

Multi-State Needs Assessment to Inform ECHO® Curricula for Behavioral Health, Substance Use, and Social Connection Needs of Adults and Older Adults

Input from health and social service providers across Maine, New Hampshire, Vermont & Northern New York

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October 2023

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Acknowledgements

The authors thank Michaela Fascione and Andrew Solomon at MCD Global Health for their project leadership, and the individuals from CARE2 partner organizations for reviewing draft data collection instruments, identifying key informants, and reviewing the report manuscript. Finally, we thank key informants and survey participants for giving their time and feedback to this needs assessment.

This curriculum is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of a financial assistance award totaling \$475,000 annually with 100% funded by HRSA/HHS. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by HRSA/HHS, or the U.S. Government.

Executive Summary

Regional Needs Assessment Scope

The Collaborative for Advancing Rural Excellence and Equity (CARE2) program was developed to respond to the impact of COVID-19 on the behavioral health individuals residing in rural communities in Northern New England and New York. To accomplish this, CARE2 facilitates evidence-based trainings through Project ECHO programs, and provides collaborative training resources through an open-access e-Learning portal.

The regional behavioral health needs assessment methods included 36 interviews with key informants in a variety of health and human service fields and an online survey of an additional 290 professionals. A literature review of recent studies and behavioral health-related reporting provided further evidence of needs among the study populations.

The needs assessment focused on three key populations:

- Adults in rural communities who have substance use disorder (SUD) and/or behavioral health needs.
- Older adults in rural communities who are either 1) socially isolated, 2) have SUDs, and/or 3) have behavioral health needs.
- Older adults in rural long-term care communities (assisted living & nursing homes) who have 1) SUD and/or 2) behavioral health needs.

Implications for Workforce Training Curricula

The diverse views and perspectives from professionals across the regions suggested an array of possible training topics to strengthen both the content knowledge and the competency of the health and social services provider workforce. Due to increased needs and reduced labor, professionals are challenged in a variety of topics related to service delivery at all levels of the ecological landscape. A *micro*, *meso*, and *macro* perspective supports workers in seeing our health and social sectors as a key part of a larger political and cultural landscape. Suggested topics can be organized according to strengthening the practice of certain professions and provider types, topics related to organizational and community issues, and topics related to system and sector issues. Integrating this ecological approach into trainings supports a provider community well-versed in recognizing the current complexities of health and social conditions and treatment options.

Profession Level Topic Areas

Care models and emerging science

Key informants identified numerous care models where further training would be of benefit to the behavioral healthcare workforce. These included telehealthcare best practices; trauma-informed care; harm reduction approaches to substance use disorder; and community health worker and other non-clinical models of supporting behavioral health. Greater exposure to emerging science on trends in substance usage and implications for treatment were also identified as priority topics.

Issues of equity

In terms of population-specific training and equity issues, key informants recommended the need for training on ageism in terms of how it impacts older adult wellbeing and willingness to access healthcare, patient-provider interactions, and strategies for recognizing and addressing ageism in healthcare and social service settings.

Generally, building cultural competence related to serving marginalized and underserved populations that are prevalent in the state's CARE2 serves, including refugee and immigrant populations.

Interventions needed

Assessment data indicates that priority training areas related to behavioral health interventions include de-escalation strategies for people experiencing acute mental health challenges and steps for intervening during such crises in terms of meeting immediate safety needs and referral to appropriate resources. Respondents also identified the need for training on intervention strategies for non-clinical professions such as mental health first aid and other models that can allow gaps in the continuum of mental health care to be addressed by professionals such as community health workers, first responders, and similar professions.

A key theme emerging from assessment data was the need for training on social isolation interventions that can be used to connect individuals to resources to overcome isolation, as well as strategies for overcoming distrust and cultural attitudes as a barrier to accepting services.

Community and Organization Level Topic Areas

The training needs of community level agencies (e.g., public health divisions and councils) and private health and social service organizations are similar; both want greater levels of integration and knowledge about each others' services and resources and increased competencies in identifying, engaging, and serving clients and patients with complex behavioral health needs, including integration with age-friendly community initiatives. Organizations want to understand and address 1) the stigma and beliefs that keep people from care and 2) how to build trust and rapport once they do access services; and 3) how to manage effective discharge planning into a

variety of home and healthcare settings. Organization-level training will contribute to supporting client relationships from the initial contacts with staff.

Communities and organizations also expressed a need to gain familiarity with the diverse ways that individuals connect with the health and social service systems. They want to create and strengthen the telehealth and tech-enabled ways that individuals access information and services to support better health. This includes acquiring a better understanding of the larger systems of reimbursement such as Medicaid, Medicare, and private insurance coverage for substance use and behavioral health treatments. Given the labor shortages and staffing needs, organizations are looking for guidance and information on effective recruitment and retention of all staff, but particularly in those areas of expertise related to serving the behavioral health and social connection needs of older adults.

System Level Topic Areas

Health and social service providers are frustrated by the number of patients and clients who are burdened by a lack of essential needs such as housing, transportation, food, and income to cover the costs of basic care. While there is little that organizations can do to impact larger systems, understanding better how these systems work improves organizational competency and it may help uncover hard-to-find resources or system work-arounds. Training on systems may also foster creative partnerships, collaborations, innovations, or advocacy that will further support local or regional populations with behavioral health needs.

Population Insights

Pandemic impact

Needs assessment data confirm that, overall, patients and client behavioral health needs worsened during the pandemic due to disruptions in care, reduced service access, increased social disconnection and stress level. As a society, we are still working to understand population level impacts of the anxiety, depression, substance use, and existential threats occasioned by a global pandemic, though providers have ample anecdotal evidence of significantly heightened service needs.

Rural challenges

Challenges to patient care stemming from rural geography were prevalent. Rates of alcohol related deaths are higher in rural areas and workforce shortages that harm quality of care and access were identified as being particularly acute in rural areas due to limited salaries for medical workers facing debt and lack of housing. Further impacting access is the lack of broadband internet in some rural areas. As telehealth has expanded access to behavioral health services, rural areas lag behind in benefitting from this increase in capacity due to a lack of broadband capacity .

Issues of loneliness and isolation are exacerbated by rural geography, with long travel distances to opportunities for socialization and supportive services that offer opportunities for contact. Winter weather and lack of regular and reliable transportation further compound these challenges.

Better reaching rural populations will involve expansion of rural-friendly outreach and care models such as Community Health Workers and greater training for providers on how to provide effective care in rural settings.

Staffing

Across the health and social services systems, organizations and initiatives have staffing challenges resulting in reduced services, service delays, and an inability to serve clients in the most rural communities. While expanded telehealth has partially filled this gap, many older or more rural clients lack access to reliable, affordable broadband or lack the technological knowledge to access telehealth services. Further, organizations are challenged to fully integrate telehealth services into workflows and care coordination. In part, staffing challenges result from system level issues (e.g., lack of available housing) and from sector shifts (e.g., migration away from healthcare jobs). Providers are searching for ways to gain greater efficiencies without compromising care.

Policy-Related Insights

The training needs assessment was designed to inform strategic planning for training rural providers in northern New England and New York; however, insights gained from the wide variety of providers are useful for local, state, regional, and national policymakers. The grave needs of individuals, the frustrations of providers, and the systemic nature of many patient and provider concerns indicates that policy change will be essential to meet health and social service needs in a meaningful way. For instance, hearing how housing shortages impact the availability of providers in rural communities may cause policymakers to think creatively about meeting the housing demands across income levels. Or understanding how frequently a lack of transportation affects access to essential care may generate innovations in how on-demand rides can be better supported or made more affordable.

Healthcare system navigation

The complexity of the US health and social care system structures and reimbursements are confounding even to professionals working within those systems. This needs assessment and myriad other reports confirm the need for system navigation support that broadly covers all domains of the healthcare system and their intersections with community social services. Many key informants noted the continuing siloed nature of services and the decrease in networking resulting from the pandemic. People with behavioral and social health needs are not getting needed care due to a lack of system navigation assistance.

Addressing ageism and the specific needs of older adults

Ageism is being addressed in certain geographic areas with specific, targeted interventions (e.g., Maine's Leadership Exchange on Ageism program); however, ageist beliefs and behaviors are prevalent across our health and social services systems and are making older people sick. Local, state, and federal policy efforts to raise awareness of the physical and emotional harm of ageism and its associated healthcare costs and decreased longevity, could precipitate transformational community and organizational change that would benefit the health and wellbeing of current and future older people.

Part One - Background & Purpose of Needs Assessment

CARE2 Background

The Collaborative for Advancing Rural Excellence and Equity (CARE2) program was developed to respond to the impact of COVID-19 on the behavioral health of rural communities in Northern New England and New York, particularly as it pertains to social isolation and lack of access to behavioral health treatment for residents with substance use disorder (SUD) and older adults in long-term care. To accomplish this, CARE2 facilitates evidence-based trainings through Project ECHO programs, and provides collaborative training resources through an open-access e-Learning portal.

The region served by CARE2 includes the three northern New England states of Maine, New Hampshire, and Vermont, as well as northern New York. Collectively, this includes 77 rural counties across three primarily rural states, and New York's North Country. This region has substantial medically underserved populations that are challenged to obtain quality health care due to poor health insurance coverage, the burden of transportation from rural communities to more urban medical centers, and the restricted availability of specialty care providers and support services. This region also includes some of the nation's oldest communities, with high rates of SUD and behavioral health issues. These challenges are further exacerbated by the COVID-19 pandemic, and have led to heightened social isolation for older adults and record rates of overdose and SUD-related deaths. This creates an urgent need for both acute and sustainable solutions, especially with a health workforce that continues to shrink.

To help address these issues, CARE2 is: 1) Developing a person-centered learning community that stresses interprofessional care and emphasizes collaborative partnerships between providers and those with lived experience (patients/families); 2) Delivering Project ECHO programs to rural primary care and long-term care "spoke sites" across the region to facilitate dissemination of best practice, with a focus on addressing gaps in services for adults with behavioral health and/or substance use disorder; 3) Developing accessible tools to support program planning and implementation (including an online portal with self-paced toolkits and other resources to complement live ECHO sessions) and to reinforce core learnings; and 4) Engaging students to facilitate early adoption of best practices and reduce stigma and bias in an all-teach, all-learn approach.

ECHO® Project Context

This multistate needs assessment will inform training structure, content, and resources provided through the Collaborative for Advancing Rural Excellence and Equity Program

(CARE2) on the topics of behavioral healthcare and social isolation among adults and older adults. The needs assessment data collection activities took place between January and August of 2023 and included key informant interviews and an electronic survey to reach stakeholders in the CARE2 service region of Maine, New Hampshire, Vermont, and New York’s North Country. The project team also reviewed recent national and state grey and academic literature reporting on issues related to the research questions. The goal in using these three methods is to triangulate the most significant needs facing patients and providers in the realm of adult and older adult behavioral health and social isolation.

Research Questions

The research questions guiding the needs assessment design were:

- As COVID-19 transitions from a pandemic phase to an endemic phase, what gaps in resources and services continue to exist, or may develop in the future, when working with rural, isolated individuals and families with substance use disorders (SUDs) or older adults, including those affected by long-COVID?
- What gaps in services have existed for the target groups during COVID-19?
- What knowledge gaps exist for providers and other community members who treat the target groups?
- What resources, strategies, and/or tools exist or are needed to provide effective and efficient services for the target groups?

