Social Science & Medicine. 2007; 65(5):868–879. DOI: 10.1016/j.socscimed.2007.04.012 [PubMed: 17499900]
17. Mulvany J. Disability, impairment or illness? The relevance of the social model of disability to the study of mental disorder. Sociology of Health & Illness. 2000; 22(5):582–601.
18. Hansen H, Bourgois P, Drucker E. Pathologizing poverty: New forms of diagnosis, disability, and structural stigma under welfare reform. Social Science & Medicine. 2014; 103:76–83. DOI: 10.1016/j.socscimed.2013.06.033 [PubMed: 24507913]
19. Bromley E, Gabrielian S, Brekke B, et al. Experiencing community: Perspectives of individuals diagnosed as having serious mental illness. Psychiatric services. 2013; 64(7):672–679. [PubMed: 23545784]
20. Jenkins JH, Carpenter Song EA. Stigma despite recovery. Medical Anthropology Quarterly. 2008; 22(4):381–409. [PubMed: 19189724]
21. Bromley E, Kennedy DP, Miranda J, Sherbourne CD, Wells KB. The Fracture of Relational Space in Depression: Predicaments in Primary Care Help Seeking. Current Anthropology. 2016; 57(5): 610–631. DOI: 10.1086/688506 [PubMed: 27990025]
22. Lee S, Chiu MYL, Tsang A, Chui H, Kleinman A. Stigmatizing experience and structural discrimination associated with the treatment of schizophrenia in Hong Kong. Social Science & Medicine. 2006; 62(7):1685–1696. DOI: 10.1016/j.socscimed.2005.08.016 [PubMed: 16174547]
23. Ostrow L, Adams N. Recovery in the USA: From politics to peer support. International Review of Psychiatry. 2012; 24(1):70–78. DOI: 10.3109/09540261.2012.659659 [PubMed: 22385429]

