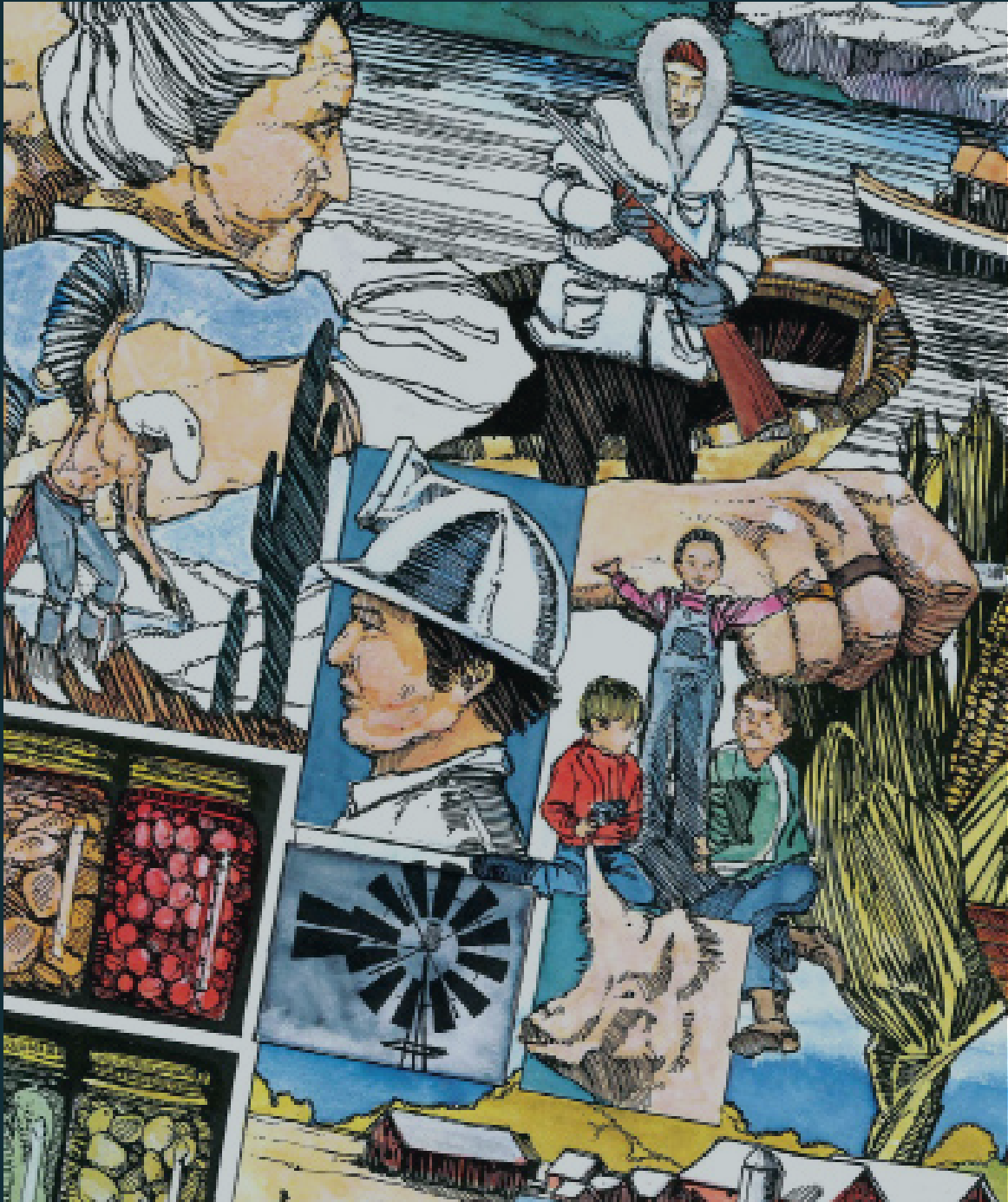


Rural Mental Health in the United States



2006-2022

 **WICHE**
Western Interstate Commission for Higher Education

Rural Mental Health in the United States: 2006–2022

An Overview and Annotated Bibliography

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Preface

This volume, *Rural Mental Health in the United States: 2006–2022*, is the fourth in a series, first published in 1979, intended to provide an overview of the field of rural mental health and access to its literature through an annotated bibliography. Like rural America itself, where much remains the same, but much is also changing, this volume is both similar to and different from earlier volumes. The goal remains to provide an overview of the field in a single volume to a broad audience, including researchers, policymakers, educators, service providers, and community members. This volume retains the two-part organization of earlier volumes: a narrative overview of the field and an annotated bibliography.

Where earlier volumes provided annotations to published and unpublished (“fugitive”) literature that may have been beyond the reach of most interested persons, today’s internet search options can yield almost instant lists of literature. This volume’s range and variety of literature demonstrate how current audiences and anticipated future readers will search for and use rural mental health literature. Given the online accessibility of much of the literature noted in this volume, we have been more selective in the number of annotated references and briefer in the length of these annotations. We grouped our annotations, and their related topical areas, together by chapter and included them in the narrative section of this volume. Our intention with this review is to help ground and guide the reader through the landscape of current rural mental health literature.


This monograph identifies gaps in our understanding of rural America and provides an analysis of rural mental health needs and care. Rural America has always been more diverse and complex in

reality than in the public imagination, and as studied and researched, this diversity is rapidly increasing. This volume recognizes this diversity in its more nuanced view of rural America’s people and places, as well as its estimation of the research needed to better understand and improve their mental health.

This volume’s more direct focus on identifying gaps in the current research distinguishes it from previous volumes. There is a long history of rural mental health research, primarily supported at the federal level by institutions like the National Institute of Mental Health (NIMH), the Office of Rural Health Policy (OHRP), and the Substance Abuse and Mental Health Services Administration (SAMHSA). Despite this federal support, conducting rural mental health services research remains uniquely and substantially challenging. Clinical interventions and service delivery models are usually developed in and for urban and more populated areas. There is less research infrastructure and fewer potential study participants in rural areas than in urban areas; thus, securing funding and conducting mental health research can be more challenging for rural researchers. The social, economic, and cultural underpinnings of mental health differ in urban and rural areas, clouding the interpretation of rural mental health research and complicating the process of translating results into improved care.

This volume was developed and written by The Behavioral Health Program of the Western Interstate Commission for Higher Education (WICHE). The Behavioral Health Program at WICHE has been working since 1955 to improve mental health systems and workforce development.

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official views of the NIMH, National Institutes of Health, or the United States government. In developing the scope and focus of this volume, the authors and staff at NIMH decided to highlight both long-standing challenges to rural mental health, including the shortage of providers, limited infrastructure, and cultural differences, with more recent and emergent variables including upward trends in substance use, increasing ethnic and cultural diversity, and the growing use of technology. A significant focus of this publication is not only to reveal gaps in knowledge, but to explore how and what research might address these gaps to help meet the mental health needs of rural communities and persons. To provide a framework for the literature review, WICHE conducted key informant (KI) Interviews with 31 leaders and researchers from the field of rural mental health. The process and results of these interviews are described in Appendix A.

Chapter 1:

Rural Mental Health in the United States

Often, to speak or write about rurality in the United States is to invoke images of open spaces, country roads, and small towns. The listener or reader is also likely to have a fleeting image of what rural is not: tall buildings, congested traffic, subway platforms. Our understanding of what rural means in the United States has long toggled between what it is, and what it is not. The need to increase and enhance mental health care for persons living in rural and remote regions of the United States has been recognized for decades. This recognition has contributed to policy initiatives, clinical strategies, and homegrown community models of care. However, improving mental health in these regions continues to be complex and challenging. There is a shortage of clinicians and helpers across the mental health professions and there are too few places for rural people to access or get care. These shortages stubbornly remain, despite decades of efforts to reduce them. That is only the supply side of the problem. A person's ability and willingness to seek or accept care (reflecting cultural factors such as health literacy and stigma) for a mental health problem is embedded in their sense of self, community, and culture. The culture of rural regions differs from that of the urban culture. However, the culture and structure of urban environments continue to be the basis for many mental health service delivery and clinical models. Increasing demographic and cultural differences within rural communities pose additional challenges, as well as opportunities, to provide improved mental health care.

This chapter first describes our current understanding of rural America today, including definitions used to measure or categorize rural areas and the changing demographics of rural communities.

Next, we describe the current rural mental health landscape, including frameworks commonly used to describe and analyze it. The chapter then introduces newer frameworks in this volume to better understand and improve rural mental health. The chapter concludes with a preview of the other chapters in this volume.

What is Rural?

State and federal agencies have developed a number of definitions of rural over time to meet programmatic and regulatory needs (Rural Health Information [RHI] Hub, n.d.). Multiple definitions delineate which programs and people are eligible for support under different legislative initiatives and funding streams. The substantial number of, and variations among, definitions of rural can be confusing and unwieldy. This ambiguity confounds the conduct and interpretation of research, particularly when measuring prevalence and interpreting outcomes (Levin & Hanson, 2020). The challenge presented by multiple definitions for the term rural is common. This volume, like earlier volumes, adopts a broad definition of rural to identify and discuss the relevant rural mental health literature. Rural and non-metro are used interchangeably, as are urban and metro. While we hope to avoid the briar patch of defining rurality, these definitions are essential for understanding rural mental health literature and identifying and addressing research gaps.

Definitions used by three federal agencies, including the U.S. Census Bureau, the Office of Management and Budget (OMB), and the U.S. Department of Agriculture- Economic Research Service (US-

DA-ERS), are the most commonly used. These three definitions, described below, yield somewhat different estimates of the U.S. population living in rural areas. Based on the 2020 Census, the U.S. Census Bureau’s definition estimates that 24.8% of Americans live in a rural area; the OMB definition estimates 15.0%, and RUCA codes estimate 16.6% (RHI Hub, n.d.). Mental health researchers have tended to select datasets based on the information contained in them, not on which definition of rural is used. This has made comparisons across studies complex at times (Levin & Hanson, 2020).

The U.S. Census Bureau uses census blocks and block groups to define two types of urban areas based on population size and density. All other areas are considered rural. An urbanized area (UA) has an urbanized core of 50,000 people within one or more contiguous census blocks within two square miles or less and a population density of 1,000 persons per square mile. A UA may include adjoining territory with at least 500 people per square mile and a population of 50,000 or more people. An urban cluster (UC) has a core (land area of two square miles or less and a population density of 1,000 persons per square mile) and may include adjoining territory defined for UAs. The population of the UC must be at least 2,500 but less than 50,000 persons. All population, territory, and housing units not in the UAs or UCs are considered rural. The U.S. Census Bureau’s definition is the only official federal definition of rural for statistical use.

The OMB uses the county to define different urban and rural areas, building on the U.S. Census Bureau’s definition of UAs and considering commuting patterns related to work:

- *Metropolitan statistical areas (MSAs)* are central or core counties that include one or more UAs (as defined by the U.S. Census Bureau) and

outlying counties in which 25% of the workers commute to the central or core county, or 25% of the workers in the central or core county commute to the outlying county (reverse commuting).

- *Nonmetropolitan (non-metro) counties* are outside the area of MSAs and are divided into two types:
 - *Micropolitan statistical areas* are non-metro counties with at least 10,000 persons. They may include outlying counties if 25% of the workers commute to the central or core county or if 25% of the workers in the central or core county commute to the outlying county.
 - *Non-core counties* are non-metro counties not meeting the requirements of a micropolitan statistical area.

The USDA-ERS collaborated with the Federal Office of Rural Health Policy (ORHP) to develop rural–urban commuting area (RUCA) codes. First publicly available in 1998, the use of this classification has increased among several government agencies to classify rural areas and by ORHP to

| | Metropolitan | Non-Metropolitan |
|----------------------------------|--------------|------------------|
| American Indian or Alaska Native | 0.6% | 2.2% |
| Asian | 6.4% | 1.0% |
| Black | 13.4% | 7.9% |
| Hawaiian/Pacific Islander | 0.2% | 0.1% |
| Multiple or Other | 11.1% | 5.4% |
| White | 68.3% | 83.4% |

Table 1: Source: Rural Health Information Hub, based on U.S. Census (2020). Note: Racial groups may include people of Hispanic origin.

determine eligibility for their programs. RUCAs use the U.S. Census Bureau's definition of urbanized areas and urban clusters with information on work commuting to identify metropolitan, micropolitan, small-town, and commuting areas. RUCAs added the critical dimension of commuting (travel) time to geographic distance in rural areas. This dimension may prove crucial in researching access to health care and other services.

Rural People, Places, and Jobs: Rural United States Demographics

During the late 19th and early 20th centuries, The United States evolved from a primarily agrarian to an industrialized economy. Then, as now, people followed jobs, with most of the United States population shifting from rural to urban areas. The 1920 Census was the first one in which at least half of the American population (51%) were classified as living in urban areas. During this long transition, an image of rural America emerged that persists in part today as we approach the quarter mark of the 21st century: rural people are White and work on or near farms. While this image was never entirely accurate, current assessments and assumptions around rural America must be adapted to reflect the demographic changes in rural America.

Census data provides the most current picture of where Americans live (U.S. Census Bureau, 2022). The 2020 U.S. Census was the first census showing a net increase in the rural population over the preceding years: an increase from 19.3 to 21.0%. In 1990, 75% of the population lived in urban areas and 25% in rural areas. This slight increase in America's rural population over the past decade may continue, at least in the short run, due to the COVID-19 pandemic, as people seek less

dense areas to live in and have more opportunities to work remotely.

The USDA-ERS has taken a close look at this demographic change since 2010 and what may be driving it (Cromartie & Vilorio, 2019):

- This reversal results from net migration into rural areas rather than a net change in birth and mortality rates.
- The view of net rural migration on the national level masks variations among different parts of rural America. Net population changes also differ significantly for different racial and ethnic groups.
- More than half (58%) of all rural counties experienced a net population increase.

Rural counties with the highest increases tended to be in areas of high amenities and recreational and retirement opportunities. Rural counties experiencing a population decrease are mostly in low-population density, remote areas. These areas tend also to experience the most significant economic and job loss decline and the highest rates of opioid use (McGranahan & Parker, 2021). Although the majority (78%) of rural Americans are White, these regions are becoming more racially and ethnically diverse, a trend that is projected to continue. From 2010 to 2020, rural America's non-White population increased by 4% (Rowlands & Love, 2021). Demographic statistics indicate that Latino/a/e/x individuals (the fastest growing group) make up 9% of the rural population, Black persons 8%, American Indian individuals 2%, and Asian individuals 1%.

Where different racial/ethnic populations live is highly regionalized. Rural counties in the West and South are the most racially and ethnically diverse, with many counties having a majority, or a near-majority, of residents of color (Rowlands & Love, 2021). Black people are most highly concentrated in the lowland areas of the South. Indigenous people are

the largest group of people of color in Oklahoma, the Four Corners area in the Southwest, and the upper tier of the Great Plains. Latino and Hispanic populations—the demographic group driving much of the increased diversity in rural regions of the United States—have grown significantly in areas of the Pacific Coast, in the High Plains, and in some rural counties in the East.

To understand the state of mental health in rural America, it is essential to also understand the job prospects and socioeconomic conditions rural persons face in the regions where they live. These conditions, also referred to as “social determinants,” affect the ability of rural persons to access mental health care in their region (through insurance and income). Additionally, social determinants impact a region’s ability to attract and maintain mental health clinicians and helpers. Employment and socioeconomic conditions also shape local and regional cultures across rural America that influence whether and how people receive mental health care.

While the image of rural America as solely agricultural farmland has faded to a degree, a newer image has yet to replace it. This may be because the economy of rural regions of the United States has been diversifying since the mid-20th century and varies significantly across its broad landscape (Laughlin, 2016). The largest rural workforce is employed in education, health care, and social assistance (22.3%). Other significant areas of rural employment are manufacturing (12.1%); retail trade (10.9%); agriculture, farming, fishing, and hunting (9.6%); construction (8.4%); arts, entertainment, recreation, and accommodations, and food services (7.3%); public administration including military (5.9%); and transportation warehousing, and utilities (5.8%). Landscape, proximity to natural resources, and availability of workers influence which jobs are available across rural America. Manufacturing jobs are prevalent in the

Midwest, South, and East, while a more significant portion of the rural workforce in agriculture, farming, fishing, hunting, and mining are in the Midwest and West.

Rural America is older than urban America. In 2015, the average age of rural Americans was 43, and 36 for urban Americans. The 2016 Census Bureau Report highlights the implications of rural America’s older age structure on labor force participation (Cheeseman Day et al., 2016):

- There is a higher proportion of workers in their late teens and 20s in urban than in rural regions, and a higher proportion of workers in their late 50s and older in rural than in urban areas. Rural America has an older workforce than urban America.
- Labor force participation drops off after age 50. Rural older persons have lower workforce participation (59.2%) than urban older persons (64.2%). Rural America’s labor force participation is lower than that of urban residents across all age groups, unrelated to the availability of full-time, year-round jobs in rural areas.

Lower labor force participation and fewer jobs impose stress on rural residents, their families, and communities, which can contribute to mental health problems and constrain their ability to finance and access care.

Poverty is an essential marker of relative economic wellbeing for communities and has cascading impacts on the health of communities, families, and individuals. Persons living in poverty have fewer educational and job opportunities, and experience more mental health issues and problems due to the strains on everyday living that poverty imposes. People living in poverty have fewer financial resources with which to access health services, including mental health. Rural America has long had higher poverty rates than urban America

and, generally, the more rural the area, the higher the poverty rate. Rural-urban differences in poverty rates are even more pronounced among minoritized racial and ethnic groups (Economic Research Service, 2022):

- In 2019, the poverty rate was 15.4% in rural (non-metro) areas and 11.9% in urban (metro) areas.
- Rural Black residents had a higher poverty rate (30.7%) than Black residents of urban areas (20.4%). Rural American Indians had a very high poverty rate (29.6%) compared to urban areas (19.4%). Rural Hispanic residents had a higher poverty rate (21.7%) than urban Hispanic residents (19.4%). White residents had roughly half the rate of poverty than residents of color in both rural and urban areas.

Rural Mental Health

The prevalence of mental illness is similar in rural and urban areas, with slightly more than 20% of all persons experiencing a diagnosable mental illness over 12 months (McCall-Hosenfeld et al., 2014; SAMHSA, 2021). Higher rates are found for some conditions, such as depression, anxiety, and substance use in rural areas among specific subpopulations, including children, youth, and veterans. There was a larger increase in suicide over the last decade in rural areas than in urban areas (Ivey-Stephenson et al., 2017).

The major difference between rural and urban mental health is in the availability of treatment. Approximately 60% of rural residents live in a designated mental health professional shortage area (Health Resources & Services Administration, 2019), and 65% of rural residents live in a county without a psychiatrist (Andrilla et al., 2018). These percentages have been unchanged for decades.

Approximately 80% of psychiatrists and psychologists live in urban areas: a distribution that has remained unchanged for decades (Mohatt et al., 2006; Andrilla et al., 2018). By itself, these percentages do not constitute a rural–urban disparity, as approximately 80% of the American population lives in urban areas. The disparity emerges because rural Americans live across vastly wider geographic areas than urban Americans, making it more difficult for rural persons to travel to and access providers that are potentially available or outside of insurance coverage.

The chronic undersupply of mental health professionals, relative to need, has led rural America to turn to primary care and other non-specialty providers (including voluntary, emergency, and safety net providers) for their mental health care (Grazier et al., 2016; Lambert & Gale, 2012), as well as to turn to long-distance technologies, particularly telehealth (Lambert et al., 2016; Mace et al., 2018). While there have been successful models and programs for both integration and telehealth, the struggle to address mental health needs in rural areas of the United States is ongoing. As the literature reviewed in this volume shows, rural mental health has made progress and significant advancements. However, the factors contributing to mental health and substance use disorders, particularly economic and other social determinants, remain in rural regions of the United States.

Mental health is influenced by and embedded in social, economic, and cultural factors and events. These events may prompt crises in care but can also point the way toward improving care and treatment. The farm crisis of the mid- and late-1980s is an excellent example of this phenomenon. An economic downturn and changing international conditions drastically reduced the economic viability of small and mid-size farms. Traditionally, a family farm had often been passed down across many genera-

tions. The decision to sell a farm was perceived by many rural farmers not just as an individual personal failure but as a failure for both past and future generations. Depression and suicide among rural farmers increased dramatically during the crisis, as well as other mental health stressors and problems among farm families and communities. Farming requires great resilience, and farmers tend to be self-sufficient, often reacting to crises by working even harder. Turning to and accepting external mental health care was not something done readily or easily. The farm crisis spawned national policy initiatives to increase awareness and resources to address this crisis, as well as development of on-the-ground outreach mental health models.

While the farm crisis was over 30 years ago, lessons learned from that time can help us contend with broader economic and social events that impact the current and future state of rural mental health. Consider the conditions exposed by the COVID-19 pandemic. In the weeks between late February through mid-March 2020, America went from business as usual to shutdowns and quarantines. People fared differently during the pandemic depending on where they lived, their age, underlying health conditions, income, and ethnicity and race. Differences in health care infrastructure and resources played an important role, as did cultural and political differences in perception of both the seriousness of the pandemic and what could be done about it. Initially, availability of and access to vaccines were significantly more limited in rural than urban areas because of travel distance, infrastructure, and culture. COVID-19 impacted daily life for almost all Americans, with the prevalence of depression, anxiety, and substance use increasing significantly (SAMHSA, 2021). Persons in rural areas may be more adversely impacted by health crises in general than persons in urban areas (Cuadros et al., 2021). During the COVID-

19 pandemic, telehealth was increasingly used for mental health and other health services. The role of telehealth and other online technologies will likely become more important in the provision of rural mental health services in the years and decades to come.

The farm crisis and the COVID-19 pandemic will not be the only major external shocks to the social and economic life of rural America that adversely impact the lives and mental health of rural people. Climate change will directly impact the industries and businesses of rural America (Brugger & Crimmins, 2013; Lichter & Brown, 2011). As with the farm crisis and COVID-19 pandemic, we need to understand and anticipate how different groups of rural Americans may be affected.

The farm crisis and the COVID-19 pandemic will not be the only major external shocks to the social and economic life of rural America that adversely impact the lives and mental health of rural people. Climate change will directly impact the industries and businesses of rural America (Brugger & Crimmins, 2013; Lichter & Brown, 2011). As with the farm crisis and COVID-19 pandemic, we need to understand and anticipate how different groups of rural Americans may be affected.

Frameworks Used to Understand Rural Mental Health

Different frameworks have been used to describe the challenges of rural mental health and suggest strategies for addressing them. A framework of the “Three As” of Accessibility, Availability, and Acceptability was introduced as early as 1991 by Human and Wasem. This framework focuses on the different experiences of rural persons and their families with mental illnesses, and the problems and challenges they face in receiving the care they need

(Hogan, 2003; Mohatt et al., 2006; Wagenfeld et al., 1994). Accessibility focuses on the ability of rural individuals (relative to urban individuals) to get to and pay for care. Availability focuses on the likelihood that there is someone to provide care. Acceptability focuses on whether rural people are able and willing to enter and receive care that is accessible and available. Some may be reluctant to seek and enter care because of cultural stigma or attitudes, as well as a lack of cultural competence or culturally congruent service models that may prevent providers from delivering care appropriate for rural care seekers. Cultural competence involves understanding the context of how individuals perceive, recognize, and seek and accept care (or not) for health issues and problems. The concept and use of “cultural competence” is undergoing a significant revision, as discussed further in this chapter and in Chapter 2.

The “Three As” framework is relatively intuitive and easy to understand. Its value is in helping policymakers, practitioners, and researchers understand the challenges of rural mental health and provide context for addressing them. In recent years, the “Three As” model has evolved in the literature. Greene (2018) separates affordability from accessibility and stigma from acceptability, resulting in “Four As and an S.” The Rural Policy Research Institute adapted the “Four As and an S” into the outer part of a circular model with access, prevalence, and social factors at the center of the circle (Gale et al., 2019). Morales and colleagues (2020) observe that it is vital to go beyond describing or grouping factors long associated with rural–urban disparities to identifying areas where research can be focused on addressing these disparities.

The authors of this monograph considered which principles and frameworks to use when grounding the review of recent rural mental health practices and research. Within mental health literature and

health literature more broadly, there is increasing recognition of the need to consider both the “upstream” and “downstream” determinants of health. There is also increased recognition of the need to consider the different forces and factors that individually and collectively impact an individual’s health, as well as to understand the lived experiences of individuals and their communities. To ground our literature review, we draw upon the social determinants of health (SDOH) framework and focus on the context, intersectionality of structural position and identity, and the broadening of cultural competence to a multicultural orientation perspective (Davis et al., 2018).

Social Determinants of Health (SDOH)

We have long known that socioeconomic conditions affect a person’s ability to access, receive, and benefit from health care. This was perceived mainly in terms of some persons and groups not having sufficient financial resources, including income or insurance. These are significant barriers to obtaining health care. Public health and public policy have expanded their focus during the last decade onto the SDOH, which include “conditions in the environments where people are born, live, learn, play, worship and age that affect a wide range of health, functioning, and quality-of-life outcomes and risk” (Office of Disease Prevention and Health Promotion, n.d.).

The RHI Hub (n.d.), maintained by the Health Services Resources Administration (HRSA), describes SDOH in the rural context:

Income level, educational attainment, race/ethnicity, and health literacy all impact the ability of people to access health services and to meet their basic

needs, such as clean water and safe housing, which are essential to staying healthy. Rural residents are more likely to experience some of the contributing social factors that impact health, such as poverty. The impact of these challenges can be compounded by the barriers already present in rural areas, such as limited public transportation options and fewer choices to acquire healthy food.

The SDOH framework makes clear that different groups of people experience different health opportunities and outcomes due to their social and economic position. These differences result in health disparities. Addressing health disparities has also become a focus of public health and public policy. Marginalized racial and ethnic groups, or racial and ethnic minoritized (REM) individuals are likely to experience even greater health disparities because of their economic and social position (structural inequality) and problems of cultural understanding and sensitivity by health care providers, schools, and other social services (cultural competence). Broader acknowledgment of the problems and opportunities faced by different groups in American society has resulted in the call for equity and inclusion in health care, as well as in other social, educational, and economic activities.

Intersectionality

Intersectionality accounts for interlocking systems of power and privilege that make up the reality of our multicultural lives. Outcomes for people at the intersections of marginalized identities are often compounded and complicated by the disadvantages associated with each of the different dimensions of their identities. Focusing on any one experience in isolation (e.g., gender) blurs the nature of mul-

tifaceted lives where experiences in society are the result of an amalgam of different times and situations (Cho et al., 2013). The experiences of a person from a marginalized racial or ethnic group in rural America are informed by their ethnic heritage, migration pattern, language fluency, and resources. The conversation on intersectionality has begun to move from focusing on identity to considering systems of inequality that impact members of different marginalized social groups (Adames et al., 2018; Grzanka, 2020).

Cultural Humility

The use of the concept of “cultural competence” is shifting to an expansive view of multicultural orientation (Davis et al., 2018) in health care settings. Rather than viewing cultural competence as a set of standards of knowledge about “diverse” populations, this framework includes a way of interacting with others with cultural humility, cultural comfort, and cultural opportunities. Cultural humility promotes engaging with humble curiosity about the needs of people regardless of their diverse cultural backgrounds. This cultural orientation is achieved by engaging with relative ease or comfort with the contexts and situations impacting an individual’s life (Owen, 2013). It is important to remember that one’s origin or residence in a rural area is often itself a marginalized identity, with rural persons considered different from (and often as less sophisticated and competent than) urban persons. The cultural humility pillar of multicultural orientation will be used as a guidepost for this monograph, with an emphasis on the fact that to understand a “rural community” is to understand “one rural community.” Or in other terms, the strengths and challenges of each rural community are unique and must be treated as such.

Language and Terms Used in This Monograph

Language is an integral part of health care. Language should be as clear and precise as possible when used to describe diseases and conditions. Language should also be clear when describing the people and places involved in health care. Language can reflect the position and power of people relative to each other. There is increasing awareness within health care of the importance of person-first language. Persons with diabetes is preferable to diabetics. Persons with mental illness is much better than the mentally ill. Language describes different demographic groups; for example, the terms Indigenous People and Native Americans are historically more accurate than Indian or American Indian. Non-White Hispanic implies that the person is less than or inferior to a White Hispanic or a White person. Whenever possible, it is preferable to use terms that persons use to describe themselves, their lives, and their culture.

The use and nuances of language in health care, public policy, and our society have evolved since the first volume of *Mental Health in Rural America* appeared in 1979. In this volume, we strike a balance between using language and terms as they have been and are currently being used and how they are changing or are likely to change in the future. Among the most important terms are rural/urban, behavioral health/mental health, and racial or ethnic minoritized (REM) groups.

There are different definitions of rural used across government agencies, and, consistent with past volumes, rural and non-metro are used interchangeably, as are urban and metro in this volume. One definition of rural used much less often today than in the past is frontier. Frontier area denotes rural areas with the lowest population density. The

decline in the use of this term is partly due to the use of more sophisticated measurements, including travel and commute time. The term's diminished use may also be due to the fact that frontier can suggest an area more backward and less sophisticated than other areas.

Mental health and substance use are diagnosed and usually treated as separate illnesses and disorders. During the 1980s, it became increasingly evident that mental health and substance use often co-occur. Programs designed to treat these co-occurring problems were introduced in the early 1990s. Over time, the term behavioral health has gained prominence to refer to both mental health and substance use. Despite the overlap and co-occurrence of these disorders, treatment systems and funding streams tend to remain separate in rural and urban America. The terms mental health and substance use are still more commonly used than behavioral health in the literature. In this volume, we use the terms mental health and substance use separately but recognize their essential relation to each other and the implications this has for recognition, treatment, and prevention.

As rural America continues to become more diverse, it is important to use language that accurately describes this diversity and denotes areas of historical and cultural difference. Instead of referring to different racial and ethnic groups as non-White, we refer to them in terms of who they are rather than who they are not, including the use of terminology preferred in the present day, such as people of color (POC). We use the term pan-ethnic to refer to groups of people in terms of the geographic areas of origin and the positions of geography and relative power rather than explicit criteria of race. We use the adjectives minoritized or marginalized to note that groups do not only have fewer members than the majority group but are often forced explicitly and implicitly to occupy inferior positions than

majority groups. This volume also recognizes our growing understanding of sexual and gender differences among people, which is particularly important in understanding and addressing their mental health needs.

Preview and Format of the Monograph

While this volume uses a similar process and maintains the basic structure of previous volumes, we have made changes intended to enhance its usefulness in the future. First, we conducted key informant (KI) interviews with researchers, clinicians, and policymakers who are prominently and currently involved in rural mental health, to identify gaps in our research and knowledge and to understand their relative importance. These interviews were used both to guide the literature review and to inform recommendations. The process and summary of these interviews are presented in Appendix A and provide the foundation for many recommendations presented in Chapter 7. These interviews allow us to be more explicit in recommending future research areas than earlier volumes, by framing our findings with voices directly from the community.

As discussed earlier in this chapter, rural America is becoming increasingly diverse. In addition to describing this diversity in demographic terms, it is essential to understand its historical and cultural contexts, which are both interrelated and central to people's willingness to understand, seek, and benefit from mental health care. To augment this understanding, we have added a new chapter to this volume, Chapter 2, "The Many Faces of Rural America."

Chapter 3 presents the epidemiology of mental health and substance use in rural America, at both the population level and for specific groups, including children, veterans, and agricultural workers. Viewing

rural America through an epidemiologic lens connects mental health needs to where and how care can be provided. Chapters 4 and 5 discuss mental health service delivery. Chapter 4 focuses on organizational and clinical issues, and Chapter 5 focuses on workforce recruitment and retention.

Chapter 6 provides an international perspective, describing the context of, and approach to, rural mental health in other Western industrial countries, including Australia, New Zealand, Canada, and the United Kingdom. An international perspective can help us to see our rural mental health issues more clearly, including issues of human, geographic, and ecological diversity. The chapter also raises the question of what else we might learn from better understanding rural mental health in non-industrialized, largely rural countries. Chapter 7 focuses on moving rural mental health forward, first summarizing fundamental changes and gaps in the field identified in earlier chapters and then presenting a research agenda for addressing these gaps in the future.

Chapter 2: The Many Faces of Rural America

Many myths exist about who makes up the landscape of rural America, often leading to assumptions about the needs of rural Americans. It is time to revise our image of those who live in rural regions of the United States. Understanding the historical contexts and current demographic, cultural, and power dynamics can suggest opportunities for policies that support the wellbeing and quality of life of rural Americans. Chapter 1 highlighted the demographic trends of rural America. This chapter discusses the factors underlying these trends. This chapter also examines identity status beyond race or ethnicity, including persons with minoritized sexual orientation and gender identity. We use the term LGBTQIA+ to identify lesbian, gay, bisexual, transgender, queer, intersex, and asexual individuals as well as others who identify as non-binary, Two Spirit, and pansexual. We also discuss immigrant and refugee populations. This chapter describes how these identities and experiences intersect and may amplify marginalization. To understand the present and look toward the future, we must understand the upstream systemic forces and policies shaping rural America.

This chapter highlights mental health research and service gaps of historically marginalized groups in rural America, focusing on persons and populations who remain underserved. Historically marginalized groups' strengths and cultural assets are identified, and suggestions are presented for enhancing research, policies, and practices.

Factors and Forces Impacting Diversity

Rural tropes persist because rural America is less racially and ethnically diverse than urban areas.

However, rural America is becoming more diverse. People of Hispanic descent are the fastest-growing group, increasing by about 2% a year from 2012–2017 (Cromartie & Vilorio, 2019). Multiracial individuals were the largest growing group in non-metro counties from 2015 to 2020 (24.8%), followed by persons of Asian heritage (8.5%), Hawaiian or Pacific Islander (6.5%), and American Indian or Alaska Native (2.6%). The percentage of Black Americans in non-metro areas decreased by 2.4% and White Americans by 2% during the same five-year period (RHI Hub, n.d.). The statistics of racial diversity need to be evaluated critically. Administrative efforts to exclude undocumented persons in the 2020 Census caused fear in immigrant populations, which may have resulted in undercounting of immigrant communities in both rural and urban areas (Williams, 2020).