Target Populations

The target populations for the needs assessment were as follows:

- Adults in rural communities who have substance use disorder (SUD) and/or behavioral health needs.
- Older adults in rural communities who are either 1) socially isolated, 2) have SUDs, and/or 3) have behavioral health needs.
- Older adults in rural long-term care communities (assisted living & nursing homes) who have 1) SUD and/or 2) behavioral health needs.

Table 1 - Older Adult Sub-Population Characteristics

Rural older adults at home	Rural older adults in LTC (Nursing Home & Assisted Living)	Rural adults
Socially isolated	Socially isolated	Substance use
Substance use	Substance use	Behavioral needs
Behavioral health needs	Behavioral health needs	

Methods

Mapping health and social service systems for key informant interviews

Individuals with substance use, behavioral health, or social connection needs might encounter health and social service providers across a broad care, service, and information landscape. To identify those key informants who would have the most helpful information for the needs assessment objectives, the project team organized the healthcare system and the primary domains of the social service system in three “layers”: the sector layer, the organizational layer, and the professions layer (see Appendix A). After discussion, the team opted to focus on the following:

Table 2 - Key Informant Interview Sector, Organization, and Profession Categories

Sector	Organization	Profession
State & local government	State health departments	Dept and Program Managers
Public health	Public health departments	Public health professionals
Advocacy	Advocacy organizations	Advocates
Healthcare	Acute care, Primary care	Physicians, Nurses
Behavioral Health	Specialty care	Psychologists
Social Services	Social service agencies	Social workers
Higher education	Health professions departments	Health professions faculty

Among the 36 key informants interviewed, the total number of organizations and professions are represented as follows:

Table 3 - Key Informant Professions

Category	# of KIs
Key Informant Organization Categories (N=36)	
Public health departments	5
Advocacy organizations	3
Acute care	2
Primary care	3

Behavioral health	2
Long-term care	3
Social service agencies	11
Specialty care	5
Education	2
Key Informant Profession Categories (N=36)	
Directors/Executive directors/Acting directors	13
Administrators	1
Public health professionals	1
Advocates/Consultant	1
Physicians/PA	6
Nurses	3
Social workers	7
Health professions faculty/researcher	2
Program professional staff	3

Key Informant Interviews

Initially, lead project staff at Medical Care Development (MCD) provided names of individuals and organizations across the four states that would likely have relevant information and be willing to be interviewed. This constituted the base list. Thereafter, each project team member was assigned one or more of the four states and conducted an internet search of organizations within the prioritized sectors (e.g., behavioral health, acute care, etc.) with a focus on the rural parts of each state. Using the *professions* list as a guide, a list of individuals with managerial titles was compiled in a spreadsheet for each state. The spreadsheet was organized by sector, organization name, organization type, and the individual's name, title, profession, and email address.

Project team members reached out to prospective key informants using a uniform recruitment email and tailored to the individual's title, profession, and area of expertise. If no response was received, at least two follow up emails were sent. No further attempts were

made after the third email. Of the 82 individuals contacted, 36 agreed to participate in an interview.

Interviews were scheduled according to the convenience of the interviewee and were conducted via Zoom. Most interviews lasted between 30 and 45 minutes. All were recorded to the cloud via Zoom and the Zoom transcriptions were subsequently downloaded, saved to the project file, and reviewed for accuracy by each interviewer.

The key informant interview breakdown among the four states was as follows:

Table 4 - Key Informant Service Region

State	# of KIIs
Maine	11
New Hampshire	8
Vermont	9
New York	7
Regional	1
Total	36

Identifying key themes

The project team established an initial thematic structure using the question categories from the key informant interview protocol. Each of the three project interviewers used this structure to code two interviews and thereafter the results were compared among project team members. Slight modifications to the coding structure were made based on team discussions. Each team member subsequently manually coded their own interviews to identify key themes and subthemes, adding interview synopses and key quotes to a coding spreadsheet. The three interviewers collectively reviewed the full results and organized themes and subthemes into a final order that best reflected and addressed the primary project research questions (see above). To allow for alignment between key informant data and the open-ended survey data, questions on the electronic provider survey were added to inquire about training and unmet needs in the target populations.

Survey Development and Distribution

The electronic survey instrument was developed with the goal of understanding direct service provider competencies and training needs and gaining feedback about the needs of patients

and clients and the barriers they face in accessing or receiving services. A convenience sampling methodology was used for survey distribution to achieve a broad geographic participation across CARE2's service region and to reach a broad array of health, human service, and other providers serving adults and older adults with behavioral health or SUD needs or experiencing loneliness/social isolation.

To ensure that survey participation captured the perspective of individuals outside the social networks of researchers and partners, the assessment used a purchased survey panel through Centiment, LLC to target professionals in the geographic area of interest who serve adults and older adults with behavioral health needs or experiencing loneliness or social isolation. Two-thirds (67%) of the survey sample was obtained through the panel, while the remaining 33% was captured through outreach to individuals, key informants, and Center on Aging networks. The project team also made specific survey-distribution requests of several regional organizations and networks in behavioral health including, for example, New England Rural Health Association, Tri-State Learning Collaborative on Aging, and Maine Geriatrics Workforce Enhancement Program.

Data Analysis

Quantitative data collected from the electronic survey were analyzed using descriptive statistics to present an overall picture of confidence in behavioral health competencies across the sample and perceived client barriers to treatment access. To examine group differences in competency ratings, bivariate analyses were conducted to identify statistically significant differences in scores between groups. Specific groupings included clinical versus non-clinical staff, professional experience, and employment sectors. Qualitative data gained from open-ended questions were analyzed using thematic analysis to identify prevalent trends among participant responses. The coding structure focused on categorizing open-ended responses in terms of key training topics and unmet needs in the target populations.

Literature Review

The literature review methodology was based on a prevalent grey literature review methodology (Godin, et. al., 2015). Criteria for inclusion of literature were specified related to patient population, care setting, topic, geography, author and time period. Searches were conducted by keywords and utilized academic databases that include grey literature, Google, and government websites. The full literature review methodology is in Appendix D.

Part Two - Findings

Introduction

Across 36 key informant interviews, health and social service providers raised broad issues of concern with a considerable list of recurring themes reflecting commonalities among the geographic regions and a heightened level of urgency. As an example, staffing shortages and the resulting challenges of accessing care and services were raised by nearly every interviewee, as was the challenge of serving very rural patients and clients, particularly during and since the pandemic.

The key themes are categorized as follows: 1) provider needs and issues; 2) attitudes toward care; 3) client needs and issues; 4) community or organizational needs; 5) systemic issues; and 6) training-related needs. This section is organized according to these six key themes and the primary subthemes within each. Across subthemes, key informants raised many similar concerns while others were unique but noteworthy because they likely have implications for future ECHO® content. For example, the burden of long COVID was noted by only a couple of key informants, but the scientific literature and mainstream media are beginning to address the significant physical, mental, and social health challenges for this population.

1. Provider Needs & Concerns

Provider needs and concerns primarily centered on labor shortages given that available, competent frontline staff are often the gateway to service access and delivery. Key informants confirmed anecdotally what we know from recent data and reporting: healthcare worker shortages are significant and widespread. Kaiser Family Foundation reported in January 2023 that “[d]ocumented workforce challenges contribute to barriers in access to care and nearly half of the US population – 47% or 158 million people – living in a mental health workforce shortage area”. Further, The Commonwealth Fund reported in May 2023 that, given these shortages and the growing need for mental health services, “over 8,000 more professionals are needed to ensure an adequate supply”. New Hampshire’s 2023 Department of Health and Human Services Roadmap identifies *promoting thriving communities* as a primary goal, including supporting the behavioral health care continuum and focusing on recruitment and retention of the behavioral health workforce. In 2022, NH’s Employment Security Division reported that healthcare had the “highest demand for workers in the healthcare and social assistance sector, a similar trend as in the nation”. Similarly, the Rural Information Hub reports that as of May 2023, all but four counties in Maine are experiencing at least a partial mental health professional workforce shortage and all of New York’s northern counties have shortages.

While CARE2 key informant providers confirmed that, on the whole, they - and the networks within which they operate - have adequate levels of proficiency and expertise related to serving the behavioral and social health needs of adults and older adults in their communities, many questioned their capacity to keep up with the behavioral and social health science due to the time demands placed on staff and leadership resulting from low staffing and high client needs. This underscores the current and future need for ECHO® training on topics related to serving these populations.

Labor shortages, recruitment, retention, turnover

Nearly every key informant noted the challenges - bordering on crisis - of staff shortages, the dearth of certain key types of providers, such as social workers or geriatric psychiatrists, or the lack of adequate supervisors and mentors for new staff hired to replace the many staff who left the workforce during the pandemic. Fewer staff translates into longer wait times for services and these long wait times often mean that patients and clients abandon care and become disconnected from the system of care and services entirely. Long wait times for services exist across the system and across geographic regions. While some providers have new triage programs to identify those who need priority care, others acknowledge the burden on staff in “having to turn people away”.

We're finding and hearing that more providers are even leaving the state or retiring. You know, we are such an old state. And also, a lot of our physicians are aging as well.

Others note that staffing shortages have resulted in services being discontinued in very rural communities simply because there are no workers available or willing to drive great distances between clients given the low travel reimbursements. And while telehealth options do mitigate these needs to some extent (see section 5 below), many key informants noted the lack of reliable

Our major problem is access to resources...we don't have enough people to be effective with interventions for our patients.

internet access for some individuals or the unfamiliarity of using electronic platforms. Other alternatives such as mobile units and stabilization units are being used in some communities to meet needs in an environment of few staff. The issue of labor shortages and wait lists also appeared in the survey responses. Despite that the survey addressed individual competencies, 23 people specifically noted staffing shortages and an additional 9 mentioned the challenge of wait lists, which are often related to lack of staff.

Lack of specific provider groups

According to several key informants, the labor shortage was exacerbated by the lack of critical categories of staff. “We are desperate for home health”, one provider noted. Many older adults want to age at home but are unable to secure the necessary help with daily living needs.

Hospital-affiliated key informants noted that due to the staffing crisis in long-term care settings, they were unable to refer or place patients who required a long-term care setting. Another provider noted the lack of behavioral health staff; and still others mentioned that geriatric psychiatrists and geriatric social workers are like the elusive “unicorn” - impossibly difficult to find and recruit. Yet, behavioral health expertise is desperately needed in long-term care given the high turnover rates and the absence of staff with demonstrated experience in managing residents with dementia or substance-related behavior in a dignified, person-centered manner. In some geographic regions, specialists share their time between two organizations to meet patient needs as best possible. Some of the specialty care staffing issues are related to larger systemic issues. Rural providers sometimes cited lack of housing and low pay as reasons for the difficulty of recruiting and retaining key positions. One interviewee noted that one of the nearby health centers hired a doctor but the hire is potentially threatened because the doctor cannot secure adequate housing.