24. Minkler M, Wallerstein N. Community-based participatory research for health: From process to outcomes. 2011
25. Chen D, Jaenicke EC, Volpe RJ. Food environments and obesity: household diet expenditure versus food deserts. American journal of public health. 2016; 106(5):881–888. [PubMed: 26985622]
26. Wilhelm M, Qian L, Ritz B. Outdoor air pollution, family and neighborhood environment, and asthma in LA FANS children. Health & Place. 2009; 15(1):25–36. DOI: 10.1016/j.healthplace.2008.02.002 [PubMed: 18373944]
27. Mujahid MS, Roux AVD, Cooper RC, Shea S, Williams DR. Neighborhood stressors and race/ethnic differences in hypertension prevalence (The Multi-Ethnic Study of Atherosclerosis). Am J Hypertens. 2011; 24(2):187–193. DOI: 10.1038/ajh.2010.200 [PubMed: 20847728]
28. Warnecke RB, Oh A, Breen N, et al. Approaching health disparities from a population perspective: the National Institutes of Health Centers for Population Health and Health Disparities. American journal of public health. 2008; 98(9):1608–1615. [PubMed: 18633099]
29. Marmot, M. Social differentials in mortality: the Whitehall studies. In: Lopez, AD.Caselli, G., Valkonen, T., editors. Adult Mortality in Developed Countries From Description to Explanation. Vol. 1995. Oxford, England: Oxford England Clarendon Press; 1995. p. 243-260.
30. Chetty R, Stepner M, Abraham S, et al. The association between income and life expectancy in the United States, 2001–2014. Jama. 2016; 315(16):1750–1766. [PubMed: 27063997]
31. Sareen J, Afifi TO, McMillan KA, Asmundson GJ. Relationship between household income and mental disorders: findings from a population-based longitudinal study. Archives of general psychiatry. 2011; 68(4):419–427. [PubMed: 21464366]
32. Roelfs DJ, Shor E, Davidson KW, Schwartz JE. Losing life and livelihood: a systematic review and meta-analysis of unemployment and all-cause mortality. Social Science & Medicine. 2011; 72(6):840–854. [PubMed: 21330027]
33. Reeves A, McKee M, Stuckler D. Economic suicides in the great recession in Europe and North America. The British Journal of Psychiatry. 2014; 205(3):246–247. [PubMed: 24925987]
34. Nordt C, Warnke I, Seifritz E, Kawohl W. Modelling suicide and unemployment: a longitudinal analysis covering 63 countries, 2000–11. The lancet Psychiatry. 2015; 2(3):239–245. DOI: 10.1016/S2215-0366(14)00118-7 [PubMed: 26359902]
35. Norström T, Grönqvist H. The Great Recession, unemployment and suicide. Journal of epidemiology and community health. 2015; 69(2):110–116. [PubMed: 25339416]
36. Frasquilho D, Matos MG, Salonna F, et al. Mental health outcomes in times of economic recession: a systematic literature review. BMC public health. 2016; 16(1):115. [PubMed: 26847554]
37. Stegman, M., Hemmeter, J. Characteristics of Noninstitutionalized DI and SSI Program Participants, 2013 Update. Research and Statistics Note No. 2015. https://www.ssa.gov/policy/docs/rsnotes/rsn2015-02.html
38. Ljungqvist I, Topor A, Forssell H, Svensson I, Davidson L. Money and Mental Illness: A Study of the Relationship Between Poverty and Serious Psychological Problems. Community Ment Health J. 2015; 52(7):842–850. DOI: 10.1007/s10597-015-9950-9 [PubMed: 26433374]
39. Kilburn K, Thirumurthy H, Halpern CT, Pettifor A, Handa S. Effects of a Large-Scale Unconditional Cash Transfer Program on Mental Health Outcomes of Young People in Kenya. Journal of Adolescent Health. 2016; 58(2):223–229. DOI: 10.1016/j.jadohealth.2015.09.023 [PubMed: 26576822]
40. Greenberg GA, Rosenheck RA. Correlates of past homelessness in the National Epidemiological Survey on Alcohol and Related Conditions. Administration and Policy in Mental Health and Mental Health Services Research. 2010; 37(4):357–366. [PubMed: 19763814]
41. U S Department of Housing Urban Development. The 2010 Annual Homeless Assessment Report (AHAR) to Congress. 2010. https://www.hudexchange.info/resources/documents/2010HomelessAssessmentReport.pdf
42. Tsemberis S, Eisenberg RF. Pathways to Housing: Supported Housing for Street-Dwelling Homeless Individuals With Psychiatric Disabilities. Psychiatric services. 2000; 51(4):487–493. DOI: 10.1176/appi.ps.51.4.487 [PubMed: 10737824]