Historical and Intergenerational Trauma

Before the arrival of European settler colonizers to Turtle Island (the name used by some Indigenous people for North America), there was a wide and varied landscape of Indigenous tribes, cultures, languages, and complex communities, including advanced civilizations. Estimates of the pre-contact population of Indigenous communities range from 2–18 million inhabitants north of Mesoamerica (Thornton, 1997). The Indigenous population declined over 400 years to about 375,000 by 1900. The steep decline of American Indian populations resulted from a variety of causes, including the introduction of foreign diseases from Europe and Africa. Thornton (1997) observes that “Native American societies were removed and relocated, warred upon and massacred, and undermined eco-

logically and economically” (p. 311). As Dunbar-Ortiz (2014) describes, “U.S. history, as well as inherited Indigenous trauma, cannot be understood without dealing with the genocide that the United States committed against Indigenous peoples” (p. 8). Even into the 20th century, the ending of explicit termination policies in the United States gave way to legislative, policy, and treaty initiatives to erase Indigenous sovereignty and territorial rights, including forced assimilation and “modernization” of Indigenous children through government boarding schools where children were not allowed to speak their Native languages, wear tribal clothing or hair, see their families, or practice traditional cultural and spiritual rites.

Today, there are close to 600 federally-recognized Indigenous nations, communities, and tribes representing 5.7 million people in the United States (American Indian/Alaska Native Health | Office of Minority Health, n.d.). This is a precipitous decrease from this land’s original 15 million inhabitants. Another 400 tribes do not have official federal or state recognition (Dunbar-Ortiz, 2014). The subjugation of Indigenous people and the importation of enslaved people provided the labor force for the growing capitalization and growth of the Americas. This history—including slavery, genocide, conquest, and racial subjugation (Lichter, 2012)—provides the context of intergenerational trauma experienced by many of the REM communities that make up rural America.

American Indian populations (the official U.S. Census name for the Indigenous people) are concentrated in the Mountain West and Southwest as well as Alaska, where many of the largest territories and sovereign nation land holdings of Indigenous peoples exist. Rural Black Americans are concentrated in the Southern United States, where enslaved African people were imported, and where slavery and indentured service supported much

of the agricultural industries of the region. Substantial economic wealth was created from New World crops such as cotton, tobacco, sugar, rice, and wheat. There is a significant overlap of socioeconomic disadvantage, poverty, and race in the southeastern United States. The location of rural Asian populations is scattered more widely, related to historic and ongoing immigration waves of labor in agriculture and railroads. Hispanic Americans are most heavily concentrated in the Southwestern United States, in and near areas which were seized by the United States from Mexico in 1848 following the Mexican–American War. Hispanic Americans are increasingly concentrated across the Great Plains and the Midwest as well.

While rural areas are the setting for historical and intergenerational trauma, they may also provide a source of strength for healing from trauma. Potential benefits for those living in rural areas revolve around experiencing a greater sense of place. Americans are highly mobile, averaging 11 moves in their lifetime. However, many people in rural areas are more likely to stay within a 30-minute drive of their birth, with 37% of rural Americans never leaving their hometown and 57% never leaving their home state (Warnick, 2016). Rural Americans are more likely to have longstanding ties to the areas where they live, increasing the fabric of their social networks and ability, or necessity, to collaborate with neighbors and within communities. Rural Americans are also more attached to their local geographic, environmental, and social landscape (Galambos, 2005). With a rapidly changing climate, these ties help us understand and develop solutions for ecological stability and strengths that help facilitate mental health services in rural America. Sources of traditional ecological knowledge may also help people return to living in balance and symbiosis with our ecological world as human beings, practices to which Indigenous tribes and cultures worldwide have long ascribed (Middleton et al., 2020).

Systemic and Institutional Issues

Social and economic inequities that impact access and utilization of health care for rural Americans, especially for REM, include “access to equitable education, income and poverty levels, insurance status, broadband access, preventative care access and utilization, and veteran status” (Rural Health Research Gateway 2020, p. 1). Sixty-six of the 100 United States counties with the highest childhood poverty rates were in majority-REM counties. In 2016, almost 40% of American Indian rural residents were without broadband access (the highest rate among demographic groups), followed by Black, Hispanic, White, and Asian Americans (Rural Health Research Gateway, 2020). Access point disparities are systemic. Institutional issues prevent rural Americans from obtaining or using relevant information, keeping them from resources potentially available to them and hindering telehealth solutions in these regions. Lack of broadband access also limits training and educational opportunities, which are increasingly being delivered remotely.

Marginalized and Minoritized Populations

The rest of this chapter reviews historically underrepresented groups in rural America and suggests areas for research to address health disparities and inequities. Each section takes a cultural strengths approach, reframing the focus from constraints and deficits to include group strengths and potential areas for intervention. Research, policy, services, and future directions are framed from the multicultural orientation framework with a strong intersectionality lens. The available literature varies widely across groups. Although the literature base continues to grow, research gaps persist, particularly in

meeting the mental health needs of Asian American, LGBTQIA+, and disabled rural Americans.

Indigenous Populations

Opinions vary on whether Native American, American Indian, Native American Indian, Indigenous, Indigenous American, or other designations are more affirming and appropriate. Ideally, it is best to refer to Indigenous populations by their tribal names in that tribe’s native language (Mihsuah, 2010). However, it is often not practical to do this for the 566 federally recognized tribes in the United States. Although not always the preferred term by Native peoples, we use the terms American Indian or Alaskan Native (AI/AN) when used by U.S. Census designations of race or when used by a publication. Where sources use other terms, that language is retained.

There is a lack of quality research on evidence-based practices (EBPs) for addressing mental illness and substance misuse among Native Americans. In their review of evidence-based practices, Gone and Alcántara (2007) found that over half the articles meeting initial search criteria were opinion or reflection pieces on how to improve therapeutic services to be better suited to Native American worldviews and experiences, rather than focused on outcomes or the standards expected of evidence-based treatment.

Rates of trauma, both of acute diagnoses of PTSD and experiences of chronic and generational trauma, are higher for American Indian populations. The National Comorbidity Study found that 12.8% of Southwest tribal members and 11.5% of Northern Plains respondents met the criteria for a diagnosis of PTSD at any point in their lifetime, compared with 4.3% in the general population (Center for Substance Abuse Treatment, 2014). Many dispari-

ties in mental illness rates among American Indian populations may be due to underlying experiences of historical or intergenerational trauma, which are expressed as grief, PTSD, depression, and comorbid substance use disorders (SUD) (Brave Heart et al., 2011). Experiences of abuse, violence, and threats of violence are associated with the development of PTSD and are shared among American Indian women and girls. One in three American Indian women and girls has been sexually assaulted during their lifetime—the highest prevalence of any racial or ethnic group. American Indian veterans have higher rates of PTSD than other veterans. The prevalence of lifetime PTSD of AI/AN Vietnam-era veterans was significantly higher than for White men of the same generation. Rural American Indian veterans had double the rate of other rural veterans being seen for mental health reasons on their last visit (Goss et al., 2017).

The high rate of substance use among American Indians is widely known, although the historical context of this use is often overlooked (Blume, 2021). AI/AN populations have both the highest rates of binge drinking of any racial group and the highest alcohol abstinence rates among ethnic groups (Center for Substance Abuse Treatment, 2014). It is helpful to consider the attitudes and experiences that foster abstinence for many American Indian community members and how multiculturally oriented systems may promote public health interventions and messaging.

There is substantial variation in substance abuse across tribes and individuals. SUD varies more widely among women by tribal affiliation than among men. American Indians are 1.4 times more likely than White Americans to have an alcohol use disorder (Center for Substance Abuse Treatment, 2014). The 2019 National Survey on Drug Use and Health (NSUDH) found that 10.2% of AI/AN people older

than age 18 had SUD, 18.7% had a mental illness, and 3.8% had comorbid disorders (SAMHSA, 2020).

Opioid use is a growing concern across all racial groups, particularly in rural communities. AI/AN populations have the second highest mortality from opioid use disorder (OUD) after White populations despite being the smallest REM group. Services need to be adapted along the continuum of care that are culturally appropriate for AI/AN populations (Mpofu et al., 2022). Medication-assisted treatment (MAT) is a life-saving intervention with high efficacy that should be culturally adapted, along with strategies around naloxone training and distribution, and incentivization of contingency behavior. Prevention focusing on family and community-based education is needed for both prescription and non-prescription users of opioids in the AI/AN rural community (Mpofu et al., 2021).

AI/AN adults have a 20% higher death rate by suicide than non-Hispanic White adults (Office of Minority Health, 2021). This rate is higher than any other racial group (SAMHSA, 2020). Suicide rates among AI/AN are exceptionally high for those in their teens and early 20s and for persons ages 25–44.

Gray and McCullagh (2014) discuss a variety of potential risks as well as protective factors for suicide within American Indian communities. Risk factors include socioeconomic factors (increased poverty, decreased educational or economic opportunities) and social factors (social isolation, bullying, gang involvement, and friends and family who have attempted or died by suicide). Protective dynamics include cultural identity and a sense of belonging, which can be enhanced through family and community support, increased cultural involvement in traditional practices, and an increased sense of contribution through civic engagement in the community. Interventions to bolster these social factors

can promote self-esteem, increased self-efficacy, belonging, and educational and occupational aspirations.

The Zero Suicide Initiative provides empirical resources for eliminating suicide in Indian Country (Isaacs et al., 2005; S. Rowe, personal communication, 2019). This nationally disseminated toolkit focuses on adapting and implementing the Zero Suicide framework across seven domains. The framework promotes cultural humility in interactions with the American Indian community. Much of the current evidence base for suicide prevention, and for behavioral health treatment more generally, has not been validated or adapted for use with American Indian populations.

Future Directions

There is a significant gap in the literature on mental health services for Indigenous populations. The lack of evidence-based treatments is a major barrier to addressing the mental health needs of American Indians, particularly in using and adapting traditional clinical and medical approaches that are congruent to Indigenous ideology and experience (Gone and Alcántara, 2007). A study of Osage participants in a rural community mental health center found that if providers are not able to meet tribal clients' expectations of how to heal their mental distress, treatment may not be effective (Aubuchon-Endsley et al., 2014). Assessing the client's worldview and expectations of therapy can guide the form of psychoeducation or approval from the therapist based on the individual's preferences. Additional suggestions include integrating Native American cultures and worldviews, such as the inclusion of discussions of spirituality and the incorporation of traditional healing into psychotherapy (Aubuchon-Endsley et al., 2014).

Many of the cultural issues and challenges of mental health care for Indigenous populations may be greater in rural areas. In small communities with relatively small Native populations, concerns include expectations of privacy and perceived stigma to seeking behavioral health care. Conversely, this close-knit community tie can also provide cultural strength to promote intervention in supporting the health of Indigenous populations. Opportunities to engage family, community, and group intervention should be considered, including using volunteers, peers, and patient navigators within the community.

Black and African American Populations

Black Americans have reported rates of mental illness lower than White Americans (Alvarez et al., 2019; SAMHSA, 2020). Explanations for this difference include stigma around mental illness in communities of color, decreased reporting due to institutional or systemic barriers which decrease the likelihood of presenting for treatment, less acceptance of mental health disorders as explanations of distress (compared to physical symptomatology), and lack of culturally attuned treatment and providers. There is some evidence that rural Black Americans may experience greater mental health distress than urban Black Americans (Haynes et al., 2017; Murry et al., 2011).

Murry and colleagues (2011) studied the perceptions and barriers around help-seeking and mental health care in rural Georgia. Mothers of rural African American children expressed confidence in mental health care providers, with 95% reporting that they were not embarrassed about seeking help for their adolescent children. Mothers also reported that their preferred sources of support come from family, church, and schools. Many study participants expressed concerns about stigma among members

of their community, alienating their children and raising concerns about how mental or behavioral health disturbances would reflect on their families. Participants also reported a lack of access to resources, or access only to low-quality care resources. These contradictory findings around stigma and reported “cultural mistrust” between the community and providers suggest that increasing education and fostering community openness about mental health issues and treatment are possible areas for targeted intervention.

Institutional barriers and poverty play significant roles in the incidence and treatment of mental and physical illness. The rural Black population has the highest rate of poverty of any racial group, including both the highest share of residents living in high poverty counties across the rural United States (75.1%) and the highest proportion of residents living in persistent child poverty counties (63.9%) (Rural Health Research Gateway, 2020). Deep poverty in rural America and its concentration within Black communities create barriers to mental health treatment, including lack of financial resources to seek health care, lack of health care literacy, and under-insurance. These findings are particularly troubling for children, given the increased incidence of mental health distress among adolescents and young adults. Policies and initiatives to improve rural mental health for Black Americans should consider the intersection of poverty and racism. Proposed solutions should address underlying poverty and support job creation and educational opportunity, as well as supporting direct care systems and services. Mental health service delivery should be modified to include co-location within schools, community centers, and natural supports.

Future Directions

Research is still largely lacking on the mental health of rural Black Americans. The literature review conducted for this volume found that most studies on rural Black mental health are from the 1970s–90s, with relatively few new studies since the last edition of the monograph. This research gap notwithstanding, recent research has added to the knowledge base. Haynes and colleagues (2017) identified potential interventions based on interviews with key stakeholder groups (including college students, primary care providers, and faith community members) in the Arkansas Delta. The interviews revealed that barriers to mental health care include limited knowledge about mental health, stigma, confusion, and obstacles in accessing mental health systems. Suggested interventions include large-scale public education around mental and emotional wellbeing to increase mental health literacy, community-based intervention, and access points (e.g., integrated primary care). Possible avenues to improve access to care could also incorporate community-based mental health services and service delivery in nonclinical settings like houses of worship, community centers, and schools. These interventions can employ non-specialized employees and volunteers to destigmatize care and provide basic mental health education programs, including peers who have also experienced mental health problems.

Asian American Populations

Research on the experiences of Asian American and Pacific Islander (AA/PI) rural populations in the United States is sparse. There is much more research on rural Asian and Pacific Islanders worldwide and within Asian countries than in America. Kiang and Supple (2016) note that “virtually nothing is known about the Asian youth and families who

are increasingly settling in new immigrant communities and rural areas of the USA” (p. 72). Recent research on immigrant populations in rural America focuses more on Latin than Asian persons.

The experiences of AA/PI vary, with many countries, languages, ethnicities, cultures, faiths, and immigration backgrounds represented within the “Asian American” experience. The racial designation of AA/PI includes cultural backgrounds from the most populated continent in the world, including East, South, Southeast, Pacific Island, Central, and Western Asian nations. Asians have a storied history of immigration in the US, including histories of exclusion and explicit discrimination barring Asian immigration. The Hart-Cellar Act and other initiatives opened the door to immigration from Europe, Latin America, Asia, and Africa. There are significant differences in economic class and educational background among AA/PI immigrants, especially in recent immigration waves where skilled laborers were granted visas and citizenship to obtain higher education and fill shortages in skilled technical and scientific jobs. Recognizing this heterogeneity is essential for research and policy development.

Future Directions

The increase in AA/PI populations in rural America is driven by various factors suggesting differing life experiences. There are differences among recent immigrants seeking a rural area for economic opportunity, the second generation of Asian Americans born to Asian parents in rural America, and individuals relocated to rural America through the refugee and resettlement process, often without a choice of location. Many jobs in rural America are labor jobs in manufacturing, ranching, farming, mechanical or agriculture work, and food service. The confounding factors of race, immigration status, language fluency, and educational background

may dictate the economic opportunities available to many Asian Americans in rural areas, further stratifying communities within rural towns by ethnic background. Competition may emerge between ethnic groups by employers and politicians as rural areas experience a “brain drain.” To address the mental health needs of AA/PI individuals, it is crucial to understand the changing mix of culture, language, and economic opportunity.

The variety of languages spoken by Asian American populations poses another challenge. Telemental health (TMH) interventions are limited by the availability of providers or interpreters to provide linguistically and culturally tailored care. A needs assessment for telepsychiatry in rural northern and eastern California identified a wide variety of languages spoken (including Mandarin, Cantonese, Vietnamese, and Tagalog) as a barrier to serving Asians (Hilty et al., 2015). Some ethnic groups with ties to agricultural production, such as Hmong and Cambodian populations, are more concentrated in rural than urban areas (Conger et al., 2016). This poses additional challenges to the broader implementation of TMH, given the lack of providers who speak specific languages or are familiar with the cultures of the different populations.

Social perception is a factor in understanding the increasing diversity in rural America. Isolation and feelings of loneliness are critical drivers of mental illness, suicidality, and substance abuse. Campaigns and public health interventions should focus on improving the social perception of addressing mental health, the strengths of diversity, and the benefits of being socially connected to one’s community (Kiang & Supple, 2016, p.83).

Latine and Hispanic Populations

The Latine population is the largest sector of rural REM and immigrants in the nation (Cromartie & Vilorio, 2019). The Latine population engages in fewer mental health services than non-Hispanic Whites despite similar illness prevalence. This difference is even more pronounced in rural communities, where the population of Latine residents is increasing, without a corresponding increase in the use of clinical services (Gonzalez et al., 2021). The Latine population relocating to rural areas for increased economic opportunity may face health risks from having larger families than other immigrant groups, often with an average younger age and frequently living in intergenerational, mixed households (Stone et al., 2022). Intergenerational family structures often require navigation of issues such as immigration status, language, acculturation, and the uncertainty of engaging in seasonal or unbenefited work. Studies on the rural Latin American experience are centered in the Southern United States, in North Carolina, and in Texas and the Western United States, particularly California (Stone et al., 2022). These studies suggest that “work-related stress [is]the primary cause of health concerns, particularly for rural Latinos employed on farms or at manufacturing plants” (Stone et al., 2022, p. 8). Additional physical and mental health stressors can include unsafe working conditions, as well as a lack of access to parks and recreational space, grocery stores and nutrition, social and community spaces, housing, transportation, internet infrastructure, medical care, and school infrastructure.

Hispanic persons are the only ethnic group officially measured and recorded in the U.S. Census. “Hispanic” was the original term used to refer to those of Spanish descent, which includes those from Spain, but would exclude populations such as Portuguese-speaking Brazilians or Creole speakers in Haiti. The shift in the 1960s and 70s towards Latino

was a by-product of effective campaigning to create political unity and activism for those of Latin American descent and to move away from the colonialist roots related to the Hispanic designation (Lopez Torregrosa, 2021). Latino promotes inclusion of all Latin American countries, including North, Central, and South America. The term includes non-Spanish speakers from Latin America, including the Caribbean and South America. Though Hispanic and Latino continue to have different meanings, they are often lumped together into one ethnic category.

Slemp (2020) presents a comprehensive review of the differences between Latino/a, Latin@, Latinx, and Latine, outlining the historical factors in a timeline of linguistic progression and describing current discourse on preferred nomenclature. Latinx began to emerge in the early 2000s as a rejection of the gender binary and automatic masculine plural gendering in Spanish, which uses the masculine form to denote a group of any size that includes at least one masculine person. The term Latinx is more popular within the United States rather than in Latin America, although it is also used across Canada and European countries (Salinas Jr, 2020). However, the term is difficult to pronounce and seen as an anglicization more familiar to English speakers than to native Spanish speakers themselves. Conversely, many scholars also claim Latinx as an homage to the erased Indigenous experience, for example, in the Nahuatl and Zapotec languages.

Future Directions

Cristancho and colleagues (2016) provide a roadmap for community mental health services to Latine individuals within various community settings across non-metropolitan areas in Illinois. Recommendations are based on a focus group and community survey and assume a small-budget strategy for implementation. Recommendations include a speaker series on depression and stress,

social support groups, sports leagues, language, cooking, and computer classes to combat isolation and loneliness, and a health fair and recreational physical activities like walking clubs. Mental health topics in high demand for rural Latine communities include bilingual services on parenting, cultural adaptation, acculturative processes and sexuality.

Stone et al. (2020) conducted a review of the built environment for rural Latinos. Their work offers important policy recommendations to create and maintain a culture of health for rural Latinos, including extending insurance coverage to the undocumented, increasing recruitment and retention of Latino health care workers, expanding TMH interventions to increase access, and strengthening networks of community health workers and mobile clinics to expand in-person services delivered locally and across the continuum of care. Hilty and colleagues (2015) studied the cultural-linguistic barriers present in TMH centered in rural California.

Gonzalez and colleagues (2021) investigated the role of lay health workers, known as *promotores de salud*, in their efficacy of health advocacy and positive mental health outcomes in rural California. *Promotores* were seen as promising interventionists for health education around depression and anxiety and could deliver services with reduced stigma and increased trust among rural populations. In this way, task-shifting engages lay health workers to identify common mental health disorders and offer behavioral therapy techniques. Such interventions may be particularly appropriate within rural Hispanic culture as a less stigmatizing way to seek support outside specialty clinics.

Underlying each suggested intervention is the importance of creating a community culture that promotes collective and family values that resonate with different Latin families. As Crouch and colleagues (2022) describe:

While many rural Hispanic families may have lived in their communities for generations, other rural Hispanic families have immigrated to their community and may be noncitizens or undocumented. This limits their interaction with and attachment to their local community, further exacerbated by cultural and language barriers. This dynamic can create the perception and/or the experience of an unsafe living environment in which rural Hispanic families feel hostility from their neighbors, experience residential segregation that limits access to resources and is subject to anti-community ties. (p.135)

Fostering community ties between cultures, races, and social strata is essential, particularly within collective cultures that value connection and interdependence.

LGBTQIA+ Populations

As noted earlier, we use the acronym LGBTQIA+ to identify lesbian, gay, bisexual, transgender, queer, intersex, asexual individuals and others, such as those who identify as non-binary, Two Spirit, and pansexual. Defining the LGBTQIA+ community is complex for a number of reasons. First, this umbrella term includes both gender identity and sexual orientation. First, biological sex and gender identity are not synonymous. The biological anatomy that someone is born with does not dictate their gender identity. Gender identity is socially constructed and includes how individuals view themselves on the gender spectrum. Gender identity can include but is not limited to cisgender (gender identity matches the biological sex assigned at birth), transgender (gender identity is different than the biological sex assigned at birth), gender non-binary (gender identity that is fluid between the typical gender binary of woman and man),

or agender (gender identity does not align with the greater social understanding of the gender binary).

Sexual orientation refers to an individual's sexual or romantic attraction to others. Sexual orientation includes but is not limited to gay (men loving men), lesbian (women loving women), bisexual (loving both men and women), pansexual (loving regardless of gender identity), as well as asexual, indicating an individual may not be interested in sexual behavior (does not necessarily include intimacy, romantic feelings). The terms given as examples are not comprehensive, and it is best to refer to individuals as they refer to themselves. These broad categories are limiting in some ways, as people's gender identity and sexual orientations are expansive and evolving. Research refers to combinations of the letters in the LGBTQIA+ acronym (e.g., LGBT, LGBTQ, etc.). The aim of providing these descriptions is not to put people into boxes, but rather to provide a framework for those hoping to understand the experiences of LGBTQIA+ people in rural communities.

According to the Movement Advancement Project (MAP), 2.9 to 3.8 million LGBT individuals reside in rural regions of the United States. As with other minoritized populations discussed in this text, it can be difficult to provide an accurate number of these individuals due to fears of discrimination that may come with honestly reporting these identities. MAP cites some of the challenges these populations may face in rural communities, including negative public opinion of these identities, discriminatory laws and fewer legal protections, and limited political representation. LGBTQIA+ individuals are located in rural regions of the United States for much the same reason heteronormative cisgender individuals are, including family ties, close-knit communities, and connection to land (MAP, 2019).

Rurality is an essential factor in understanding strength and health outcomes for diverse sexual ori-

entation and gender identity populations and individuals. There are significant differences in the experience of sexual minorities in rural and urban areas that correlate with and impact mental health. Rickard and Yancey (2018) found that sexual minorities in rural areas across the United States reported higher lifetime experiences of victimization and discrimination, significantly greater identification with fundamental religious beliefs, being less comfortable in disclosing their sexual orientation, experiencing less perceived social support, and weaker identification with and involvement in the LGBT community than their non-rural counterparts. Fisher et al. (2014) also found that rural participants in Nebraska significantly differed from their urban counterparts in a number of social determinants of health, including being out to fewer people in their personal lives, lower levels of self-acceptance (and higher levels of internalized homophobia), as well as higher rates of depression. A review of health disparities for rural LGBTQIA+ people found that only one of 19 studies of health outcomes reported that rural participants had higher happiness and wellbeing scores than urban participants. Results for mental health and substance abuse outcomes were consistently either worse or mixed/neutral for LGBTQIA+ populations (Rosenkrantz et al., 2017).

It is important to examine more discretely different sexual and gender-minoritized (SGM) communities. Barefoot and colleagues (2015) found that lesbians are more likely than gay males to live in rural America. Several reasons are suggested for this finding: increased privacy and freedom afforded by geographic isolation in rural areas; lower cost of living in rural America coupled with the lower income that lesbian couples are likely to have; and the higher likelihood of having children, which may make economic factors an even more prominent consideration for lesbians than gay men. Although social isolation is an issue across rural America, minimal support can often be enough to

improve mental health outcomes. Such support may include having at least one family member, one LGBT community support space, or frequent interactions with LGBTQIA+ supportive friends.

Horvath and colleagues (2014) examined 1,229 transgender rural Americans and found that transmen reported significantly more depression, somatization, overall mental distress, and lower self-esteem than non-rural transmen. The MAP (2019) offers an excellent series of reports on rural LGBTQIA+ needs and services, entitled “Where We Call Home.” The project provides comprehensive reports on specialized communities, including LGBTQIA+ people of color and transgender people. Rural transgender and gender non-conforming (TGNC) individuals are three times as likely to have a disability as their cisgender rural peers and half of all transgender people of color have a disability (Movement Advancement Project, 2019). As with transgender people in metropolitan areas, rural TGNC persons are more likely to be a veteran (18% vs. 10%) as well as more likely to have a college degree (39% vs. 22%) than their rural cisgender peers while still being two to three times less likely to be insured (MAP, 2019).

Compared to urban areas, TGNC people face barriers to care in rural areas, including amplified visibility, larger ripple effects from rejection, fewer alternatives for health and service needs, and less overall support structure due to social and geographic isolation and fewer resources (MAP, 2019). While more than half (54%) of TGNC adults live in majority-rural states, including 41% of all transgender adults residing in the South, rural states are also less likely to offer discrimination protections in areas such as in life-affirming medical treatment, employment, and housing. This lack of services and protections exists despite the support of a majority (62%) of rural residents. (MAP, 2019). One avenue for intervention is in policy initiatives that

are not in line with evidence bases for TGNC affirmative health care.

Future Directions

A lack of research and data is a significant barrier to understanding and meeting the needs of LGBTQIA+ persons in rural America. The U.S. Census does not include questions about sexual orientation and expansive gender options. Much of our information is from the National Longitudinal Study of Adolescent Health or the Behavioral Risk Factor Surveillance System Survey. Many studies continue to be qualitative, making it difficult to draw generalizable conclusions about the SGM population. Longitudinal studies are also in short supply, as are coordinated efforts to improve health care access (Rosenkrantz et al., 2017).

A survey in rural and Appalachian Tennessee found that while medical providers endorsed caring for LGBT patients, over half reported that they did not feel competent to treat LGBT patients. Physicians reported not receiving adequate training with this population (Patterson et al., 2019). A promising intervention is trained peer advocates offering community-based strategies for broader outreach (Willging et al., 2018). A randomized study of brief expressive and affirmative narrative interventions for 108 “sexual minority” young adults found significant reductions in depressive symptoms, psychological distress, suicidal ideation, and drug abuse, which were maintained at three-month follow-up (Pachankis et al., 2020).

Considering the intersectionality of age and LGBTQIA+ identity, Lee and Quam (2013) corroborated differences between urban and rural populations in outness and income, although not in the amount of support that SGM older persons experience. The authors suggest that many queer and trans elders have selected chosen families

and develop care networks within rural areas that promote financial stability and aging-in-place in inventive ways. Policies that specifically seek to support aging LGBTQIA+ individuals and families, as well as service providers actively seeking to connect rural queer elders, can significantly impact on health and belonging. These considerations are particularly important since rural America tends to be older than urban America. Inclusive practices include affirmative signage in buildings, in outreach materials, gender-neutral language in intake forms and diagnostic interviews, and refraining from making assumptions about older adults' gender, sexual orientation, and family practices, which can help alleviate these disparities for the rural gender and sexually diverse.

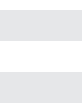
More research is needed on the experiences of TGNC individuals within rural America, as well as on bisexuality and other plurisexual (i.e., pansexual, queer), as opposed to monosexual (i.e., gay, lesbian), identities. Further intersections of identity should also be explored based on some of the growing findings amassed here. For example, more data is needed regarding the intersection of disability, REM, and poverty, as well as more strategic sampling of sexual orientations and genders. Such data would expand our knowledge and understanding of the needs of the broader rural LGBTQIA+ population, and could serve as a foundation for appropriate policy, services, and public health education.

Promising Directions and Next Steps

How can we offer community-engaging services in culturally relevant ways that also align with the values of the rural Americans within a region? The rural United States is diversifying, and the needs of rural Americans are likely to change dramatically in

the next 20 years. There is limited research on evidence-based practice in rural areas in general, much less for different, often marginalized rural populations. It is important to consider the unique cultural context of rural America itself. Some components of rural residency may be protective against mental and behavioral health disorders (McCall-Hosenfeld et al., 2014). We must study areas of strength associated with life in rural America to inform health intervention. Promoting mental health with interventions focused on place attachment, fostering a stronger sense of community within rurality, and senses of resourcefulness and interdependence are points of cultural leverage in rural areas that demonstrate culturally humble and attuned intervention. Debunking myths about mental health will enhance upstream efforts to address the stigma that often contributes to silent suffering and delays in seeking care. Rural mental health research is critical in developing both needed infrastructures and an evidence base to support further improvement and innovation. A research–practitioner approach to addressing rural mental health disparities can provide sustainable and effective solutions for individuals and communities.

Research into marginalized rural communities should focus on the intersectionality of experience and attending to the multifaceted needs of rural Americans (e.g., REM with a disability, Spanish-speaking immigrant who is TGNC). This research can support the delivery of comprehensive, affirming, and culturally humble services, which will ultimately be more effective. Among the most neglected communities within rural research are Asian Americans, those who experience disability, LGBTQIA+ identity, and those in deep poverty. Culturally adapted EBPs, drawing on inherent strengths and strongly held aspects of culture, will likely be more effective in deepening our understanding of the strengths within rural communities



and places. Incorporating those strengths of rural life into outreach, education, and treatment will enhance their efficacy. Interventions that deepen a sense of place and attachment to the local community and reinforce local ties can help heal our physical environment and improve our mental and emotional health.

There are opportunities to increase diversity as a strength of a rural community by providing opportunities for engagement to combat loneliness and social isolation, as well as increasing collective wellness. Bolstering accessibility through a wider continuum of care is also needed, including expanding broadband internet access to enable mobile community-located services, telehealth and app-based interventions, and training and employing mental health peer support with non-professional degrees. Interventions in telehealth and community-based delivery can expand the reach of mental health services, but interventions must be done in culturally humble ways. Potential sources of natural and community support include family units in schools, places of worship, within the workplace, local recreation centers, sports leagues, leisure activities, and more, including intervening within the justice system and jails/prisons.

Chapter 3: Viewing Mental Health and Substance Use in Rural America Through an Epidemiologic Lens

The prevalence of mental health disorders in rural areas is similar in rural and urban areas but varies among certain types of rural communities and specific population groups. Alcohol use tends to be somewhat higher in rural areas, and drug use somewhat higher in urban areas. Substance use disorders also vary among specific rural population groups, including youth and young adults. Understanding the epidemiology of mental health and substance use disorders in rural and remote areas is important for a number of reasons. At the population level, research provides information on the magnitude of the problem, which is important for developing policy and directing funding. At the community level, understanding the prevalence and context of these disorders and looking more closely at distinct types of rural communities and population groups can suggest what types of interventions and services may be helpful and under what conditions.

This chapter takes up the discussion of social determinants of health, introduced in Chapter 1, to sketch the context for understanding mental health and substance use prevalence in rural areas. Next, we describe the opportunities and challenges for assessing mental health and substance use prevalence in rural areas. Then, we discuss the prevalence of mental health disorders in rural areas, by type of disorder and among specific rural populations. The second half of the chapter covers the prevalence of substance use disorders in rural areas in general, as well as by type of disorder and for specific rural populations. We conclude by noting the research and data gaps in the epidemiology of mental health disorders and substance use in rural America and among rural people.

Social Determinants of Rural Mental Health and Substance Use

Socioeconomic conditions can impact a person's health and their ability to access, receive, and benefit from mental health care. Until recently, these conditions have usually been considered in terms of having access to sufficient financial resources, including income or insurance. As described in Chapter 1, public health and public policy have expanded their focus during the last decade to the social determinants of health (SDOH), which include "conditions in the environments where people are born, live, learn, play, worship and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks." These conditions include economic stability, education access and quality, health care access and quality, neighborhood and built environment, and social and community context (Office of Disease Prevention and Health Promotion, n.d.). The SDOH framework is relevant to mental health, particularly to rural mental health, although incorporating this framework into rural mental health is only in its early stages. Social and economic factors influence the likelihood that a rural person will experience mental health problems and symptoms, as well as their likelihood of recognizing their symptoms and seeking or accessing treatment. Environmental factors, such as climate change, are almost certain to impact the economic structure of rural America, increase stress, and undermine the everyday security of many rural people.