Many of the medical service models in the area have a hard time attracting new hires and providers. My agency personally has been struggling to hire MDs, struggling to hire a wide range of providers who may not be interested in relocating to a rural area, when if they're emerging from school with student loan debt. They want to be in an area where they can earn much more money to repay that debt faster. Rural communities may not be as desirable for providers to relocate their families.

In addition to overall gaps in care due to poor staffing, other key informants highlighted that continuity of care is disrupted when, for instance, case managers are not available to coordinate necessary care and that clinical supervision can be inadequate when staffing is challenged. Disruptions to care continuity can result in ineffective, delayed, or unsafe care (Shapira, et al., 2020). Staff who work overtime or consistently long hours covering vacant positions suffer burnout and compassion fatigue, further compromising care and service delivery. High turnover compromises organizational memory which, in turn, leads to less efficient care. Further, as noted by some key informants, fewer seasoned staff who can be available for mentoring and supervision, often leads to poorer quality care.

2. Attitudes Toward Care

Key informants identified attitudes toward care - both from the perspective of the provider and the client/patient - as a factor impacting care quality and access. Facets of this broad area include, for example, stigma associated with mental health and substance use disorder outcomes, patient-provider relationships, and willingness of patients to access service, lack of knowledge about services among patients and providers, and the consequences of trauma and pandemic stress.

Stigma, mistrust, reticence

Issues of stigma and trust were identified by eight key informants as reasons why patients and clients may not access behavioral health services. Mental health stigma is a complex phenomenon, but generally involves negative stereotyping or negative associations that lead to mistreatment, discrimination, or avoidance of a person perceived to embody a stereotype or characteristic (Horsfall, et al., 2010). Mental health stigma has documented negative impacts on self-esteem and self-efficacy, practitioner-patient relationships, social support, symptomatology, and coping. The role of stigma as a barrier to accessing mental health is still being understood, but likely is mediated or moderated by such variables as race/ethnicity, age, and gender and severity of mental health condition (Sickel, et al., 2014).

Suboxone has a really high success rate over the course of a year, as high as 60% or 70%. But because this condition is seen as a moral failing, and that people are somehow bad, it's turned a lot of people off from treatment. And that's a really sad thing. So partly, the stigma work is really just facing some of this systemic challenges, but also encouraging providers to shift their perspective and change how they're interacting with people because people who are coming in for services are highly perceptive and the providers attitude can push someone away from seeking a life- saving service.

A 2023 assessment published by the University of Vermont Center on Rural Addiction surveyed 457 rural healthcare practitioners in Northern New England.

When asked to identify the top three barriers to opioid use disorder treatment, more than half of practitioners identified stigma as a patient-related barrier, and more than a quarter identified it as a provider-related barrier. The assessment also examined practitioner beliefs about medications for opioid use disorder and whether opioid replacement therapy replaced “addiction to one kind of drug with another.” While most practitioners did not hold this belief, the study found that “one-fifth to one-quarter of clinicians and counselors agreed that MOUD [medications for opioid use disorder] replace one drug with another addictive drug” (University of Vermont Center on Rural Addiction, 2023).

In discussing the practical impact of stigma from the substance use disorder perspective, one key informant noted that the view of substance use disorder as a moral failing is still prevalent. This belief can impact provider-patient relationships and patients with substance use disorders or mental health challenges may be fearful of being judged by clinicians or other healthcare providers. Stigmatizing language is often present in healthcare as well (for example “dirty” urine screens), which also contribute to stigma as an overall barrier and lack of uptake in medically assisted treatment for those who could benefit from it. Stigma can negatively impact clinical practice, for instance, when necessary treatment is withheld because patients may be viewed as drug seeking, or when relapse is seen by providers as a failure rather than a recognized part of the recovery process. The key informant contrasted this to a condition such as diabetes, where a clinician would never question providing insulin to a patient if they ate something that aggravated their condition.

Lack of awareness of community resources

Lack of awareness of the community resources available to support people with behavioral health needs was identified by five key informants and was mentioned both from the provider perspective of knowing what services are available for referrals for different conditions, and of people with behavioral health needs not being aware of resources they can access on their own. One key informant noted that this challenge can be exacerbated by the shortage of case management resources, as this type of provider is typically very knowledgeable of a wide range of supports and can help clients navigate difficult to access resources.

We do actually have quite a few resources, believe it or not, being in a small area, but not all of our staff are aware of what resources are available. There's times that we make things more complicated than they need to be because staff don't know, 'oh, there's a service to transport them for that,' Or they just don't know how to refer to somebody because they don't know that that is an option to refer them to.

Trauma, stress, and anxiety

Issues related to trauma, stress, and anxiety were identified by eight key informants. As will be discussed in the training needs section, trauma was most often mentioned in the context of a desire for more training on providing trauma informed care.

Pandemic related stress and anxiety was also identified by key informants as a challenge that many are still trying to understand. Existing studies on stress resilience and mental health indicate that during the early stages of the pandemic, there was an increase in distress, and depressive and anxiety symptoms, but the population as a whole has shown signs of building resilience, although there is significant variation in sub-populations.

Older adults have borne a significant portion of the burden of pandemic-related physical disease and there is evidence older adults experiencing cognitive challenges have suffered increased mental health challenges from the pandemic, although compared to younger groups there has been a lower level of psychopathology.

Healthcare providers in particular have been severely stressed by the pandemic. For example, a study of 90,000 nurses found a higher prevalence of mood, anxiety, stress, and sleep disturbances than the general population. Due to a lack of longitudinal studies, it is unclear whether these challenges are ongoing as the pandemic emergency wanes (Mancia, et al., 2022). Emerging evidence suggests that death anxiety contributes to high rates of burnout among healthcare professionals (Norouzi, et al., 2022), and this may have implications for a post-COVID-19 health and social service system and system still struggling with an opioid epidemic that kills over 80,000 people annually (CDC, 2023).

3. Client Needs

Behavioral healthcare is influenced by broader trends related to social determinants of health, and most recently, the impacts of the COVID-19 pandemic. When asked about client needs, key informants cited challenges related to accessing basic goods as barriers to service and impediments to thriving. Particularly prevalent were concerns about poor housing, transportation access, and negative economic trends impacting affordability of basic needs. Additionally, key informants identified an increase in social isolation and substance use disorder largely driven by the COVID 19 pandemic.

Basic Needs

Access to affordable or stable housing was mentioned by twelve key informants. Stable housing has documented impacts on mental health, with prolonged and intermittent challenges with unaffordable housing leading to poorer mental health (Baker, et al., 2020). Challenges related to housing identified by key informants included rising rental costs, property taxes, and lack of housing stock leading to cost barriers to affordable housing. For homeowners, maintaining older houses can be a further financial burden. During COVID, housing interventions such as vouchers and eviction moratoriums had some impact on housing need, but have mostly been phased out.

We are all severely impacted by the lack of housing and rent increases...I'm seeing older adults becoming homeless. They come to me, and they're crying. They have nowhere to go.

The National Low Income Housing Coalition provides state by state data on housing affordability from 2021. Table 5 shows key statistics on rental housing affordability for extremely low-income households (defined as incomes at or below the poverty guideline or 30% of their area median income). In Maine, New Hampshire, and Vermont, more than half of extremely low-income renter households are severely cost burdened by housing. Vermont has a particularly high cost burden for low income households, with 73% having a severe cost burden (National Low Income Housing Coalition, 2021).

Table 5 - Rental Affordability by State

State	% of extremely low income renter households with severe cost burden (spend more than half of income on housing)	% of extremely low income renter households that are older adults
Maine	52%	33%
New Hampshire	62%	43%

Vermont	73%	36%
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See Section 5 below on *System Issues* for findings on other basic needs such as transportation and food.

Isolation

The challenges of social isolation were identified by eleven key informants, particularly behavioral health aspects of social isolation intersecting with pandemic-related challenges and systemic issues such as rural geography and lack of accessible to or affordable transportation. While social isolation is a challenge throughout the lifespan, key informants identified specific challenges faced by older adults - especially those living in remote locations that exacerbate loneliness and isolation and pose challenges for effectively addressing or alleviating them.

Population data related to social isolation is sparse, but America’s Health Rankings publishes a social isolation index, which is a composite score based on the following factors which are risk factors for social isolation. The data are five-year averages from 2017-2021:

- Poverty
- Living alone
- Divorced
- Separated or widowed
- Never married
- Disability
- Independent living difficulty among adults ages 65 and older

Rankings closer to one indicate higher levels of social isolation. For the CARE2 region, Maine ranked 19th in the U.S. in this measure; New Hampshire, 2; and Vermont, 11. The state of New York was ranked 47th, which includes all areas, not just the North Country (United Health Foundation, 2022).

One key informant tied systemic issues related to lack of transportation services and broadband as a driver of isolation, preventing in-person connection which could be beneficial to mental health. Winter weather was identified by two key informants as contributing to social isolation and feelings of loneliness. Thirty-four survey respondents noted isolation and loneliness as one of the primary unmet needs for target populations, often noted in connection with lack of transportation.

Social isolation was also identified as a byproduct of COVID mitigation efforts. One example provided by a key informant was the older adult housing program Silver Sneakers exercise class which provided a valuable opportunity for socialization for older residents. The program has only recently been restarted. Another key informant provided the example of cancellation of in-person narcotics anonymous meetings as a way in which people lost access to social networks that were beneficial to their wellbeing.

The thing I worry most about is the isolation, and we absolutely saw that as a very real challenge during the pandemic. Because older people were in the higher risk categories they were self-isolating, and then we saw an increase in domestic violence and abuse. We saw an increase in substance use disorder, overdoses and exacerbation or relapse from recovery.

Proposed solutions identified by a key informant included better use of natural groups (e.g., rotary members, retired teachers) as trusted individuals who may be more effective in reaching out to isolated individuals. Another key informant suggested that formal services, such as home visiting services could ease social isolation, while another suggested the use of community health workers or paraprofessionals who can serve as outreach workers to rural, isolated older adults to connect them with resources, complete screenings, and similar activities. Barriers to implementation of these types of services identified include services not being reimbursable, as well as reluctance by individuals to let providers into their homes, and for some individuals, simply having no desire to be connected with other individuals, formally or informally.

Self-isolation was also an effect of COVID, with concerns about infection influencing decisions to leave home and contributing to loneliness.

Increases in substance use and mental health issues during pandemic

A theme related to client needs identified by five key informants was an increase in substance use disorder prevalence and mental health needs as a result of the pandemic and other factors. Because the pandemic is a recent event with ongoing impacts, the dynamics between substance use, mental health, and COVID-19 is still an area of study. However, there are population health data available.

An analysis by KFF of 2020-2023 U.S. Census Bureau Household Pulse survey data indicated that the share of adults nationally reporting symptoms of anxiety and/or depressive disorder was 35.9% in April of 2020 at the beginning of the pandemic, rising to a height of 39.3% in February 2021 and declining to 32.3% in February of 2023 (KFF, 2023)

Current population health data in the region studied related to drug overdoses is available through 2021. Death rates per 100,000 caused by drug overdose were 47.1 in Maine (eighth highest in U.S.), 32.3 in New Hampshire (twenty-third highest in U.S.), 42.3 in Vermont

(thirteenth highest in U.S.), and 28.7 in New York (statewide), (thirty-first highest in U.S.) (Centers for Disease Control and Prevention, 2022). Nationally, an increase in age-adjusted drug overdose deaths has been observed over the course of the pandemic from 21.6 deaths per 100,000 in 2019 to 32.4 in 2021. Data indicate that synthetic opioids have been the major driver of drug overdose deaths (KFF, 2023).