43. Tsemberis, S., Henwood, B., Yu, V., Whoriskey, A., Stefancic, A. The Role of Psychiatry in Permanent Supported Housing. In: McQuistion, HL.Sowers, WE.Ranz, JM., Feldman, JM., editors. Handbook of Community Psychiatry. Springer; New York: 2012. p. 349-368.
44. McHugo GJ, Bebout RR, Harris M, et al. A Randomized Controlled Trial of Integrated Versus Parallel Housing Services for Homeless Adults With Severe Mental Illness. Schizophr Bull. 2004; 30(4):969–982. DOI: 10.1093/oxfordjournals.schbul.a007146 [PubMed: 15957201]
45. Tsemberis S, Gulcur L, Nakae M. Housing First, Consumer Choice, and Harm Reduction for Homeless Individuals With a Dual Diagnosis. American journal of public health. 2004; 94(4):651–656. DOI: 10.2105/AJPH.94.4.651 [PubMed: 15054020]
46. Mares AS, Rosenheck RA. Twelve-Month Client Outcomes and Service Use in a Multisite Project for Chronically Homelessness Adults. J Behav Health Serv Res. 2010; 37(2):167–183. DOI: 10.1007/s11414-009-9171-5 [PubMed: 19350394]
47. Aubry T, Goering P, Veldhuizen S, et al. A Multiple-City RCT of Housing First With Assertive Community Treatment for Homeless Canadians With Serious Mental Illness. Psychiatric services. 2015; 67(3):275–281. DOI: 10.1176/appi.ps.201400587 [PubMed: 26620289]
48. Fitzpatrick-Lewis D, Ganann R, Krishnaratne S, Ciliska D, Kouyoumdjian F, Hwang SW. Effectiveness of interventions to improve the health and housing status of homeless people: a rapid systematic review. BMC public health. 2011; 11(1):1.doi: 10.1186/1471-2458-11-638 [PubMed: 21199570]
49. O'Connell MJ, Kasprow WJ, Rosenheck RA. Impact of Supported Housing on Social Relationships Among Homeless Veterans. Psychiatric services. 2017; 68(2):203–206. DOI: 10.1176/appi.ps.201500276 [PubMed: 27745532]
50. Rosenheck R, Kasprow W, Frisman L, Liu-Mares W. Cost-effectiveness of Supported Housing for Homeless Persons With Mental Illness. Archives of general psychiatry. 2003; 60(9):940.doi: 10.1001/archpsyc.60.9.940 [PubMed: 12963676]
51. U S Department of Housing Urban Development. The 2016 Annual Homeless Assessment Report (AHAR) to Congress. 2016. https://www.hudexchange.info/resources/documents/2016-AHAR-Part-1.pdf
52. Haywood BR. The Right to Shelter as a Fundamental Interest Under the New York State Constitution. Colum Hum Rts L Rev. 2002; 34:157.
53. Coalition for the Homeless. [Accessed February 6, 2017] Number of homeless people each night in the NYC shelter system. 1983–2016. http://www.coalitionforthehomeless.org/wp-content/uploads/2014/04/SOTH2016_Graph3.png. Published 2016
54. Office of Alcoholism and Substance Abuse Services. New York / New York III: https://www.health.ny.gov/diseases/aids/general/resources/docs/supportive_housing_agreement.pdf [Accessed March 17, 2017]
55. Davidson C, Neighbors C, Hall G, et al. Association of Housing First Implementation and Key Outcomes Among Homeless Persons With Problematic Substance Use. Psychiatric services. 2014; 65(11):1318–1324. DOI: 10.1176/appi.ps.201300195 [PubMed: 25022344]
56. Culhane DP, Metraux S, Hadley T. Public service reductions associated with placement of homeless persons with severe mental illness in supportive housing. Housing Policy Debate. 2002; 13(1):107–163. DOI: 10.1080/10511482.2002.9521437
57. Los Angeles City. Homelessness Reduction and Prevention, Housing, and Facilities Bond (Proposition HHH). 2016. http://clkrep.lacity.org/election/final%20homelessness%20hhh%20for%20web.pdf
58. Smith, D. Absentee vote pushes L.A. County homeless sales tax measure to a strong finish. Los Angeles Times. Mar. 2017 http://www.latimes.com/local/lanow/la-me-ln-measure-h-final-recap-20170317-story.html
59. Housing for Health Division of the Los Angeles County Department of Health Services. [Accessed January 31, 2017] https://dhs.lacounty.gov/wps/portal/dhs/!ut/p/b0/04_Sj9CPykssy0xPLMnMz0vMAfGjzOLdDAwM3P2dgo0sQp3MDBwtPIJdfdwNDdx8jPQLsh0VAbRn2lQ!/
60. Los Angeles County Department of Health Services. Bringing Housing to Scale: Housing for Health Progress Report. May. 2017