We understand mental health and substance use prevalence best when we consider the context of social factors. The incidence and trajectory of mental health symptoms are heavily impacted by the social capital and resources to which individuals and communities have access. These factors interact in complex, reciprocal patterns that are often difficult to disentangle (Alegría et al., 2018). To better understand how these factors influence one another, Reid (2019) presents a framework depicting rural health, including mental and behavioral health, as “framed by the geography and history of place, impacted by the politics and economics of a region, and experienced as socially and culturally distinct” (p.8). This framework highlights that context is not simply a component of understanding and addressing rural mental health issues, but rather is vital in establishing and maintaining effective initiatives.

A specific example of the importance of context is the work of Benda and colleagues (2020) that proposes that broadband internet access (BIA) be included in the framework of SDOH, stating “reduced BIA [...] has the potential to exacerbate this country’s existing health disparities because it disproportionately affects those who are already vulnerable” (p.1123). This analysis underscores that using technology to address mental health disparities in rural areas runs up against other resource constraints that vary among, and are experienced differently by, demographic groups.

Geography can compound matters. Rural and remote populations are spread out across vast stretches of physical land, which presents unique challenges for how people experience their mental health. In this chapter, we consider the implications of geography on the mental health of rural people. In the next chapter, we discuss how the challenges of physical location affect how rural people receive

treatment. While remoteness may be considered a physical determinant of health, isolation impacts psychological and emotional experiences. It can be a risk factor for mental health symptom severity while also providing context through which individuals and communities build hope, strength, and resilience. As we consider the prevalence of mental health in rural America, statistics should be viewed through a contextual lens.

Assessing Mental Health and Substance Use Prevalence in Rural Areas

Surveys and studies of mental illness consistently find that at least 20% of all Americans experience a mental health disorder in a given year, and at least twice as many Americans experience a mental health disorder over their lifetime (Kessler & Ustun, 2008; McCall-Hosenfeld et al., 2014). However, getting more precise estimates can be challenging and prevalence estimates vary (Bagalman & Napili, 2014). Many surveys ask about symptoms of mental illness or distress, but few ask specifically about, or can determine, diagnosable mental illnesses. Survey instruments to identify specific diagnosable illnesses usually require trained clinical interviewers and relatively large sample sizes. Three large surveys (funded by the U.S. Department of Health and Human Services) provide estimates of the prevalence of diagnosable mental illnesses: the National Comorbidity Survey Replication (NCS-R), the National Comorbidity Survey Replication Adolescent Supplement (NCS-A), and the National Survey on Drug Use and Health (NSDUH). The NCS-R replicates the most comprehensive epidemiologic survey of mental illness conducted in 1994 (Kessler et al., 1994), but researchers have conducted neither the NCS-R nor

the NCS-A for well over a decade. The NSDUH is conducted annually but does not identify specific mental illnesses (Bagalman & Napili, 2018).

Efforts to estimate the prevalence of mental illnesses in rural areas face additional challenges. Levin and Hanson (2020), summarize these challenges, which include but are not limited to, lack of consistent definitions of rurality, generalizability of results to other rural and remote regions due to small or highly specific samples, and true versus treated prevalence (p.304). The challenge of collecting epidemiological data on the prevalence of mental health and substance use disorders in general, and for rural populations specifically, is not new. Psychiatric disorders lack a gold standard, arising from challenges of reliability and validation (Wagenfeld et al., 1994). In the absence of large-scale clinical surveys (which are difficult and expensive to do, especially so when compounded by access issues in rural areas), rural mental health and substance use prevalence is often estimated on the basis of treatment prevalence rather than true (population) prevalence. It is important to examine and use the epidemiological evidence we do have on rural mental health and substance use in a way that is most useful for enhancing access and care, even if the evidence has limitations. We take this up in the last section of this chapter.

Mental Health Disorders and Challenges in Rural and Remote Regions of the United States

What do we know about the prevalence of mental health disorders and problems in rural America? In the absence of comprehensive epidemiological surveys comparing rural to urban areas, we are left to piece together the answers. Levin and Hanson (2020) and Gale and colleagues (2019) provide

cogent summaries of what is known. First, Levin and Hanson:

SAMHSA reports almost 20% (over 6.5 million) of residents living in non-metropolitan counties suffered from one or more behavioral health problems during 2016 (Center for Behavioral Health Statistics and Quality, 2017). Symptoms related to anxiety disorders, trauma, cognitive disorders, behavioral disorders, and psychotic disorders are often comparable to those of urban residents (CBHSQ, 2017). However, suicide rates in rural areas have surpassed urban suicide rates (Ivey-Stephenson et al., 2017). In addition, the highest per capita rates of complex co-occurring disorders (COD) were found in rural areas. Further, rural residents who are female, poor, elderly, belong to a cultural, racial, or ethnic minority, or who are unemployed have an increased likelihood of experiencing behavioral health problems. (p.305)

After noting the similar overall prevalence of mental health conditions across rural and urban areas found in the literature, Gale and colleagues (2019) describe important differences found in suicide and depression in rural areas:

[T]he difference in suicide rates between rural and urban residents is particularly alarming: in 2013–2015, the suicide rate was 55 percent higher in rural areas (19.7 per 100,000 population) than in large urban areas (12.7 per 100,000 population) (Ivey-Stephenson, 2017). Rural areas also experienced higher increases in suicide rates over time. From 2001–2015, the rural suicide

rate increased by 27 percent, from 15.5 to 19.7 per 100,000. By contrast, the large urban rate increased by 13 percent during this same period, from 11.2 to 12.7 per 100,000 (Ivey-Stephenson et al., 2017). The reasons for higher rates of suicide in rural areas include limited access to MH services, high levels of [substance use], greater availability of firearms, and reduced access to timely health care and emergency medical services (Clay 2014; Nestadt et al., 2017). There are also variations within some rural sub-populations and communities in the rates of depression, suicidality, disease burden, and mental distress, including among women, low-income children, veterans, non-Hispanic blacks [sic], and American Indian/Alaska Natives (AI/ANs). (p.3)

Rural women have twice the rates of depressive symptoms of urban women and are more likely to exhibit a range of mental health conditions (Burton et al., 2013). Suicide rates are significantly higher for rural veterans, American Indians/Alaskan Natives, and LGBTQ youth (RHI Hub, n.d.).

The factors—genetic and environmental—underlying mental health disorders are complex, and understanding how they contribute to even modest rural–urban prevalence differences can have important implications for improving care and treatment. McCall-Hosenfeld et al. (2014) used data from the National Comorbidity Survey Replication (NCS-R) to explore the role of traumatic exposures (war-related, accident-related, disaster-related, interpersonal, or other) in prevalence of mental health symptoms in rural and urban areas. Reports by some primary care providers that rural individuals experienced trauma differently, leading to a higher prevalence of mental health issues when compared to their urban

counterparts, formed the impetus for the study (McCall-Hosenfeld et al., 2014). The researchers found that contrary to their expectations, the frequencies of both psychiatric disorders and trauma exposures are similar across the rural–urban continuum, reinforcing calls to improve mental health care access in resource-poor rural communities (McCall-Hosenfeld et al., 2014).

James and colleagues (2017) pooled self-reported data from the 2012–2015 Behavioral Risk Factor Surveillance System to examine racial/ethnic disparities in health, access to care and health-related behaviors among rural residents in all 50 states and the District of Columbia. Rural White respondents reported frequent mental distress (14 or more days) during the past month at a rate of 12.5%, compared to 13.9% of rural Black respondents, 11.2% of rural Hispanic respondents, 5.4% of Native Hawaiian, and 17.1% of American Indian/Alaskan Native respondents (McCall-Hosenfeld et al., 2014).

Substance Use and Misuse in Rural America

Social, economic, and cultural conditions play a key role in the onset, progression, and success of treatment for substance use disorders (SUD). Initiation of substance use and progression to substance misuse often begins earlier in life and can continue over a lifetime, compromising physical health, educational and occupational success and increasing the likelihood of domestic and other violence and incarceration. The social and economic context (social determinants) of rural America, including poverty, diminished job opportunities, family stress, and increasing ethnic and economic diversification, play an important role in understanding the prevalence and progression of substance use and misuse (Conger, 1997; D. Mohatt et al., 2006; RHI

Hub, n.d.). Low education attainment, poverty, and unemployment are all associated with higher drug use, and all are more prevalent in rural than urban areas (RHI Hub, n.d.). As discussed in Chapter 1, the more rural the area, the higher the rates of SUD.

The annual National Survey on Drug Use and Health (NSDUH) provides useful and ongoing information about self-reported substance use and allows for comparisons among non-metro, small metro, and large metro areas. Table 2 presents rural substance rates based on the 2020 NSDUH, as compiled and reported by the RHI Hub (n.d.). This table is consistent with and supports long-observed trends in rural substance prevalence:

- Drug misuse is more prevalent in urban areas than in rural areas but still significant in rural areas, particularly misuse of opioids and use of methamphetamines.
- Alcohol use is more prevalent among rural than urban youth, with riskier binge drinking substantially more prevalent among rural youth.
- Rural youth have higher rates of both cigarette smoking and smokeless tobacco use than urban youth.

The NSDUH has documented higher alcohol use rates among rural than urban youth for many years.

In 2008, the Maine Rural Health Research Center (MRHRC) pooled three years of NSDUH data (2002–2004). This data gave researchers enough cases to examine substance use across varied sizes of rural communities: rural-adjacent, rural-large, rural-small/medium (Lambert et al., 2008a). The goal for this study was to more closely examine the use of methamphetamine by youth and young adults, which was widely reported at that time (and since) to be an increasing epidemic in rural areas. The study found that methamphetamine use was the highest in small/medium urban areas compared to larger rural and urban areas. However, as with the NSDUH data nearly 20 years later, shown in Table 2, the overall rate of methamphetamine use was relatively low (ranging from 0.7 to 1.2%). Equally, if not more alarming, were the far higher rates of alcohol use and high-risk alcohol use (binge drinking, driving while intoxicated) among rural youth and young adults living in the smallest rural areas. To help publicize this finding, the MRHRC issued a research and policy brief with the provocative title of Substance Abuse Among Rural Youth: A Little Meth and a Lot of Booze (Hartley, 2007).

The Stanford Law and Policy Review published another effort to publicize the hidden problem of youth substance use in rural communities around

| | Non- Metro | Small Metro | Large Metro |
|---|------------|-------------|-------------|
| Alcohol use by youths aged 12-20 | 33.2% | 30.3% | 28.5% |
| Binge alcohol use by youths aged 12 to 17 (in the past month) | 6.0% | 3.0% | 4.3% |
| Cigarette smoking | 22.9% | 20.1% | 16.2% |
| Smokeless tobacco use | 6.4% | 3.9% | 2.1% |
| Marijuana | 14.7% | 18.5% | 18.5% |
| Illicit drug use | 18.2% | 21.8% | 22.0% |
| Misuse of Opioids | 3.5% | 3.8% | 3.2% |
| Cocaine | 1.0% | 1.8% | 2.1% |
| Hallucinogens | 1.7% | 2.6% | 2.8% |
| Methamphetamine | 0.9% | 1.6% | 0.6% |

Table 2: Rural and Urban Substance Use Rates (ages 12 and older, unless noted)

this time, also with a provocative title: *The Forgotten Fifth: Rural Youth and Substance Abuse* (Pruitt, 2009). This policy analysis places both the factors contributing to youth substance abuse and the suggested solutions to the problem squarely within the context of the social and economic conditions of rural communities. As we discuss later in this and subsequent chapters, the need for and underlying challenges of addressing rural youth substance abuse remain largely the same today as they were 15 or more years ago.

Substance Use Among Specific Rural Populations

It is useful to change the focus of the epidemiological lens when considering specific rural populations and areas. There are important variations in substance use among these populations, but they are often difficult to estimate precisely because of the sampling requirements of large epidemiological studies and to different definitions used to measure rural and specific substance use disorders. In considering substance use estimates from smaller studies, it is helpful to keep in mind the socioeconomic, demographic, and cultural context in which this use occurs. For example, being low-income and experiencing poverty are strongly associated with drug use. Rural areas have higher poverty rates than urban areas, with the smallest rural areas having the highest rates. This section briefly reviews what is known about substance use for youth and young adults, rural women, veterans, older adults, and racial and ethnic groups in rural America within this broader context.

The research literature provides the clearest evidence for the prevalence of substance use among youth and young adults. According to Monnat & Rigg (2016), rural youth were 3.5 times

more likely than their urban counterparts to have misused opioids over a 12-month period. Youth in more rural areas have the highest rates of alcohol use, binge drinking, heavy drinking, and driving while intoxicated, as well as methamphetamine use (Lambert et al., 2008a).

As noted earlier, rural women have twice the rates of depressive symptoms of urban women and are more likely to exhibit a range of mental health conditions (Burton et al., 2013). Depression, anxiety, and mental health disorders in general are all further associated with higher substance use. A 2010 study of women entering a hospital-based detoxification center found that rural women were six times more likely to report injection drug use, eight times more likely to report opiate use, and three times more likely to report multiple illicit drugs in the past 30 days than urban women (Shannon et al., 2010).

Generally, veterans report slightly more mental health disorders, substance use disorders, and substantially more post-traumatic stress disorders (PTSD) than the general population (Olenick et al., 2015). A higher percentage of all veterans live in rural areas (between 25–32%) (Shiner et al., 2021) than in the general population (approximately 20%) (RHI Hub, n.d.). Higher rates of mental health disorders, particularly PTSD, put veterans at higher risk of other stress-related disorders and substance use (Gale et al., 2019). Among veterans with PTSD, 27% also have a substance use disorder. Rural women veterans demonstrate a particularly distressed community with higher rates of PTSD, experiences of military sexual trauma, chronic pain, and insomnia (Murray-Swank et al., 2018).

Rural veterans are also more likely than urban veterans to attempt and die by suicide (RHI Hub, n.d.). Rural veterans have a 20% increased risk of death by suicide after controlling for access to care, demographic factors, and diagnoses (McCarthy et al.,

2012). Recent studies have documented that while rural veterans experience a higher rate of suicide than their civilian counterparts, this trend actually converged in 2005 when suicide rates were adjusted for age, sex, and race, | White users of Veterans Administration (VA) services had more than three times the rate of death by suicide as Black VA users (Shiner et al., 2021). While the prevalence of substance use among rural veterans is slightly less than that of urban veterans, substance use often plays a significant role in the likelihood of suicide. As N. V. Mohatt et al. (2018) describe, it is useful to consider rural veteran suicide in terms of the intersection of the environmental and person-level risk factors of veterans. It is within this context that the role of substance abuse in rural veterans' suicide may be best understood, and prevention services and programs designed to address it.

Agricultural workers are vulnerable to mental health problems (Rosmann, 2008). A global review of the literature finds that farm workers are likely to experience poorer mental health than persons

in other occupations (Daghagh Yazd et al., 2019). People within farm families experience a somewhat different set of stressors relating to their role within the family, family composition, and region of the country (Alterman et al., 2018). Social support from family and friends can help mediate or prevent the depressive symptoms of farmers (Bjornestad et al., 2019). Climate change is verylikely to disrupt farming and increase the stress and emotional burden on farmers, their families, and communities (Howard et al., 2020).

Data on the prevalence of substance use among older persons (65 and older) is limited and, where available, tends not to be substance-specific (Blanco & Lennon, 2021). Given that substance use is generally lower for older than younger persons, health care workers often do not ask about or screen for substance use by older persons. Consequently, substance use among older persons is almost certainly underreported and increasing. Data from the NSDUH found that drug use among persons 65 and older increased from 19.3% in 2012 to 31.2% in 2017 (Teich

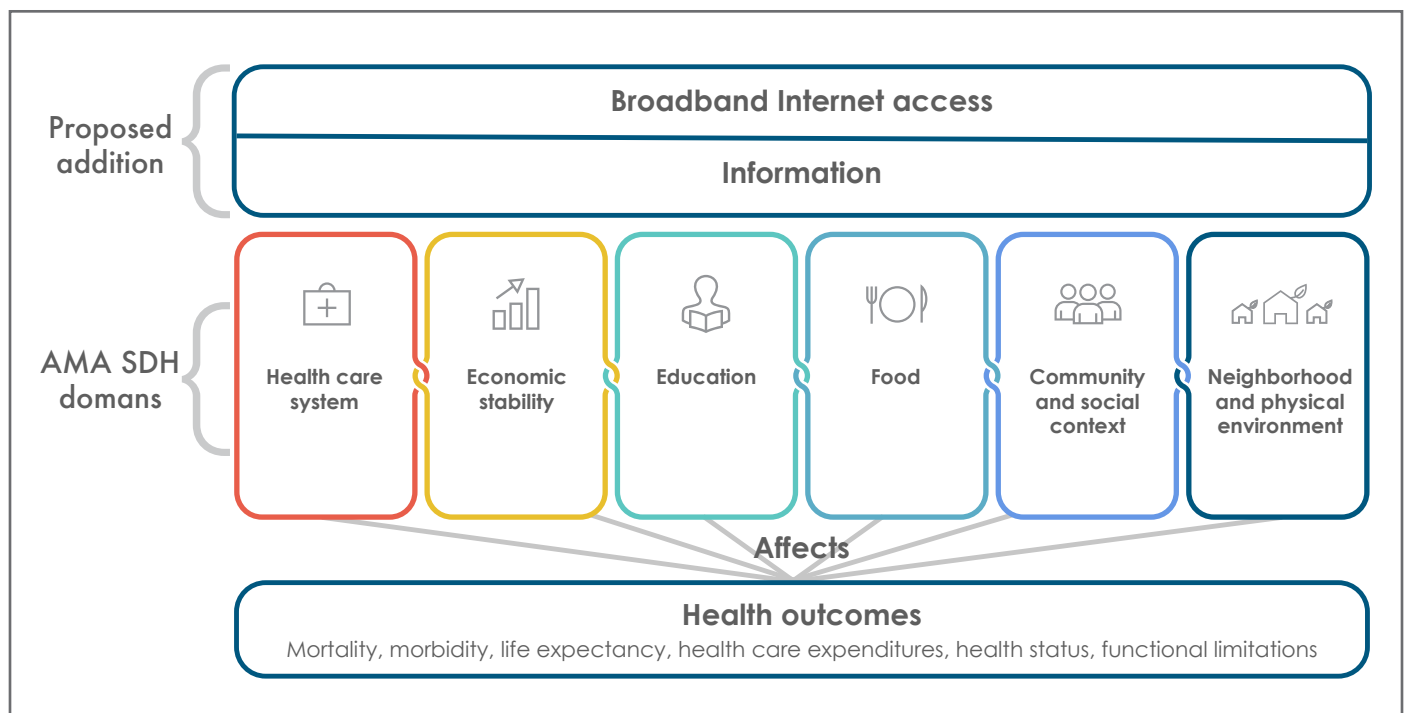


Table 3: Proposed extended model of Social Determinants of Health (SDH)

et al., 2017). Alcohol and prescription drugs tend to be the most used and misused substances by older persons (Hardey et al., 2023). This use is compounded by the decreased tolerance of these substances as persons age, and the added possibility of interactions with other prescribed medications (the use of which increases steadily with age). A higher percentage of people 65 and older live in rural areas than in urban areas (19% vs. 15%). As discussed elsewhere in this volume, isolation is a risk factor for substance use and tends to be greater in rural than urban areas.

As covered in Chapter 3, data on the prevalence of substance use among racial and ethnic minoritized individuals is also very limited, in general, and especially so for rural areas. Relatively high rates of alcohol use have long been reported (and assumed) for American Indians and Alaska Natives (McCall-Hosenfeld et al., 2014; Moonesinghe et al., 2012; SAMHSA, 2017). Identified risk factors for rural substance use—including low educational attainment, poverty, unemployment, lack of access to mental health care, and isolation—are all potentially present among minoritized groups. These groups are also likely to encounter a lack of culturally appropriate service and treatment options.

Promising Directions and Next Steps

There is a solid research base on the prevalence of mental health and substance use disorders in rural areas at the population level. However, much less is known about mental health and substance use prevalence across distinct types of rural communities and population subgroups, particularly those of REM persons. It is important to sustain and improve research at the population level and to better understand the prevalence and context of mental health and sub-

stance use across rural communities and peoples.

More frequent and, where appropriate and feasible, larger-scale studies should be conducted at the population and community level with appropriate sampling of different communities and population groups. Researchers should conduct more ethnographic research to better understand the determinants and context of mental health and substance use among different rural communities and peoples. People living in rural and remote areas recognize the barriers they encounter in maintaining and receiving care for their health. Hege and colleagues (2018) conducted a qualitative study of the social determinants of health of Appalachian residents in North Carolina and identified five key themes: poverty, lack of access and barriers to health insurance and other health resources, social and mental health implications, food and insecurity and hunger. The authors conclude their study with a call to action:

It can be said that place and the context that comes with it play a major contribution to the health disparities experienced every day by the millions of people living in this region of the United States. As the evidence has mounted in recent years, it is now time for action from our community, state, and national leaders and policymakers. We, as health researchers, must be advocates for the most vulnerable among us as we seek health equity across our nation. (Hege et al., 2018, p.252)

Chapter 4: Mental Health Service Delivery in Rural Areas: Organizational and Clinical Issues

The core challenge of rural mental health service delivery is that there are too few mental health specialists, spread over large physical distances. The need for more specialists compounds other challenges. Modifications must be made to services designed for urban areas to be more appropriate for rural areas. Rural people encounter more financial and cultural barriers than urban people in getting mental health care. These barriers have become more challenging over time, as specialty mental health care availability has become more constrained in both rural and urban areas, and rural areas have become more economically challenged as well as more culturally and ethnically diverse. These factors contribute to the organizational and clinical context within which rural providers must deliver mental health services.

In this chapter we provide details and data from the literature about these challenges in rural mental health service delivery. We describe the organizational settings in which providers must deliver rural mental health services, including how broader organizational changes in mental and general health care have affected these settings. We also discuss the delivery of rural mental services, including integrated care models, the use of technology, and adapting evidence-based practice to rural areas. We finish by noting rural mental health service delivery research gaps at the organizational and clinical levels.

Organizational Settings in Rural Mental Health Service Delivery

Given the chronic shortage of specialty mental health providers (psychiatrists, psychologists) and facili-

ties (community mental health centers, psychiatric hospitals, substance use inpatient and outpatient facilities), rural America has had to rely on primary care providers and other non-specialty care settings. These settings include local health clinics, Federally Qualified Health Centers, general acute care hospital emergency settings, schools, the criminal justice system, and faith-based organizations. Rural persons with mental health concerns are less likely to be treated at all, and more likely to be treated by a generalist provider than their urban counterparts (Morales et al., 2020). Most rural people receiving care do not receive that care from a mental health specialist. Receiving care in more familiar primary care settings can increase access for rural persons but can also burden or overwhelm stretched primary care systems. The need for specialized care for more complex problems also remains.

A worsening shortage of health care providers 50 years ago prompted policy and clinical attention to focus on the specific context and challenges of mental health care delivery in rural areas. Efforts to enhance service delivery have been ongoing ever since. Fifty years ago, community mental health centers (created in 1963 under the Community Mental Health Services Act) were relatively well-funded and provided a broad scope of services to persons with a range of mental health problems. In the 1970s and 1980s, community mental health centers were the primary source of mental health care in rural areas (Wagenfeld et al., 1994). Rural community mental health centers tended to serve large geographic areas, with a decentralized delivery system that resulted in clinicians often serving as generalists and coordinating with local service

agencies. The Omnibus Reconciliation Act of 1981 fundamentally shifted the funding of mental health services and, ultimately, the role of community mental health centers. As Wagenfeld and colleagues (1994) observe:

As the block grant and fee-for-service shifts took hold, the rural community mental health center was forced to step away from its role as a multi-service agency accessible for general community utilization and into a narrower role of provider of services to the seriously impaired (defined by the state, rather than the community) or to those able to pay. (p. 22)

The shift to fee-for-service payment was problematic in rural areas, where persons were less likely to have health insurance and more likely to have lower incomes than persons in urban areas. The central role of community mental health centers as rural mental health providers has continued to decline. By the early 1990s, many states had moved from the free-standing mental health model toward private managed care systems (Zuvekas, 2020). The decline in the supply of community mental health centers and growth in the role of community health centers offering mental health services continues to this day, as described in a recent analysis (Borders et al., 2022):

The supply of community mental health centers (CMHCs) decreased substantially from 2000 to 2019 and became nearly non-existent in non-metropolitan counties. The number of CMHCs in non-metropolitan counties declined from 182 to 15. The number of CMHCs in metropolitan counties declined from 582 to 104. The supply of community health centers (CHCs) offering mental

health services increased substantially over the same period, from 2000 to 2019. The number of CHCs in non-metropolitan counties increased from 184 to 573. The number of CHCs in metropolitan counties increased from 126 to 797. (p. 1)

Inpatient psychiatric services have also been scarce in rural America for decades. Following the downsizing of state mental health hospitals in the 1960s and 1970s, there was a growth in private psychiatric hospitals. Not surprisingly, these hospitals were much more likely to be in urban areas, where clinicians and patients were more plentiful. In 1988, 95% of the most urbanized counties had psychiatric inpatient beds, compared to only 13% of rural counties (Slade & Domino, 2020; Wagenfeld et al., 1994).

Thirty years later, the picture has not changed much. As Gale and colleagues (2019) describe:

Rural residents have limited access to [behavioral health] treatment facilities. When they do have access, they frequently must travel farther than urban residents to access care and typically have less choice when selecting services and providers. A national shortage of psychiatric inpatient services extends to rural and [remote] areas, most of which have no inpatient psychiatric beds. Of the 595 psychiatric hospitals in the United States, only 73 (12%) are in rural areas (Center for Medicaid and Medicare Services 2019). Among 1,054 short-term acute care hospitals that operate prospective payment-exempt psychiatric units, 232 (22%) are located in rural areas (Flex Monitoring Team 2019). Only 95 of 1,350 Critical Access Hospitals (CAHs) operate

distinct part psychiatric units. Rural areas also lack detoxification services; 82% of rural residents live in a county with no detoxification service provider. (Lenardson et al., 2009, pp.9–10)

The narrative on substance use in rural America has changed over the decades, even as the shortage of substance use treatment remains an ongoing challenge. In the 1960s and into the 1970s, alcohol and drug abuse were viewed as separate problems, with drug abuse considered primarily an urban problem. The few rural alcohol and drug programs were based on urban models. During the late 1970s and 1980s, researchers began to see alcohol and drug abuse as part of the broader problem of chemical dependency and began to notice and study their co-occurrence with mental health problems. Rural substance abuse programs grew in the 1980s but continued to be based on urban models, with staff usually trained in urban settings before working in rural areas. This was problematic since both individual and family treatment occur within the rural environment and are influenced by rural culture, and values.

Frontline providers continue to face a shortage of substance use referral and coordination options. While rural substance use treatment settings almost always provide intake, assessment, and some form of treatment, far fewer facilities provide detox, day treatment, or longer-term treatment (as noted above). The shortage of detox facilities remains problematic since detox is often the first and most crucial step toward recovery (Lenardson et al., 2012).

During the 1990s, methamphetamine (meth) use became a growing problem and soon was described as the “rural epidemic,” although it also was prevalent in urban areas. The use of opioids, heroin, prescription medications, and meth has in-

creased nationally over the last three decades. As noted in Chapter 3, drug use and abuse has disproportionately affected many rural areas and populations. In 2002, buprenorphine was approved as an alternative to methadone for treating withdrawal from heroin, prescription pain medication, and other opioids that could be prescribed by office-based primary care physicians trained to prescribe it. This training and service is known as medically assisted treatment (MAT) and offers a potentially important source of substance use care, especially where specialty substance use treatment is scarce or difficult to access. As with other mental health and substance abuse services, MAT is less available in rural than urban areas. Approximately 60% of rural counties do not have a physician qualified to prescribe buprenorphine (Andrilla et al., 2018), and rural Federally Qualified Health Centers are less likely to express interest than urban centers to provide MAT (Jones et al., 2018).

Primary care has always played an outsized role in providing mental health care in rural and urban areas. In 1978, Regier and colleagues, in a seminal article, identified primary care as the “de facto mental health system.” At that time, rural primary care providers played an important but behind-the-scenes role in providing mental health care in rural areas, with community mental health centers being the primary access point for mental health care. Rural community health centers often served as ‘safety net providers.’ As the role of community mental health centers in rural areas began to decline by the early 1980s, there were efforts to link or connect primary care to mental health care, including the Rural Health Initiative, Health Underserved Rural Grants, and the Linkage Demonstration Program. These programs and their services often dissolved when their grant funding ended (Lambert & Gale, 2012).

The importance of community health centers as “safety net providers” continued during the 1980s and has grown as an expanded provider of mental health treatment since the early 1990s. The creation of federally qualified health centers (FQHCs) in 1989 allowed for cost-based reimbursement by Medicare and Medicaid that could facilitate the link between primary and mental health care in rural areas. In 2003, the Bureau of Primary Health Care’s New Access Initiative significantly enhanced reimbursement for community health centers to provide care or link with mental health and substance services. Rural FQHCs have continued to play an essential role in providing a safety net of mental health care, particularly for more moderate conditions (Gale et al., 2019). FQHCs can partner in providing integrated care and be a site for telehealth services (Jensen, 2021).

During the 1980s, efforts to connect primary and mental health care came to be called integrated care. By the early 1990s, it was unclear whether efforts to link primary care and mental health care in rural areas had been sustained. The scope and form of the “integrated care” model was also unknown. The Maine Rural Health Research Center (MRHRC) conducted a national survey of 53 primary care programs in rural areas that provided or coordinated mental health care (Bird et al., 1998). The study identified four strategies or models for integrating care: diversification, linkage/co-location, referral, and enhancement. A follow-up case study conducted a decade later found that community health centers were more likely than 10 years before to use their staff on-site to provide care. Additionally, the study found that care involved two components: integrative activities and direct care services (Gale & Lambert, 2006). Most visits (75% to 80%) were for treatment of depression. The researchers noted that while much of the earlier push toward integration in rural areas had originated at the policy level,

either the growth and success or the failure of integration would be at the clinical level (Lambert & Gale, 2012). Integrated care remains an important model for mental health services in urban and rural areas. In urban areas, 40% of primary care physicians are geographically co-located with behavioral health providers, compared with 28% in isolated areas and 26.5% in remote rural areas (26.5%) (Miller et al., 2014).

Scafe et al. (2021) found that while rural and urban patients had similar rates of mental health symptoms, rural patients were more likely to live in a different location than their clinic, had an increased rate of behavioral health service use, and demonstrated similar rates of appointment attendance and patient improvement. This suggests that while urban clients have access to alternatives to mental health care outside of their medical system, rural clients may access these services out of necessity due to a shortage of alternative providers.

For several reasons, integrated primary care settings may increase access to rural mental health services. Primary care offices serve as a medical “home base” for general populations. Family physicians may have strong connections to their communities and families, given the long-term nature of the care provided. Introducing behavioral health into the existing system makes patients more likely to meet with mental health care providers initially, especially when referrals are facilitated through the warm hand-off of a trusted provider. In 2018, Habeger and Venable reported that the inclusion of behavioral health into primary care settings “normalizes routine screenings and reduces the backlog for specialty care referrals and treatment” (p. 224). As with most urban-to-rural solutions, integrated care in rural areas must be adapted to meet the needs of the rural environment, including increased flexibility in referrals, scheduling, patient

profiles, provider ratios, coverage, and treatment focus (Selby-Nelson et al., 2018).

Rural people have always had to rely heavily on safety net providers for their mental health care, particularly in acute situations or emergencies. While there is no official definition of the rural mental health safety net, it includes general acute emergency settings, law enforcement, emergency rooms, the criminal justice system, schools, and faith-based organizations. Approximately 30% of rural residents identified a hospital, emergency room, or clinic as a source of health care (AHRQ, n.d.). The use of emergency departments (EDs) has been increasing for years in urban and rural areas. A 2017 study of seven states found that 15% of all urban ED visits and 12% of rural ED visits were for a primary diagnosis of mental health or substance use (Schroeder & Peterson, 2018). Urban residents were slightly more likely to present with a primary substance use diagnosis (20.4%) than rural residents (17.7%). Urban residents were more likely to have private health insurance than rural residents. Of the rural older persons using emergency departments, 25% present with a mental health problem. The reliance of many rural patients on emergency care settings for their mental health care, as well as the long distances they often travel to get there, make it difficult to arrange for follow-up and coordinated care (Levin & Hanson, 2020).

The new National Suicide Prevention Lifeline 988 phone number, launched on July 16, 2022, was designed to be a universal system available anytime, anyplace, to those experiencing a mental health emergency. The 988 system has the potential to ease some of the shortages of behavioral health services, particularly crisis services, in rural areas. However, current shortages of services and the role that individual states must play in supporting the system suggest that many rural areas are likely to continue to face shortages of crisis and other

services. As a Kaiser Health Network report (Louis, 2022) describes, soon after the launch:

[T]he United States is a patchwork of resources for crisis assistance, so what comes next is not universal. The level of support that 988 callers receive depends on their ZIP code. In particular, rural Americans, who die by suicide at a far higher rate than residents of urban areas, often have trouble accessing mental health services. While 988 can connect them to a call center close to home, they could end up being directed to far-away resources. The new system is supposed to give people an alternative to 911. Nevertheless, callers from rural areas who are experiencing a mental health crisis may still be met by law enforcement personnel rather than mental health specialists.

The difficulty of getting mental health treatment leads to the arrest of many people who would not have been, had they had access to care. People with mental health and substance abuse conditions are three to six times as likely to have been incarcerated as the general population, even though most of them did not commit a violent crime (Negrusa et al., 2014). The number of incarcerated persons with mental health problems continues to increase as the availability of treatment in both urban and rural areas continues to decline. The criminal justice system is a poor place to provide mental health care. However, jails and prisons must often provide multiple resources to incarcerated persons with mental health and substance abuse problems.