A key informant indicated that while the opioid epidemic tends to dominate the news, alcohol continues to be a significant substance use issue. From 2019 to 2021, alcohol induced death rates increased by 38%. There were significant differences in these rates by race and ethnicity. KFF notes that “AIAN [American Indian and Alaska Native] people died of alcohol-induced causes at a rate of 91.7 per 100,000 in 2021, six times more than the next highest group – Hispanic people at a rate of 13.6 (KFF, 2023).” Rural areas also saw an increased burden relative to urban areas, with the increase in deaths being 46% to 36%, respectively (KFF, 2023).

Long COVID and its impact on behavioral health is coming into focus as an increasingly concerning issue. Long COVID was not directly mentioned by any key informants, but the issue was identified through the literature review as an emerging behavioral health concern.

The Substance Abuse and Mental Health Administration (SAMHSA), in a summary of published studies on long covid and behavioral health, notes that depression, anxiety, and sleep disturbances appear to be more prevalent among COVID survivors. Among this cohort, depression was found among 45% of COVID survivors vs. 33% in the general non COVID population; 47% experienced anxiety vs. 31% in the general population, and 34% experienced sleep disturbances vs. 20% in the general population. The report cites another systematic review that “found indications of cognitive impairment and at least one psychiatric disorder six months post-COVID-19 in approximately 56% of patients, with difficulty concentrating (24%) and generalized anxiety disorder (30%) being among the most prevalent Long COVID sequelae (2023).”

4. Community & Organizational Needs

Overall, the attitude of organization and community key informant representatives was positive and hopeful and reflected high levels of trust, confidence, and dedication in local and statewide health and social service providers. Despite these good intentions, however, many noted that financial and staffing concerns are constant threats to service delivery and that working more collaboratively and in an integrated manner would benefit patients and providers alike. COVID-19 disrupted some community networking efforts but for others it offered partnering opportunities. Key informants often referred to larger system and sector issues (see below), some of which posed long-standing challenges for many in the target populations such as

housing scarcity and burden, lack of transportation options, deepening economic inequality, and a dearth of specialty care such as geriatricians and geriatric psychiatrists.

Partnerships and collaborations

At least six key informants noted the importance of partnering with community colleagues to fill gaps on subject matter expertise or services that they could not fulfill, or to create smooth transitions in care, or to supplement care they are providing. This was particularly the case where there are complex care needs or specialty care. Working collaboratively with complex medical or behavioral healthcare allows organizations to tap into knowledge and experience of professionals that may not have access to within their own company structure.

Organizational capacity was also noted as a prerequisite for forming partnerships with community service providers. Key informants in rural behavioral health mentioned recent growths in funding for high-level services such as technical assistance development and implementation due to the opioid epidemic response.

The community network is strong, and we used to meet regularly but don't so much anymore. We are all collaborative but don't always take the time to meet even though it is always beneficial.

However, while the need for technical assistance may be there, one interviewee discussed technical assistance fatigue in the North Country region. While the increase in funds has led to no-cost technical assistance, the amount of assistance available was discussed as “almost duplicitous”. Increased leadership and provider workforce may be needed before a

service organization accepts technical assistance. Though it is a no-cost resource, it does cost the behavioral health service providers time, which is already a limited resource. Under current labor conditions, many agencies have limited staff capacity to accommodate technical assistance needs, largely at the clinical provider level.

Along with labor shortages, specialty care gaps are impacting communities. Vermont has 14 critical access hospitals, but only one that specializes in psychiatry. These hospitals, “need more collaboration with designated agencies and hospitals, and independent and primary care ...[and] they need more integration and communication throughout the whole system”. The widespread need for behavioral health services is burdening communities and organizations and they are requesting “more collaboration with the hospitals in their communities”. Currently in Vermont, community health organizations report that hospital discharge plans are not always fully implemented in a timely manner. For example, a patient may be admitted to the hospital and require hands-on care assistance while healing. The in-patient, acute care space may not be needed at this point; however, nursing home short-term rehabilitation beds are limited. When in-home care is appropriate, it may be ordered by the hospital discharge team instead, only for the patient to then go home, be added to a waitlist for in-home services, and possibly during that waiting period regress or have complications leading to an easily avoidable hospital readmission.

Stronger collaboration and communication between hospitals and the larger continuum of care are needed to better serve communities.

Alternative care models and innovations in care: telehealth, peer support, harm reduction

Key informants echoed what many have observed in recent years: a silver lining to the pandemic was that it forced innovation and alternative approaches to providing needed care and services. COVID-19's disruption affected everyone; as a result, providers were inspired to reach out to others and think outside-the-box and to reach out to local and regional colleagues to find solutions that would quickly get people the help they needed.

As an example, providers and their patients and clients stepped up to incorporate, learn, and adapt to new technology and processes that would connect them to essential services. Lending libraries supplied tablets to older people living in some public housing communities so they could stay updated on public health information, connect with friends and family, and have recreational diversions during the long days of physical isolation. There were funding opportunities to distribute iPads to people to be able to access telehealth in several different health care settings, including behavioral health and long-term care. Now that more in-person services are available, many communities are offering hybrid in-person and live streamed wellness programming, such as community yoga classes, to increase access to programming.

While gaps in the continuum of care have long-existed, the pandemic exacerbated health conditions, raised alarm, increased behavioral health needs, created more widespread isolation, and heightened vulnerability. Some providers responded by creating new programs to fill gaps. For example, two created, expanded, or reinvented peer support programs to accommodate new social connection needs in light of pandemic distancing and the closure of many in-person group convenings, such as Narcotics Anonymous meetings. One key informant noted that “peer support is a huge untapped resource”. Although forms of peer support have been available for decades, there is still much we do not know, for example, about including older people as peer supporters, or about the type and amount of compensation that will draw peers to contribute their time and assistance.

Two key informants noted the recent use of harm reduction models for substance users, though one noted that the concept and its implementation is not yet well understood by providers. The model requires community and provider partnering and collaboration and guidance from the study of those countries such as Portugal and Canada that have adopted it over the past two decades (see, for example, Jozaghi, 2022 and Pillipow, 2020). The ECHO® curricula may be an opportunity to review the scientific literature on lessons learned and gauge regional support for the harm reduction approach in the CARE2 geographic area.

Community health workers

Several key informants noted the important role that community health workers (CHW) currently play in supporting healthier communities and connecting people to needed services and resources. Recent global and US attention on CHWs (see, for instance, Hodgins, et al., 2021) has increased during the pandemic years. A full assessment of the role and benefits of CHWs is beyond the scope of this report, but current reporting suggests that the success of CHW collaborations and interventions depends on a myriad of factors. CHWs must be integrated into a system of communication from other local providers and reimbursement from public or private payers. According to key informants, the flexibility that CHWs have to step in quickly to where service gaps open was a key benefit during the pandemic when other “programming was shut down...[and] we were the only link for many”. Given the ongoing public health focus on CHWs, there are opportunities for rural communities and organizations to reconsider whether and how CHWs can advance the delivery of needed services to rural individuals with behavioral health or substance use needs.

Need for effectiveness data

Two key informants expressed frustration over the lack of effectiveness data for programs or interventions and the difficulty this creates for strategic planning and decision-making in current conditions of resource shortages and heightened demand. One example is the lack of data and reporting on the impact of new recreational cannabis laws enacted in Vermont in October 2022 and the particular need for data and best practices guidance for cannabis use by older adults, especially those receiving behavioral health and substance use support services. Another example from Maine was the lack of data on the time between when a referral is made and when services are actually delivered. This data gap made it difficult for the organization to identify the characteristics of those clients who are most at risk for delayed care or who might be lost in the system. These and similar data gaps contribute to failures in population and individual level harm prevention and less effective organization and community planning for current and future needs.

5. Systemic Issues

Many of the key informants’ comments about the needs and concerns of their clients and patients identified frustrations with structural or demographic factors over which they had no control and little influence. Many of the system level barriers are longstanding aspects of our health and behavioral care system but were exacerbated by the pandemic and the unprecedented health care resignations. Despite challenges, however, the pandemic has shed light on the dysfunctions of the larger system and generated societal and policy discussions about possible improvement in many areas such as isolation and loneliness in older people (see, for instance, Hwang, et al., 2020 and Buecker & Horstmann, 2022).

Similarly, the open-ended survey responses about existing challenges strongly suggest that system level issues present barriers to local level problems. Nearly a third of survey respondents identified lack of resources - primarily transportation, labor, and subject matter expertise - as ongoing challenges for meeting the needs of the subject populations. Another 56 noted that housing and homelessness are challenges and barriers to receipt of services for many adults with substance use and behavioral health needs. An additional 45 respondents noted rural poverty, fixed incomes, and lack of basic needs as interfering with access to behavioral health care and/or adequate socialization, and 12 specifically mentioned food insecurity or lack of access to healthy food choices.

Rurality & Transportation

Both key informants and survey respondents often cited transportation as a challenge for rural providers and clients. Providers experience difficulty getting to clients and clients experience difficulty getting to providers. Public transportation has never been an option in rural communities, although two key informants noted the benefit of the volunteer transportation options available through age-friendly community initiatives. The pandemic disrupted access even to volunteer transportation options as many older individuals were - and still are - uncomfortable leaving their homes.

We do have some transportation services, but those can be hit or miss in the sense that if they don't have enough drivers for that day, transportation might not come to pick you up to take you to your doctor's appointment. If you miss a few appointments, or if you miss your transportation, you can get blacklisted and so many people are relying on friends or family members, or even driving vehicles that aren't inspected or insured to get to the appointments that they need.

Rurality is also a significant factor in decreased access to care. Key informants often noted that the distance between providers and clients was problematic primarily due to inadequate reimbursement for the time and expense of visiting patients in rural communities. With labor shortages, the focus became how to use available capacity as efficiently as possible, and that sometimes meant pulling services from the most remote locations. Several survey respondents cited the overall lack of services in many rural areas as a distinct challenge. One key informant suggested that rurality presents opportunities for innovation given the increased connectedness resulting from technological advancement and the increased health and social needs accompanying the aging of rural communities.

Gaps in the continuum of care

Health and behavioral health care has always been fragmented despite recent efforts to create better integration across care settings. Two interviewees specifically mentioned that community services are still very "siloeed" and that has obvious consequences for the quality and comprehensiveness of patient care but also for providers who are thereby deprived of

opportunities to network with other organizations and agencies. One Maine region had established a provider networking event before the pandemic for the purpose of sharing information about each other's work and the challenges each faced, but the pandemic disrupted the program and it has not reconvened.

Other key informants noted that often patients with behavioral health needs have other physical or mental health needs and they or their family members are challenged to navigate the system effectively. Some communities are experimenting with programs similar to a 'no wrong door' approach where current or prospective patients get help getting the exact services they need, thus reducing care gaps or delays resulting from difficulty navigating confusing systems, particularly for patients with complex needs. The goal is for patients to get the care they need more quickly and with greater efficiency. Other communities' health and social services are less formally connected but operate efficiently to deliver and refer services because they know of each other's existence. Other key informants expressed better community networking as an aspirational goal and one that would likely improve service delivery to clients.