61. Baicker K, Taubman SL, Allen HL, et al. The Oregon experiment--effects of Medicaid on clinical outcomes. The New England journal of medicine. 2013; 368(18):1713–1722. DOI: 10.1056/NEJMsa1212321 [PubMed: 23635051]
62. Van Der Wees PJ, Zaslavsky AM, Ayanian JZ. Improvements in health status after Massachusetts health care reform. The Milbank quarterly. 2013; 91(4):663–689. DOI: 10.1111/1468-0009.12029 [PubMed: 24320165]
63. Katon W, Unutzer J, Wells KB, Jones L. Collaborative depression care: history, evolution and ways to enhance dissemination and sustainability. Gen Hosp Psychiatry. 2010; 32(5):456–464. DOI: 10.1016/j.genhosppsych.2010.04.001 [PubMed: 20851265]
64. Swartz MS, Wilder CM, Swanson JW, et al. Assessing outcomes for consumers in New York's assisted outpatient treatment program. Psychiatric services. 2010; 61(10):976–981. [PubMed: 20889634]
65. Viron MJ, Zioto K, Schweitzer J, Levine G. Behavioral Health Homes: an opportunity to address healthcare inequities in people with serious mental illness. Asian journal of psychiatry. 2014; 10:10–16. DOI: 10.1016/j.ajp.2014.03.009 [PubMed: 25042945]
66. Little, V. [Accessed February 5, 2017] New CMS payment codes benefit collaborative care. https://aims.uw.edu/new-cms-payment-codes-benefit-collaborative-care. Published 2017
67. New York State Department of Health. [Accessed October 4, 2016] Frequently Asked Questions (FAQs): New York's MRT Waiver Amendment Delivery System Reform Incentive Payment (DSRIP) Plan. https://www.health.ny.gov/health_care/medicaid/redesign/dsrip/dsrip_faq/docs/2016-07_dsrip_faq.pdf. Published July 2016
68. Druss BG, Esenwein von SA, Glick GE, et al. Randomized Trial of an Integrated Behavioral Health Home: The Health Outcomes Management and Evaluation (HOME) Study. AJP. 2017; 174(3):246–255. DOI: 10.1176/appi.ajp.2016.16050507
69. Parcesepe AM, Cabassa LJ. Public stigma of mental illness in the United States: a systematic literature review. Administration and Policy in Mental Health and Mental Health Services Research. 2013; 40(5):384–399. [PubMed: 22833051]
70. Mangurian C, Sreshta N, Seligman H. Food insecurity among adults with severe mental illness. Psychiatric services. 2013; 64(9):931–932. DOI: 10.1176/appi.ps.201300022
71. Teplin LA, McClelland GM, Abram KM, Weiner DA. Crime Victimization in Adults With Severe Mental Illness: Comparison With the National Crime Victimization Survey. Archives of general psychiatry. 2005; 62(8):911–921. DOI: 10.1001/archpsyc.62.8.911 [PubMed: 16061769]
72. Perese EF. Stigma, Poverty, and Victimization: Roadblocks to Recovery for Individuals With Severe Mental Illness. Journal of the American Psychiatric Nurses Association. 2007; 13(5):285–295. DOI: 10.1177/1078390307307830
73. Wright EM, Fagan AA, Pinchevsky GM. The effects of exposure to violence and victimization across life domains on adolescent substance use. Child abuse & neglect. 2013; 37(11):899–909. DOI: 10.1016/j.chiabu.2013.04.010 [PubMed: 23743232]
74. Otis MD, Skinner WF. The prevalence of victimization and its effect on mental well-being among lesbian and gay people. Journal of homosexuality. 1996; 30(3):93–121. DOI: 10.1300/J082v30n03_05 [PubMed: 8743118]
75. Hanson RF, Sawyer GK, Begle AM, Hubel GS. The impact of crime victimization on quality of life. Journal of traumatic stress. 2010; 23(2):189–197. [PubMed: 20419728]
76. Monahan J, Vesselinov R, Robbins PC, Appelbaum PS. Violence to Others, Violent Self-Victimization, and Violent Victimization by Others Among Persons With a Mental Illness. Psychiatric services. 2017 appi.ps.201600135.
77. Corrigan PW, Watson AC, Gracia G, Slopen N, Rasinski K, Hall LL. Newspaper Stories as Measures of Structural Stigma. Psychiatric services. 2005; 56(5):551–556. DOI: 10.1176/appi.ps.56.5.551 [PubMed: 15872163]
78. Newman JM, Turnbull A, Berman BA, Rodrigues S, Serper MR. Impact of Traumatic and Violent Victimization Experiences in Individuals With Schizophrenia and Schizoaffective Disorder. J Nerv Ment Dis. 2010; 198(10):708–714. DOI: 10.1097/NMD.0b013e3181f49bf1 [PubMed: 20921860]