Nationally, diversion programs have been developed to reduce the number of incarcerated persons with mental health or substance abuse problems,

and to assist those incarcerated upon their release from jail. Recommendations and models involve community collaboration among law enforcement, the courts, treatment, and social service agencies, including housing and employment. The Stepping Up Initiative for Reducing Mental Illness in Rural Jails ((The Stepping Up Initiative | National Association of Counties, n.d.) studied jail diversion programs in rural areas in nine states. A sequential intercept model is outlined, which suggests five points in a community’s system for developing policies, practices, or programs:

1. Train law enforcement and establish mobile outreach teams.
2. Screen for mental illness and link to comprehensive services.
3. Establish a mental health court and provide jail-based mental health services.
4. Create reentry treatment plans, coordinate transition with community providers.
5. Maintain continuity of care, use graduated responses.

When communities are ill-equipped to serve individuals with severe mental health concerns, limited resources are available to manage mental health crises. Law enforcement commonly becomes the de facto mental health system (Balfour et al., 2022; Goss, 2008) (Balfour et al., 2022; Goss, 2008; Ruen et al., 2020). In the absence of resources like mobile crisis units, law enforcement may act as the crisis service to provide welfare checks and involuntary mental health holds.

Treatment Settings for Specific Rural Populations

Different rural population groups may have different levels of need for mental health treatment and they can encounter different challenges in receiving it. As discussed in Chapter 3, rural youth and young

adults have higher rates of alcohol and some substance use, are more likely to engage in risky behavior, and have higher rates of suicide than urban youth and young adults.. Rural schools are often considered the “hub” of service delivery for children and adolescents, given limited and scattered mental health and social services in rural areas (Capps et al., 2020). While this approach is promising, school-based or centered services must still contend with the scarcity of clinicians and service infrastructure at schools and within rural communities. The recent literature reflects both promising approaches and ongoing challenges.

Ashcraft and colleagues (2021) reviewed research on adverse childhood experiences (ACES) in rural areas and offered approaches to address them (p. 33):

1. Expand use/access to telehealth services and advocate for expanded access and continued flexibility.
2. Build on existing collaborative relationships to fund and sustain varied mental health practices.
3. Create and maintain culturally sensitive and respectful services with trusted providers and organizations.
4. Attend to the needs of diverse and vulnerable populations.
5. Conduct intervention research on mental health practices and remaining data informed.
6. Work towards formal alignment and collaboration within and among systems.

Bailey and colleagues (2022) studied a school-based suicide education and prevention program, Youth Aware of Mental Health (YAM), facilitated by non-school staff to increase students’ willingness to self-disclose and discuss. Study findings suggest the feasibility of implementing this program with rural youth.

While these studies suggest paths forward, the research base for treating the mental health needs of rural youth remains limited. Berryhill and col-

leagues (2022) reviewed studies on the treatment of depression and anxiety in rural high schools. While 82 articles were identified for potential inclusion, only four were retained when exclusion criteria were applied. The authors conclude that there is “preliminary evidence for school-adapted, group CBT, and IPT-A skills programs for adolescent depression” (p.23).

Belhumeur (2017) investigated best practices in crisis intervention for children in rural Montana, concluding that even the premise of a “best practice” is inadequate for meeting the contextual needs of these communities. Understanding and addressing contextual needs is a promising direction:

... [W]e had more success with a multifaceted approach that enabled us to identify new areas of need (e.g., bullying) and expand our efforts within each demonstration site. We also learned the critical influence of families and the importance of honoring community champions in addressing an issue as pervasive and complex as youth suicide. While we worked primarily from the perspective of the school, it

quickly became apparent that friends and family were regularly seen as primary sources of support and guidance in times of crisis. Thus, those human assets should be incorporated more fully into safety. (p.318)

As noted in Chapter 3, rural women have twice the rate of depressive symptoms as urban women and are more likely to exhibit a range of mental health conditions (Sano et al., 2011). A study of rural and urban pregnant women in a hospital-based detoxification program found rural women to have six times higher rates of reported injection drug-use and eight times the reported rates of illicit opiate use when compared to their urban counterparts (Shannon et al., 2010).

Veterans experience higher rates of mental health, substance use, and post-traumatic stress disorders than the general population. Additionally, veterans are more likely to be from rural areas than the general population (Olenick et al., 2015). Rural veterans are more likely to enroll in the Veterans Administration (VA) health care system (58%) than urban veterans (37%). As noted in Chapter 3, while rural veterans have lower rates of reported mental

| | Clergy | Mental Health |
|-----------|--|--|
| Trust | People may not need MH care, they need more of God to help with their problems. Referring to MH providers may drive people away from God and the church | Some clergy are not capable of or properly credentialed to address MH problems. The clergy may convince patients not to take their mental health medications |
| Stigma | Physical health providers are seen as “blessings from God,” but MH providers are not. Clergy therefore become de facto MH counselors | Religion remains undervalued in the context of evidence-based therapies—both in terms of training and in terms of the scientific literature. Historically, religion has been equated with delusion |
| Knowledge | There is no dialogue between clergy and MH providers so they do not know what each other has to offer. Clergy are often not aware of veterans in their congregations, do not know how to refer to MH, and assume that HIPPA rules will make the sharing of information nearly impossible | MH providers have minimal knowledge and training in how to talk about spiritual issues. MH providers are uncomfortable talking with patients about religion or spiritual issues for fear that doing so will reveal too much of themselves and compromise the patient/provider working alliance |

Table 4: Current perspectives on clergy and mental health tensions

health conditions than urban veterans, they report a lower quality of life and higher disease burden (Bumgarner et al., 2017). Veterans are more likely to experience stigma about receiving treatment, as a result of the “warrior culture” they are embedded within (Jameson & Curtin, 2012). Efforts to engage and treat veterans must deal with the stigma found within the general rural community, as well as the military “warrior culture.” Care must also be coordinated between community-based treatment and the VA health care system.

Older adults experience slightly higher rates of depression and suicide than the general population, which increases with age, chronic health conditions, and loss of partners and friends (Stamm, 2007). Older adults are a larger part of the rural population (19%) than of the urban population (15%) and rural older adults have higher rates of depression, alcohol misuse, and suicidality than urban older adults (Cromartie, 2018). The scarcity of geriatric behavioral health specialists, a lack of transportation (particularly for those who no longer drive), and social isolation compound the challenges for older adults seeking access to mental health and substance services in rural areas.

As described in Chapter 3, racial and ethnic groups sometimes experience different rates of mental health and substance abuse problems and disorders than their majority peers. However, they also face significant unique obstacles to receiving treatment, including lower insurance, stigma, and the lack of culturally sensitive providers (Gale et al., 2019). As described in Chapter 3, rural American Indian, Alaska Native, and Black individuals experience a higher prevalence of mental distress and depression than non-Latino/a/x White individuals (James et al., 2017; Morales et al., 2020).

Faith-based mental health care has long occupied a complex place in rural communities. The cultural

role of clergy makes them a natural resource for people to turn to for personal and family issues, including emotional and mental health challenges. Places of worship center institutions in rural communities and rates of religiosity are generally assumed to be higher in rural than urban areas. However, the close-knit and strong communal ties of rural communities can also strain the role of clergy and religious institutions, particularly around confidentiality issues (Hall, 2013). Sullivan et al. (2014) conducted a study of a collaborative initiative between the VA and churches in rural Arkansas, providing a useful schematic to understand the conflict and tension in the mental health role of clergy. Studies continue to explore the role of rural clergy and faith-based organizations in rural mental health with positive results (Baldwin & Poje, 2020; Bryant-Moore et al., 2018; Mama et al., 2020). However, results tend to be based on individual organizations and programs. The potential for building on faith-based organizations remains but has yet to be fully determined or realized. The increasing diversification of rural America suggests both the potential importance and additional complexity for rural faith-based organizations in rural mental health.

Technology

Technology holds promise to compensate for the chronic shortage of specialty mental health providers and ease the burden placed on primary care and alternative treatment systems. Technology enables telehealth and the emerging use of telehealth mobile applications. Interest in the potential of tele-behavioral health in rural areas goes back decades, given the shortage of specialty mental health providers. While there were early demonstration programs, technical challenges and high start-up costs for equipment slowed the broader

adoption of this technology. Over time, technology has improved, and start-up and operating costs have decreased significantly. However, the adoption of telehealth programs within rural systems and settings and the volume of services provided remain lower than might be expected given the ongoing scarcity of on-site treatment (Gale et al., 2019; Lambert et al., 2016; Levin & Hanson, 2020). As Gale and colleagues (2019) describe:

Although the technology is readily available, implementing telebehavioral health services is complex and requires providers to think differently about how they organize and deliver care. Barriers to the expanded use of telebehavioral health include coverage and reimbursement policies, cross-state professional licensure issues, practice regulations, inadequate broadband access, workforce supply, issues related to the exchange and security of patient information, changes to professional training and care delivery models, and hype (enthusiasm for the potential for telehealth that exceeds practice realities and challenges). (p. 16)

Levin and Hanson (2020) reach a similar conclusion about the potential and challenges of rural telebehavioral health, stating that it is necessary to look at factors within states, such as policies and insurance structures, to understand the use and impact of telemedicine. These studies illustrate the challenges and issues involved in licensing, liability, and accreditation when providing mental health licenses, remote prescribing, and immunity and liability issues that may occur when dealing with emergency or crisis events. However, progress is being made. Since 2016, more states have addressed these key regulatory questions. For example, Arkansas, Hawaii, Indiana, Louisiana,

and Maine established regulations allowing patient relationships and evaluations via real-time audio and visual telehealth technologies (Lerman et al., 2018).

In the spring of 2020, the COVID-19 pandemic ushered in a dramatic increase in the use of telehealth for both physical and behavioral health care in urban and rural areas. Cross-state licensure restrictions and other regulations were relaxed, and private and public payers enhanced reimbursement. However, by late 2021 and Spring 2022, telehealth use was declining, although still higher than pre-COVID-19 rates (Shaver, 2022). Telehealth has remained significantly higher for behavioral health than other health care visits. As a 2022 Kaiser Family Foundation (Lo et al., 2022) analysis describes:

Telehealth represented less than 1% of outpatient care before the pandemic (rounding to zero) for both mental health and substance use and other concerns. However, at its pandemic peak, telehealth represented 40% of mental health and substance use outpatient visits and 11% of other visits (during the March–August 2020 period). Since then, in-person care has returned, and telehealth visits have dropped off to represent 5% of other outpatient care visits, those without a mental health or substance use claim in the March–August 2021 period. However, telehealth use has remained vital for mental health and substance use treatment, still representing 36% of these outpatient visits. Telehealth Has Played an Outsized Role in Meeting Mental Health Needs During the COVID-19 Pandemic.

From March to August 2021, 55% of all rural telehealth visits were for a mental health or substance abuse diagnosis, compared to 35% in urban areas (Lo et al., 2022). State Medicaid programs and private insurers will play an important role in determining to what extent telehealth (including behavioral health) visits will be supported in the future. As noted, several states and private insurers have pulled back their support.

The “digital divide” between rural and urban areas to access broadband internet services has been a concern of policymakers and clinicians, and is considered a major barrier to the use of telehealth in rural areas (Mackie, 2015; Talbot et al., 2020). The reality of this concern became clear in the beginning of, and during, the COVID-19 pandemic. Benda et al. (2020) propose that broadband internet access (BIA) be included in the framework of SDOH, citing that limited BIA “has the potential to exacerbate this country’s existing health disparities because it disproportionately affects those who are already vulnerable” (p. 1123). Technology will continue to develop, and promises to expand access in rural and remote areas with mental health provider shortages. However, technological advances and potential solutions (e.g., telehealth appointments, computerized treatments, apps) are only viable with access to reliable, fast internet connections.

Evidence-Based Practice

If it is difficult to access mental health providers and treatment, it is all the more important that the treatment delivered to rural patients is determined to be effective, based on strong research. Evidence-based practices (EBPs) have been and continue to be developed in mental health. Implementing mental health EBPs in rural areas faces several challenges, but significant progress is being

made. One challenge is that clinical trials on which EBPs are based are much more likely to have been conducted in urban areas, where the infrastructure to conduct the clinical trial and a population base to recruit study participants are more plentiful. Trawver et al. (2020) found that only 5% of 183 articles reviewed for mental health interventions included a portion of results relevant to rural populations. Mental health EBPs are more likely to be implemented in larger health care networks with a high private insurance payer mix. These networks are more likely to be in urban than rural areas (Levin & Hanson, 2020). The staffing and operational requirements of EBPs developed in urban areas are often difficult to meet in rural areas. Recent efforts to promote mental health EBPs include various staffing arrangements (described in Chapter 6) (SAMHSA, 2020). Additionally, studies are bringing attention to the challenges and solutions to implementing effective service delivery models in a rural environment (Pietras & Wishon, 2021). Implementing EBPs in rural areas requires promotion and collaboration at the regional and state levels. The California Evidence-Based Clearinghouse (CEBC, n.d) identifies four areas for developing strategies to overcome barriers to implementing EBPs for mental health and social services:

1. Careful program selection and preparation.
2. Building partnerships.
3. Dealing with distance.
4. Supporting staff.

An exemplar of a culturally humble systems approach is the Connect Suicide Prevention Program, a culturally adapted EBP in rural Hawai’i featuring largely AA/PI and Native Hawaiian participants to prevent suicide (Chung-Do et al., 2016). Chung-Do and colleagues found through focus groups with trainers and developers of the program that “cultural adaptation is an iterative process and at the core, community knowledge and relationships must

be prioritized and honored” (p. 95). Adaptations include understanding key cultural protocols, being mindful of the explicit and implicit rules within tight-knit rural communities, using relevant local examples, and engaging with key gatekeepers. Factors such as colonization and immigration, which have contributed to cultural mistrust of systems of health care sometimes represented by EBPs, can be mitigated when research is culturally oriented to the relevant community. With a culturally humble approach, EBP work can be done with fidelity to the standards of the evidence base.

Non-traditional Providers and Task-sharing

Chapter 5 covers the rural mental health workforce, including the growing interest in, and reliance on, non-traditional (professional) providers. It is useful to note some of the recent literature on non-traditional providers and task-sharing relevant to treatment topics discussed in this chapter. Solutions for workforce shortages can include training community individuals as peer support workers. With training, these individuals can provide important supports such as care management, some evidence-based treatments, and crisis support (Raviola et al., 2019; Singla et al., 2018). Training community individuals in peer support can provide basic mental health and substance use treatment and care. Hoeft et al. (2018) reviewed task-sharing approaches to meeting rural mental health service delivery needs and found that community health workers and primary care settings are key components in meeting the mental health needs of rural communities. Their findings also emphasized the role of technology in these settings, both as a resource for telemedicine and a source of education and training for current providers. From their systematic review, Hoeft and colleagues provide a list

of research gaps and strategies to address them. The authors pose the questions, “What are the most effective methods to engage and retain patients and providers in intervention programs that involve task-sharing?” and “How should task-sharing approaches differ across communities given differing cultural factors, geographic factors, and local resources?” (p.58). The authors urge researchers to fill these gaps by providing specific recommendations for future research, including calling for a “Systematic effort to collect and ‘map’ information on existing task-sharing approaches in rural and otherwise underserved settings in the United States and abroad using a mixed methods approach” (p.58). (see Hoeft et al., 2018, for the full review).

Turning Weakness Into Strength: Stigma and Stoicism

Stigma has long been recognized as a significant barrier keeping individuals from seeking mental health care in rural areas. Additionally, stoicism is an underlying value and attribute of rural culture. Efforts to educate and engage rural persons about mental health issues recognize the cultural importance of both concepts, but stoicism and stigma are generally considered separately. This is beginning to change. Warbinton (2019) conducted a national online survey of 222 rural residents to examine the impact of stigma, stoicism, and community affiliation on mental health help-seeking. All three variables are related to an individual’s likelihood of seeking mental health help, but when examined in a multivariate model, stoicism ranked higher than stigma, while community affiliation was not significant.

Several of the key informants interviewed for this monograph described similar experiences regarding the relative importance of stigma and stoicism in rural mental health. In our KI interviews, a rural

mental health services researcher offered that he thought “distrust of institutions and organizations” was as, if not more, important than stigma, as commonly understood, and that this distrust overlapped but was also separate from stoicism (which was also important). Studies in rural Australia also underscore the importance of stoicism in understanding rural mental health help-seeking (Hull et al., 2017; Kaukiainen & Kølves, 2020). It is essential to better understand the effects and interplay of stigma, stoicism, and sense of community or place on rural mental health help-seeking.

Moving Beyond the Shortage of Providers and Treatment Settings

The shortage of specialty mental health providers and the resulting demand for primary care and safety net providers will not change. Rural health care, more generally, must contend with shortages of specialists, limited infrastructure, and constrained revenue, with rural persons having lower incomes and higher reliance on public health insurance (Medicare and Medicaid), which pays lower reimbursement than private insurance. Rural persons are more likely to live in states that have not implemented Medicaid expansions under the Affordable Care Act. Medicaid is an important source of expanded mental health funding (Levin & Hanson, 2020). These ongoing provider supply and financing/revenue challenges suggest that providers and treatment settings are likely to be limited in many rural communities.

Gale and colleagues (2019) observe that the general transition toward regionalization of rural behavioral health services might mediate some of the challenges of rural mental health care:

Regionalization of services supports the delivery of services through linkages between local rural providers (who provide BH services for less complex patients) and specialty BH providers (who provide consultative support and access to more intensive specialist services). The goal of regionalization is to build a sustainable system of care at each level of delivery and avoid unnecessary competition for specialty services that require a more extensive population base to be viable. Examples of regionalized models of behavioral care include larger health/hospital systems with inpatient and other specialty BH services that provide consultative support and access opportunities for patients served by their rural partners. An example of this type of system is the Avera Health system serving states in the upper Midwest. A more recent example is the hub-and-spoke model used to support providing medication-assisted treatment for opioid use disorders (OUDs) in states such as Vermont, California, Washington State, and West Virginia (Brooklyn & Sigmon, 2017; Watson et al., 2020). In the hub-and-spoke model, the spokes are the local service providers waived to prescribe buprenorphine for OUDs. The hubs are larger specialty providers offering consultative support to the spokes, as well as a referral source for patients with more complex needs that the spoke providers can address. (pp. 15–16)

Promising Directions and Next Steps

Mental health in rural America centers around service delivery. Given rural regions' literal and metaphorical landscape, mental health service delivery faces unique challenges and opportunities that are not easily translatable from urban-setting solutions. Rural regions may not have a traditional mental health provider within several hours of an individual's home. While telehealth has progressed rapidly in recent years, these regions may not have access to the broadband or reliable, high-speed internet needed to support telehealth solutions. Once described as "perceived" barriers to mental health care, the varying attitudes and values of rural communities serve as a genuine factor that must be considered when developing mental health treatment infrastructure. Mental health service delivery in rural areas may include key ingredients common to rural solutions. However, the recipe must be customized for individuals and their respective communities.

Chapter 5: Rural Workforce Challenges and Opportunities

A mental health workforce shortage has been a constant in the rural and remote areas of the United States. Usually, this shortage is described in terms of the concentration of psychiatrists (between 80% and 90%) and psychologists (around 80%) in urban areas and the needs that rural mid-level mental health clinicians and non-credentialed workers must meet given this shortage. Although technology has long been promoted to compensate for the rural mental health workforce shortage, the growth in the use of telehealth and newer mobile technologies has been constrained. While the historical drivers of the rural mental health workforce shortage remain stubbornly in place, other challenges have emerged. There is a worsening shortage of mental health clinicians in both urban and rural United States regions, and the community mental health system has shrunk nationwide. Substance use disorders are universally on the rise. The COVID-19 pandemic has exacerbated and focused attention on these challenges. Although it has been difficult to increase the supply of the mental health workforce, workers can be deployed and teamed differently and can use technology to enhance the availability and efficacy of care. The recent workforce literature suggests this work will remain difficult, but there is a path forward.

This chapter first describes the current variation in the mental health workforce in rural and urban areas and then describes past and current efforts to increase the rural mental health workforce. We also discuss recommendations for enhancing the rural mental health workforce, including education and training, innovative use and teaming of mental health workers, and reimbursement. Finally, we describe efforts to support the enhancement of the rural mental health workforce.

Supply of the Mental Health Workforce in Rural and Urban Areas

The concentration of psychiatrists and psychologists in urban areas is only part of the story of the rural mental health workforce shortage. Other “core” mental health workers—including psychiatric nurse practitioners, social workers, and counselors—also concentrate in urban areas. The less populated the rural area, the lower the supply of mental health workers. Geographic workforce differences are usually measured in terms of workers per capita. Another valuable way to examine these differences is how many areas (typically counties) have no specific type of mental health worker.

Researchers at the Washington, Wyoming, Alaska, Montana, and Idaho (WWAMI) Rural Health Research Center present a clear picture of the supply and distribution of the rural mental health workforce using 2015 data from The National Plan and Provider Enumeration System (Andrilla et al., 2018; Larson et al., 2016). The analysis compares behavioral health providers (psychiatrists, psychologists, psychiatric nurse practitioners, social workers, and counselors) in rural and urban counties and divides rural counties into micropolitan and noncore areas. Here is a summary of their findings:

- 65% of all non-metro counties do not have a psychiatrist.
- 47% do not have a psychologist.
- 27% do not have a social worker.
- 81% do not have a psychiatric social worker.
- 18% do not have a counselor.

The percentage of rural counties without these providers is substantially higher in non-core than in micropolitan areas. Thirteen (13) % of all non-metro counties do not have any mental health provider (5% in micropolitan areas and 17% in non-core areas).

The WWAMI researchers found substantial variation in the supply of the mental health workforce across census regions of the United States (Andrilla et al., 2018). Overall, the New England census division had the highest per capita supply, and the West South-Central census division had the lowest supply of three provider types: psychiatrists, psychologists, and psychiatric nurse practitioners. Differences in the supply per capita of all three provider types between the New England and the West South-Central census divisions increased by level of rurality (micropolitan and non-core counties).

It is important to consider the need for different providers relative to mental health conditions across rural regions (Andrilla et al., 2018). Psychiatrists and psychiatric nurse practitioners can prescribe psychotropic medications, but other core mental health providers typically cannot. Primary care physicians can also prescribe medication and—given the shortage of prescribing mental health specialists—account for over half of the prescriptions for depression and anxiety (Barkil-Oteo, 2013). Primary care has long functioned as the de facto mental health system in rural and urban United States regions (Kessler & Stafford, 2008; Regier, 1978). This is less than ideal, particularly when the first-line prescriptions are ineffective or result in complications, and rural primary care physicians have too few behavioral health specialists with whom to consult. The increase of opioid use disorder (OUD) and shortage of substance abuse providers has led to the adoption of medication-assisted treatment (MAT), where trained primary care physicians are granted a waiver permitting them to prescribe buprenorphine for OUD. In 2017, 60% of

rural counties did not have a physician who could prescribe buprenorphine, and rural Federally Qualified Health Centers were less interested in prescribing buprenorphine than urban centers (Gale et al., 2019).

The chronic shortage of mental health providers has blurred the roles of types of providers in terms of what they do and which conditions they treat. Ideally, psychiatrists, psychiatric nurse practitioners, and psychologists would treat persons with the most severe and persistent disorders (e.g., schizophrenia, schizoaffective disorders, bipolar disorder, major depression), and social workers and counselors would treat more mild and moderate mental health conditions, including anxiety, depression, and panic disorders. Different types of practitioners would consult with and assist each other, as needed, as well as with providers treating substance use disorders. In reality, it is “all hands on deck”. As described in Chapter 4, all too often, there is no mental health provider to go to and, in the case of a crisis, the first responder is often law enforcement. How did things get this way, and what can be done about it?

Programs and Strategies to Cultivate the Rural Mental Health Workforce

Rural mental health practice is challenging. Rural mental health providers receive lower income and have a higher number of patients to treat than their urban counterparts. Rural persons typically enter mental health care later and are in more distress than urban persons (New Freedom Commission on Mental Health Subcommittee on Rural Issues, 2007). Rural mental health providers have fewer options for consultation with other providers and fewer treatment options for their patients.

Individual professions and the federal government have been working to resolve these challenges for five decades. The efforts to resolve workforce issues focus on producing more professionals through education, preparing them for rural practice through training, and retaining them in rural areas with financial incentives and job opportunities. The National Health Service Corps (NHSC), established in 1970, was an early federal program developed to improve access to health care in underserved rural areas. Rural areas experienced a worsening shortage of physicians during the 1950s and 1960s as older physicians retired and younger physicians increasingly chose to move to urban areas because of higher salaries, more amenities, infrastructure support, and more medical facilities with the latest medical technologies (DeLeon et al., 2012). More medical school graduates were also entering specialty rather than primary care practice. The NHSC created two programs: the NHSC Scholarship Program and the NHSC Loan Repayment Program. The NHSC Scholarship Program is a competitive program that pays tuition and a stipend to students in accredited medical, dental, nurse practitioner, certified nurse midwife, and physician assistant training programs. Graduating scholarship students must work two to four years in a community-based site in the health professional shortage area (HPSA).

The NHSC Loan Repayment Program was established in 1987 and offers tax-free student loans to a broad range of health professionals, including health service psychologists, licensed clinical social workers, marriage and family therapists, and licensed professional counselors. Loan recipients must work at least two years in a community-based site in an HPSA. The amount of the loan increases with each additional year of service, for up to five years. The Health Services Resource Administration (HRSA) allows participating states and ter-

ritories to operate their own state loan repayment program (SLRP). In 2021, 43 states and territories participated in this program (*State Loan Repayment Program Contacts* | NHSC, n.d.)

Since their inception, the NHSC Scholarship and Loan Repayment Programs have placed tens of thousands of graduates in mental health professional shortage areas. While these programs have been helpful in mediating rural mental health workforce shortages, they cannot, by themselves, fundamentally reduce it (DeLeon et al., 2012; Morales et al., 2020; Negrusa et al., 2014). Not surprisingly, NHSC-participating providers practicing in mental health HPSAs are more likely to leave that area when their term of service is over than non-participants. Those graduates who stay in their original placement area tend to remain in practice at similar rates to non-HPSC graduates (Negrusa et al., 2014). These trends are comparable for providers serving in medical and dental HPSAs. The NHSC programs have provided a steady flow of mental health providers into underserved areas, boosting the capacity of crucial rural health providers, such as Federally Qualified Health Centers, and strengthening the rural behavioral safety net.

Different training programs have focused on preparing mental health professionals for rural practice. The field of social work initiated rural training programs as early as the 1970s and psychology began to focus on rural practice in the 1980s (Wagenfeld et al., 1994). Over the decades, HRSA has continued to promote and support rural health professional training programs. In 2001, The Annapolis Coalition on The Behavioral Health Workforce was formed to advocate for addressing the chronic behavioral health workforce shortage. The coalition's early efforts informed the work of the rural subcommittee of the 2004 New Freedom Commission on Mental Health. The coalition remains active 20 years later. In 2015, SAMHSA created Mental

Health Technology Transfer Centers (MHTTC) to foster the transfer of evidence-based practice to the field. Centers were set up to serve geographic regions and special populations, focus on a specific topic or problem, and disseminate findings and products regionally and nationally. The Mountain Plains MHTTC (a partnership between The University of North Dakota and The Western Interstate Commission for Higher Education) focuses on rural mental health, with the workforce being a significant topic.

Rural and remote areas of the United States have always had to rely on informal (non-professional) sources of care to address their mental health and substance use needs. Given the chronic and ongoing shortage of professional clinicians, there was simply no other choice. In addition, community peer support mental health workers bring many attributes to their work. They understand and share the culture of the community, reducing stigma among clients toward both reaching out for and accepting help and treatment. They may also be less threatening to clients than a professional outsider, and might understand more fully the needs of rural people and their families (Cronise et al., 2016; Myrick & del Vecchio, 2016).

Rural regions have relied on primary care providers for much of their mental health care, and a reliance on non-mental health professionals to provide mental health supports continues in rural communities. Over the last decade, there has been a more explicit recognition of the role of non-mental health professionals in supporting community behavioral health, as well as the need to incorporate these workers into rural mental health service delivery. The importance and role of the non-professional mental health workforce have been recognized and promoted internationally and throughout the United States. The National Council for Mental Well Being offers the Mental Health First Aid program,

which trains members throughout a community to recognize and respond to signs of mental distress. This training has been promoted in both urban and rural areas (National Council for Mental Wellbeing, 2022).

The use of peer support—persons with a mental illness or problem helping other persons with a mental health illness or problem—has grown from an advocacy movement started in the 1970s (Clay, 2005; Ralph & Corrigan, 2005) to an essential component of care, increasingly recognized by federal policymakers (Chapman et al., 2018; Gagne et al., 2018; Myrick & del Vecchio, 2016). As discussed in Chapter 4, faith-based organizations can also provide a source of non-professional mental health support in rural communities (Baldwin & Poje, 2020; Hall & Gjesfjeld, 2013).

The ongoing need to properly educate, train, and place the professional mental health workforce, and to draw upon community members and resources, is reflected in the Rural Mental Health Workforce summary of core rural workforce strategies from the MHTTC Networks (mhttcnetwork.org):

- Loan repayment programs to attract professionals to rural communities. These loan programs are sponsored federally by the HRSA.
- Development of career ladders in a rural area or state so that residents can enter the mental field and advance without leaving the area for education and training.
- “Grow Your Own” strategies that focus on recruiting and fostering the career development of individuals native to a community, since they are more likely to remain in the area. Such individuals are sometimes referred to as “place committed.”
- Workforce development within tribal health care systems, which provide a large portion of mental health services in many rural parts of the country.

- Recruitment, retention, and competency development initiatives with direct care paraprofessional workers, who constitute a large segment of the rural mental health workforce.
- Increased use of telehealth to extend the reach of mental health professionals in rural and other underserved areas.
- Promotion of integrated care models that increase primary care providers' role and skills in meeting residents' mental health needs.
- Training community members to be mental health first responders through programs such as Mental Health First Aid, which has a rural version.
- Focused workforce development in state hospitals, which play a major role in the service system of rural states.

The challenges of creating and maintaining an adequate behavioral health workforce are ongoing. Policymakers have turned their focus to what combination or teams of behavioral health workers are necessary to provide the latest evidence-based practice for specific areas of mental health needs. A recent SAMHSA Behavioral Health Workforce Report focuses on meeting the needs of persons with the most serious mental health and substance use conditions (2021). The report is presented in four parts:

1. Evidence-based models of care are presented, with various staffing arrangements (types of providers) for each model.
2. The number of providers needed to staff and team each of the 13 models of mental health care is described, including models of care for youth with severe emotional disorders (SED).
3. The number of providers necessary to staff each of the three substance use disorder (SUD) models of care is presented.
4. The report concludes with an analysis of the supply and demand for each behavioral health occupation included in the staffing models.

Mathematica Policy Research conducted an environmental scan, based on subject expert interviews and virtual case studies, of the impact (efficiency) of the behavioral health workforce under current and emerging behavioral service delivery models (Pietras & Wishon, 2021). The models assessed included behavioral health integration models, behavioral health mobile applications, certified community behavioral health centers, crisis services, hub-and-spoke models for medical-assisted treatment, telebehavioral health models, psychiatric mental health nurse practitioners, peer support models, and same-day access. Three models were assessed in depth—psychiatric mental health nurse practitioners, behavioral health mobile applications, and crisis services. Psychiatric nurse practitioners can provide many of the same services as psychiatrists, including prescribing medications, at a lower cost. Some practice laws, which vary across states, limit the full impact of psychiatric nurse practitioners.

Expanding laws could increase their impact on both mental health and substance use disorders. Behavioral health mobile applications to supplement clinical treatment are in development which may increase access by helping clinicians see more patients over distance and time, and improve patient self-management. While the number of mental-health-related applications is growing substantially, adoption and use have been relatively slow. This area has substantial potential but will require guidance and regulatory oversight to establish (and pay for) integration with ongoing clinical care. Crisis services are needed to stabilize individuals quickly and keep them in the least restrictive settings, if possible. In addition to helping patients and keeping them from harm and further distress, crisis services can reduce the strain and burden on emergency departments and other de facto crisis providers such as law enforcement. Fragment-

ed and inconsistent funding of crisis services has limited their wider use.

An ambitious effort to rethink and redirect the behavioral health workforce to meet mental health needs comes from the United Kingdom. In 2008, the United Kingdom initiated the Improving Access to Psychological Therapies (IAPT) program. The program is aimed at engaging persons with anxiety and depression in treatment and treating them with cognitive behavioral therapy (CBT). The initiative is noteworthy because of its scale, its focus on relatively common mid- to moderate-severity mental health conditions with a history of under-detection and under-treatment in the United Kingdom, and its training of a novel behavioral health provider: psychological wellbeing practitioners. A Commonwealth Fund Report describes the IAPT (Hostetter & Klein, 2021):

The IAPT differs from predominant models of mental health care in the US in several ways. First, it promotes a standardized approach. Frontline therapists (psychological well-being practitioners) receive a year's training in a national CBT curriculum. People with symptoms of mild-to-moderate depression or anxiety are offered treatment by these practitioners, typically over the phone or via text messaging. For patients who find this insufficient, treatment shifts to face-to-face therapy with psychologists.

IAPT is also unusual in that treatment outcomes—the degree to which people feel better—are measured at each session, and aggregated data about treatment retention and results are reported on a public dashboard. There is minimal gatekeeping: People

with general practitioners can refer to the program, pursue therapy and pharmacological treatment, and incur no costs. The program has grown steadily; during 2019–20, nearly 1.7 million Britons were referred to it, and more than half of those who completed treatment recovered.

A growing body of research literature suggests the success of the IAPT (Wakefield et al., 2021), but also raises some concern that the program may be overreaching its original scope in terms of the types of clients and conditions it is serving. This dichotomy echoes the historic debate within mental health in the United States over the scope of practice among the professions. The success of the IAPT has led to adaptations of the program in Australia, New Zealand, and Norway (Hostetter & Klein, 2021).