Regarding behavioral health and long-term care needs for older people, the labor challenges make it extremely difficult to provide seamless care between settings, such as between the hospital and nursing home or the hospital and home care. Adult day services were noted by three key informants as a particular need to cover gaps in care. One community that has available day services stated, "we are incredibly lucky to have it".

Telehealth benefits and challenges

For obvious reasons, the use of telehealth services rapidly increased during the COVID-19 pandemic, aided by federal emergency policy change including new reimbursement models (Shaver, 2022). While there is still a lot to learn about the benefits and shortcomings of telemedicine, most providers and many patients adapted to new structures and workflows, first by necessity and now also for convenience. Public and private policy changes are still integrating research findings even as the physical infrastructure continues to take shape, primarily as the result of the passage of the federal Infrastructure Investment and Jobs Act in November 2021 which provided federal money to expand laying down fiber optic cable and connecting community *anchor institutions* (e.g., healthcare providers, libraries, schools, community organizations) (see [Pew Charitable Trust report, 2020](#)). In addition, there have been grants and programs distributing tablets and other hardware to older patients and offering training opportunities (e.g., [Maine Digital Inclusion Initiative](#)).

Multiple key informants discussed both the benefits and challenges of increased availability of internet-based services and increased use of them during the pandemic. As expected, telehealth service delivery made it possible for many people to continue accessing care when visits in person were unavailable and many patients and providers are opting to continue use of telehealth for its convenience and the time and travel savings it offers. Unsurprisingly, however, many rural patients, including those who are very old, either do not have broadband access or are unable to use it comfortably or reliably. One key informant said that some patients do not even know to ask for it, which may indicate a lack of effective messaging.

One of the things that has come out of the pandemic that's positive is when health insurance companies are willing to reimburse for telehealth visits, it opens up a whole new world of access for people who were previously having to drive hours to get to a health center and having to really limit their access to go into the doctor's if they couldn't get rides or couldn't afford gas that week.

Healthcare related inequities - Ageism

The World Health Organization's 2021 *Global Report on Ageism* indicates that around the world, half of us exhibit ageism toward older people. Here in the United States, Rebecca Levy's groundbreaking work on ageism and healthcare costs (Levy, et al., 2020) finds that one in every seven US healthcare dollars - or 63 billion dollars each year - are the result of ageist attitudes and behaviors among both patients and providers. Since rural New England and New York tend to have higher percentages of older adults, addressing ageist attitudes and behavior in both older people themselves and among the provider workforce should be high priority.

Three key informants specifically called out the need for specialized hubs of expertise for the behavioral health needs of older people. They observed that significant amounts of ageism show up in attitudes and behaviors toward older people that result in unexamined, undiagnosed, and untreated - or poorly treated - health conditions. They noted that in many respects, older people's poor mental health or substance use does not always manifest in the same ways as younger people and, further, that providers often assume, without meaningfully inquiring, that older people will refuse treatment or refuse to comply with treatment suggestions. While some communities are experimenting with, for instance, geriatric emergency departments, most lack the financial and staffing resources to dedicate space, funds, and people to the unique needs of older people experiencing SUD or other behavioral health needs. Maine and New Hampshire have taken significant steps toward recognizing and reducing ageism which may, over time, address patterns of ageist behavior at the provider and social services level in those states and across rural New England and New York as trends spread. New Hampshire has convened a Commission on Aging and Maine has a newly formed Cabinet on Aging, both of which are taking steps to ensure that age is adequately reflected in state policy across sectors, including healthcare.

Age-Friendly Initiatives

Across the four states, Maine stands out for its robust and highly-developed age-friendly community initiatives. Two key informants noted that age-friendly initiatives in their communities have made the difference for some patients and clients for essentials such as volunteer transportation services, or visiting programs to reduce isolation and loneliness. Age-friendly community programming may serve as best practice models for community supports that integrate with the health and social service sectors in ways that contribute to improved wellbeing for older adults with behavioral health or social health needs. Greater awareness of age-friendly initiatives among clinical and social services professionals will strengthen networks and provide opportunities for innovative partnerships and collaborations to better serve rural older people.

6. Training

The subject matter content and competency development most needed to effectively address the needs of adults and older adults with behavioral or social health concerns was a primary focus of inquiry for both key informants and survey respondents. The project team included questions on training topics in the key informant interview protocol and the online survey was based on the most prevalent framework for behavioral health workforce competency areas: the SAMHSA-HRSA Center for Integrated Health Solutions' Core Competencies for Integrated Behavioral Health and Primary Care. This framework identifies nine core competency areas:

We have had quite a bit of turnover; we've lost a lot of institutional knowledge. We have a lot of people who are smart, who are eager in the field, but don't have that systems experience yet. So we also have education workforce needs as part of the mix.

- Interpersonal Communication
- Collaboration & Teamwork
- Screening & Assessment
- Care Planning & Care Coordination
- Intervention
- Cultural Competence & Adaptation
- Systems Oriented Practice
- Practice-Based Learning & Quality Improvement
- Informatics

While there have been relatively few needs assessments or academic studies of behavioral health workforce training needs post-COVID, the key informant and survey data reveal topic areas and competencies that providers and community leaders see as opportunities for training improvement and support.

This section is organized according to the following: 1) key informant interview findings on training; 2) survey response demographics 3) quantitative survey results concerning competencies; and 4) key themes from qualitative survey responses.

Key Informant Interview Findings re Training

Key informants were asked about training needs for colleagues and themselves related to behavioral health and social isolation. Responses were diverse, but fell into broad categories ranging from skills to support patient-provider interactions, to profession-specific training needs.

Communication and Patient Interaction

A broad theme identified by key informants was the need for more training related to improving communication and patient interactions skills (N=12). These training needs are related to outreach, addressing treatment barriers, and specific techniques to strengthen patient-provider interactions, including developing “soft skills” for more effective interactions with patients and clients.

From the perspective of outreach, a key informant identified the need for guidance on recruiting high needs individuals into programming, noting that older adults in need of substance use disorder or mental health resources may be the individuals who are least likely to seek them out. Individuals with active substance use were specifically mentioned as challenging to reach out to and engage. Strategies for reaching different populations in need of treatment and overcoming resistance to treatment represent potentially valuable training topics.

One of the areas that we really need to focus on is outreach and engagement of individuals living with active substance use and really developing those motivational interviewing skills, being able to establish a strong therapeutic alliance with people, being able to establish rapport with them.

Regarding interventions to support better communication, two key informants mentioned motivational interviewing as a needed skill for establishing a strong therapeutic alliance and rapport with patients. One key informant specifically mentioned that this training is needed for hospice staff. In addition, key informants mentioned soft skills as potential training topics including customer service skills, developing empathy with clients, and cultivating compassion in care. Additionally, three key informants identified the need to develop skills around cultural competence and stigma. Cultural competence was specifically mentioned in the context of Vermont’s refugee and immigrant communities. Stigma-related training needs included understanding stigma and implicit bias in race, age, gender, and similar categories and developing communication skills that do not stigmatize individuals with mental health challenges or substance use disorder, thus reducing harm and improving patient safety.

Crisis/Early Intervention

Training topics related to crisis and early intervention were identified by five key informants. These topics included steps staff can take when a patient discloses excessive drinking or

I see a real gap in crisis intervention for our clinicians in understanding crisis intervention, and where do you go? And what do you do? And how do you de-escalate? Because so many people are in crisis right now. And building those skills, which requires a lot of kinds of hands-on training and practice is a critical piece.

medication misuse and how to work effectively with difficult patients or individuals presenting with acute behavioral health needs.

Crisis intervention training was identified as a key need. This includes de-escalation tactics and educating about referral options for acute care, which were identified as a need for clinicians across the board. Emergency department staff and new providers in behavioral health care were identified as groups that could specifically

benefit from these topics. One key informant mentioned the Therapeutic Crisis Intervention Training as one training option that is particularly well done. A key informant also indicated that crisis intervention was a topic that would be beneficial for non-clinical professionals who may periodically encounter individuals with substance use or mental health challenges.

Other Topics

A key informant identified telemedicine as a valuable training topic. Mental health care providers have identified both challenges and benefits from the increased provision of telemedicine during the COVID-19 pandemic. Benefits reported by providers related to the convenience of this medium, and its role in overcoming access barriers such as transportation. Beyond technological issues, telemedicine topics that are important to address include those topics related to the remote setting, such as how to compensate for not being able to see non-verbal signals, engaging in therapies that might necessitate in-person interaction, working with people in crisis, and building relationship and rapport (Feijct, 2020).

Training to develop supervision skills was identified by one key informant as a needed resource given that high rates of staff turnover lead to newer workers who could benefit from supervision. This need has been identified in existing literature and SAMHSA has developed competencies for supervision in substance use disorder in five areas: theories, roles, and modalities of clinical supervision; leadership; supervisory alliance; critical thinking; and organizational management and administration (SAMHSA, 2021).

Discharge planning for behavioral health was identified by one key informant. Specifically, addressing gaps in knowledge about existing resources including transportation resources. The importance of strong discharge planning, including connection to primary care, has been documented as an important component of reducing hospital admissions (Pourat, et al., 2019).

Conceptual models of care were identified twice by key informants as areas in need of training resources. The topic of trauma-informed care in mental health and substance use treatment was identified by one key informant, as well as what one key informant referred to as “behavioral health informed care.” Another key informant indicated that the harm reduction model of addressing substance use disorder is still not well understood among providers and could benefit from further training.

I see a lot of people entering the field who have no clue how to de-escalate a situation. Just the tone of your voice and lowering your voice and being calm, just those little tools that can really make a difference in how that interaction is going to go.

A key informant indicated that clinicians lack knowledge about the safety of opioid replacement therapy medicines. There are also barriers to prescribing opioid replacement medicines that have been overcome (e.g., waivers, education, and DEA requirements) that are still perceived barriers by clinicians. These are barriers to hospice and regular PCP providers prescribing this medicine.

Emerging Issues

Three key informants suggested the need for educating providers on the topic of emerging issues in behavioral health, particularly as it relates to substances that have treatment implications. Particular issues mentioned included emerging science on psychedelics and cannabis, and recent trends of Xylazine being mixed with fentanyl and heroin and the treatment implications, such as in wound care. From a policy perspective, a key informant suggested training on navigating new recreational marijuana policies.

Older Adult Specific Issues

Three training topics raised by key informants were specific to the needs of older adults. These include identifying and preventing fraud aimed at older adults, *Reframing Aging* education to address the widespread stereotyping of older people, and caring for older people with behavioral health needs in long-term care, and ensuring physical safety in the long-term care setting.

Population Specific Training

A key informant from a palliative care background identified a need to get more prescribers comfortable with opioid risk assessment in the palliative care population. They may be reluctant to do this at the end of life because they feel it might be stigmatizing. However, people can have long trajectories in hospice and substance use risks do exist. Generally, the key informant suggested training on navigating the intersections of substance use disorder and hospice care.