79. Latkin CA, Curry AD. Stressful Neighborhoods and Depression: A Prospective Study of the Impact of Neighborhood Disorder. J Health Soc Behav. 2003; 44(1):34.doi: 10.2307/1519814 [PubMed: 12751309]
80. Kirkbride JB, Hameed Y, Ankireddypalli G, et al. The Epidemiology of First-Episode Psychosis in Early Intervention in Psychosis Services: Findings From the Social Epidemiology of Psychoses in East Anglia [SEPEA] Study. AJP. 2017; 174(2):143–153. DOI: 10.1176/appi.ajp.2016.16010103
81. Essock SM. When Social and Environmental Adversity Causes Schizophrenia. AJP. 2017; 174(2): 89–90. DOI: 10.1176/appi.ajp.2016.16111208
82. Penkalla AM, Kohler S. Urbanicity and Mental Health in Europe: A Systematic Review. EJMH. 2014; 9(2):163–177. DOI: 10.5708/EJMH.9.2014.2.2
83. Leventhal T, Brooks-Gunn J. Moving to Opportunity: an Experimental Study of Neighborhood Effects on Mental Health. American journal of public health. 2003; 93(9):1576–1582. DOI: 10.2105/AJPH.93.9.1576 [PubMed: 12948983]
84. Kessler RC, Duncan GJ, Gennetian LA, et al. Associations of Housing Mobility Interventions for Children in High-Poverty Neighborhoods With Subsequent Mental Disorders During Adolescence. Jama. 2014; 311(9):937.doi: 10.1001/jama.2014.607 [PubMed: 24595778]
85. Xue Y, Leventhal T, Brooks-Gunn J, Earls FJ. Neighborhood residence and mental health problems of 5-to 11-year-olds. Archives of general psychiatry. 2005; 62(5):554–563. [PubMed: 15867109]
86. Bandura A. Exercise of Human Agency Through Collective Efficacy. Current Directions in Psychological Science. 2000; 9(3):75–78. DOI: 10.1111/1467-8721.00064
87. Wright EM, Pinchevsky GM, Benson ML, Radatz DL. Intimate Partner Violence and Subsequent Depression: Examining the Roles of Neighborhood Supportive Mechanisms. American journal of community psychology. 2015; 56(3–4):342–356. DOI: 10.1007/s10464-015-9753-8 [PubMed: 26391793]
88. Sampson, RJ. Great American City: Chicago and the Enduring Neighborhood Effect. University of Chicago Press; 2012.
89. Wright EM, Pinchevsky GM, Benson ML, Radatz DL. Intimate Partner Violence and Subsequent Depression: Examining the Roles of Neighborhood Supportive Mechanisms. American journal of community psychology. 2015; 56(3–4):342–356. DOI: 10.1007/s10464-015-9753-8 [PubMed: 26391793]
90. Fagan AA, Wright EM, Pinchevsky GM. The protective effects of neighborhood collective efficacy on adolescent substance use and violence following exposure to violence. Journal of youth and adolescence. 2014; 43(9):1498–1512. [PubMed: 24170438]
91. Heid AR, Pruchno R, Cartwright FP, Wilson-Genderson M. Exposure to Hurricane Sandy, neighborhood collective efficacy, and post-traumatic stress symptoms in older adults. Aging & mental health. 2016:1–9. [PubMed: 26516791]
92. Browning CR, Gardner M, Maimon D, Brooks-Gunn J. Collective efficacy and the contingent consequences of exposure to life-threatening violence. Developmental psychology. 2014; 50(7): 1878. [PubMed: 24842460]
93. Chou K-L. Perceived discrimination and depression among new migrants to Hong Kong: The moderating role of social support and neighborhood collective efficacy. Journal of affective disorders. 2012; 138(1):63–70. [PubMed: 22284018]
94. Alley DE, Asomugha CN, Conway PH, Sanghavi DM. Accountable Health Communities--Addressing Social Needs through Medicare and Medicaid. The New England journal of medicine. 2016; 374(1):8–11. DOI: 10.1056/NEJMp1512532 [PubMed: 26731305]
95. Health Home Information Resource Center. [Accessed February 6, 2017] https://www.medicaid.gov/state-resource-center/medicaid-state-technical-assistance/health-homes-technical-assistance/health-home-information-resource-center.html. Published 2017
96. New York State Office of Mental Health. [Accessed October 4, 2016] New York State: Health and Recovery Plan (HARP) Adult Behavioral Health Home and Community Based Services (BH HCBS) Provider Manual. https://www.omh.ny.gov/omhweb/bho/docs/hcbs-manual.pdf. Published 2016