Promising Directions and Next Steps

The shortage of mental health workers in rural and remote United States regions endures and is not likely to be reduced in the near future. There are too few psychiatrists and psychologists, and the challenges of recruiting and retaining them in rural communities remain: rural practice pays less, has less infrastructure and support, and has fewer referral options than urban or suburban practice. These and similar challenges are present for other mental health professionals, including psychiatric nurse practitioners and physician assistants, and for mid-level practitioners, such as clinical social workers and counselors. Community-grown support workers, including peer support workers and educational and behavioral technicians, must contend with the heavy workload and service limitations imposed by the professional workforce shortage.

How does the rural United States maintain and enhance the mental health workforce it does have? Ongoing efforts to recruit a professional workforce must continue and be improved where possible and practicable. Although well-established federal programs like the NHSC have not “solved” the rural health workforce shortage, they remain critically important. It is necessary, if not sufficient, to get mental health professionals into the pipeline in these regions. The workforce must be retained and used most efficiently in rural communities. Reimbursement and financial support, such as loan repayment options, should be increased. The Rural Policy Research Institute offers the following recommendations (Gale et al., 2019):

- Develop and fund more effective training and pipeline programs.
- Expand scholarship and loan repayment options.
- Explore federal reimbursement and scope-of-practice regulations to expand the pool of reimbursable providers.
- Revise Medicare reimbursement to include an expanding array of behavioral providers, including master’s trained counselors, marriage and family therapists, and peer support counselors.
- Encourage the use of peer recovery and community health workers by creating training programs and payment strategies to support their integration into behavioral health teams.
- Use technology to support supervision and collaboration among rural providers to reduce isolation and burnout.

The Behavioral Health Workforce Research Center at the University of Michigan offers similar recommendations for developing a national recruitment strategy for the rural behavioral workforce (Baum & King, 2020). The Michigan researchers note that state-level experts often lack current or thorough data to fully assess their options and make evidence-based decisions:

Although some recruitment and retention tactics have an evidence base, others could greatly benefit from evaluation. Most state experts do not have data that indicates which behavioral health providers are in the highest need in their state or region. Knowing the gap in provider adequacy by provider type could help tailor efforts to increase and maintain the behavioral health workforce (p.9).

This suggests that regional and state workforce centers and programs are needed more than ever to help educate, train, and place professional, mid-level, and peer workers into local delivery systems and rural communities. It is important to grow our understanding of how the workforce can be used – both as substitutes for, and complements to, developing technology – including telehealth and mobile applications. More generally:

- How can the mental health workforce best support and be supported by the fragmented and changing behavioral health service systems of rural United States?
- How adequate is the workforce to address the changing demographics and diversity of United States rural regions to best serve the needs of subpopulations, including children and youth, veterans, and older persons?

To help guide and evaluate these steps, more focused research is needed on the role and impact of the mental health workforce on the availability, quality, and impact of behavioral health care in the rural United States. Significant barriers to conducting such research have been the need for uniform workforce data across states and differences in licensure laws, scope of practice regulations, and reimbursement across states and territories. A minimum behavioral health workforce dataset is needed to provide the foundation for more timely

and focused research on the most efficient and effective use of behavioral health workers (Beck et al., 2018a; Beck et al., 2018b).

In light of all of the challenges described above, it will be necessary for rural mental and behavioral researchers, health care systems, and government entities to invest in innovative and novel strategies to recruit and retain an adequate workforce across rural and remote areas in the United States. These solutions will likely come from something other than a generalizable approach. Instead, they will need to be created and maintained from within rural and remote communities, drawing from their own unique strengths and resources.

Chapter 6: Rural Mental Health Around the World

Drs. David Perkins & Hazel Dalton

This chapter provides an international perspective, describing the context and approach to rural mental health in other Western industrial countries. The chapter starts with an Australian focus, where the authors are based, and broadens to other countries, including New Zealand, Canada, and the United Kingdom. An international perspective can help readers see their rural mental health issues more clearly, within the broader context of human, geographic, and ecological diversity issues. This chapter also raises the question of what else we might learn from a better understanding of rural mental health in non-industrialized, largely rural countries.

The discussion of other countries besides Australia should not be considered comprehensive, given the authors' knowledge and the chapter's constraints. We have attempted to provide "signposts" so that the interested reader can follow up on specific interests. Another caveat involves the literature on rural suicide. We do not regard suicide as a subset of mental ill-health, but many who die by suicide have mental health problems, and those who lose friends or family to suicide suffer psychological distress and much worse. A final caveat: this chapter does not provide a detailed analysis of Aboriginal and Torres Strait Islander wellbeing, although a few key publications are referenced.

The Context for Rural Mental Health in Australia

The Australian population is largely huddled around parts of its 34,000 km coastline (22,000 miles).

Approximately 70% of the population lives in the greater capital cities, while the rest live in regional and rural communities. In 2021, The population of Australia was 25,788,215, of whom 881,600 are the Indigenous Aboriginal and Torres Strait Islander peoples who are understood to have occupied mainland Australia for 50–60,000 years (Australian Bureau of Statistics, 2021a; 2021b). Large parts of the continent are sparsely populated and devoted to various forms of agriculture, mining, mineral extraction, and tourism. Rainfall patterns determine land use; climate variation and extreme events seriously challenge rural residents and communities.

The Australian health care system reflects its federal governance, with a split in responsibilities between different levels of government. The federal government reimburses or subsidizes medical fees (through the Medicare Benefits Schedule, or MBS) and provides grants to state and territory governments responsible for public hospital services. Most people are expected to buy private health insurance, contributing to specialist medical care and private hospital stays. Many insurance plans do not provide adequate benefits for mental health care.

There is a saying that "once you have seen one rural town you have seen one rural town." Rural communities vary according to demographic, socio-economic, geographic, cultural, ethnic, and many other factors. Governments are nonetheless keen to classify them for resource allocation, calculation of various forms of incentives and investments, planning public services, and providing targeted forms of expertise and support.

The prevalence of poor mental health has been reported as relatively similar across remoteness

categories in Australia, with the latest estimates of mental disorders in the last 12 months at 21.2% for city dwellers compared to 22.2% for rural residents (Eckert et al., 2004; Australian Bureau of Statistics, 2021b). The most widely-used classification is the Australian Statistical Geography Standard Remoteness Structure- Remoteness Areas (ASGS-RA), which classifies rural communities by distance to communities defined as service centers (Australian Department of Health and Aged Care, 2021). Service centers stand at one edge of the classification (inner regional) and, as distance increases, we have outer-regional, remote, and very remote categories. This and other classifications are crude instruments to classify the enormous variety of locations and communities across rural Australia (McGrail & Humphreys, 2015).

Rural communities share that more than the population is needed to support specialist services, whether private sector or publicly provided (Dalton & Perkins, 2020). Remote communities are often too small to support resident generalist services such as general medical practitioners (GPs), and those generalist providers usually have a broader scope of practice than is common in the city. An important study by Smith et al. (2008) examined epidemiological evidence about rural health disadvantages. After controlling for socioeconomic disadvantage and other factors, they found that matters were complicated. It follows that we need to address poverty, inequality, discrimination, and other social determinants. Wilkins (2015) found that rural towns with less than 1,000 people may have positive life satisfaction. McGrail et al. (2017) have looked at the relative attractiveness of communities. Those with high amenities, such as attractive coastal locations, may be better able to attract and retain health and other staff and services.

Despite a plethora of National Mental Health Plans (Australian National Mental Health Commission,

2017; Mendoza, et al. 2013), there has been widespread dissatisfaction with mental health services for at least the last decade, and with rural mental health services in particular. A series of inquiries have pointed to gaps in services, due to shortages and maldistribution of the specialist mental health workforce as well as access barriers such as co-payments, which disproportionately impact poor and vulnerable consumers (Senate Community Affairs Committee Secretariat, 2018; Productivity Commission, 2020; Legislative Council New South Wales Portfolio Committee No. 2- Health, 2022).

Other key considerations include climate change and rural adversity, the impact of the COVID-19 pandemic, and special challenges faced by Aboriginal people and Veterans. Australian identity is built on the notion of a sunburnt country with fire, floods, and drought (Mackellar, 1908). The recent pattern of drought, floods, fire, and pests—sometimes in sequence and sometimes together—has impacted rural residents' mental health and wellbeing. While climate change has been a controversial matter in the Australian discourse, the term "rural adversity" has been coined to include the implications of climatic variability on the wellbeing of rural residents (Lawrence-Bourne et al., 2020). Such rural adversity must be understood in addition to personal misfortune and the social and economic determinants of mental ill-health. While farmers constitute a minority of rural residents, they are particularly susceptible to the impact of climatic variation. The work of the Newcastle University Australian Rural Mental Health Study (ARMHS) is described in Kelly et al. (2010), and evidence on farmer mental health is summarized in Brew et al. (2016).

COVID-19

Nearly four years since the virus was first recognized, the implications of COVID-19 on the psycho-

logical wellbeing of rural and remote communities are still being identified. Direct effects from infection, illness, and death were slow to spread to rural and remote areas. However, the indirect impacts of economic and social disruption combined with quarantine, restrictions on movement, and disruption to supply chains and workforce had major impacts on rural communities as tourism virtually ceased, businesses were disrupted, new hygiene rules became oppressive, and many businesses ceased operations (Simmons et al., 2022). COVID-19 seems to have accelerated many business and other processes, such as telehealth and digital services, which we discuss below. It is uncertain which innovations will be regarded as temporary adjustments and which will lead to permanent changes. Health and social care workers, who were not always well-prepared or supported for the additional workload that came with supporting organizational responses to the COVID-19 public health recommendations, experienced particular impacts during the pandemic (Simmons et al., 2022).

Access to Mental Health Care

Perhaps the most frequently cited reason for high levels of psychological distress and suicide in rural areas is that access to care is poor. While the focus is often on supply-side issues such as shortages in staff, skills, or beds, Levesque et al (2013) reminds us that there are two sides to access: supply and demand. On the demand side, the issue of mental health literacy is particularly important since it underpins help-seeking, self-care, and informal care in non-health care settings. Handley et al. (2018a; 2015) have shown that some rural and remote residents may not recognize symptoms, such as persistently disturbed sleep, as indicators of possible (treatable) mental illnesses. Similar arguments have been made about identifying and support-

ing those who may be at risk of suicidal behavior (Handley et al., 2018b; 2013). In response, there have been several programs to improve lay understanding of mental health, illness, and suicide risk. At a community level across Western Australia, the “Act, Belong, Commit” program was designed and widely implemented to promote positive mental health and wellbeing (Donovan & Anwar-McHenry, 2016; Donovan et al., 2021; Drane et al., 2020). At an individual level, Kitchener & Jorm (2002) appropriated a widely-accepted concept and developed Mental Health First Aid, which provides lay participants with the knowledge to support individuals with mental health problems (Morgan et al., 2018). Positive mental health and support programs have also been developed for industries such as construction (Gullestrup et al., 2011; Martin et al., 2016) and mining (Tynan et al., 2018).

Another key target for mental health promotion activities is young people, through schools-based and similar programs. A 2018 joint report by Mission Australia and Reach Out examined young people’s mental health and health services needs in rural and remote Australia. The report found evidence of increased unmet needs in rural and remote communities, and nuances within the support networks and stressors identified by rural teens compared to their metropolitan counterparts (Ivancic et al., 2018). Sources of stress included finances, school/study stress, and fears for the future. Peters et al. (2019) and Handley et al. (2017) have examined the mental health needs of rural young people.

Rural suicide is a rare event with devastating consequences. Rates are often 50% higher than the lowest rates in capital cities. Many of those who die by suicide are not being actively treated for mental health conditions or other conditions. A variety of programs have been developed to increase the capability of lay community members and health practitioners to provide support to those who may

be considering suicide (Dabkowski et al., 2022; Davies et al., 2020; Hazell et al., 2017; Handley et al., 2021; Kennedy et al., 2020). For example, universal programs addressing the general public include the “RUOK” campaign, (www.ruok.org.au) which seeks to encourage adults to enquire about the wellbeing of others by asking, “Are you OK?” and providing them with practical strategies to use if the answer is “No.”

A number of community-based suicide prevention initiatives have been initiated, usually on a locality or trial basis. The largest is the University of New South Wales Black Dog Institute’s “Lifespan Project” (Long et al. 2022; Shand et al., 2020) which includes locally-led complex interventions employing local variants of evidence-supported interventions such as gatekeeper training. To date, the project has found that suicidal risk differed by geographical areas (by both demographics and means), stigma related to suicide differed across the community (with significant variation by sex, sexual preference, and Indigenous status), and collaborative networks strengthened community social capital for suicide prevention, which was enhanced by geographic proximity but challenging in rural areas. Further results are eagerly awaited. Powell et al. (2019) describe a community project in Clarence Valley, New South Wales that promoted wellbeing rather than a suicide prevention goal. Given rural communities’ complex and changing contexts, these interventions are difficult to evaluate.

Intricately linked to mental health literacy is the challenge of stigma reduction, not to be confused with questions of privacy and confidentiality, which are often thought to be more prevalent in rural communities. In Australia, the Melbourne-based “Beyond Blue” organization has addressed stigma through the presentation of evidence-based and accessible information about mental illness (Beyond Blue, n.d.). Independent evaluations are available on its website.

Numerous other organizations with a strong online presence work similarly to reduce stigma and build tailored mental health literacy, either generally or to target sub-population groups or particular mental illnesses. These include: ReachOUT, which targets young people (www.au.reachout.com), Gayaa Dhuwi (Proud Spirit) Australia (www.gayaadhuwi.org.au) and WellMob (www.wellmob.org.au), focusing on the needs of Aboriginal and Torres Strait Islander peoples, QLife (www.qlife.org.au), which offers LGBTQIA+ community support, Embrace Australia (www.embracementalhealth.org.au), providing multicultural support for culturally and linguistically diverse people, PANDA (www.panda.org.au), offering support for perinatal concerns, the Butterfly Foundation focusing on eating disorders, and SANE Australia (www.sane.org), which supports those with recurring, persistent or complex mental health issues.

Rural Mental Health Services

Considering the supply side, the physical health disparities of people with mental health conditions, which include an increased burden of disease and premature mortality due to untreated physical ailments, have been known for some years but only addressed more recently in research and policy (Australian National Mental Health Commission, 2016; Roberts et al., 2018). The “Equally Well” movement (www.equallywell.org), spreading beyond Australia, focuses on caring for the whole person rather than a single disease. While rural mental health services are structured according to provider assumptions about needs, patient needs are often more complex and may include physical, psychological, social, and material support.

As a human service, the availability of generalist and specialist mental health providers is particularly important. The maldistribution of mental health spe-

cialists favoring large cities is an enduring problem in Australia. The rates of specialists, GPs, and allied health professionals per 100,000 are much lower than those in the cities, but the absolute number is only one part of the problem (National Rural Health Alliance, 2021). The distribution of staff varies within and between regions (Furst et al., 2021; van Spijker et al., 2019). Rural communities vary in amenities and attractiveness (McGrail et al., 2017), and staff recruitment and retention are an important area for research (Cosgrave et al., 2015; 2018; Russell et al., 2015). The Royal Australian and New Zealand College of Psychiatrists (RANZCP, 2022) has recognized this challenge in policy position paper 65 and an associated roadmap to address the issue.

The core mental health services provided in rural areas include acute services provided (free) by state mental health services, primary care services provided by GPs under the MBS in which patient fees are subsidized by the federal government, and services provided by private psychologists whose fees also attract a federal subsidy. GP and psychologist services can incur a co-payment, and psychological care may be limited in duration/number of sessions or by the ability to pay.

Approximately one in every eight GP presentations is for a mental health problem, and one in five Australians consulted a GP about their mental health in 2018 to 2019: 60% were prescribed medication, 30% were provided with counseling or advice by the GP, and 20% referred either to a psychiatrist or psychologist (Productivity Commission, 2020). GPs are understood to have limited expertise in treating mental health issues, so providing such “upskilling” is part of the latest Mental Health and Suicide Prevention Plan (Australian National Mental Health Commission, 2017).

In 2019–20, the MBS spending per person on mental health items ranged from \$56.87 in capital

cities to \$32.97 in outer regions and \$20.38 in remote areas (National Rural Health Alliance). Some block funding is provided to services for remote communities, such as the Royal Flying Doctor Service, but the scope and duration of such funding are complex and hard to monitor. The MBS reimbursements reflect the reduced availability of GPs and allied health providers in rural and remote areas. Thus, rural and remote communities are not equitably funded for mental health services.

Rural and remote communities have depended on fly-in, fly-out psychiatrist services for many years. Attempts to improve these services are described by Perkins (2008) and Fitzpatrick (2017). In both cases, the visiting specialist is employed to provide a contribution that meets local needs, including but not limited to assessing and treating patients with complex needs.

One response to the perceived GP skills deficit, and to the failure to develop strong community services following the closures and downsizing of psychiatric hospitals, is the development of community-based services, including sub-acute mental health services, Headspace specialist services for young people (Looi et al., 2021), Early Psychosis Prevention and Intervention Centres (Brown et al., 2021; Williams et al., 2021), and more recently, community-based integrated mental health services for adults branded as Head to Health Centres. These federally-funded centers offer free services, which help to address inequalities and tend to be in larger regional population centers. These centers have been designed to address pressing problems such as access for young people, addressing the so-called “missing middle” between inpatient and GP services (sub-acute and Head to Health Centres)(Headspace National Youth Mental Health Foundation, n.d.). Each of these centers adds to the complexity of the mental health system but also claims to assist users in navigating that system.

Furst and colleagues (2021) have used the internationally recognized mapping methodology DESDC-LTC to detail the location and availability of staff in various parts of Australia. Comparing two regions in Western Australia and New South Wales, they found differences in skills and staffing within and between regions. This team has also used this approach to map and compare services in Australia, Canada, and Finland (Salinas-Perez et al., 2020), noting that international, contextually similar rural–rural comparisons may be more instructive than the ubiquitous urban–rural comparisons.

Australia has several helplines (Healthdirect, 2023) designed for broader or more narrow populations. These lines have become widely known and used due to initiatives such as Everymind’s Mindframe program (www.everymind.org), which supports safer media reporting of suicide and mental health stories, accompanied by links to national helplines. Private and voluntary sector donations and extensive government grants support these services. More recently, helplines have been developed for specific groups such as children, veterans, victims of domestic violence, and employees through employee assistance programs. These services are promoted widely in rural and metropolitan areas. Key questions arise about the effectiveness and efficiency of such services (e.g., percentage of calls answered), the issue of one-off and regular/repeat callers, and the extent of connections with local health services (Mishara et al., 2022; Middleton et al., 2017).

Tele-behavioral health is not a new idea in Australia, as illustrated by Kavanagh and Yellowlees in 1995 (p. 66). Take-up has been sporadic as technological, systemic, and workflow issues have been addressed. It took the COVID-19 lockdowns, work-from-home orders, and travel restrictions to ease restrictions on including telehealth in the MBS

and private insurance reimbursement schedules, as well as ensuring its broader use by psychiatrists and psychologists. The acceptance of tele-behavioral health by patients and incorporation in primary care work programs was another matter. Many GPs resorted to the telephone as a simple substitute for some consultations. The literature on the acceptability of telemental health is growing, but evidence on its effectiveness still needs to be provided.

Examples of telehealth services that were well-established before the pandemic include the MindSpot Clinic, which is described as a national digital mental health service that commenced operations in 2013 (Titov et al., 2015). The federal government funds the service for anxiety and depression and provides free care on a national basis using digital modalities and teletherapy. It has a comprehensive online assessment, which is required prior to starting online courses or clinician-mediated support. Such services are of particular value to rural residents, such as health provider staff, who are determined to protect their privacy. This example has been the subject of extensive research and stands up well compared to face-to-face services. Rural residents and Aboriginal and Torres Strait Islander people use the MindSpot Clinic at a rate commensurate with their population (Titov et al., 2017; 2019; 2020). A wide variety of online services, often based on cognitive behavioral therapy, have not been as well-researched.

Online CBT-based courses provided by This Way Up (www.thiswayup.org.au) provide clear opportunities for GPs and other health professionals to prescribe their online courses via the clinician hub (www.thiswayup.org.au/clinician-hub/), where the course fee is waived. Clinicians can use it in a variety of ways to support patients. The site has a long track record of operation with stable partners, going back to 1996 when the first programs were developed. It has strong credibility with clini-

cians, with more than 27,000 clinicians using the service and a strong research base (www.crufad.org/our-research/) (Karyotaki et al., 2018).

Research addressing the expansion of telehealth during the pandemic is still developing, and as might be expected, a complex picture emerges. It is becoming clear that for some consumers the expansion of telehealth presents an improvement in care, while creating difficulties for others. For instance, consumers have reported that they have the full attention of their clinician in a telehealth visit in a way that may not be the case in the office. Others may be excluded from telehealth due to the so-called digital divide.

Digital mental health services are ubiquitous in Australia. A recent review of digital mental health services for young people suggests that they are better than nothing, but require active support (Garrido et al., 2019). A recent American review by Borghouts (2021) includes Australian material and concludes that the context is all regarding digital mental health interventions. It describes enabling factors that might improve consumer engagement. This description of rural mental health services suggests an unhelpful degree of complexity and a lack of integration. The Orange Declaration suggests that a mental health ecosystems approach is needed (Furst et al., 2021) and that concerted development will be needed on several fronts (Perkins et al., 2019). An ecosystem approach takes into consideration the full context of a service area, including variables like available infrastructure, population characteristics, established treatment services, and more.

The grassroots Men's Sheds Movement began in Australia in the 1990's and has spread worldwide, including New Zealand, Ireland, Canada, the USA, Denmark, Sweden, the UK, Scotland, and Wales. A Men's Shed provides a friendly meeting place for

men to come together and undertake various mutually agreed-upon activities (International Men's Shed Association, 2022). A recent systematic review showed that participation in Men's Shed activities improved self-rated health, social connection, and wellbeing (Foettinger et al., 2022).

To conclude this section, we discuss services for three underserved groups: Aboriginal persons, Veterans, and those with eating disorders. These groups are located across Australia, but they experience particular problems accessing services in rural locations. Any consideration of Aboriginal Mental Health should note two points:

1. The individualist or family framing of mental health does not match Aboriginal peoples' assumptions about health found in the concept of "social and emotional wellbeing".
2. The extent of mental illness and the rates of suicide among Aboriginal people significantly exceed those of the non-Aboriginal population.

It is hard to overstate the importance of colonization, dispossession, removal of children from families, deaths in prison, and other forms of discrimination on the mental and physical wellbeing of Aboriginal people. While welcomed by many, prime minister Kevin Rudd's formal apology to Australia's Indigenous peoples in 2008 did not make everything better.

Aboriginal Persons

The Proud Spirit Declaration (National Aboriginal and Torres Strait Islander Leadership in Mental Health, 2017) builds on developments and collaborations with similar countries. Aboriginal people have stated how they would like to be understood and treated and engaged in health and mental health services. This addresses issues such as the role of Western "scientific" medicine together with

culturally appropriate and respectful care. While attempts to train Aboriginal people as health professionals have been slow, the story of Aboriginal mental health workers is a positive development (Mackean et al., 2020). Aboriginal insights support the importance of mind and body, a concept we address below. Aboriginal mental health workers are often employed within community-controlled Aboriginal health services that provide multi-disciplinary and culturally safe care. They do not, however, cover all rural communities with substantial Aboriginal populations.

Veterans

Returned soldiers face distinctive mental health challenges and are often located in rural communities after leaving active service (Sadler et al., 2021). Suicide rates among veterans are high, and there is currently a Royal Commission examining defence and veteran suicide (Royal Commission into Defence & Veteran Suicide Defence Taskforce, 2021).

Individuals with Eating Disorders

Eating disorders include a serious group of conditions with psychological and physical aspects that disproportionately affect young people. Services for those with eating disorders have been a serious gap in Australian rural mental health services for many years. Following effective advocacy, the latest national strategy to combat eating disorders includes funds to increase psychological services and to build several community-based residential treatment centers, as well as the development of a best practice collaboration to promote learning and effective practice (Sadler et al. 2021).

Describing the rural mental health services outlined above as a mental health system overstates the consistency between places and the relationships between organizations, clinical services, and clini-

cians providing mental health care. The Australian Government Department of Health and Aged Care has recognized the difficulties users face in obtaining reliable information and navigating services and developed the Head to Health website, which provides a single portal to trusted information, digital mental health resources, and telephone call services (www.headtohealth.gov.au).

A group of researchers, service providers, and clinicians have published an analysis of the system problems and the priorities for action (Perkins et al., 2019). The Orange Declaration notes a set of system priorities that require concerted, not disjointed, action. Fitzpatrick has published a series of papers based on coronial data for deaths by suicide in rural communities in the eastern states of Australia. Papers focus on social determinants (Fitzpatrick et al., 2019), older adults (Fitzpatrick et al., 2021a), help-seeking (Fitzpatrick et al., 2021b), and violence (Fitzpatrick et al., 2022).

Key Issues for Consideration

In addressing rural mental health care, choosing an appropriate voice, or viewpoint, is important. Is rural wellbeing an issue to be addressed by external (usually metropolitan) authorities, or is it the direct concern of rural and remote residents whose voice needs to be enacted? The variability and complexity of needs and services have been established above. The integration of services and the navigation of services by both users and providers present formidable obstacles. These obstacles are made even more difficult by the absence of good, consistent data on inputs, activities, outputs/outcomes, and value-for-money considerations.

A key question that needs to be addressed is the attractiveness of particular locations and the difficulties in recruiting and retaining staff in less attractive

places. The Australian rural experience is marked by rural and personal adversity, announcements of government policies and spending intentions, and shortages and maldistribution of key skills. Such shortages cannot be solved quickly, given the lag times for education/training and the acquisition of necessary experience. The separation of health care for mind and body poses problems in rural settings where mental health problems are increasingly seen as the domain of specialists, and medical treatment focuses on medication and referral. Increasingly important is the role of philanthropy as a response to perceived gaps in mental health, suicide prevention, and disaster recovery services. Governments and charities are making significant investments in resilience and recovery programs where outcomes are uncertain.

Looking More Broadly— International Perspectives

Canada

As countries with similar colonial histories, federated governance, and geographical size, comparisons have been drawn between Australia and Canada with respect to health and mental health systems (Dalton & Perkins, 2020). Oelke and Lints-Martindale (2020) note that the analysis underpinning the Orange Declaration fits well in the Canadian context. They point to the importance of the needs and perspectives of Canadian Indigenous peoples and also the contribution to be made by people with lived experience of mental illness (Oelke and Lints-Martindale, 2020). Bartram (2019) points to a key gap in the Canadian (rural) mental health system. While mental health services provided by GPs and psychiatrists can be billed to public health insurance programs, care provid-

ed by non-physician providers cannot. Access to mental health care is inequitable due to income differences. This access gap was also the case in Australia before 2006. While fees charged by allied health providers are now subsidized, the number of annual attendances is restricted and co-payments are common.

The 2017 Common Statement of Principles on Shared Health Priorities (Health Canada, 2017) is a commitment of federal, provincial, and territorial governments (FPT) to work together over 10 years to respond to the health needs of Canadians. The statement informs bilateral funding agreements to promote collaboration, innovation, and accountability with the main objectives of improving access to mental health and substance use treatment services, as well as home and community care. The statement promises close partnership with Indigenous people and transparent, annual reporting of activity and progress.

The difficulties in accessing and providing rural mental health services are the starting point of a review article by Freisen (2019). Describing similar access and delivery barriers to those in Australia, three developments are noted: technology-based psychiatric consultations, specialist traveling clinics, and mental health supports for rural general practitioners. One notable element of technology-based support is Project Echo (Arora et al. 2011; Sockalingam et al., 2018), which provides support from psychiatrists in metropolitan “hubs” to primary care physicians and mental health workers in rural “spoke” locations. Technology-based mental health services face similar barriers to success as to those in Australia when they are not properly integrated with the rural community.

The use of Assertive Community Treatment programs shows promise in some rural communities, supported by evidence of reductions in emergency

room visits and increased satisfaction by patients with schizophrenia (Pope et al., 2014). Additionally, local health hubs provide comprehensive “one-stop-shop” services to rural populations, including culturally appropriate and traditional healing services for First Nations users (Whaley, 2019). These strategies assume the ability to attract and retain a rural health workforce. A dedicated local health professional recruiter/community connector role has been employed in Marathon in rural Ontario since the mid-1990s to attract and retain health professionals, beginning with a focus on family physicians and expanding to nursing and allied health. This model has been adapted and is in use in rural Australia as the “Attract-Connect-Stay” and highlights the strengths and opportunities of residing in rural communities.

A promising approach to addressing rural and Indigenous health inequities is the Socially Accountable Health Partnerships approach (Markham et al., 2021). This is an intensive approach to building partnerships between communities, policymakers, health administrators, health professionals, and academic institutions. It recognizes that changes need to be made to complex adaptive systems if remote and First Nations consumers are to experience improved access to health care services.

The use of digital solutions for Indigenous wellbeing is an under-researched area. Hensel et al (2019) describe using digital mental health solutions concerning the service in Manitoba, which serves young people and has been operating since 2010. The service combines itinerant visits and telehealth, and several key success factors have been identified. These approaches include the following person-centered digital health solutions: telemental, e-learning, decision support tools, web-based applications, social media, digital storytelling, virtual communities of practice, and electronic consults. These solutions are

based on an individual’s mental, physical, emotional, and spiritual needs.

New Zealand

While New Zealand is geographically much smaller than Australia or Canada, it shares some characteristics, including a significant agricultural sector, exposure to rural adversity such as earthquakes, and a concentration of services in larger cities. New Zealand addresses some of the issues of scale by sharing education and training infrastructure, such as the Australian and New Zealand College of Psychiatrists.

New Zealand has built on its colonial past somewhat better than many countries and this is sometimes attributed to The Treaty of Waitangi (1840). Its welcome-to-country ceremonies are often more than perfunctory, and many New Zealanders of European heritage can offer greetings in the Māori language. New Zealand’s experience of earthquakes and aftershocks has been extensive in recent years, including 2011 and 2016. Disaster management is often understood in phases: risk reduction, readiness, response, and recovery. While most attention is given to the sequence of shocks before, during, and following a large earthquake, it is important to be aware of those who are psychosocially vulnerable and to understand that the process of recovery may take many years. In a recent article, Hay and Pascoe (2022) demonstrated social workers’ potential contribution in each disaster phase.

An innovative approach to the wellbeing of New Zealand Farmers is a “Social Good Initiative” entitled FarmStrong, which adopts the premise that in an industry characterized by family ownership and small workforces, the farmer, family, and workers are the most important asset (Wyllie, 2021). Therefore, investments in farmer wellbeing should be a

priority for each farm business. FarmStrong conducts research, which is published on its website (www.farmstrong.co.nz).

Holman (2018) points to the role of the police as first responders when mental health crises occur, noting that this may not be the most appropriate response, but may be the only option outside working hours or on weekends in small communities (p. 99). Questions arise about the use of restraint and the relationship between police and mental health services. In some parts of New Zealand, nurses accompany police on crisis calls, but there are questions about whether this is ideal.

The United Kingdom

Consideration of mental health services in the United Kingdom awakens us to the variety of places and communities that employ the term rural. As in the case of New Zealand, distances from major cities in the United Kingdom are relatively small, but the variety of communities is enormous. Philo and Parr (2020) remind us that the 19th-century asylums were constructed in rural settings, on the assumption that green space, peace, and quiet would benefit patients. Deinstitutionalization and the creation of new smaller services have led to increased investment in urban and suburban settings despite many service users remaining in rural communities.

The United Kingdom and Scotland provide interesting examples of non-medical wellbeing interventions that promote social prescribing and self-referral. Gorman describes the Care Farming Initiative in the United Kingdom, where people with mental health problems work and sometimes live on farms (2020). These services provide opportunities for connection with rural landscapes and engagement in physical and social activity, which benefits individual wellbeing.

In the Inverness region of Scotland, Morton and Bradley describe several non-clinical wellbeing interventions, including: “Branching Out in Nature on Prescription,” “Velocity Cycle to Health,” and “Nature Walks for Wellbeing” (2020). These non-medical alternative interventions are helpful in places where the medical and allied health workforce is limited. They encourage the user to develop and exercise personal agency with the support of peers and community members. Such programs are built on the premise that mental and physical wellbeing are intimately connected.

Lower- and Middle-Income Countries

There have been many developments in policy and practice concerning low- and middle-income countries (LMIC) in the last two decades, and we cannot do justice to them in this short chapter. Several major publications have highlighted the problems faced by their citizens, published data for comparative and strategic purposes, proposed key priorities and strategies, and provided resources to be used in such countries. Some of these developments have gained widespread political, professional, and public support, such as the 2013 Mental Health Action Plan, endorsed by 194 ministers of health (World Health Organization [WHO], 2013). We note that such endorsement does not mean the countries have the staff, systems, or resources to implement these actions.

In 2008, the World Health Organization (WHO) published The mhGAP Action Program, a series of actions to address priority mental health and substance abuse, particularly in LMIC countries where specialist mental health services are scarce, and progress depends on a wide range of non-specialist and sometimes non-health providers (WHO, 2008). The mhGAP intervention guide provides evidence-based guidance and tools to support mental health care (assessment and treatment)

in low-resource settings, including using non-professionals with training, task-sharing, and enhancing usual care. A recent systematic review of 33 peer-reviewed studies demonstrated the substantial impact of training, patient care, research, and practice across low- and middle-income countries (Keynejad et al., 2018).

In the intervening years, the mhGAP program has been revised (WHO, 2016), and a reframing of the Millennium Development Goals as the Sustainable Development Goals now includes the provision of mental health services, the prevention of mental illness and substance use disorders, and the provision of universal health coverage (United Nations, 2015).

In 2011, the U.S. National Institute of Mental Health published “Grand Challenges in Global Mental Health,” in the journal *Nature*. The challenges discussed included the integration of mental health services into primary health care, providing universal access to medications, training LMIC health professionals to provide mental health care for children; developing community-based and rehabilitation services; and strengthening mental health training for all health professionals (Collins et al., 2011).