Considerations for behavioral healthcare practice in rural areas were also noted. With telehealthcare expanding, patients and clients may see providers at a significant geographic

distance who do not have rural-specific knowledge. As noted in other sections of the report, rural settings face unique service access barriers that providers should know about.

For long-term care staff, a key informant indicated that there is a need for direct care worker training in dementia and increasing staff awareness of the differences between behavioral health needs and dementia needs among patients in nursing home and assisted living settings.

Finally, two key informants identified training needs focused on first responders. Emergency medical services and EMTs were identified as a provider group that would benefit from additional training on substance use and overdose interventions. Training on medication interventions for overdose, specifically buprenorphine, could potentially help start overdose treatment sooner for patients. A second key informant mentioned police department staff as being a group in need of training including support staff who may interact with people with substance use or mental health challenges, but who are not clinicians.

Training Barriers

As was discussed in the Provider Needs and Concerns section, turnover is detrimental to behavioral health providers and results in increased costs and burden on staff. There is also evidence that turnover in the behavioral health workforce negatively impacts patient outcomes. Regarding training needs, a key informant indicated that turnover contributes to a loss of institutional knowledge, especially as it relates to evidence-based practices and other therapeutic knowledge which hampers client care. This may be particularly acute in rural or underserved areas where there are limited specialty providers (Brabson, et al. 2020). For this reason, repeated training can be valuable to ensure timely access to new cohorts of providers.

Although not necessarily a barrier to providing training, it is necessary to consider state-specific regulations around training for behavioral health providers. Two key informants from New York's North Country indicated that New York has specific regulations around trainings that are eligible for continuing education; training offerings must meet these applicable state requirements to be valuable to providers serving those geographic regions.

Training Modalities

A key informant felt that coaching is an important part of a successful educational model that allows providers to reach out to each other for advice and resources. ECHO®s can give broad guidance, but the follow-up coaching and assistance is important both for changing practice and reducing burnout and isolation.

Feedback from interviewees indicated that online training modalities are the preferred modality for learning due to time constraints and travel burden. Since the beginning of the COVID 19

pandemic, online training for the behavioral health workforce has shown promise in expanding training access. A 2022 study of training offered through SAMHSA's technology transfer demonstrated that with the switch to online only content during COVID, there was a 270% increase in attendees, while expanding geographic and professional scope, and maintaining satisfaction with training offerings (Powell, et. al, 2022).

Survey Respondent Demographics

A total of 290 electronic surveys were submitted. Respondents were asked to select a primary population they work with and respond to questions about their work with that population. The three populations were older adults experiencing social isolation, adults with behavioral health needs, and older adults with behavioral health needs. The highest percentage of respondents indicated primarily serving adults with behavioral health needs (58.2%), followed by older adults experiencing social isolation (29.0%), and older adults with behavioral health needs (12.8%) (Figure 1).

Approximately two thirds of respondents were employed in healthcare (34.4%), social services (17.9%), or behavioral healthcare (16.1%) sectors. The remaining respondents came from a variety of miscellaneous sectors including government, education, etc. (Figure 2).

Respondents were asked to select which states in the study area they served patients/clients and could select multiple areas. The most prevalent state served was Maine (47.9%), followed by New Hampshire, (33.80%), Vermont, (24.10%), and New York's North Country (8.60%) (Figure 3).

The sample includes respondents of a wide variety of experience levels who work at small and large employers. Slightly more than half the sample (57%) had 1-10 years of experience in their profession, while 19.7% had 11-20 years, and 23.4% had more than 20 years. Almost a third (30.8%) of respondents worked for organizations with 500 or more employees and 63.7% worked for organizations with less than 500 employees (Figure 4).

Healthcare and behavioral healthcare workers were asked to classify themselves according to an offered list of professional categories. The sample includes a wide variety of professions, with the most prevalent ones being nurse practitioners, mental/behavioral health professionals, social workers/case managers, and other allied health professionals. These four categories of professions made up approximately two thirds of the individuals who identified as being part of the healthcare and behavioral healthcare fields (Table 6).

Finally, respondents were asked about their role within their organizations. Slightly less than a third indicated that they were clinicians as opposed to management or support staff. A "professional" category made up approximately one quarter of respondents. It is noteworthy that

this category included a significant number of individuals who also identified with a profession such as nurse practitioner or social worker and likely have direct contact with patients (Figure 5).

Figure 1 - Population Served (N=290)

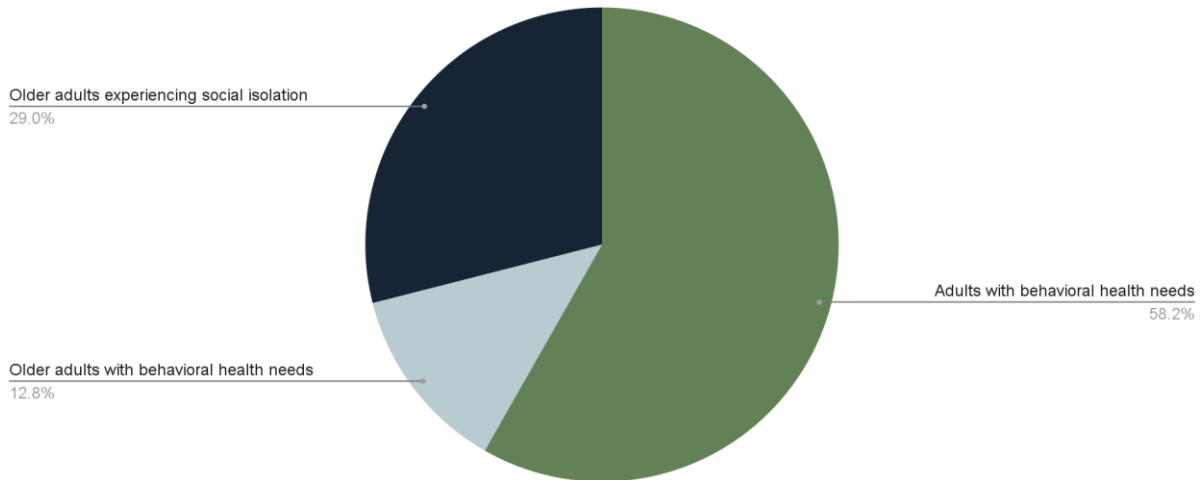


Figure 2 - Respondent Sector (N=285)

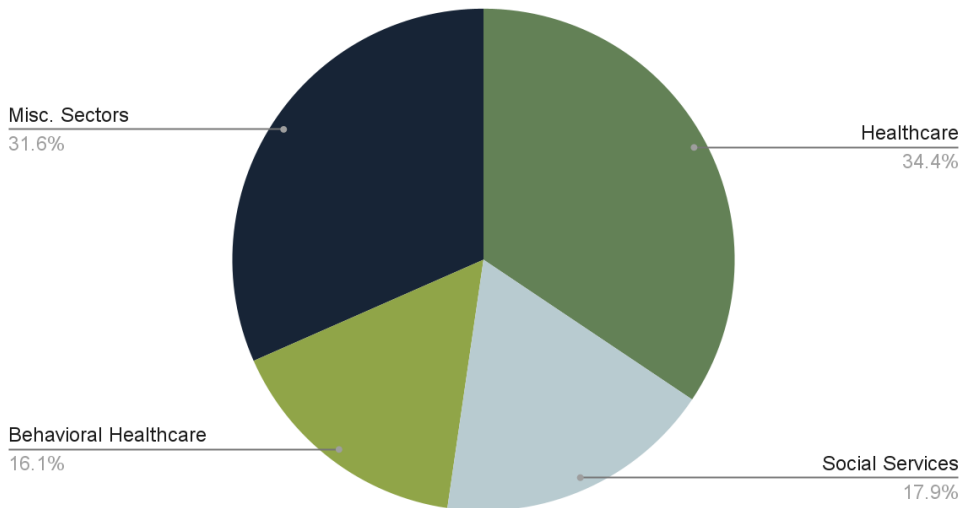


Figure 3 - Geographic Area Served (N=290)

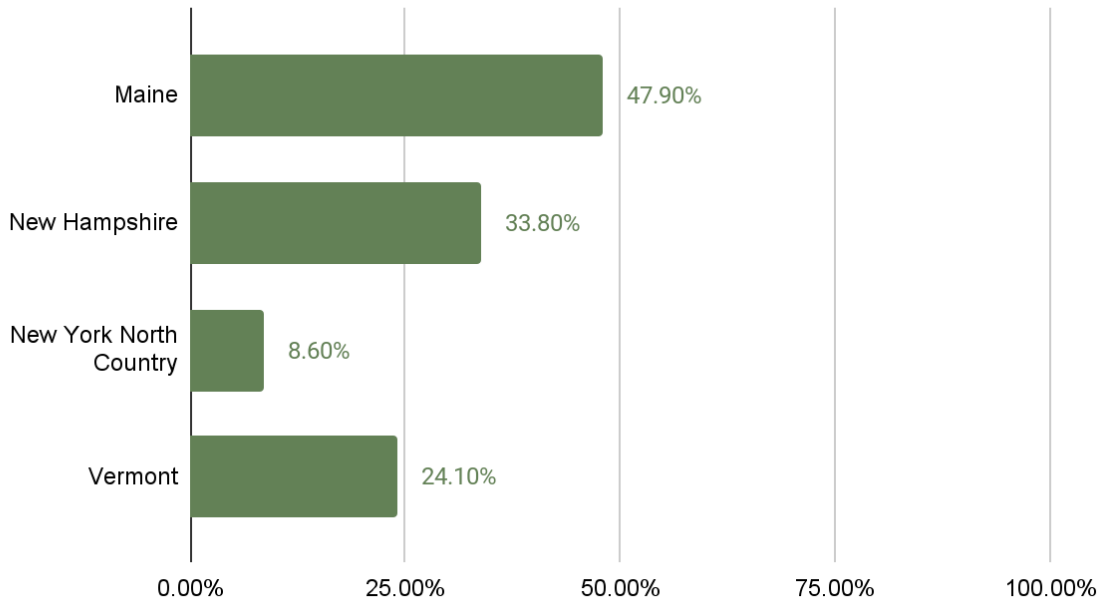


Figure 4 - Employer Size (N=289)

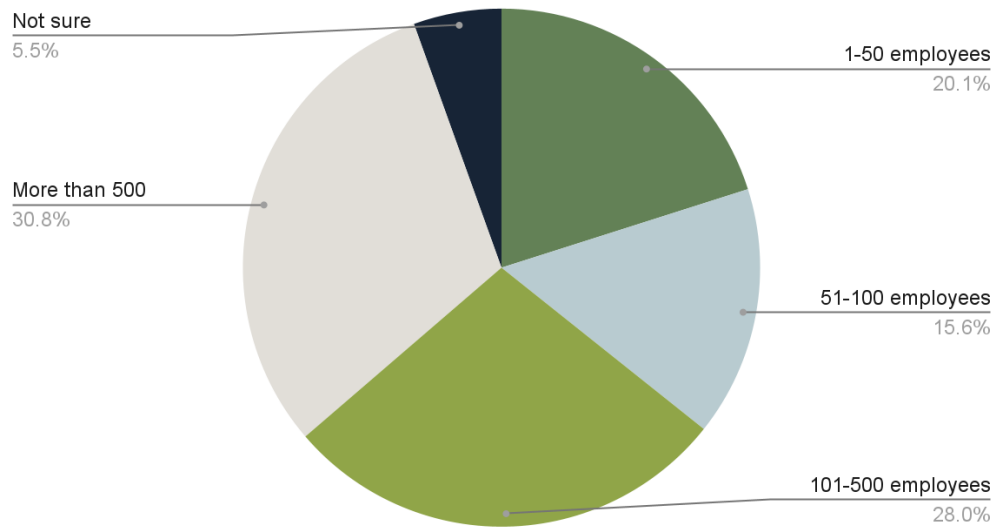


Figure 5 - Respondent Role (N=290)