97. Sandberg SF, Erikson C, Owen R, et al. Hennepin Health: a safety-net accountable care organization for the expanded Medicaid population. Health affairs. 2014; 33(11):1975–1984. DOI: 10.1377/hlthaff.2014.0648 [PubMed: 25367993]

98. Ehlinger EP. We need a Triple Aim for Health Equity. Minnesota medicine. 2015; 98(10):28–29.

99. Colorado Department of Public Health and Environment. Colorado Health and Environmental Assessment 2013. Denver: 2013.

100. Feldman S. The “millionaires tax” and mental health policy in California. Health affairs. 2009; 28(3):809–815. [PubMed: 19414891]

101. Office of the Assistant Secretary of Health, U.S. Department of Health and Human Services. [Accessed December 27, 2016] Public Health 3.0: A Call to Action to Create a 21st Century Public Health Infrastructure. https://www.healthypeople.gov/sites/default/files/Public-Health-3.0-White-Paper.pdf

102. Marmot M, Friel S, Bell R, Houweling TA, Taylor S. Commission on Social Determinants of Health. Closing the gap in a generation: health equity through action on the social determinants of health. The Lancet. 2008; 372(9650):1661–1669.

103. Mann, C. Improving Access to Home and Community-Based Services. Center for Medicaid, CHIP and Survey Certification. 2010. SMDL# 10-015, ACA #6. http://downloads.cms.gov/cmsgov/archived-downloads/SMDL/downloads/SMD10015.pdf

104. Marmot M, Allen JJ. Social determinants of health equity. American journal of public health. 2014

105. Rudolph, L., Caplan, J., Ben-Moshe, K., Dillon, L. Health in All Policies: a Guide for State and Local Governments. Washington, DC and Oakland, CA: American Public Health Association and Public Health Institute; 2013.

106. Purnell TS, Calhoun EA, Golden SH, et al. Achieving health equity: closing the gaps in health care disparities, interventions, and research. Health affairs. 2016; 35(8):1410–1415. [PubMed: 27503965]

107. The California Endowment. A New Power Grid: Building Healthy Communities at Year 5. 2015. http://www.calendow.org/bhcreport/

108. Lavizzo-Mourey, R. Building a Culture of Health: 2014 President’s Message. 2014. http://www.rwjf.org/content/dam/files/rwjf-web-files/Annual_Message/2014_RWJF_AnnualMessage_final.pdf

109. Tan S, Fraser A, Giacomantonio C, et al. An evaluation of Social Impact Bonds in Health and Social Care. Interim Report Policy Innovation Research Unit, Department of Health Services Research and Policy, London School of Hygiene and Tropical Medicine, and RAND Europe PIRU Publication. 2015:12.