The 2018 Lancet Commission on Global Mental Health notes that in the mental health field, all countries can be regarded as developing (Patel et al., 2018). It could be said that services for those with mental health and substance abuse problems were and continue to be the “poor relation” in many health systems, whatever the national income.

In 1995, the WHO published its first World Mental Health Report, highlighting the need to address a huge treatment gap in mental health services between and within countries. In 2022, The WHO produced another World Mental Health Report in which it noted that progress measured against the

Mental Health Action Plan remains slow and that the approach to mental health care in most countries remains very much business as usual (WHO, 2022). As a result, “mental health conditions continue to exact a heavy toll on people’s lives while mental health services remain ill-equipped to meet people’s needs” (WHO, 2022). Despite the disappointing conclusion, the 2022 WHO Report found some examples of good practice in economically developing countries.

Promising Directions and Next Steps

The failure of countries to address the mental health of their populations has only recently been addressed and according to the WHO, progress over the past two decades has been slow (WHO, 2022). While we have identified examples of good practice in countries in various stages of economic development, the care of people with mental health problems is not fully established in primary care and community settings, and many individuals and families face overwhelming problems in accessing care. The role of non-medical and health services actors and initiatives is promising. However, there is a long way to go and many vulnerable people in rural communities suffer.

Chapter 7: The Future of Rural Mental Health in America

This monograph surveys the rural mental health literature since 2005 to provide an overview of the field and identify challenges in how rural Americans receive the mental health care they need. This chapter first summarizes the significant changes and challenges in rural mental health noted in this monograph. Revisiting these changes and challenges allows us to make connections among them and sketch out the opportunities for improving mental health care. The second part of the chapter presents research questions in rural mental health suggested by our literature review and the key informant interviews described in Appendix A. Answering these research questions is an essential step in moving the field forward.

Rural Mental Health Today

It is more difficult for rural Americans to receive the mental health care they need than urban Americans. This disparity has persisted for decades despite policy initiatives, clinical strategies, development and adaptation of technology, and reliance on local (community) strengths and models of care. Many of these efforts to address mental health disparities between rural and urban America have been helpful. However, rural mental health remains uniquely challenging due to structural and cultural barriers to care. There is a shortage of clinicians and helpers across the mental health professions and too few places for rural people to access or get care. These shortages stubbornly remain despite decades of efforts to reduce them. A person's willingness to seek or accept care for a mental health problem is embedded in their sense of self, community, and culture. Many mental health service

delivery and clinical models are developed within and based upon urban cultures, which are fundamentally different from rural cultures.

While the rural–urban disparity in mental health care remains, as well as the factors contributing to it, there are promising changes in the approach to and practice of rural mental health. This starts with the growing demographic, ethnic, and economic diversity of rural America. Understanding this diversity and learning about the current and historical experiences of different groups provides a foundation for developing more culturally informed, effective services and treatment. The role of non-physician clinicians in prescribing medications is growing in rural areas, as are efforts to recruit peer support workers to complement and enhance the rural mental health workforce. Technology, particularly tele-behavioral health, has long held the potential to address the rural mental workforce shortage, but adoption has remained lower than expected. The COVID-19 pandemic accelerated the use of telehealth throughout health care and may result in broader adoption of telebehavioral health in rural areas. The increased use of mobile technology may also enhance the delivery of mental health care. There is growing consensus on the need to understand and use evidence-based mental health practices in rural areas, particularly given the shortage of services and care. In the next section, we describe these challenges and changes and the connections among them.

Changes, Challenges, and Opportunities in Rural Mental Health

Increased Diversification of Rural America

Rural America has long been viewed in relatively simple terms. Open spaces. Farms. White people. Close-knit communities where people know and support each other. A “can-do” spirit. Resilient and stoic. These images and descriptions have always reflected some mythologizing, perhaps best captured by Grant Wood’s 1930 painting, *American Gothic*. While these images and descriptions have never truly captured all facets of rural America, they are becoming even more outdated as the demographic, ethnic, cultural, and economic composition continues to diversify. Recognizing this diversity is central to addressing current and future challenges of rural mental health.

A person’s mental health is embedded in and influenced by social, economic, and cultural factors, as well as current and historical events. These events may elicit care crises and spark innovations to improve care and treatment. As discussed in Chapter 1, the farm crisis of the late 1980s and the recent COVID-19 pandemic of the early 2020s are examples of external events with profound impacts on the incidence of mental distress and illness. Events like this also underscore the value of community and culturally based disaster response. Climate change poses a significant and looming challenge to rural America, threatening to redefine where people can safely build and live (with increased incidence and intensity of disasters such as wildfires and hurricanes). Climate change will also impact the economic viability of industries such as farming and fishing.

The explicit recognition of the social, economic, and cultural factors influencing a person’s health and wellbeing has been a significant advancement in public health practice and policy. The social determinants of health framework (SDOH) makes clear that different groups of people experience different health opportunities and outcomes because of their social and economic position. These opportunities play out across different areas of everyday life, including housing, education, engagement, and place in the community. These differences result in health disparities. Minoritized racial and ethnic groups will likely experience even greater health disparities because of their economic and social position (structural inequality) and as a result of problems of cultural understanding and sensitivity by health care providers, schools, and other social services.

The SDOH framework is a good start in recognizing and addressing health disparities. It is also important to examine both the upstream and downstream variables within service delivery to improve the mental health of marginalized rural communities and people. Upstream, the intersectionality of experience of racially and ethnically minoritized (REM) persons, the LGBTQIA+ community, and individuals with disabilities needs to be understood and addressed. This is critical for developing better preventive services. Downstream, cultural competence must be replaced by a more comprehensive multicultural orientation (MCO). This is particularly important to improve the engagement and uptake of both preventative and therapeutic mental health care by marginalized rural persons and communities. As discussed in Chapter 2, the MCO approach emphasizes the importance of a sense of a place in engaging, receiving, and benefiting from care. It transforms rural community affiliation from a perceived weakness to a strength. A sense of place is vital for all marginalized rural persons, including those marginalized by poverty.

As rural America becomes more diverse, it is important to understand the prevalence and needs of different groups and subpopulations. As discussed in Chapter 3, research has consistently found similar rural and urban mental health prevalence rates at the population level but differences among subgroups (e.g., women, veterans). The factors behind subgroup differences have been theorized and speculated about but never fully understood. Chapter 2 clearly describes what we know, and all that we still need to know, about REM groups and LGBTQIA+ identity persons and persons with disabilities.

Ongoing Shortages, Changing Roles of the Rural Mental Health Workforce

Rural America has never had enough mental health professionals to meet its mental health needs. Shortages include psychiatrists, psychologists, and other “core” mental health professionals, including psychiatric nurse practitioners, social workers, and counselors. Professionals with prescribing authority, including psychiatrists, primary care physicians, physician assistants, and nurse practitioners, are also in lower supply in rural than urban areas. A majority—65%—of non-metro counties do not have a psychiatrist, and 13% do not have any mental health provider.

Several strategies have been tried, in different forms, to address the rural mental health workforce shortage, but the problem persists. The National Health Service Corps (established 50 years ago) and related loan forgiveness programs have trained psychiatrists, physicians, and other clinicians and placed them in rural areas. Usually, they do not stay when their service is over. Primary care programs were first linked with behavioral health providers and programs more than 40 years ago, and “integrated care” in rural areas continues to

evolve. Job training, placement, and integrated care programs remain essential in mediating the rural mental health workforce shortage. How can they be made more effective, refined, or adapted in light of other changes in rural mental health, like changing technology and delivery systems and more diverse rural populations?

One response to the shortage of mental health professionals is to rely more on mid-level and non-traditional therapists, including peer-support workers. An ambitious effort to rethink and redirect the behavioral health workforce to meet mental health needs comes from the United Kingdom. The United Kingdom’s IAPT program uses cognitive behavioral therapy (CBT) to primarily treat patients with depression and anxiety. This approach is being adopted in Australia, New Zealand, and Norway, but differs from the approach taken in the United States. As described in Chapter 4, rethinking and enhancing the role of non-core rural mental health providers in the United States is being advanced through increased task-sharing (Hoeft et al., 2018). It will be helpful to see how initiatives such as the IAPT, teaming, and task-sharing continue to evolve, how they are used with evolving technology, and whether they become significant components of integrated programs. The congruence and compatibility of these initiatives with different age and REM groups as well as LGBTQIA+ persons should also be assessed.

Increased Regionalization of Rural Health and Mental Health Services

Mental health services, in both urban and rural areas, have traditionally been described in terms of two delivery models. One, the model of specialty mental health, involves psychiatrists, psychologists, social workers, and counselors providing care in inpatient psychiatric facilities, community health

centers, and inpatient or outpatient substance use facilities. The other model is general health care, in which care is provided by primary care professionals in community health centers, clinics, or Federally Qualified Health Centers (FQHCs). Specialty mental health includes public mental health (inpatient and outpatient funded by the federal and state governments) and private mental health facilities and services. Safety net providers, including emergency departments and, increasingly, law enforcement, play a role in the absence of specialty or general care and for individuals without insurance.

Two separate but converging trends in health care have rendered the distinction between specialty mental health care and general health care in rural areas much less meaningful and valuable. First, as described in Chapter 4, community mental health centers and community health centers (including FQHCs) in rural areas have reversed roles over the decades, with community health centers now playing a much more central and critical role. The role of public mental health authorities and services has also declined in both urban and rural areas. Second, health care systems are increasingly consolidated in urban and rural America. This has increased the regionalization of health care systems and services in rural areas. This portends that mild-to-moderate mental health conditions such as depression and anxiety may continue to be treated locally. However, more severe conditions will likely be referred to and treated at distant sites and communities. This is an existing trend that has accelerated in recent years. The implications of this trend for diverse rural populations need to be monitored.

Increased Use of Technology to Provide Mental Health Services

While telehealth has long held promise for expanding mental health services in rural areas, its adoption and use have generally been lower than expected. The COVID-19 pandemic greatly increased telehealth use across many health care areas in urban and rural areas. Long-standing regulatory, licensing, and financial barriers were relaxed or addressed during the pandemic. The importance of increasing broadband internet access to all people in all geographical areas became apparent. At present (2022), it appears that while the use of telehealth is higher throughout health care than before the beginning of the COVID-19 pandemic, its use is declining (Chapter 4). Telehealth use will likely remain higher than before the pandemic, particularly for mental health and in rural areas. Regulatory, licensing, and financing barriers may reemerge (as Federal waivers of regulatory requirements are rescinded), and the need for enhanced broadband internet access in rural areas must still be addressed. However, major challenges in expanding telemental health include how they fit within existing and evolving service settings and delivery systems, as well as the congruence and compatibility of telemental health programs with different age, ethnic, and cultural groups, particularly REM groups. For telemental health to be viable, users must have trust and comfort with both the process and the clinician at the other end. This is no different from face-to-face encounters but is a reminder that technology alone will not resolve the issues faced by rural Americans when seeking and accessing mental health care services.

Behavioral health mobile applications are a rapidly developing technology that holds promise for rural mental health. Mobile applications can help users track and monitor their symptoms and well-

ness, provide prescription and appointment reminders and updates, and deliver online counseling (Pietras & Wishon, 2021). As with telemental health programs, there are important questions regarding how well behavioral health applications work with different cultural groups.

Ongoing Need to Develop / Adapt Evidence-Based Practices to Rural Areas

If it is difficult to access mental health providers and treatment, it is all the more important that individuals in rural communities receive treatment determined to be effective, based on strong research. While evidence-based practices (EBPs) in mental health have and continue to be developed, the implementation of mental health EBPs in rural areas faces several challenges. Research, particularly large-scale studies on which EBPs are based, is usually conducted in urban areas. Urban models and programs that are informed or based on this research need to be adapted to rural areas. It is our hope that rural-based or rural-informed EBPs will also be developed. Service use data from behavioral health mobile applications (in which a sufficiently large number of rural persons may be included) are a potentially important source of information. There is also a strong need for smaller-scale, ethnographic, community-based participatory research on diverse rural populations. This will ground our understanding of the intersectionality of experience and cultural context of the social determinants of health for marginalized and other groups, and provide the foundation for rural EBPs.

Research Questions and Gaps

Prevention

- What evidence and models are available to promote health literacy, education, and help-seeking behavior? How do these vary across different subpopulations and racially and ethnically minoritized persons?
- Opioid and other drug use has grown largely unchecked for several decades. What is known about how to begin to prevent or reduce it? How does opioid and other drug use vary among different rural subpopulations and racially and ethnically minoritized persons? What are the promising practices? What are the elements/components of more comprehensive programs? How can different groups' resilience and cultural strength be incorporated into prevention and treatment?
- What can be done to reduce the rates of trauma and adverse childhood events in rural areas and improve the care of rural children who experience high rates of mental, behavioral, and developmental disorders, (both "upstream," considering social determinants of health, and "downstream" at the community level and point of service)?

Prevalence and Need

- What is the prevalence and related need of mental health illness and problems among different rural subpopulations? Among racially and ethnically marginalized persons? Among LGBTQIA+ persons? Among children, adolescents, and young adults? Among older persons?

Social Determinants of Health

- What is known about the relation in rural areas between the intersectionality of experience of racially and ethnically minoritized (REM) persons, LGBTQIA+ identity persons, and persons with disabilities and social and economic determinants of mental health?
- Most studies of SDOH focus on one or two determinants upon which interventions are based (Alegria et al., 2018). How can the study design be modified to incorporate additional determinants upon which to base interventions? Which determinants are most important in rural areas? For which groups?
- What are the unintended consequences of linking SDOH to mental health outcomes? For example, Alegria and colleagues (2018) point out that this practice could lead insurers and providers to take less responsibility for mental health outcomes and to stigmatize or blame clients.

Help-Seeking and Engagement in Care and Treatment

- The rural mental health literature is replete with reported barriers to care. To what extent are these barriers and issues perceived or anecdotal, or supported by empirical evidence?
- What data/research is there to examine who seeks and receives treatment within a causal, rather than descriptive, model?
- How can screening and referral for mental, developmental, and substance problems in rural health care settings be improved?
- What is the nature and role of stigma and stoicism in dampening or promoting help-seeking and engagement in care and treatment in rural areas? How do stigma and stoicism vary among rural sub-populations and groups? What are the determinants and correlates of stigma and stoicism? What is the cultural context?
- What is the role of the family, schools, places of

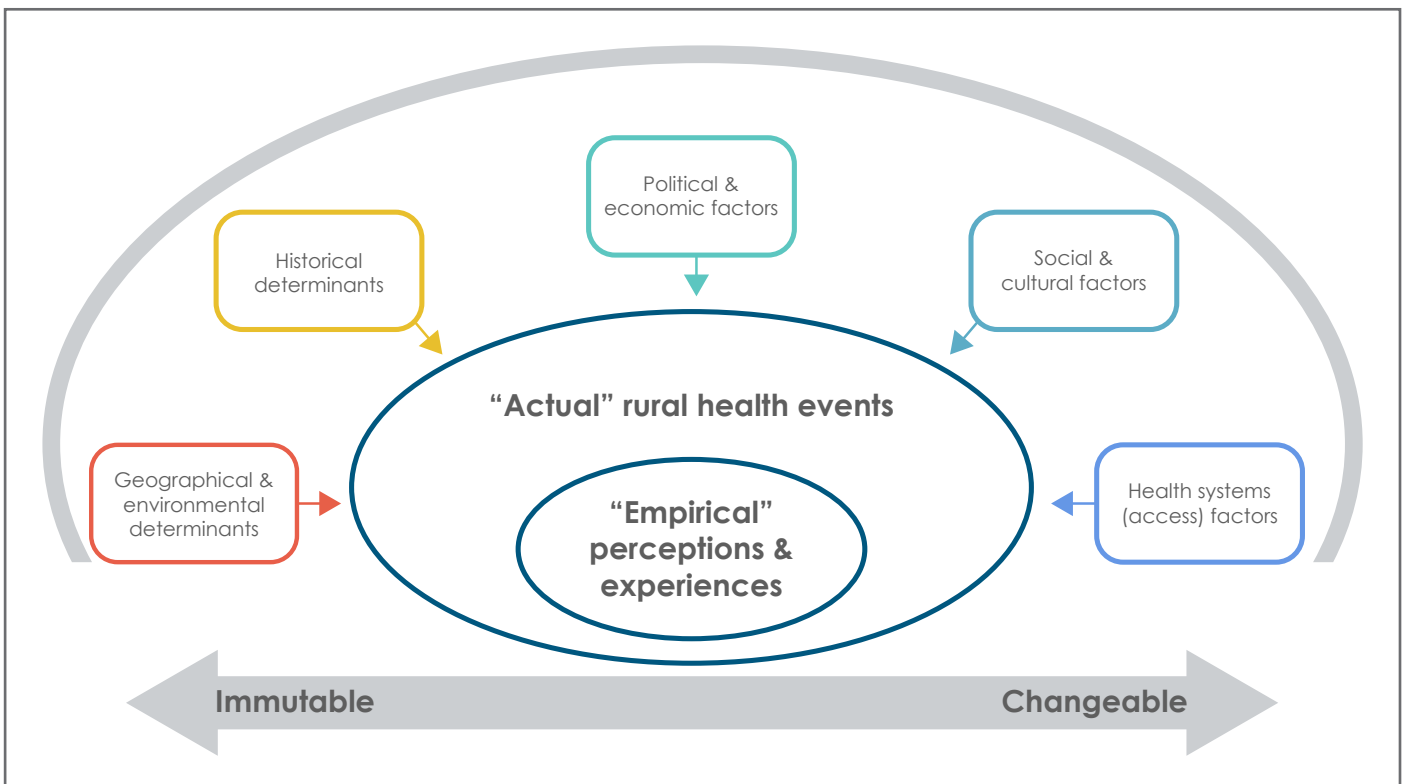


Table 5: The ‘real’ social determinants of health

worship, the workplace, local recreation centers, and other informal social centers in mediating stigma and promoting seeking mental health services?

Workforce

- How can retention in rural areas of graduates of health training and placement programs be improved? Why don't graduates stay in rural areas? Are placements more successful in some types of rural communities than others?
- How can the current workforce be used as a substitute and complement with developing technology, including telebehavioral and behavioral health mobile applications?
- How adequate is the current workforce to address rural America's changing demographics and diversity? To address the needs of subpopulations, including children and youth, veterans, and older persons? To understand and address the needs of racially and ethnically minoritized persons and LGBTQIA+ persons?
- How may peer-support and non-traditional mental health workers be recruited and used in rural areas? How may they leverage and enhance natural community supports? To address the needs of subpopulations, including children and youth, veterans, and older persons? To understand and address the needs of racially and ethnically minoritized persons and LGBTQIA+ persons?

Technology

- How effective are cognitive behavioral therapy and other specific therapies delivered through telehealth in rural areas? How does this compare to office-based therapy? Does effectiveness vary across different population groups?
- What are the best practices for developing and maintaining network adequacy standards for

rural telehealth programs?

- What do the use and experience of mobile technology mental health applications in other countries suggest for its adoption and use in rural areas in the United States?
- Does the use, experience, and outcomes of mobile technology mental health applications vary among age groups? Among different racially and ethnically minoritized groups? What technical and cultural adaptations are necessary to improve use, experience, and outcomes?

Evidence-Based Practice (EBP)

- How can EBPs be culturally adapted to draw on the strengths of a group's culture, including its sense and value of place? How can these strengths be incorporated into outreach, education, and treatment interventions?
- How can ethnographic, participatory community studies of different rural populations and marginalized groups be conducted to inform EBPs?
- What strategies and approaches can be used to increase the number and diversity of rural persons in the research base to develop EBP?
- How can established clinical practice guidelines be shifted to address rural and remote attributes impacting treatment?

8: Appendix A: Key Informant Interviews Overview and Findings

Leaders in rural mental health were surveyed to identify the most important issues facing the field. Major themes were identified across the interviews and used as guideposts to help develop this monograph. Key informants (KIs) discussed the importance of research investigating significant challenges in rural America, such as how to better serve historically excluded and oppressed populations, development and study of effective prevention, how to create, study, and disseminate evidence-based practices in rural settings, and the recruitment and retention of the rural-based workforce.

Semi-structured interviews were conducted with 31 key informants (KIs) to identify perceived gaps in rural mental health research. KIs were selected through convenience sampling by responses to broadly disseminated recruitment emails. KIs included individuals working in rural mental health, including researchers, academics, clinical staff, and government employees from around the United States. All interviews were completed virtually, recorded, transcribed, and de-identified for qualitative analysis. Then direct quotes from the KIs were distilled into significant themes, producing common trends across KIs (table below).

Major Themes

Several significant themes emerged across KI interviews. KIs reported that, while statistics are often available on rural mental health concerns and observational data, there is a deficit of empirical data to support causal hypotheses. Without understanding the reasons for an issue's prevalence, it is challenging to work toward prevention and intervention

strategies to implement change. KIs reported that individual communities are often left to develop their own strategies to address their concerns. There is often no published research on these efforts as many communities and providers primarily focus on practice without the means to conduct or publish empirical research. Nearly all KIs discussed the importance of researching service-related concerns to provide empirical evidence about the significant issues of rural mental health care.

KIs discussed the disparities between national and state-level focus on urban and rural research, often citing the lack of general funding and resources for this area of work. KIs expressed that “one size does not fit all,” stating that the term “rural” inaccurately describes a presumed homogenous population. Another critical theme included the importance of shifting from “rural” to “regional” and “community-level” research. Part of this shift is motivated by KI's emphasis on supporting historically excluded rural populations, including the Indigenous peoples of North America. For those who have faced historical and ongoing systematic oppression and marginalization, respondents noted that it is critical to focus national and state-level research initiatives on how to best address the immense health disparities and barriers to wellbeing in the United States.

We describe four major themes raised by the KIs below: research agendas and initiatives; historically excluded and oppressed populations; workforce development, recruitment, and retention; and barriers to mental health care.

Research Agendas and Initiatives

A salient topic that KIs discussed was the barriers to traditional experimental research in rural settings. For example, it is extremely difficult to conduct a traditional randomized control trial in many rural settings. Even quasi-experimental designs can be nearly impossible to coordinate, given the lack of resources and small populations which limit opportunities for randomization and heterogeneity. In comparison, large organizations that provide funding and grant opportunities aim for large samples for analysis. KIs point to the fact that these systems were developed in and for urban settings. KIs suggested shifting the paradigm to research that better fits the rural experience, for example, utilizing qualitative and community-based participatory research methodologies. “Evidence-based” intervention strategies are often researched in urban and suburban settings. The scientific assumption that “evidence-based” treatments, practices, and interventions are generalizable to populations that are heterogeneous to the validation sample is inherently flawed. These sentiments can be summarized by the phrase “the power of one,” which demonstrates an underestimation of the value of smaller samples.

KIs discussed the importance of researching effective prevention strategies in rural environments. Rural communities often do not receive state or federal assistance until a problem has occurred for an extended period. One KI reported that rural communities often must “figure it out on their own” when a problem becomes severe (e.g., the opioid crisis). As a result, intervention strategies are often “too little, too late.” Many KIs discussed moving from a reactive stance on mental health and substance use issues to proactive, prevention-based strategies. Several KIs used the terminology “moving upstream” to shift focus away from problem-focused,

reactive mental health care and instead focus on prevention strategies and making systems-level changes to increase the overall health and wellbeing of these rural communities.

Historically Excluded and Oppressed Populations

KIs highlighted the importance of research initiatives dedicated to populations within rural areas representing historically excluded and oppressed populations in the United States, including but not limited to Indigenous groups, immigrants, and agricultural workers, and how these intersecting experiences may interact to create identities subject to layers of marginalization. KIs discussed broadly how much of the mental health field in the United States has been created in and for urbanized settings and how this creates a challenge when generalized to rural and remote areas without full consideration of the context of rural America. Many of these communities have faced historical, intergenerational, and ongoing traumas such as genocide, colonization, slavery, and systemic oppression and disenfranchisement. KIs emphasized that research funding should focus on adapting evidence-based practices for rural and remote populations, as well as the creation and validation of practices made by and for these rural communities.

Workforce Development, Recruitment, and Retention

Another major theme included the importance of expanding rural workforces in unconventional and novel ways. For example, if there is only one physician in a 10-hour radius, one KI challenged, “How can the community work to certify someone in related support without sacrificing the quality of care?” This aligns with the push for bolster-

ing non-traditional service delivery, such as peer support workers, another salient theme in the interviews. Peer support is a way for community members to connect and offer wisdom and support through lived experiences rather than traditional, formalized education. Addressing workforce shortages in rural and remote areas requires either bringing providers permanently into these communities or providing education to established community members. Peer support is a way to meet local needs while also building natural social support for individuals experiencing challenges. KIs noted that, while there are programs to bring trained providers into rural areas such as loan forgiveness, these methods may inadvertently increase turnover and thus decrease the quality of care in the long term. Some KIs indicated that investing in current community members is a more sustainable approach to addressing workforce challenges.

KIs indicated that some rural communities could expand their mental health resources through established community systems, such as schools, churches, other faith-based organizations, as well as embedded nonprofit organizations like 4H Clubs or Future Farmers of America (FFA). Expanding access to mental health care in rural and remote areas involves identifying the systems communities have created and sustained for themselves, as well as those which might be best received or have the largest impact within their community.

Some KIs discussed that workforce shortage is a barrier due to longer wait times, physical distance to care, multiple relationships, and other factors. Workforce shortages and other barriers are discussed in the next section.

Barriers to Mental Health Care

A central theme across KI interviews included the multiple barriers to accessing mental health care in rural and remote areas. Some KIs discussed this in terms of “perceived” versus “actual” barriers, though this language may misconstrue the issues at hand. The language of “perceived” could be interpreted as dismissive when, regardless of the type of barrier, it is a barrier nonetheless and not necessarily easier to solve. For example, some KIs discussed rural cultures, which may promote attitudes of stoicism and the importance of self-reliance. One KI expressed that, while many discuss stigma as a barrier to care in rural and remote areas, it would be better conceptualized as discrimination, or how people with mental health struggles may be treated poorly or isolated in their communities. In more densely populated areas, individuals may be able to privately find social support away from their social circles. However, accessing services in rural areas may expose an individual to discrimination from the only other people in their community. This can result in an increased sense of isolation for those experiencing mental health distress.

While community beliefs, attitudes, norms, and behaviors surrounding mental health and substance use may create barriers for individuals seeking care, numerous other barriers may make establishing care nearly impossible. The physical distance between individuals and providers is significantly larger in rural and remote areas. There are numerous limitations on the feasibility of someone driving for an extended period for a mental health appointment, including time, reliable transportation, cost, weather, childcare, and more. Even when someone does have access to care despite these barriers, the cost of care and insurance coverage may also be prohibitive. Mental health care can be costly and unavailable under some insurance plans.

KIs also discussed the complexity of telehealth services. Many people consider telehealth a solution to rural mental health care barriers because individuals may be able to engage in care from their home. However, this method of service delivery comes with a whole new set of challenges. For example, individuals need access to reliable broadband internet, technology such as a computer or smartphone, and private space. Additionally, state laws may prevent out-of-state providers from assisting individuals in workforce shortage areas. Moreover, if an individual connects with a provider from outside the area, the provider is more likely to be unfamiliar and untrained in working with rural populations.

KI Interview Guide

1. Thinking about research in the areas of behavioral health (mental health and substance use) in rural America, do you perceive gaps in important areas of study? If so, what are those gaps?
2. Are there research studies or articles on rural behavioral health over the past 10 to 15 years that you have found especially useful in your work? If so, can you tell me what the topics are and how we might access them? (Interviewer: ask for journal title, year, authors, and title)
3. Considering the interplay between culture and mental health and culture and treatment adaptations; what, if any, are your research priorities in this area— the issues or topics that you'd like to see more research on?
4. Have you identified gaps or are you aware of useful research regarding the effective adaptation of evidence-based interventions for mental health and substance use prevention and treatment available for rural AI/AN community members and other minority groups?
5. Do you have any suggestions for how to address the research gaps that we've talked about today?
6. Is there anything else you'd like to share with me about research and research priorities in rural behavioral health, especially as it applies to AI/AN, people of color, minorities and other diverse populations? (Follow-up)
7. Do you have any additional comments about behavioral health in frontier and mountain areas?
8. Do you have any additional information you would like to share that we have not covered yet in the interview?

Key Informant Interviews – Salient Themes and Related Quotes

Cultural and Social Factors

- “[There is a] barrier of stigma in seeking treatment in small towns [because the] community knows you)”
- “...we in [deidentified rural area] appear to still be very suspicious of the use of telepsychiatry or telecare...”

Historically Excluded & Oppressed Populations

Agricultural Workers

- “[We need to focus on] agricultural workers [and] identifying some of their specific needs and how to meet those needs.”

American Indian and Alaska Native Populations

- “... [We need to focus on] addressing the spe-

- cific and unique needs of our Native American population.”
- “[We need to] get more research done on the reservation...some of the barriers [include] ... to do the research on tribal land and what tribal members, I think really limits the research with this population.”
 - “...[Collaborative Assessment and Management of Suicidality] CAMS – that’s a therapy that works with suicidal ideation suicidal clients – it’s one of the few actual therapies that is specifically working with suicidal thoughts, and I think it would be great to do research on the American Indian population using this type of therapy.”
 - “...the barriers that are there...statistics show that the Native American population has a high suicide rate.... it’s really disappointing...that more research... isn’t being done with this population...And if it’s barriers like getting approvals and permission, that is disappointing...”
 - “The Indian Child Welfare Act... research on the impact of children in the foster care system dealing with equity...impact of being in a foster home for several years and then having to move or transition to another relative placement... looking at how that really can affect [children]... there is some good research on grief and loss... but nothing that we’ve found specific to the Native American population.”

Laws, Policies, Legislation, Initiatives

- “Research about implementation and evaluation of federal behavioral health parity law”
- “We don’t know what’s really driving the access to care challenges... there are obvious issues around structural and policy and funding issues [regarding suicide]”
- “...trends nationally are always a year or two

behind what’s happening in a community.”

- “We had been struggling with the opioid epidemic in our areas for years before it ever got national attention, and it was significant where we were having major overdose losses of life in our areas...we had already had to kind of struggle and find ways to treat and kind of take the hard road down trying to get Naloxone in our areas...about two years after we have the heaviest problem, then the feds come in, they go we’re going to do this study, about how we can improve, and these were like we’ve been doing this for two years already with just our own resources that we could come up with.”

Research Strategies & Concerns

- “...chief among them has to do with disparities in healthcare generally and specifically to behavioral health... because we are such an urban dominant society. Just like historically most health research was done on men, and women were ignored... it’s been an analogous situation...Most of our research institutions are in urban areas.”
- “... [There is a] dramatic under-focus or lack of focus of rural behavioral health issues in the federal government, including in NIH and NIMH and in SAMHSA. And so you know I think considerable work needs to be done to actually develop that agenda, so there is a meaningful agenda going forward rather than simply giving rural lip service.”
- “... [the] biggest barriers to being able to do research in those communities...leads to the gap...leads to the disconnect between what is structuring our behavior health system and sometimes what works and can be implemented in those communities.”
- “When I hear the term rural it [means] different things for different places. “Rural” for us doesn’t

always capture the remote aspect...and what it takes to be able to access some of these places where the services are being provided, and to get resources out to them, most of our communities are not on the road systems.”

Service Delivery

Crisis Response

- “Crisis mobile outreach is great in practice, but in reality, in a rural area, to pay for people around the clock 24/7 to be available to go out and then the distances, you know the crisis mobile outreach is assuming that you can get to someone pretty quickly and in rural areas, it may take several hours.”

Access to Care

- “How can insurance help play a role in closing some of the gaps and access?”
- “.... [focus on] measuring perceived access to care, access to care, access to behavioral health providers in terms of network adequacy.”
- “Burdens/ barriers to care... [for example,] how much are rural residents paying out of pocket and how far do they need to travel in order to be able to receive that care.”
- “How hard was it for rural residents to be able to access that care or do they have to travel further? Did they have a harder time finding someone that could take their insurance?”
- “Where are the practitioners [who have the] ability to prescribe buprenorphine ...[which is] coming to be more accepted...where is substance [use] treatment available? Where are their prescribers?”

Model of Care

- “...Investing in the system of care, whether it be, as it relates to post-secondary its mission and scholarships and targeting the interest in high school studies.”
- “...the whole issue of developing integrated care with rural primary care physicians.”
- “Research on evidence-based practices don’t consider workforce shortages and just the volume of patients that are seen.”
- “Models may be developed, or most times developed for more urban and suburban areas and they’re not fiscally feasible. Assertive community treatment: just the volume for that in a rural and frontier area you wouldn’t be able to keep those people employed full time because there’s not as many people.”
- “...model implementation and studies on implementation, do not often consider rural populations. Implementation science is a way of finding out are these models really going to work in these rural communities.”
- “...connection between behavioral health, mental health, and substance use and the effects of physical health of rural residents and life expectancy.”
- “...co-occurring behavioral health and substance use disorder dual diagnosis in rural areas”
- “What would an effective mental health promotion suicide prevention intervention or mental health treatment system look like if it were built exclusively and explicitly from rural?”
- “There’s been some really cool work over the last 20–30 years in Indigenous contexts around the world, but here in the United States there’s been some great research done to look at how to build mental wellbeing, local grassroots, cultural perspective and Indigenous.”
- “With other types of pockets of rural America, can we look at what the mental health system

would look like in [a specific region]?”

- “What would it look like in the frontier plains ranching agricultural communities that are so spread out... it’s not just one rural America... [it] has to be really interesting to try to actually develop a mental health system on mental health treatment practices [and to] promote health promotion and prevention programs that are really built from the ground up.”
- “...conducting the research with people in those communities so many times, a lot of our practice or guidelines or whatever it is that is kind of providing the structure around behavioral health services are informed by research or practices that are done in urban areas, or just non-rural areas.”