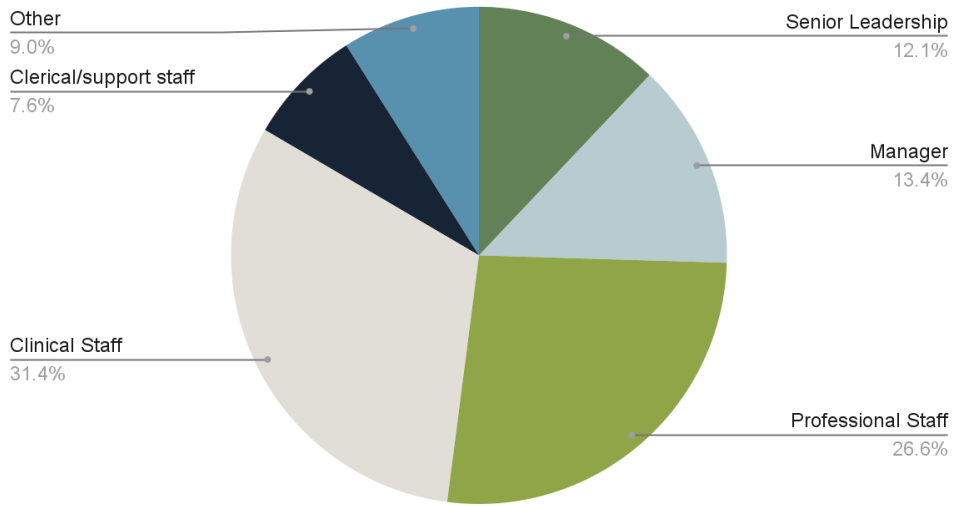


Table 6 - Healthcare Respondent Professions

Healthcare Respondent Professions (N=144)	
Nurse/Nurse practitioner	26.4%
Other allied health professional	15.3%
Mental/Behavioral health professional	14.6%
Social worker/Case manager	10.4%
Other non-clinical professional (i.e. front desk staff, grant writer)	9%
Other	5.6%
Medical assistant	4.2%
Community health worker/Community health representative	2.1%
Doctor/Physician (MD/DO)	2.1%
Peer support worker/Peer education	2.1%
Practice administrator or leader (i.e., chief executive officer, nurse administrator)	1.4%
Psychologist	1.4%
Other public health professional	1.4%
Dentist	0.7%
Nutritionist/Registered dietician	0.7%
Physician assistant	0.7%

Survey Responses - Quantitative Data

Respondents were provided a list of core competencies in behavioral health and asked to rate their confidence in providing these aspects of care on a rating scale from 1 (not at all confident) to 5 (very confident). Individuals were also provided with a “non-applicable” response. This was provided to accommodate professions not involved in certain aspects of care, such as interventions with clients/patients.

Although there is overlap between the populations of older adults facing social isolation and individuals experiencing behavioral health challenges, researchers felt they were distinct enough

that they would benefit from being analyzed separately. Figures 6 and 7 show confidence ratings for the nineteen competencies for each of these two populations.

For both populations, the general trend was that respondents felt they were most confident in the interpersonal skills related to working with each of the populations. This included competencies such as effective listening, collaborating across professions to meet the needs of clients, clearly communicating with patients, and managing personal biases. Screening for social supports and health and human services needs were also areas where individuals felt most confident.

Areas where individuals felt the least confident tend to relate to providing interventions related to substance use disorder, mental health, and social isolation. Additionally, respondents indicated that they lacked confidence that they knew the full spectrum of services in their areas that they could refer clients to.

In addition to overall confidence scores related to working with the two populations, differences in scores were examined by length of experience and whether an individual identified as being in a clinical or non-clinical position.

For respondents serving older adults facing social isolation, there was no statistically significant difference in scores between clinical and non-clinical positions, or between individuals who had been involved in their profession for ten years or more or less than ten years.

For respondents serving individuals with behavioral health challenges, there were two competencies where there was a statistically significant difference. Individuals who identified as being in a non-clinical position indicated that they were more confident in knowing the full spectrum of resources in the community that can meet a client/patients' behavioral health needs (clinical, 3.08; non-clinical, 3.54; $P < .01$). Non-clinical individuals were also more confident in their ability to connect patients/clients to community services (clinical, 3.49; non-clinical, 3.93; $P < .01$). There were no statistically significant differences in confidence levels when comparing staff with ten or more years of experience to those with less than ten years of experience. The sample size was sufficient to also consider individuals with five or more years of experience versus those with less than five years and no difference was found.

Figure 6 - Competency Ratings - Respondents Serving Older Adults Experiencing Loneliness/Isolation

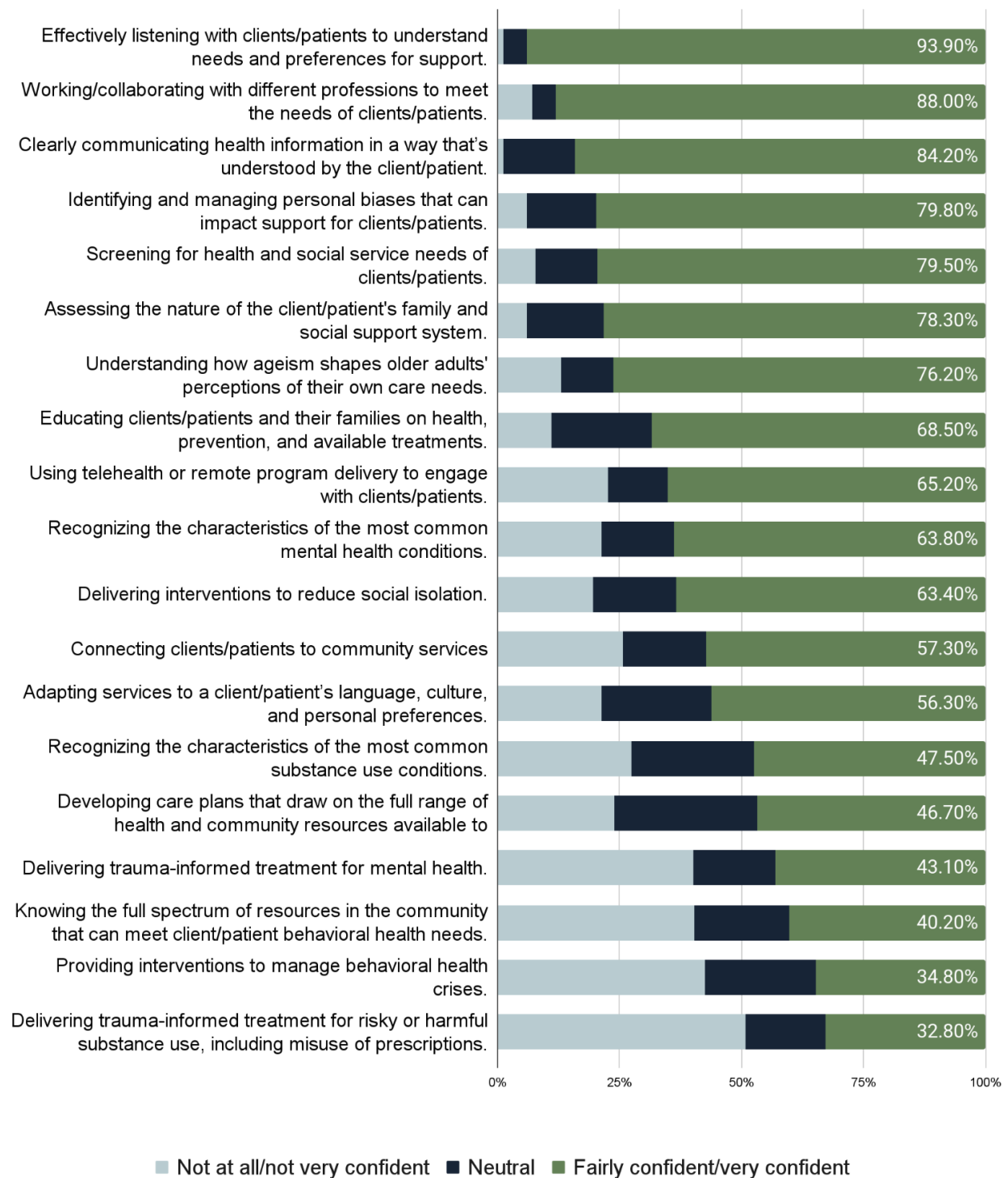
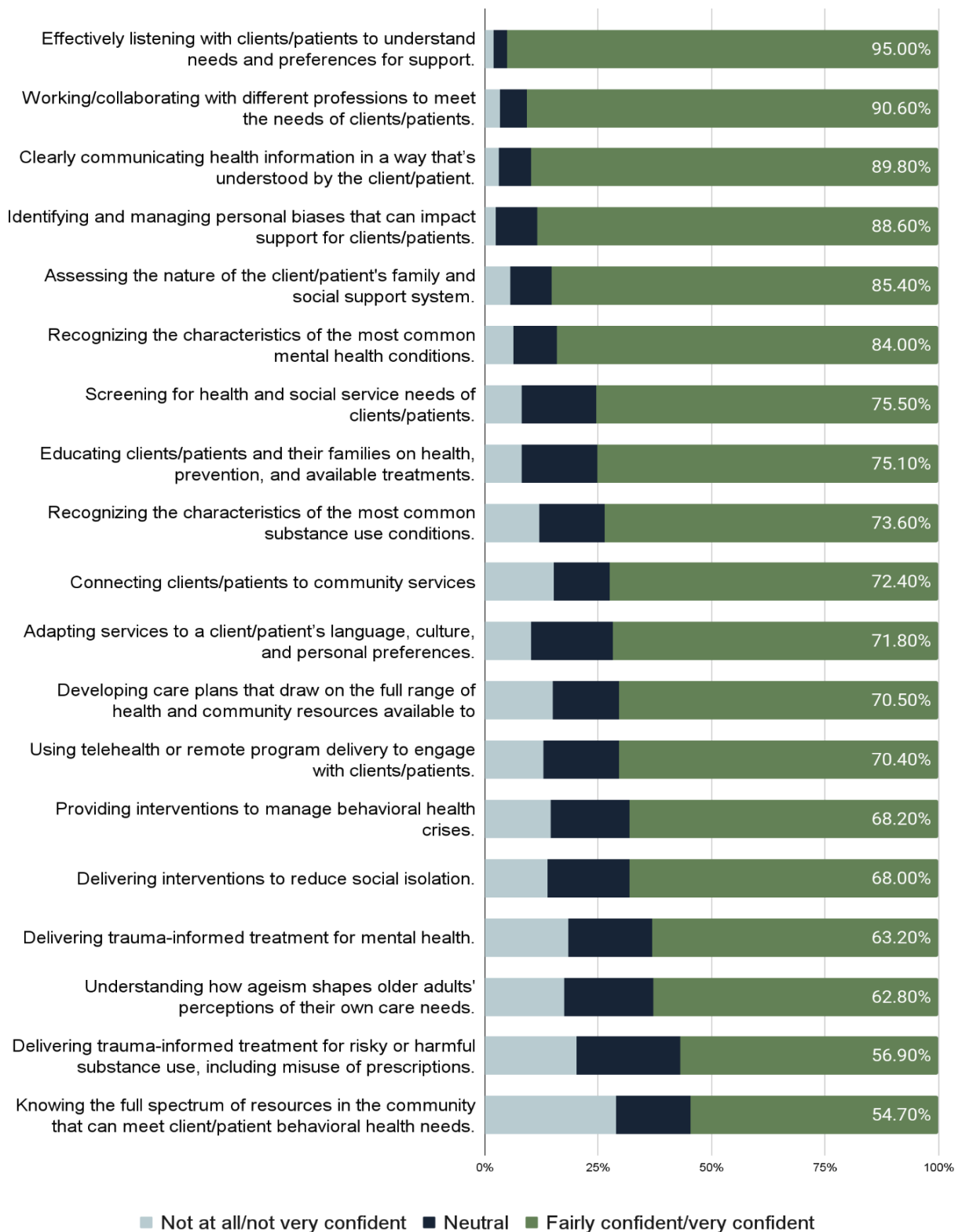