110. Centers for Disease Control and Prevention. Community Transformation Grants (CTG) states and communities programs description. 2012.

111. Los Angeles County Department of Mental Health. Health Neighborhoods: A Toolkit for Service Delivery Providers.

112. Los Angeles County Department of Mental Health. MHSA Innovation 2 Project – Health Neighborhoods.

113. New York City Department of Health and Mental Hygiene. ThriveNYC: a Roadmap for Mental Health for All. New York: 2015.

114. Mares AS, Rosenheck RA. A Comparison of Treatment Outcomes Among Chronically Homelessness Adults Receiving Comprehensive Housing and Health Care Services Versus Usual Local Care. Administration and Policy in Mental Health and Mental Health Services Research. 2011; 38(6):459–475. DOI: 10.1007/s10488-011-0333-4 [PubMed: 21259068]

115. Case, A., Deaton, A. Mortality and morbidity in the 21st century. 2017.

116. Lopez AM, Bourgois P, Wenger LD, Lorvick J, Martinez AN, Kral AH. Interdisciplinary mixed methods research with structurally vulnerable populations: Case studies of injection drug users in San Francisco. International Journal of Drug Policy. 2013; 24(2):101–109. DOI: 10.1016/j.drugpo.2012.12.004 [PubMed: 23312109]

117. Hawkins JD, Oesterle S, Brown EC, et al. Sustained decreases in risk exposure and youth problem behaviors after installation of the Communities That Care prevention system in a

randomized trial. Archives of Pediatrics & Adolescent Medicine. 2012; 166(2):141–148. [PubMed: 21969362]

118. Wells K, Jones L. “Research” in Community-Partnered, Participatory Research. Jama. 2009; 302(3):320.doi: 10.1001/jama.2009.1033 [PubMed: 19602693]
119. Garg A, Dworkin PH. Surveillance and screening for social determinants of health: the medical home and beyond. JAMA pediatrics. 2016; 170(3):189–190. [PubMed: 26746685]
120. Wells KB, Jones L, Chung B, et al. Community-partnered cluster-randomized comparative effectiveness trial of community engagement and planning or resources for services to address depression disparities. J GEN INTERN MED. 2013; 28(10):1268–1278. DOI: 10.1007/s11606-013-2484-3 [PubMed: 23649787]
121. LeMelle S, Arbuckle MR, Ranz JM. Integrating Systems-Based Practice, Community Psychiatry, and Recovery Into Residency Training. Academic Psychiatry. 2013; 37(1):35–37. DOI: 10.1176/appi.ap.12030057 [PubMed: 23338871]
122. Accreditation Council of Graduate Medical Education. [Accessed March 28, 2017] ACGME Competencies: Systems-based Practice. http://www.acgme.org/Portals/0/PDFs/commonguide/IVA5f_EducationalProgram_ACGMECompetencies_SBP_Explanation.pdf. Published May 20, 2008
123. Mental Health America. [Accessed February 9, 2017] Current Mental Health Legislation. http://www.mentalhealthamerica.net/issues/current-mental-health-legislation. Published 2017
124. Bergstresser SM, Brown IS, Colesante A. Political Engagement as an Element of Social Recovery: A Qualitative Study. Psychiatric services. 2013; 64(8):819–821. DOI: 10.1176/appi.ps.004142012 [PubMed: 23903610]
125. Lawn S, McMillan J, Comley Z, Smith A, Brayley J. Mental health recovery and voting: why being treated as a citizen matters and how we can do it. J Psychiatr Ment Health Nurs. 2013; 21(4):289–295. DOI: 10.1111/jpm.12109 [PubMed: 24066832]
126. Ranz JM, Deakins SM, LeMelle SM, Rosenheck SD, Kellermann SL. Public-Academic Partnerships: Core Elements of a Public Psychiatry Fellowship. Psychiatric services. 2008; 59(7):718–720. DOI: 10.1176/ps.2008.59.7.718 [PubMed: 18586986]
127. LeMelle S, Ranz JM. Resident Training in Recovery. SAMHSA Recovery to Practice Weekly Highlight. 2012; 3(19) http://www.atr.samhsa.gov/Resources/wh/2012/2012_05_24/WH_2012_05_24.html.
128. Metzl JM, Hansen H. Structural competency: Theorizing a new medical engagement with stigma and inequality. Social Science & Medicine. 2014; 103:126–133. DOI: 10.1016/j.socscimed.2013.06.032 [PubMed: 24507917]
129. Drake RE, Essock SM. The Science-to-Service Gap in Real-World Schizophrenia Treatment: The 95% Problem. Schizophr Bull. 2009; 35(4):677–678. DOI: 10.1093/schbul/sbp047 [PubMed: 19502492]
130. Jones L, Wells K. Strategies for academic and clinician engagement in community-participatory partnered research. Jama. 2007; 297(4):407–410. [PubMed: 17244838]
131. Lizaola E, Schraiber R, Braslow J, et al. The Partnered Research Center for Quality Care: developing infrastructure to support community-partnered participatory research in mental health. Ethnicity & disease. 2011; 21(3 0 1):S1.
132. Figueroa C, Castillo EG, Norquist G, et al. A Window of Opportunity: Visions and Strategies for Behavioral Health Policy Innovation. Manuscript Submitted for Publication.
133. Bayer R, Johns DM. Screening for Social Determinants of Health. Jama. 2016; 316(23):2551–2552. [PubMed: 27997647]