Evidence-Based Care

- “...Effective prevention strategies...and in particular in prevention work [specific to rural areas].”
- “Does this evidence-based practice work in rural America?”
- “We lag behind...looking at primary preventative strategy... we tend to focus on that treatment end of the spectrum certainly our national funding agencies often place a lot more clarity and funding into treatment...more focused research going into primary prevention, where we’re looking at getting ahead of the development, particularly in terms of substance use disorders.”
- “...opioid overdose public health crisis... prevention of death and overdose but getting anywhere further downstream and prevention... we’re just nowhere near that and that my own research focuses on preventative interventions...I guess upstream and downstream that are more obscure to figure out.”

Specialty Care

- “Do they have a harder time finding someone who you know specialized in whatever their thing was that they were seeking care?”
- “[What are the] children’s mental health services available? ... they had enormous numbers of children, and I said is there a massive child alcohol program? But this is the only place, it was the local alcohol and substance treatment program sponsored by state, the only place that they can send a child, for a psych assessment that they will get it, regardless of whether they have insurance. So, the fact that we are sending children to an adult treatment facility to get screened for general psych things means that the availability of general psych and rural is poor.”
- “young people with cognitive development and health disorders.”

Technology

- “...improved network adequacy measures and research.”
- “[There is the] whole issue of implementing information technology as part of this work in rural areas.”
- “...utilizing telehealth strategies, probably for longer than other areas just had a necessity geographically in our state but, again, there’s just really little data available on reach and uptake...”
- the effectiveness and of evidence-based strategies like cognitive behavioral therapies as they’re delivered over video...is a big area in need of more study.

Treatment and Interventions

- “...Evidence based practices that schools could adopt, many have largely been tested in non-rural settings, research on what works, specifically in heterogenous rural contexts.”
- “...establishing evidence-based practices across the range of rural settings like you know across the ethnic range the cultural, political attitudinal ranges of different rural communities.”
- “...Generalizability of evidence-based practices for a range of things.”
- “What kind of modifications can be made to assertive community treatment and still get the same type of results in rural communities with more barriers (i.e., distance).”
- “That gap is intensive outpatient treatment for substance. This is standard practice; this is a best practice for people with severe addiction challenges.... You go to your provider potentially on a daily basis, potentially multiple times a day with the standard of care, something like 10 to 20 hours a week. Now we can deliver some of that, I know that some of that’s been modified from rural areas... so we’ve tried to adapt this policy... if you step back in a way that model of going into the clinic would not even be where you first think about doing in a place where the clinic is two hours away from home.”
- “If we step away and say, instead of saying we know we need to do intensive outpatient and instead say here’s the context of these people, how do we treat severe addiction challenges in this context.”

OLDER ADULTS

- “...older population we don’t have a lot for resources or research references things like that on adults going into retirement and how being in a rural community limits resources.”

SUICIDE

- “...federal limitation on data analysis of the impact of firearms on suicide.”
- “The character and culture of the west and research that would help policymakers connect to rural White middle-aged men. Why it is that middle aged men are dying by suicide at such a high rate.”
- “...Intersection between mental health and substance use around alcohol use. In the Western states so in Montana nationally it’s 20 to 30% of the deaths by suicide have alcohol in their system at the time of suicide completion, but in Montana it’s 40%. Liberal attitudes about [alcohol].”
- “...do death rates from suicide, overdose alcohol-related liver disease, fall into [specific rural regions]?”
- “What’s driving the high suicide rates and the rapid rise of suicide rates in rural America and what to do so know that it exists, we know that suicide rates are higher”
- “...we have lots of theories, based upon solid research...but we don’t have a lot of information...of what the driving factors are [for firearm suicide rate].”
- “...understanding how things like access to care there’s challenges in rural area relate to suicide.”

WORKFORCE

- “...research how to develop a non-physician workforce in rural areas that can help close some of the access gaps without kind of reducing quality.”
- “...how telehealth plays a role in reducing workforce gaps.”
- “...evaluating the behavioral health consultant model and other common models of integrating mental health into primary care.”

- “...recruitment and retention of providers and how rates affect ability for us to recruit and retain professionals.”
- “How do you provide these services in areas where there tend not to be providers, where the other ancillary community services or other types of community services are really small where there’s no workforce development”
- “...provider shortage so whether we’re talking about psychiatrists or nurse practitioners even therapist or counselors....is something...every organization struggles with so. I think you know areas of research; you know could be like... what makes access more difficult, you know wait times longer.”
- “What incentives...to keep you know folks in rural areas, I know they have some loan forgiveness programs.... But not all rural areas completely qualify for them.”
- “The whole issue of recruiting behavioral health providers into rural areas.”
- “Gaps are in workforce development and the utilization of peer supports appears and in helping to address the workforce shortage.”
- “There’s a lot of theory and hypothesizing about cultural barriers to care too. Cultural barriers that are more prevalent in rural America stigmatized mental illness stigma for suicide a preference for taking care of oneself or reaching out maybe more to peer networks as opposed to professional networks stoicism like I can just deal with my pain is more prevalent, so we have some data on those cultural issues that are existing wrong. But we actually don’t know if they relate to suicide rates. If it makes logical sense but it’s not been directly tested.

9: Appendix B: Annotated Bibliography

Chapter 1 - Rural Mental Health in the United States

Cromartie, J., Dobis, E. A., Krumel, T., McGranahan, D., & Pender, J. (2020, December). Rural America at a glance: 2020 edition (Economic Information Bulletin No. (EIB-221)). U.S. Department of Agriculture- Economic Research Service. <http://www.ers.usda.gov/publications/pub-details/?pubid=100088>

This high-level report introduces three issues which set the stage for the book's larger discussion of members of ethnic or racial minority groups who live in rural areas of the United States. The report offers definitions of minority and rural and notes the challenges and complexities of defining each of these terms. The report describes the geographic distribution of these individuals and the large variation of these groups in rural communities. This discussion is followed by a brief overview of the challenges associated with rural and minority identities. The last section highlights the contributions and focus of each of the chapters in the book.

Davis, D. E., DeBlaere, C., Owen, J., Hook, J. N., Rivera, D. P., Choe, E., Van Tongeren, D. R., Worthington Jr., E. L., & Placeres, V. (2018). The multicultural orientation framework: A narrative review. *Psychotherapy*, 55(1), 89. <https://doi.org/10.1037/pst0000160>

This review of the multi-cultural orientation (MCO) moves beyond the narrower construct of cultural competence.

The MCO framework was developed in response to trends within the multicultural competencies tradition, with a particular emphasis on integrating this tradition into research on psychotherapy process. This article reviews studies that include one of the three multicultural orientation constructs (cultural humility, cultural opportunities, and cultural comfort).

DeLeon, P. H., Kenkel, M. B., & Shaw, D. V. (2012). Advancing federal policies in rural mental health. In K. B. Smalley, J. C. Warren, & J. P. Rainer (Eds.), *Rural mental health: Issues, policies, and best practices* (pp. 17–36). Springer Publishing Company

This article offers an overview of the development and importance of federal policies impacting rural mental health, including the establishment of the Office of Rural Health Policy and the National Rural Health Policy Advisory Council. The article describes the important role and growth of federally Qualified Community Health Centers (FQHCs) and rural health clinics. Finally, it articulates the development and impact of federal policies on recruiting and retaining rural mental health workers and on the development and use of technology.

Gale, J., Janis, J., Coburn, A., & Rochford, H. (2019). Behavioral health in rural America: Challenges and opportunities. Rural Policy Research Institute. <https://rupri.org/wp-content/uploads/Behavioral-Health-in-Rural-America-Challenges-and-Opportunities.pdf>

This report provides an overview of the policy issues in delivering behavioral health services in rural America. The goal is to help rural leaders and providers understand the issues related to rural mental health and substance use and offer resources and tools to develop targeted strategies to address the unique needs of their communities. The first section discusses the prevalence of behavioral health disorders (BHDs) in rural populations generally and among certain high-risk population groups (e.g., veterans, children). The second section reviews rural access to behavioral services, focusing on the challenges of providing prevention, treatment, and recovery services. The third section describes promising program and policy strategies in use in rural communities. The last section discusses opportunities for policy and system changes to improve rural behavioral health systems and outcomes.

Grazier, K. L., Smiley, M. L., & Bondalapati, K. S. (2016). Overcoming barriers to integrating behavioral health and primary care services. *Journal of Primary Care & Community Health*, 7(4), 242–248. <https://doi.org/10.1177/2150131916656455>

According to this article, organizations with varying characteristics have, despite barriers to success, achieved full integration of primary care services that identify, treat, and manage those with mental health and substance use disorders. What are the key factors and common themes in stories of this success? A systematic literature review and snowball sampling technique was used to identify organizations that

had successfully integrated behavioral health and primary care services. Site visits and key informant interviews were conducted with six organizations with integrated behavioral health and primary care services. Common characteristics include prioritization of vulnerable populations, extensive community collaboration, team approaches that include the patient and family, diversified funding streams, and data-driven approaches and practices.

Grzanka, P. R. (2020). From buzzword to critical psychology: An invitation to take intersectionality seriously. *Women & Therapy*, 43(3–4), 244–261. <https://doi.org/10.1080/02703149.2020.1729473>

This paper introduces a framework that invites psychologists to take intersectionality seriously. First, some primary tools of intersectional analysis and their relevance to critical training are discussed. Next, the authors provide a flexible typology of what intersectionality is, as well as what it is not. The authors extend Cole's three-question framework for intersectional research in psychology to develop practical questions that might deepen psychology's engagement with intersectionality at the level of critical pedagogy.

Hogan, M. F. (2003). New freedom commission report: The president's New Freedom Commission: Recommendations to transform mental health care in America. *Psychiatric Services*, 54(11), 1467–1474. <https://doi.org/10.1176/appi.ps.54.11.1467>

This document is an influential rural subcommittee report resulting from the New Freedom Commission, a major initiative to reform and reshape

mental health policy and treatment. It adapts a framework for viewing barriers to mental health care in rural areas in terms of availability, accessibility, and acceptability. This framework, with modifications, is still used today.

Lambert, D., & Gale, J. A. (2012). Integrated care in rural areas. In K. B. Smalley, J. C. Warren, & J. P. Rainer (Eds.), *Rural mental health: Issues, policies, and best practices* (pp. 131–148). Springer Publishing Company

This article reviews the background, current status, and prospects for integrating behavioral health and primary care in rural areas. It provides definitions, models, barriers, and evidence from the integration literature. The authors offer current and best practices, including exemplary programs. The last section looks at the road ahead to predict that the impetus for integration will shift from the policy level to the organizational and provider level.

Lambert, D., Donahue, A., Mitchell, M., & Strauss, R. (2001). *Mental health outreach in rural areas: Promising practices in rural areas*. Center for Mental Health Services. Substance Abuse and Mental Health Services Administration.

This monograph focuses on the increasing attention devoted to the integration of mental health and substance use treatment in rural areas and addresses a gap in the study of outreach practices in those areas. The monograph reports on the methods and best promising practices used to conduct mental health outreach in rural areas. The authors describe how an advisory committee was recruited to identify rural

agencies providing outreach. Surveys (n=25) were conducted of those agencies with follow-up interviews. Four types of outreach programs were identified:

1. Tailored outreach to specific populations
2. General outreach to specific populations
3. General outreach to mental health populations
4. General outreach to general populations

Finally, the monograph presents specific strategies for conducting outreach.

Morales D.A., Barksdale C.L., Beckel-Mitchener, A.C. (2020). A call to action to address rural mental health disparities. *Journal of Clinical and Translational Science*, 4(5), 463-467. <https://doi.org/10.1017/cts.2020.42>

The paper examines the research framework of the National Institute on Minority Health and Health Disparities (NIMHD), which approaches mental health needs in rural America by considering the societal, community, and interpersonal levels of influence as equally as those for the individual, mapping on to population health, community health, and family and organizational health, respectively. The paper expands on Bronfenbrenner's classic systems ecological model from the 1970s, which conceptualizes the identity and mental health of an individual to be situated within their family, community, society, and institutional forces. NIMHD posits that the intersection of these dimensions, with considerations

for sociocultural environment and health care systems require our focus on addressing issues such as discrimination, health care policies and laws, insurance coverage, cultural identity, and community resources in addressing rural mental health disparities.

McCall-Hosenfeld, J. S., Mukherjee, S., & Lehman, E. B. (2014). The prevalence and correlates of lifetime psychiatric disorders and trauma exposures in urban and rural settings: Results from the National Comorbidity Survey Replication (NCS-R). *PLOS ONE*, 9(11), e112416. <https://doi.org/10.1371/journal.pone.0112416>

The authors use the National Comorbidity Survey Replication (NCS-R) to examine the prevalence of psychiatric disorders and frequency of trauma exposures by position on the rural–urban continuum. Contrary to the expectation of some rural primary care providers, the frequencies of most psychiatric disorders and trauma exposures in rural areas are similar to those in urban areas, reinforcing calls to improve mental health care access in resource-poor rural communities.

Rowlands, D., & Love, H. (2021, September 28). Mapping rural America's diversity and demographic change. *The Avenue*. The Brookings Institute. <https://www.brookings.edu/blog/the-avenue/2021/09/28/mapping-rural-americas-diversity-and-demographic-change/>

The Reimagining Rural America project at the Brookings Institute takes a fresh look at the current reality and future prospects of rural America. This publication examines the growing diversity and demographic changes within

rural America suggested by the 2020 Census. The authors describe three major trends:

1. The racial and ethnic diversity of rural America increased in the last decade.
2. The distribution of people of color in rural America is complex and highly regionalized.
3. Latine populations continued to drive diversity in rural America

Rural Health Information Hub. (n.d.). Retrieved March 14, 2023. Federal Office of Rural Health Policy. <https://www.ruralhealthinfo.org/>

This database offers a concise discussion of alternative definitions used by the federal government and researchers to measure rurality and the implications of using different definitions.

Wagenfeld, M. O., Murray, J.D., Mohatt, D. F., & DeBruyn, J. C. (1994). *Mental health and rural America, 1980–1993: An overview and annotated bibliography*. Office of Rural Health Policy, Health Resources and Services Administration: Office of Rural Mental Health Research, National Institute of Mental Health, National Institutes of Health: U.S. Department of Health and Human Services, Public Health Service.

This is the second edition of this monograph. The review revealed how the field of rural mental health had grown in terms of policy focus and published literature since the 1960s and 1970s. It was written when managed care was emerging as an important force within health care. The monograph provides an important focal point to see both how rural mental health has evolved

and how to understand ongoing challenges in the field.

Chapter 2 - The Many Faces of Rural Regions in the United States

Alvarez, K., Fillbrunn, M., Greif Green, J., Jackson, J. S., Kessler, R. C., McLaughlin, K. A., Sadikova, E., Sampson, N. A., & Alegría, M. (2019). Race/ethnicity, nativity, and lifetime risk of mental disorders in US adults. *Social Psychiatry and Psychiatric Epidemiology*, 54(5), 553–565. <https://doi.org/10.1007/s00127-018-1644-5>

This article analyzes how the prevalence of lifetime risk of mental health disorders for individuals varies across racial and ethnic identities (Asian, Black, Latino/a/x, White) and country of origin for a large sample (N=20,000). Results indicated the statistically significant variation of prevalence depends on the country of origin, with those living outside the United States experiencing a lower risk for lifetime prevalence of mental health disorders. These results varied across racial and ethnic identities.

Aubuchon-Endsley, N. L., Callahan, J. L., & Scott, S. (2014). Role expectancies, race, and treatment outcome in rural mental health. *American Journal of Psychotherapy*, 68(3), 339–354. <https://doi.org/10.1176/appi.psychotherapy.2014.68.3.339>

A study comparing Osage (n=13) and White patients (n=65) in treatment expectancy and treatment outcomes through projective analyses. Results indicated that Osage participants' ex-

pectations for treatment, which included therapist advice and approval, were associated with lower treatment outcomes. For White participants, low expectations for therapy was associated with worse treatment outcomes. The authors share treatment implications for these findings.

Blume, A. W. (2021). An Indigenous American conceptualization of substance abuse and its treatment. *Alcoholism Treatment Quarterly*, 39(2), 135–153. <https://doi.org/10.1080/07347324.2020.1741330>

This article discusses the persistent issue of alcohol misuse in Indigenous communities and the insufficient treatment methods available for addressing substance misuse prevention, treatment, post-treatment, and relapse prevention. The author aims to generate hypotheses on the missing elements in treatment and proposes transforming the treatment perspective to align with an Indigenous worldview on wellbeing and health. The author emphasizes the need to address the consequences of colonialism that harm clients' wellbeing, align treatment models with Indigenous beliefs on communal existence, and adopt a holistic healing approach that addresses substance misuse within the context of relationships. Overall, the focus is on advancing treatment for American Indian and Alaska Native individuals by addressing systemic harm, promoting communal wellbeing, and transforming treatment models.

Brave Heart, M. Y. H., Chase, J., Elkins, J., & Altschul, D. B. (2011). Historical trauma among Indige-

nous peoples of the Americas: Concepts, research, and clinical considerations. *Journal of Psychoactive Drugs*, 43(4), 282–290. <https://doi.org/10.1080/02791072.2011.628913>

This article explores the collective trauma experienced by Indigenous peoples of the Americas and current and ongoing discrimination and oppression. The authors discuss emotional responses and unresolved grief, highlighting the need for strategies to alleviate psychological suffering. The article outlines a conceptual framework of historical trauma, measures its impact on emotional distress, and examines research and clinical innovations. The authors emphasize the importance of understanding historical trauma for effective interventions and concludes with recommendations for future actions.

Bolin, J. N., Bellamy, G. R., Ferdinand, A. O., Vuong, A. M., Kash, B. A., Schulze, A., & Helduser, J. W. (2015). Rural healthy people 2020: New decade, same challenges. *The Journal of Rural Health*, 31(3), 326–333. <https://doi.org/10.1111/jrh.12116>

This article presents the results of the Rural Healthy People 2020 national survey (N=1214), which aimed to identify rural health priorities in the United States. The findings indicate that rural health priorities have remained largely unchanged over the past decade. Access to health care was consistently identified as the most significant priority, with concerns focused on emergency services, primary care, and insurance. The top 10 rural health priorities, in order, were access to health care,

nutrition and weight status, diabetes, mental health and mental disorders, substance abuse, heart disease and stroke, physical activity and health, older adults, maternal infant and child health, and tobacco use. This study provides valuable insights into the ongoing challenges faced by rural and remote communities in the United States, which may inform future interventions and policy decisions to address these priorities.

Conger, K. J., Reeb, B. T., & Chan, S. Y. S. (2016). Racial–ethnic minority youth in rural America: Theoretical perspectives, conceptual challenges, and future directions. In L. J. Crockett & G. Carlo (Eds.), *Rural ethnic minority youth and families in the United States: Theory, research, and applications* (pp. 13–36). Springer International Publishing/Springer Nature. https://doi.org/10.1007/978-3-319-20976-0_2

This chapter outlines details about racial–ethnic minoritized youth located in rural and remote regions of the United States and provides the racial–ethnic minority youth development in context (REMYC) conceptual model. The chapter offers an extensive list of concepts related to the racial-ethnic minority youth in context (REMYC) model.

Cromer, K. J., Wofford, L., & Wyant, D. K. (2019). Barriers to healthcare access facing American Indian and Alaska Natives in rural America. *Journal of Community Health Nursing*, 36(4), 165–187. <https://doi.org/10.1080/07370016.2019.1665320>

This article provides a literature review on health care access for American Indians in rural areas. It identifies barriers in rural America, within the Indian

Health Services system, and highlights disparities in resources. The review suggests that increased funding and tribal management control can improve health care access for American Indians.

Lichter, D. T. (2012). Immigration and the new racial diversity in rural America. *Rural Sociology*, 77(1), 3–35. <https://doi.org/10.1111/j.1549-0831.2012.00070>

This article emphasizes the new racial and ethnic diversity in rural and remote areas of the United States, highlighting its impact on various aspects of community life, economy, and politics. The author discusses the challenges resulting from the incorporation of Latino/a/x newcomers. The article underscores the significance of immigration and increasing ethnic and racial diversity in shaping rural communities as the United States moves towards becoming a majority-minority society.

Middleton, J., Cunsolo, A., Jones-Bitton, A., Wright, C. J., & Harper, S. L. (2020). Indigenous mental health in a changing climate: A systematic scoping review of the global literature. *Environmental Research Letters*, 15(5), 053001. https://ui.adsabs.harvard.edu/link_gateway/2020ERL....15e3001M/doi:10.1088/1748-9326/ab68a9

This article presents a systematic review on the mental health impacts of climate change on Indigenous peoples around the world. It highlights the connection between meteorological changes, seasonal variations, and mental health outcomes such as emotional distress and depression. The review emphasizes the need for global consideration to

support Indigenous-led initiatives and decision-making for mental wellness in a changing climate.

Mpofu, E., Ingman, S., Matthews-Juarez, P., Rivera-Torres, S., & Juarez, P. D. (2021). Trending the evidence on opioid use disorder (OUD) continuum of care among rural American Indian/Alaskan Native (AI/AN) tribes: A systematic scoping review. *Addictive Behaviors*, 114, 106743. <https://doi.org/10.1016/j.addbeh.2020.106743>

This systematic scoping review focuses on opioid use disorder (OUD) management among rural American Indian/Alaskan Native (AI/AN) communities and identifies workforce training needs. Eight studies met the inclusion criteria, highlighting the importance of culturally grounded health interventions, involving families and community interventionists. The authors document a preference for community reinforcement approaches as well as cultural adaptation of medication-assisted treatments (MAT) and recovery care approaches. The evidence supports culturally adapted OUD management, prioritizing prevention education, MAT with cultural adaptation, and whole-person approaches for sustainable recovery care. The review emphasizes the need to integrate mental health care into OUD prevention, treatment, and recovery care for rural AI/AN communities.

Rickard, A., & Yancey, C. T. (2018). Rural/non-rural differences in psychosocial risk factors among sexual minorities. *Journal of Gay & Lesbian Social Services*, 30(2), 154–171. <https://doi.org/10.1080/10538720.2018.1444525>

This study compares risk factors among LGBTQIA+ adults in rural and non-rural areas. The researchers examined victimization/discrimination, fundamental religiosity, involvement in the LGBT community, social support, and comfort disclosing sexual identity. The sample consisted of 699 individuals, with 23.3% living in rural areas. The results showed that rural sexual minorities experienced higher levels of religious identification, less comfort in disclosing their sexual identity, more victimization and discrimination, lower involvement in the LGBT community, and less perceived social support compared to non-rural counterparts. These findings highlight the increased exposure to negative risk factors for sexual minorities in rural areas. The authors discuss implications for mental health providers working with this population.

Rosenkrantz, D. E., Black, W. W., Abreu, R. L., Aleshire, M. E., & Fallin-Bennett, K. (2017). Health and health care of rural sexual and gender minorities: A systematic review. *Stigma and Health*, 2(3), 229–243. <https://doi.org/10.1037/sah0000055>

This article presents a literature review on the health and health care experiences of lesbian, gay, bisexual, and transgender (LGBTQIA+) individuals living in rural areas. The review includes 58 articles published between 1998 and February 2016, highlighting three main themes: individual health

outcomes and risk behaviors, experiences with health care and the health care system, and sociocultural factors at the intersection of rurality and health. The findings emphasize the need for culturally competent rural health care and provide evidence-based recommendations for systemic change and interventions to improve the health of rural LGBT individuals.

Stone, G. A., Fernandez, M., & DeSantiago, A. (2022). Rural Latino health and the built environment: A systematic review. *Ethnicity & Health*, 27(1), 1–26. <https://doi.org/10.1080/13557858.2019.1606899>

This systematic review examines the influence of the rural built environment on health outcomes and behavior of Latinos in the United States. The review analyzed approximately 146 full-text sources out of nearly 2,500 articles. The findings indicate that limited access to health care, internet, transportation, and recreation infrastructure in rural Latino neighborhoods negatively impacts health outcomes and behaviors. Strategies to address these challenges include the use of telecommunications for health information dissemination, community health workers and mobile clinics to increase awareness and access to services, workplace trainings and adaptations, and promotion of safety net programs like the Special Supplemental Nutrition Program for Women, Infants and Children (WIC). The review highlights the need for further research on the health experiences of rural Latinos of different backgrounds, ages, and genders.

Chapter Three - Viewing Mental Health and Substance Use in Rural Regions of the United States Through an Epidemiologic Lens

Alegría, M., NeMoyer, A., Falgàs Bagué, I., Wang, Y., & Alvarez, K. (2018). Social determinants of mental health: Where we are and where we need to go. *Current Psychiatry Reports*, 20(11), 95. <https://doi.org/10.1007/s11920-018-0969-9>

This article indicates that mental health and substance use prevalence are best understood in the context of social factors. The incidence and trajectory of mental health symptoms are heavily impacted by the social capital and resources to which individuals and communities have access. These factors interact in complex, reciprocal patterns that are often difficult to disentangle. The article reviews and synthesizes recent literature on social determinants and mental health outcomes and provides recommendations on how to advance the field. It summarizes current studies related to changes in the conceptualization of social determinants; how social determinants impact mental health; learnings from social determinant interventions; and new methods to collect, use and analyze social determinant data.

Bagalman, E., & Napili, A. (2014). Prevalence of mental illness in the United States: Data sources and estimates. (Report No. R43047). Congressional Research Service. <https://crsreports.congress.gov/product/pdf/r/r43047/14>

Determining how many people have a mental illness is difficult, and prevalence estimates vary. While many surveys include questions related to mental illness, few provide prevalence estimates of diagnosable mental illness (e.g., major depressive disorder as opposed to feeling depressed, or generalized anxiety disorder as opposed to feeling anxious), and fewer still provide national prevalence estimates of diagnosable mental illness. This report briefly describes the methodology and results of three large surveys (funded in whole or in part by the U.S. Department of Health and Human Services) that provide national prevalence estimates of diagnosable mental illness: the National Comorbidity Survey Replication (NCS-R), the National Comorbidity Survey Replication Adolescent Supplement (NCS-A), and the National Survey on Drug Use and Health (NSDUH). The NCS-R and the NCS-A have the advantage of identifying specific mental illnesses, but they are more than a decade old. The NSDUH does not identify specific mental illnesses, but it has the advantage of being conducted annually.

Benda, N. C., Veinot, T. C., Sieck, C. J., & Ancker, J. S. (2020). Broadband internet access is a social determinant of health! *American Journal of Public Health*, 110(8), 1123–1125. <https://doi.org/10.2105/AJPH.2020.305784>

The article describes how the impact of the COVID-19 pandemic demonstrates that lack of broadband internet access (BIA) influences each of the six social determinants of health domains

defined by the American Medical Association. It also affects an additional domain, which is particularly pertinent during a pandemic: access to credible information. Limited access to information has the potential to exacerbate existing health disparities in the United States, because it disproportionately affects those who are already vulnerable. Indeed, those who are older, are racially or ethnically minoritized, have lower incomes, are less educated, or live in rural areas may experience worse health outcomes under normal circumstances. These people are even less able to access health-enhancing resources during social-distancing orders. The article presents a conceptual model that incorporates BIA and information needs into the social determinants of health framework.

Blanco, C., & Lennon, I. (2021). Substance use disorders in older adults: Overview and future directions. *Generations*, 44(4), 1–7. American Society on Aging. <https://generations.asaging.org/substance-use-disorders-older-adults-overview>

Knowledge of substance use disorders (SUD) in adults ages 65 and older is limited. This article presents an overview of epidemiology, service use and clinical considerations on SUD in older adults and suggests future directions. SUD prevalence is lower in older versus younger adults, as are treatment rates among those with SUD. SUDs may be difficult to recognize and treat in older adults due to the presence of other psychiatric and general medical disorders. Better integration of SUD and general medical treatment, and increased at-

tention to social determinants of health, are important future directions for research and treatment of SUD in elders.

Bjornestad, A., Brown, L., & Weidauer, L. (2019). The relationship between social support and depressive symptoms in Midwestern farmers. *Journal of Rural Mental Health*, 43(4), 109–117. <https://doi.org/10.1037/rmh0000121>

This study examined the role of social support as a protective factor in the development of depressive symptoms in farmers. The major depression inventory (MDI) and the multidimensional scale of perceived social support was completed by 172 farmers for this study. Results indicate the importance of social support from friends and family members in the prevention of depressive symptoms in farmers. Telemental health may be an alternative to face-to-face counseling to provide mental health outreach services to farmers.

Carpenter-Song, E., Snell-Rood, C. (2017). The changing context of rural America: A call to examine the impact of social change on mental health and mental health care. *Psychiatric Services*, 68(5), 503–506. <https://doi.org/10.1176/appi.ps.201600024>

Social changes and rising social inequality in the rural United States have affected the experience and meaning of mental illness and treatment-seeking within rural communities. This open forum calls for a research agenda supported by anthropological theory and methods to investigate the significance of this changed rural social context for mental health. Recommendations include:

1. Documenting the experience of mental distress in settings at the heart of rural communities' social and economic shifts: churches and businesses of persons who have recently migrated to the area, homes of people following job losses, and offices where disability benefits are sought on the basis of a depression diagnosis.
 2. Raising questions about how direct-to-consumer advertising and more accessible pharmacological treatment affect the experience of mental health in rural areas.
 3. Documenting experiences and on-the-ground realities of the rural mental health care workforce.
2. Tackle the inequitable distribution of power, money, and resources—the structural drivers of those conditions of daily life—globally, nationally, and locally.
 3. Measure the problem, evaluate action, expand the knowledge base, train a workforce in the social determinants of health, and raise public awareness about the social determinants of health.

Commission on Social Determinants of Health. (2008). Closing the gap in a generation: Health equity through action on the social determinants of health: Final report of the commission on social determinants of health. World Health Organization. <https://apps.who.int/iris/handle/10665/43943>

Foundational Report by the World Health Organization (WHO) on the need to understand and address the social determinants of health. Three overarching recommendations are presented: improve daily working conditions, tackle the inequitable distribution of power, money, and resources, and measure and understand the problem and assess the impact of action. Three principles of action, corresponding to each recommendation are proposed:

1. Improve the conditions of daily life: the circumstances in which people are born, grow, live, work, and age.

Conger, R. D. (1997). The special nature of rural America. In E.B. Robertson, Z. Sloboda, G.M. Boyd, L. Beatty, & N.J. Kozel (Eds.), *Rural Substance Abuse: State of Knowledge and Issues* (NIDA Research Monograph 168) (pp 37–52). National Institutes of Health: National Institute on Drug Abuse.

This document presents a social contextual model of influences on substance use and abuse in rural areas. Individual pathways from early childhood behavioral problems to later multifaceted syndromes and problems are viewed as taking shape within a set of closely connected social contexts family, peers, school, and other community institutions. Highly relevant, 25 years after publication.

Daghagh Yazd, S., Wheeler, S. A., & Zuo, A. (2019). Key risk factors affecting farmers' mental health: A systematic review. *International Journal of Environmental Research and Public Health*, 16(23), Article 23. <https://doi.org/10.3390/ijerph16234849>

This article presents a systematic review of the outcomes, locations, study designs, and methods of current studies on farmers' mental health. The review aims to fill an important gap in

understanding of the key risk factors affecting farmers' mental health around the world. The authors conduct a final systematic review of 167 articles on farmer mental health using a standardized electronic literature search strategy and PRISMA guidelines. The four most-cited influences on farmers' mental health in the reviewed literature were pesticide exposure, financial difficulties, climate variabilities/drought, and poor physical health/past injuries. The majority of studies were from developed countries, including the United States, Australia, and the United Kingdom. Comparative studies on the mental health of farmers and other occupational workers showed mixed results, with a larger portion identifying that psychological health disturbances were more common in farmers and farm workers. Knowledge of farmer risk factors for psychological disorders is essential for reducing the burden of mental illness. Further research is needed on climate change impacts, developing country farmers' mental health, the reduction of help-seeking barriers amongst farmers.

Hartley, D. (2007). Substance abuse among rural youth: A little meth and a lot of booze. (Research and Policy Brief No. 35A). University of Southern Maine, Maine Rural Health Research Center. https://digitalcommons.usm.maine.edu/behavioral_health/39/

This policy brief is based on a Lambert, Gale, and Hartley (2008) study of substance use among rural youth and young adults intended to highlight the

often overlooked problem of alcohol use in that population. Alcohol use among rural youth often goes ignored due to the attention paid to the increasing use of meth and other drugs. This policy brief calls attention to the need to focus on the use and abuse of all substances by rural youth and young adults.

Hege, A., Ball, L., Christiana, R. W., Wallace, C., Hubbard, C., Truesdale, D., Hege, J., & Fleming, H. (2018). Social determinants of health and the effects on quality of life and well-being in 2 rural Appalachia communities: The community members' perspective and implications for health disparities. *Family & Community Health*, 41(4), 244–254. <https://doi.org/10.1097/FCH.0000000000000201>

There are substantial health disparities among rural communities. This study sought to learn from members of two Appalachia communities in North Carolina about barriers to health and well-being. Researchers conducted three focus groups (n = 24), which were coded and analyzed to identify five themes:

1. Poverty/lack of economic opportunity
2. Access to health care and health resources
3. Social/mental health challenges
4. Food insecurity/hunger
5. The notable vulnerability of youth/older adults being to health disparities

Ample evidence suggests that rural Appalachia is in dire need of public health attention.

Howard, M., Ahmed, S., Lachapelle, P., & Schure, M. B. (2020). Farmer and rancher perceptions of

climate change and their relationships with mental health. *Journal of Rural Mental Health*, 44(2), 87–95. <https://doi.org/10.1037/rmh0000131>

This study examined ranchers' and farmers' perceptions of climate change's impact on their businesses and their mental wellbeing in a rural, western U.S. state. Surveys were administered online and in-person to farmers and ranchers in fall of 2017. Descriptive statistics and correlational tests were conducted to evaluate if climate risk perception was related to levels of mental distress. Open-ended survey questions explored specifically how climate change is impacting mental wellbeing. The majority of respondents agree that climate change is having an impact on agricultural business, and nearly three quarters of respondents are experiencing moderate to high levels of anxiety when thinking about climate change and its effects on agricultural business. A moderate correlation was observed between climate risk perception and climate-related anxiety. Qualitative data showed the impact of climate change on profitability was perceived as the main cause of distress. This study demonstrates that climate change is generating anxiety and distress for farmers and ranchers. To maximize public health preparedness efforts, interventions are warranted to provide climate adaptation education and therapeutic outreach specific to agricultural workers experiencing economic struggle in the context of climate change.