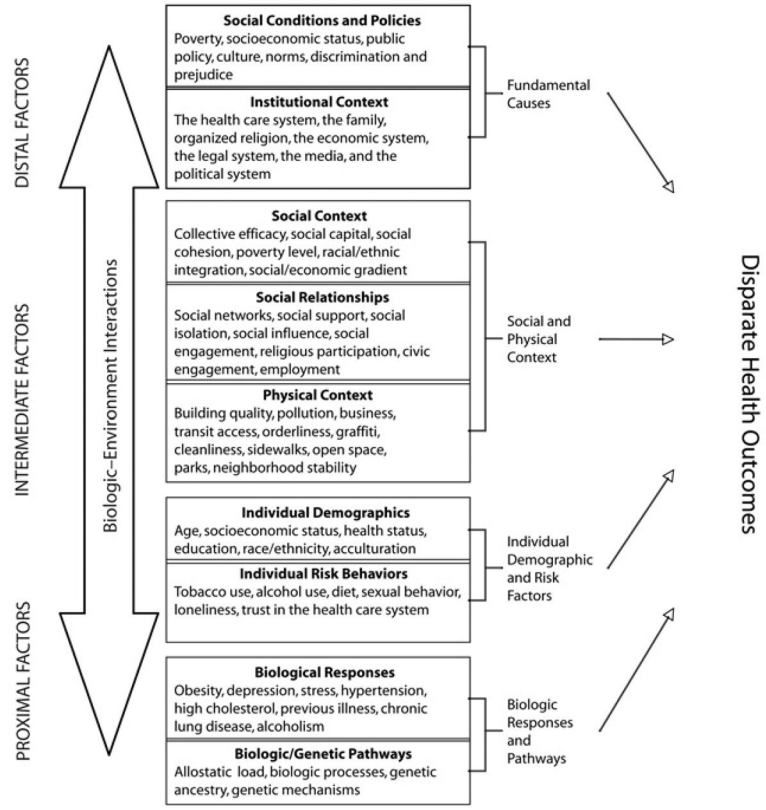

Figure 1.

Model for Analysis of Population Health and Health Disparities, Centers for Population Health and Health Disparities of the National Institutes of Health

Figure reproduced with permission from Warnecke RB, Oh A, Breen N, et al.: Approaching health disparities from a population perspective: the National Institutes of Health Centers for Population Health and Health Disparities. American Journal of Public Health 98: 1608–1615, 2008. Copyright The American Public Health Association.