Kessler, R. C., & Ustun, T. (2008). *The WHO mental health surveys: Global perspectives on the epidemiology of mental disorders*. Cambridge University Press, The World Health Organization. https://assets.cambridge.org/97805218/84198/frontmatter/9780521884198_frontmatter.pdf

This book reports results from the World Health Organization (WHO) World Mental Health (WMH) Survey Initiative, the largest coordinated series of cross-national psychiatric epidemiological surveys ever undertaken. Results from discrete surveys of 17 different countries are reported here for comparison and cross-referencing. Many of the countries included in the WMH surveys had never before collected data on the prevalence or correlates of mental disorders in their country, and others had information on mental disorders only from small regional studies prior to the WMH survey. These surveys provide invaluable information for physicians and health policy planners and provide greater clarity on the global impact of mental illness and its undertreatment.

Lambert D., Gale J.A., Hartley D. (2008). Substance abuse by youth and young adults in rural America. *Journal of Rural Health*, 24(3):221-8. <https://doi.org/10.1111/j.1748-0361.2008.00162.x>

This study linked three years (2002–2005) of NSDUH data to examine substance use among rural youth and young adults. The goal for this study was to investigate more closely the contemporary reports of increased use of methamphetamine by youth and young adults in rural areas. The study found that methamphetamine

use was the highest in small/medium urban areas, compared to larger rural and urban areas. However, as with the NSDUH data nearly 20 years later, the overall rate of methamphetamine use was relatively low (ranging from 0.7 to 1.2 %). Equally, if not more alarming, were the far higher rates of alcohol use and high risk alcohol use (binge drinking; driving while intoxicated) among rural youth and young adults living in the smallest rural areas.

Levin, B. L., & Hanson, A. (Eds.). (2020). Foundations of behavioral health. Springer International Publishing. <https://doi.org/10.1007/978-3-030-18435-3>

This succinct chapter provides an overview of rural mental health literature and issues from a public health perspective. The larger book, in its current and earlier editions, sets the standard for describing and understanding mental health services. This chapter describes the challenges of the rural mental health research literature regarding variability in definitions of rural/urban, racial/ethnic characteristics, and of behavioral health disorders. Rural mental health research literature often does not distinguish between treated and true population prevalence.

Mohatt, N. V., Billera, M., Demers, N., Monteith, L. L., & Bahraini, N. H. (2018). A menu of options: Resources for preventing veteran suicide in rural communities. *Psychological Services*, 15(3), 262–269. <https://doi.org/10.1037/ser0000203>

Rural veterans have a 20% increased risk of death by suicide after controlling for access to care, demograph-

ic factors, and diagnoses. This analysis examines rural veteran suicide in terms of the intersection of the environmental and person-level risk factors faced by rural veterans. It is within this context that the role of substance abuse in rural veteran's suicide may be best understood, and prevention services and programs designed to address it.

Olenick, M., Flowers, M., & Diaz, V. (2015). United States veterans and their unique issues: Enhancing health care professional awareness. *Advances in Medical Education and Practice*, (2015)6, 635–639. <https://doi.org/10.2147/AMEP.S89479>

This article describes United States veterans as a diverse population with a distinct culture that includes values, customs, ethos, selfless duty, codes of conduct, implicit patterns of communication, and obedience to command. Veterans experience mental health disorders, substance use disorders, post-traumatic stress, and traumatic brain injury at disproportionate rates compared to their civilian counterparts. The authors review both the clinical and cultural challenges of addressing the mental health needs of veterans and offers recommendations for enhancing awareness and clinical skills of health care professionals working with veterans.

Reid, S. (2019). The rural determinants of health: Using critical realism as a theoretical framework. *Rural and Remote Health*, 19(3). <https://doi.org/10.22605/RRH5184>

This article posits that rural health needs to be based on a robust theory that guides efforts in practice, teaching

and research. Rural health has not yet been described in theoretical terms, since workers within the health sector tend to see their work as practical, rather than academic. The rural determinants of health, as a more specific expression of the social determinants of health, include issues of geography and topography in addition to the social, economic and political factors that result in the persistent disadvantage in health access and outcomes of rural populations. The philosophical approach of critical realism provides a theoretical framework that is inclusive of subjective, objective and abstract realities. Using a case study from South Africa as an illustrative example, authors propose a conceptual model that displays the geographical and historical foundations of rural health alongside the political, economic, social and health system factors influencing patterns of disease and wellness in rural areas.

Chapter Four - Mental Health Service Delivery in Rural Areas: Organizational and Clinical Issues

Balfour, M. E., Hahn Stephenson, A., Delany-Brumsey, A., Winsky, J., & Goldman, M. L. (2022). Cops, clinicians, or both? Collaborative approaches to responding to behavioral health emergencies. *Psychiatric Services*, 73(6), 658–669. <https://ps.psychiatryonline.org/doi/10.1176/appi.ps.202000721>

This article reviews the clinical and policy issues and context of the role of

law enforcement in responding to behavioral health emergencies. Individuals experiencing a behavioral health crisis often receive inadequate care in emergency departments (EDs), boarding for hours or days while waiting for treatment. Such crises also account for a quarter of police shootings and more than 2 million jail bookings per year. Racism and implicit bias magnify these problems for people of color. As communities grapple with behavioral health emergencies, the question is not just whether law enforcement should respond to behavioral health emergencies but how to reduce unnecessary law enforcement contact and, if law enforcement is responding, when, how, and with what support. This policy article reviews best practices for law enforcement crisis responses, outlines the components of a comprehensive continuum-of-crisis care model that provides alternatives to law enforcement involvement and ED use, and offers strategies for collaboration and alignment between law enforcement and clinicians toward common goals. Policy considerations regarding stakeholder engagement, financing, data management, legal statutes, and health equity are presented to assist communities interested in taking steps to build these needed solutions.

Bumgarner, D. J., Polinsky, E. J., Herman, K. G., Fordiani, J. M., Lewis, C. P., Hansen, S. K., Rutschman, R. L., Bonnell, M., & Cardin, S. A. (2017). Mental health care for rural veterans: A systematic literature review, descriptive analysis, and future directions. *Journal of Rural Mental*

Health, 41(3), 222–233. <https://doi.org/10.1037/rmh0000078>

This manuscript examines the state of mental health care for rural veterans through a systematic literature review. The authors provide descriptive analysis regarding the quantity and quality of the current literature base including the number of articles by year published, definitions of rurality, rural subpopulations of focus, and treatment modalities. The authors describe current findings, including delivery of intervention services via telehealth, emphasis on the study of specific mental health disorders, and inconsistency regarding reporting of rural definition. The authors discuss areas for future research including suicide/suicide prevention, nonprescription opioid use, and web-based/online treatment modalities.

Berryhill, B., Carlson, C., Hopson, L., Culmer, N., & Williams, N. (2022). Adolescent depression and anxiety treatment in rural schools: A systematic review. *Journal of Rural Mental Health*, 46(1), 13–27. <https://doi.org/10.1037/rmh0000183>

Depression and anxiety are the most common mental illnesses in adolescents; however, there is limited research on the treatment of depression and anxiety in rural high schools. This review summarized the state of the field on rural school-based interventions to reduce adolescent depression and anxiety. Authors used PubMed, PsychINFO, EMBASE, ERIC, and CINAHL databases to conduct literature searches. Inclusion criteria identified peer-reviewed articles evaluating

rural high-school based interventions for the treatment of depression and/or anxiety. Of the 322 articles screened, 82 articles were reviewed, with only four articles satisfying inclusion criteria. All studies examined a group- or classroom-based program to reduce depression. Three studies reported either significant pre- to post-intervention improvements or clinical change in depressive symptoms or coping skills; one study found null effects. There is an on-going need for additional rigorous investigations on rural high-school based interventions for the treatment of depression and anxiety among teens.

Bird, D. C., Lambert, D., Hartley, D., Beeson, P. G., & Coburn, A. F. (1998). Rural models for integrating primary care and mental health services. *Administration and Policy in Mental Health and Mental Health Services Research*, 25(3), 287–308. <https://link.springer.com/article/10.1023/A:1022291306283>

The Maine Rural Health Research Center conducted a national survey of 53 primary care programs in rural areas that provided or coordinated mental health care. Four strategies or models to integrate care were identified: diversification (care provided on-site with center's own staff); linkage/co-location (care provided on-site by a non-center staff); referral (care provided off-site by non-center staff); enhancement (primary care practitioner trained to provide mental health care on-site).

Borders, T., Williams, T., Youngen, K., & Cecil, J. (2022). Non-metropolitan and metropolitan trends in mental health treatment availability in community health and community mental health centers. *Rural*

& Underserved Health Research Center Publications. https://uknowledge.uky.edu/ruhrc_reports/22

This recent analysis documents the dramatic decline of community mental health centers and significant increase of community health centers in providing mental health care in rural areas over the past decades.

Capps, R. E., Michael, K. D., Jameson, J. P., & Sulovski, K. (2020). Providing school-based mental health services in rural and remote settings. In T. A. Carey & J. Gullifer (Eds.), *Handbook of rural, remote, and very remote mental health* (pp. 1–19). Springer. https://doi.org/10.1007/978-981-10-5012-1_27-1

This chapter outlines challenges to establishing effective school mental health programs in rural and remote areas and offers suggestions for navigating them. First, problems related to rural clinician shortages may be ameliorated through the forming of university-community partnerships with an emphasis on interdisciplinary collaboration. Second, the efficient delivery of effective services that enhance student functioning and wellbeing may be facilitated through the use of multilevel approaches to intervention and evidence-based practice. Third, family and parent engagement is especially crucial for positive outcomes in rural areas and may impact both the access to and effectiveness of services. Given these challenges, practitioners must carefully consider relationship-building in defining needs, building support for programming, establishing and delivering services, as well as monitoring the

outcomes of services for effective practice in rural schools.

Habeger, A. D., & Venable, V. M. (2018). Supporting families through the application of a rural pediatric integrated care model. *Journal of Family Social Work*, 21(3), 214–226. <https://doi.org/10.1080/10522158.2017.1342468>

Rural families are burdened by lost time from work, extensive time spent navigating the system of care, and long wait times. Colocating social care and medical care services in the primary care office would expand the availability of shallow end services, allowing for the triaging of concerns and the reduction of wait times for initial screening and assessment services. The Maryland behavioral health integration in pediatric primary care model described in this article involves collaborations between primary care providers and master's-level social work interns to enhance behavioral health outcomes for children and families in rural Maryland. Findings from the first three years' program evaluations provide valuable information about challenges to program success and utilization. Some of the findings indicate that the primary care providers' understanding of the social work identity in a colocated context affects how often the interns are asked to consult and how they are perceived by families. Feedback from the interns indicates that feelings of isolation as social workers in the host environments affects their experiences in field placement and with the families. Finally, families' aversion to stigma

related to working with a social worker likely affects their engagement with the interns.

Hoefl, T. J., Fortney, J. C., Patel, V., & Unützer, J. (2018). Task-sharing approaches to improve mental health care in rural and other low-resource settings: A systematic review. *The Journal of Rural Health: Official Journal of the American Rural Health Association and the National Rural Health Care Association*, 34(1), 48–62. <https://doi.org/10.1111/jrh.12229>

Rural areas persistently face a shortage of mental health specialists. Task shifting, or task-sharing, is an approach in global mental health that may help address unmet mental health needs in rural and other low-resource areas. This review focuses on task-shifting approaches and highlights future directions for research in this area. The review identified approaches to task-sharing that focused mainly on community health workers and primary care providers. Technology was identified as a way to leverage mental health specialists to support care across settings both within primary care and in the community. The authors also highlight how provider education, supervision, and partnerships with local communities can support task-sharing. Challenges, such as confidentiality, are often not addressed in the literature. Approaches to task-sharing may improve reach and effectiveness of mental health care in rural and other low-resource settings, though important questions remain. Promising research directions to address these questions are recommended.

Jameson, J. P., & Curtin, L. (2012). Providing mental health services for rural veterans. In K. B. Smalley, J. C. Warren, & J. P. Rainer (Eds.), *Rural mental health: Issues, policies, and best practices* (pp. 311–326). Springer Publishing Company.

This chapter first provides an overview of the available research on providing mental health services for rural veterans, including descriptive characteristics of veterans and the barriers they face in receiving care. The chapter then presents a clinically focused primer for providers with limited experience working with rural veterans. Recommendations for future research to address existing gaps are offered.

Lambert, D., Gale, J., Hartley, D., Croll, Z., & Hanson, A. (2016). Understanding the business case for telemental health in rural communities. *The Journal of Behavioral Health Services & Research*, 43(3), 366–379. <https://doi.org/10.1007/s11414-015-9490-7>

Telemental health has been promoted to address long-standing access barriers to rural mental health care, including low supply and long travel distances. Examples of rural telemental health programs are common; however, it is less clear how widely implemented these programs are. There also persists a lack of understanding around the organization, staffing, and services provided by telemental health programs. To address these gaps, a national study was conducted through an online survey for 53 rural telemental health programs, with follow-up interviews of 23 survey respondents. The article describes the current landscape

and characteristics of these programs and examines their business cases. Can rural telemental health programs be sustained within current delivery systems and reimbursement structures? This question is explored in four areas: need and demand, infrastructure and workforce, funding and reimbursement, and organizational fit and alignment.

Lenardson, J. D., Hartley, D., Gale, J., & Pearson, K. B. (2012). Substance use and abuse in rural America. In K. B. Smalley, J. C. Warren, & J. P. Rainer (Eds.), *Rural mental health: Issues, policies, and best practices* (pp. 191–212). Springer Publishing Company.

This chapter compares rural and urban areas and the rural continuum (where available) for prevalence of substance use and abuse, efforts to prevent substance abuse, treatment availability and accessibility, and continuing care and long-term support for abstinence. The chapter also presents models of service delivery that address resource limitations common to rural areas.

Mackie, P. F.-E. (2015). Technology in rural behavioral health care practice: Policy concerns and solution suggestions. *Journal of Rural Mental Health*, 39(1), 5–12. <https://doi.org/10.1037/rmh0000027>

The use of technology is touted as a response to problems associated with delivering rural behavioral health care. Although the use of technology has effectively addressed many service delivery concerns, it continues to fall short of being the overarching remedy to what ails rural behavioral health care needs. This article denotes that the full

implementation and utilization of technology to deliver rural behavioral health care is in conflict with state and federal policies and laws. Identifying and responding to these barriers is important to move opportunities for growth forward, but requires more than hope and limited support. There is a need for committed political will matched with focus and desire along with the allocation of adequate resources. Suggestions for policy changes and responses are offered to encourage continued dialogue on this topic.

Pietras, S., & Wishon, A. (2021). Workforce implications of behavioral health care models. *Mathematica Policy Research*. <https://www.mathematica.org/publications/workforce-implications-of-behavioral-health-care-models-final-report>

Mathematica conducted an environmental scan, based on subject expert interviews and virtual case studies, of the impact and efficiency of the behavioral health workforce under current and emerging behavioral service delivery models. The models assessed included behavioral health integration models; behavioral health mobile applications; certified community behavioral health centers; crisis services; hub-and-spoke models for medical assisted treatment; telebehavioral health models; psychiatric mental health nurse practitioners; peer support models; and same-day access. Three models were assessed in depth: psychiatric mental health nurse practitioners, behavioral health mobile applications, and crisis services.

Raviola, G., Naslund, J. A., Smith, S. L., & Patel, V. (2019). Innovative models in mental health delivery systems: Task-sharing care with non-specialist providers to close the mental health treatment gap. *Current Psychiatry Reports*, 21(6), 1–13. <https://doi.org/10.1007/s11920-019-1028-x>

This article reviews approaches to implementing task-sharing, or engaging non-specialist providers to deliver mental health care. There is strong evidence both for the effectiveness of task-sharing as a means of delivering care for a range of conditions across settings and for the effectiveness of non-specialist providers and health workers in delivering elements of culturally adapted psychosocial and psychological interventions for common and severe mental disorders. Key approaches to facilitate task-sharing of care include balanced care, collaborative care, sustained training and supervision, use of trans-diagnostic interventions based on a dimensional approach to wellness and illness, and the use of emerging digital technologies. Non-specialist providers and health workers are well positioned to deliver evidence-based interventions for mental disorders, and a variety of delivery approaches can support, facilitate, and sustain this innovation. These approaches should be used and evaluated to increase access to mental health services.

Chapter Five - Rural Workforce Challenges and Opportunities

Andrilla, C. H. A., Patterson, D. G., Garberson, L. A., Coulthard, C., & Larson, E. H. (2018). Geographic variation in the supply of selected behavioral health providers. *American Journal of Preventive Medicine*, 54(6, Supplement 3), S199–S207. <https://doi.org/10.1016/j.amepre.2018.01.004>

This article describes the limitations of behavioral health workforce data, the need for standardization in data collection, and the development of a behavioral health workforce minimum dataset intended to address these gaps. The minimum dataset includes five categorical data themes to describe worker characteristics: demographics, licensure and certification, education and training, occupation and area of practice, and practice characteristics and settings. Some data sources align with minimum dataset themes, although deficiencies in the breadth and quality of data exist. Development of a minimum dataset is a foundational step for standardizing the collection of behavioral health workforce data. Authors also address key challenges for dissemination and implementation of the minimum dataset.

Baum, N., & King, J. (2020). The behavioral health workforce in rural America: Developing a national recruitment strategy. University of Michigan School of Public Health Behavioral Health Workforce Research Center. <https://www.behavioralhealthworkforce.org/wp-content/uploads/2020/02/Recruitment-and-Retention-of-BH-Providers-Full-Report-2.2020.pdf>

This article is part of a supplement entitled *The Behavioral Health Workforce: Planning, Practice, and Preparation*, sponsored by SAMHSA and the HRSA. The authors use the National Plan and Provider Enumeration System National Provider Identifier data (October 2015) to examine the supply of psychiatrists, psychologists, and psychiatric nurse practitioners. Providers were classified into three geographic categories based on their practicing county (metropolitan, micropolitan, and non-core). U.S. population data were used to calculate provider-to-population ratios for each provider type. Results indicate that substantial variation exists across census divisions in the per capita supply of psychiatrists, psychologists, and psychiatric nurse practitioners. The New England Census Division had the highest per capita supply and the West South Central Census Division had among the lowest supply of all three provider types. Nationally, the per capita supply of these providers was substantially lower in non-metropolitan counties than in metropolitan counties, but census division disparities persisted across geographic categories. There was a more than tenfold difference in the percentage of counties lacking a psychiatrist between the New England Census Division (6%) and the West North Central Census Division (69%). Higher percentages of non-metropolitan counties lacked a psychiatrist.

Beck, A. J., Manderscheid, R. W., & Buerhaus, P. (2018b). *The future of the behavioral health workforce: Optimism and opportunity*. *American Journal*

of Preventive Medicine, 54(6), S187–S189. <https://doi.org/10.1016/j.amepre.2018.03.004>

Researchers completed 75 one-hour interviews with experts from 47 states who shared their experiences in recruitment and retention efforts for behavioral health workers in rural areas of their states. Experts described numerous efforts in place in their states to recruit and retain behavioral health workers to rural areas. Loan repayment and scholarship programs, pipeline/pathway programs, visa waiver programs, and online job databases were the most common tactics. Many also said they worked to retain providers by investing in telehealth, expert consultation, integrated care environments, and learning collaboratives to create supportive work culture and reduce burnout. Experts were enthusiastic about the perceived effectiveness of pipeline programs, but few track data about actual recruitment to behavioral health professions in the state as a result of such programs. Although many expressed a desire to increase residency slots for psychiatry training, only a handful of states have been able to do so in recent years. State experts have little data indicating which behavioral health professions are in greatest need in their states. Many shared their perspectives that the need for psychiatrists was highest, although shortages of nearly every level of behavioral health provider in rural areas were reported. Most experts believe that raising behavioral health workers' salaries and improving Medicaid reimbursement for behavior-

al health services will positively impact workforce adequacy.

Barkil-Oteo, A. (2013). Collaborative care for depression in primary care: How psychiatry could “troubleshoot” current treatments and practices. *The Yale Journal of Biology and Medicine*, 86(2), 139–146. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3670434/>

Primary care providers prescribe 79% of antidepressant medications and see 60% of people being treated for depression in the United States, with little support from specialist services. Depression is not effectively managed in the primary care setting. This article calls for the collaborative care model, originally developed for the management of diabetes in the primary care setting, to be adapted for the treatment of depression in primary care.

Chapman, S. A., Blash, L. K., Mayer, K., & Spetz, J. (2018). Emerging roles for peer providers in mental health and substance use disorders. *American Journal of Preventive Medicine*, 54(6, Supplement 3), S267–S274. <https://doi.org/10.1016/j.amepre.2018.02.019>

The purpose of this study was to identify and assess states with best practices in peer provider workforce development and employment. A growing body of research demonstrates that peer providers with lived experience as recipients of mental health and substance abuse treatment contribute positively to the treatment and recovery of others with behavioral health needs. A case study approach included a national panel of subject matter experts who suggested best practice states. Researchers con-

ducted three- to five-day site visits to health and substance abuse treatment and recovery organizations in Arizona, Georgia, Texas, and Pennsylvania. The authors found that peer providers work in a variety of settings, including psychiatric hospitals, clinics, jails and prisons, and supportive housing. The paper highlights the need for a favorable policy environment along with individual champions and consumer advocacy organizations to achieve robust programs. Medicaid billing for peer services was found to be an essential source of revenue in both Medicaid expansion and non-expansion states. Research found variations in the states’ peer provider training and certification requirements. Issues of stigma remain, and the research found that peer providers are low-wage workers with limited opportunity for career growth who may require workplace accommodations to maintain their recovery.

Clay, S. (Ed.). (2005). *On our own, together: Peer programs for people with mental illness*. Vanderbilt University Press.

This book looks in depth at eight successful peer-run programs for adults with mental illness. The established programs participated in the Consumer Operated Services Project Study, conducted by the Substance Abuse and Mental Health Services Administration from 1998–2003. The author presents both historical and research background related to the development of the recovery movement, as well as analysis of the eight peer-support programs themselves.

Hostetter, M., & Klein, S. (2021, February 25). Making it easy to get mental health care: Examples from abroad. The Commonwealth Fund. <https://doi.org/10.26099/dj88-5254>

The Commonwealth Fund surveyed seven countries (Australia, Canadian New Zealand, Norway, Pakistan, United Kingdom, and Zimbabwe) to find what strategies they have used to improve wellbeing and address mental health problems. Lessons for the United States are presented in four areas:

1. Treating mild to moderate symptoms
2. Integrating physical and mental health care
3. Using technology to make care more convenient
4. Addressing the social determinants of mental health problems

Gagne, C. A., Finch, W., , L., Myrick, K., and J., & Davis, L. M. (2018). Peer workers in the behavioral and integrated health workforce: Opportunities and future directions. *American Journal of Preventive Medicine*, 54(6 Supplement 3), S258—S266. <https://doi.org/10.1016/j.amepre.2018.03.010>

This article describes the experiences that organizations and their workforce, including peer workers, encounter as they integrate peer support services into the milieu of behavioral health services. Specific attention is given to the similarities and differences of services provided by peers in mental health settings and substance use settings, and implications for future directions. The article also addresses the role of peer workers in integrated behavioral and physical health care services.

Larson, E., Patterson, D., Garberson, L., & Andriola, C. (2016). Supply and distribution of the behavioral health workforce in rural America. WWAMI Rural Health Research Center. https://depts.washington.edu/fammed/rhrc/wp-content/uploads/sites/4/2016/09/RHRC_DB160_Larson.pdf

This analysis compares behavioral health providers (psychiatrists, psychologists, psychiatric nurse practitioners, social workers, and counselors) in rural and urban counties and divides rural counties into micropolitan and non-core areas.

Myrick, K., & del Vecchio, P. (2016). Peer support services in the behavioral health care workforce: State of the field. *Psychiatric Rehabilitation Journal*, 39(3), 197–203. <https://doi.org/10.1037/prj0000188>

This article examines how the history and philosophy of peer support services has shaped current mental health and substance use service delivery systems. The article discusses the growth of peer-run and recovery community organizations in the changing health care environment, including issues related to workforce development, funding, relevant policies, and opportunities for expansion. These initiatives are designed to increase access to recovery-promoting services.

National Council for Mental Wellbeing. (2022). Rural Mental health first aid. *Mental Health First Aid*. <https://www.mentalhealthfirstaid.org/population-focused-modules/rural-communities/>

Online resource for understanding and using Mental Health First Aid in rural areas. Four major tabs are:

1. Getting trained
2. Becoming an instructor
3. Impact
4. About Mental Health First Aid

Negusa, S., Ghosh, P., & Warner, J. (2014) Provider retention in high need areas: Final report. Prepared by the Lewin Group for the Assistant Secretary for Planning and Evaluation. U.S. Department of Health and Human Services. <https://aspe.hhs.gov/reports/provider-retention-high-need-areas-0>

The National Health Service Corps (NHSC) is administered by the Bureau of Health Workforce (BHW) in the Health Resources and Services Administration (HRSA). The NHSC was originally designed to address geographic maldistribution of the health care workforce by increasing the number of health care professionals in areas designated by HRSA to be Health Professional Shortage Areas (HPSAs). In September 2013, ASPE awarded the Lewin Group a contract to examine short- and long-term retention in high-need areas of providers who participated in the NHSC Loan Repayment Program and Scholarship Program and compare their retention with retention of non-participants working in those areas. Important questions for ASPE and HRSA include the number of providers who participate in the NHSC programs and remain in high need areas once they have completed their contract obligations, and how their retention compares with the retention of pro-

viders in high need areas who did not participate in the programs. This study addresses these questions using data from the period 2000–2013. In addition to physicians, this study examines retention of non-physician providers, including nurse practitioners, physician assistants, mental health and dental care clinicians.

Ralph, R. O., & Corrigan, P. W. (Eds). (2005). Recovery in mental illness: Broadening our understanding of wellness. American Psychological Association. <https://doi.org/10.1037/10848-000>

This book of edited chapters explores what recovery means, drawing from sociological models and from qualitative studies that incorporate mental health consumers' subjective experiences. Recovery is examined and discussed as a process, outcome, and natural occurrence. The book is intended to be a useful resource for both researchers and therapists.

Rodgers, M., Asaria, M., Walker, S., McMillan, D., Lucock, M., Harden, M., Palmer, S., & Eastwood, A., The clinical effectiveness and cost-effectiveness of low-intensity psychological interventions for the secondary prevention of relapse after depression: A systematic review. *Health Technology Assessment*, 16(28):1-130. <https://doi.org/10.3310/hta16280>

In 2008, the United Kingdom initiated the Improving Access to Psychological Therapies (IAPT) program. The program focuses on the treatment of individuals with anxiety or depression symptoms, through cognitive behavioral therapy (CBT). The IAPT program is of note for its scale, its focus on relative-

ly common (though under-reported and under-treated) mild- to moderate-severity mental health conditions, and its use of psychological wellbeing practitioners (a novel provider role). This article reviews 17 studies of the effectiveness of the program in preventing relapse. The study concludes that there is inadequate evidence to determine the clinical effectiveness or cost-effectiveness of low-intensity interventions for the prevention of relapse or recurrence of depression.

Substance Abuse and Mental Health Services Administration (2021). Behavioral Health Workforce Report. U.S. Department of Health and Human Services.

This report is presented in four parts. First, evidence-based models of care are presented, with various staffing arrangements (types of providers) presented for each model. The report recognizes that staffing availability and types of licensure requirements may differ across states. Second, the number of providers needed to staff and team each of the 13 models of mental health care are described, including models of care for youth with severe emotional disorders (SED). Third, the number of providers necessary to staff each of three substance use disorder (SUD) models of care are presented. The report concludes with an analysis of the supply and demand for each behavioral health occupation included in the staffing models.

Chapter Six - Rural Mental Health Around the World

Borghouts, J., Eikey, E., Mark, G., De Leon, C., Schueller, S. M., Schneider, M., Stadnick, N., Zheng, K., Mukamel, D., & Sorkin, D. H. (2021). Barriers to and facilitators of user engagement with digital mental health interventions: Systematic review. *Journal of Medical Internet Research*, 23(3), e24387. <https://doi.org/10.2196/24387>

This systematic review examines user engagement with digital mental health interventions (DMHIs), which deliver mental health support through technologies like mobile apps. The review includes 208 articles and identifies common barriers and facilitators that influence user engagement. Factors influencing engagement were related to the end user, the program/content of the intervention, and the technology/implementation environment. Barriers to engagement included severe mental health issues, technical problems, and lack of personalization, while facilitators included social connectedness, increased insight into health, and a sense of control. The findings emphasize the importance of considering contextual factors when evaluating and designing DMHIs to enhance user engagement and improve mental health support.

Dalton, H. & Perkins, D. (2020). Adversity and resilience: Rural mental health in Australia. In S. Munoz & S. F. Bain (Eds.), *Mental health and wellbeing in rural regions* (pp. 8–25). Routledge.

This chapter explores the topic of adversity and resilience in rural areas. It

discusses the unique challenges faced by individuals living in rural regions and how these challenges can impact mental health and wellbeing. The authors examine various factors contributing to adversity, such as limited access to health care, social isolation, economic hardships, and environmental stressors. They also highlight the importance of resilience in overcoming adversity and maintaining mental health in rural communities. The chapter provides valuable insights into understanding the specific issues faced by rural populations and offers recommendations for promoting resilience and improving mental health outcomes in rural regions.

Donovan, R. J., Koushede, V. J., Drane, C. F., Hinrichsen, C., Anwar-McHenry, J., Nielsen, L., Nicholas, A., Meilstrup, C., & Santini, Z. I. (2021). Twenty-one reasons for implementing the Act-Belong-Commit 'ABCs of mental health' campaign. *International Journal of Environmental Research and Public Health*, 18(21), 11095. <https://doi.org/10.3390/ijerph182111095>

This article presents practical knowledge on implementing a population-wide mental health promotion campaign based on the Act-Belong-Commit campaign in Western Australia. It highlights the campaign's development, implementation, and evaluation, emphasizing its success and relevance for achieving global mental health goals. The article offers 21 reasons for jurisdictions to consider adopting or adapting the Act-Belong-Commit campaign when implementing their own public mental health promotion campaigns,

based on its evidence-based approach and alignment with international recommendations.

Lawrence-Bourne, J., Dalton, H., Perkins, D., Farmer, J., Luscombe, G., Oelke, N., & Bagheri, N. (2020). What is rural adversity, how does it affect wellbeing and what are the implications for action? *International Journal of Environmental Research and Public Health*, 17(19), 7205. <https://doi.org/10.3390/ijerph17197205>

This conceptual paper examines the impact of adversity on mental health in rural and remote areas, considering factors such as drought, bushfires, limited health care access, the COVID-19 pandemic, and ongoing economic challenges. The authors propose a rural ecosystem lens to understand rural adversity, providing insights from interdisciplinary research and expert input. They develop a conceptual model illustrating the impact of rural adversity on mental health and wellbeing. The paper concludes with implications for policy and practice, highlighting its relevance for rural communities globally.

Morgan, A.J., A. Ross, and N.J. Reavley. (2018). Systematic review and meta-analysis of Mental Health First Aid training: Effects on knowledge, stigma, and helping behaviour. *PLOS ONE*, 13(5), e0197102. <https://doi.org/10.1371/journal.pone.0197102>

This systematic review and meta-analysis assessed the effectiveness of the Mental Health First Aid (MHFA) training program in improving mental health knowledge, reducing stigma, and promoting helping behavior. The review included 18 trials with a total of 5,936

participants. The results showed that MHFA training led to improved Mental Health First Aid knowledge, recognition of mental disorders, beliefs about effective treatments, and reduced stigma. There were also positive effects on confidence in helping individuals with mental health problems and intentions to provide first aid. However, the impact on the amount and quality of help provided varied. Overall, this review supports the effectiveness of MHFA training in enhancing mental health literacy and providing appropriate support for up to six months after training.

Mishara, B. L., Côté, L. P., & Dargis, L. (2023). Systematic review of research and interventions with frequent callers to suicide prevention helplines and crisis centers. *Crisis*, 44(2), 154–167. <https://doi.org/10.1027/0227-5910/a000838>

This review aimed to identify the characteristics of frequent callers to helplines and provide recommendations on how to best assist them. A total of 27 studies were analyzed, which revealed that frequent callers often experience mental health problems, loneliness, and suicide risk. However, there was variability in defining and categorizing frequent callers among the studies. Based on the recommendations from these studies, 10 suggestions were identified to improve the management and support of frequent callers, although their effectiveness needs further empirical validation. The review emphasizes the importance of evaluating interventions tailored to the specific needs of frequent callers and their reasons for calling, rather than solely

focusing on reducing call frequency.

Smith, K. B., Humphreys, J. S., & Wilson, M. G. (2008). Addressing the health disadvantage of rural populations: How does epidemiological evidence inform rural health policies and research? *The Australian Journal of Rural Health*, 16(2), 56–66. <https://doi.org/10.1111/j.1440-1584.2008.00953.x>

This article reviews rural–urban health disparities in developed countries, including Australia, New Zealand, Canada, the United States, the United Kingdom, and Western European nations. It finds that while rural location affects access to health services, it doesn't always lead to health disadvantages. Factors such as socioeconomic status, ethnicity, limited-service availability, and hazardous conditions contribute to disparities. Addressing these determinants collectively is crucial for improving rural health outcomes. The article emphasizes the need to consider broader social and structural factors for effective rural health policy formulation.

References

Chapter 1

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Chapter 6

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