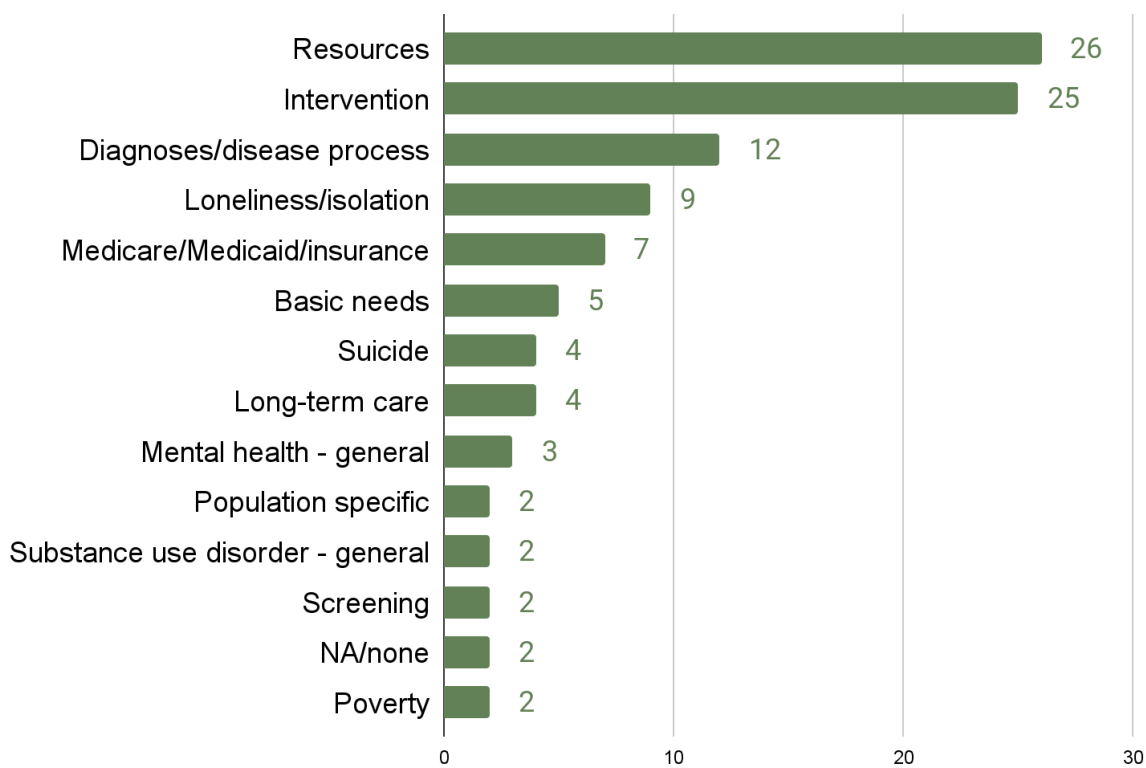
Figure 7 - Competency Ratings - Respondents Serving BH Populations



Survey Responses - Qualitative Data

The electronic provider survey included two open-ended questions designed to gather qualitative data about what respondents felt were areas where they were least confident in serving individuals with behavioral health challenges or older adults with substance use disorder. The two questions asked were 1) What topic area do you feel the least confident in your knowledge or skills in supporting this population?; and 2) What other training topics or resources would benefit you or your colleagues? Figures 8 and 9 show the prevalence of broad themes for providers serving individuals with behavioral health challenges and older adults facing social isolation, respectively.

Figure 8 - Themes - Areas of Least Confidence - Providers Serving Older Adults Experiencing Social Isolation (frequency)



Resources

This theme dealt with identifying and connecting individuals to services that would be valuable to the population.

Intervention

Respondents identified a variety of areas related to providing interventions with this population including helping to address social isolation in individuals without transportation or internet access (2), overcoming COVID fear as a factor in isolation, identifying individuals who are socially isolated, and addressing mental health challenges that may be contributing to isolation.

Diagnoses/Disease Process

Various aspects of diagnoses and knowledge of disease processes were mentioned by respondents including; understanding depression (4); understanding the interrelationship between isolation and behavioral health issues (4); substance withdrawal (2); and miscellaneous topics such as hoarding, long-covid, and trauma.

Loneliness/Isolation

This theme dealt with aspects of loneliness/isolation in terms of better understanding of its effects, how to support individuals who are experiencing loneliness (7), mental health impacts, and identifying older adults who are socially isolated.

Medicare/Medicaid/Insurance

Respondents indicated that they would benefit from knowledge about benefits and eligibility for this population through Medicare (3), Medicaid (3), and SHIP.

Basic Needs

Addressing basic needs for this population, including transportation (4) and housing.

Suicide

Understanding suicide and suicide prevention.

Long-Term Care

Care transitions from home to long-term care (2), and supporting residents with physical challenges or displaying aggressive behaviors.

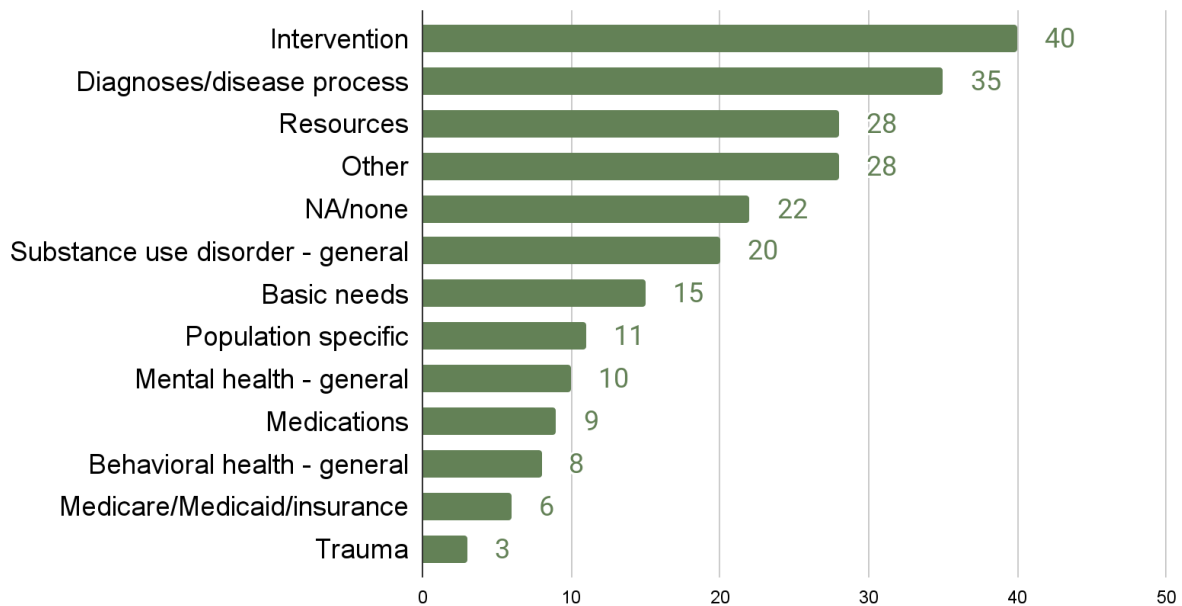
Minor Themes

There were numerous minor themes that emerged from participant responses:

- More general training in mental health
- Information on specific populations including identifying services for veterans, and special considerations for serving individuals in long-term care who have previously been incarcerated.
- More general training in substance use disorder.

- Screening for social isolation and basic needs.
- Poverty and its impact on substance use disorder.

Figure 9 - Themes - Areas of Least Confidence - Providers Serving Adults With Behavioral Health Needs



Providers serving adults with behavioral health needs

Intervention

The most prevalent theme was related to interventions in behavioral health. There was significant diversity within this broad theme. Areas where respondents felt they lacked confidence included:

- General substance use intervention (6)
- De-escalation (6)
- Mental health treatment modalities such as Assertive Community Treatment, psychoeducation, and cognitive behavioral therapy (4)
- Intervention for acute episodes including psychosis and crises (4)
- Housing focused interventions (4)
- Supporting long-term recovery (3)
- Relapse prevention (2)
- Substance use disorder prevention (2)
- Outreach to bring individuals into treatment (2)

Diagnoses/Disease Process

Respondents identified specific mental health diagnoses of interest and disease processes where they felt they lacked confidence. These include:

- The addiction process, including withdrawal, environmental triggers, and causes of addiction (7)
- Substance specific knowledge, including stimulants, meth, and opiates (5)
- Severe or complex mental illness (5)
- Mental health and substance use disorders in older adults (5)
- Dementia (3)
- Depression (2)

Resources

Most comments under this theme were general statements that the respondent lacked confidence in knowing what resources are available for individuals with behavioral health needs. Specific resources mentioned included peer support, medication-assisted therapy and other treatment resources, as well as support for accessing basic needs.

Basic Needs

The basic needs theme mostly involved the need for knowledge in how to support individuals with homelessness, accessing housing, and housing stability (13). Supporting employment was also mentioned (2).

Population Specific

Older adults were the most commonly identified sub-population of people who may experience behavioral health issues that respondents felt least confident in supporting (7). Other populations mentioned include those with disabilities, veterans, and LGBTQ+ individuals.

Medications

This theme dealt with prescribing and administering medications.

Medicare/Medicaid/Insurance

Respondents under this theme identified a lack of confidence with identifying public and private insurance benefits and the application process.

Trauma

Respondents under this theme identified a lack of confidence with understanding how trauma impacts behavioral health.

Summary of Training Needs

Due to the structure of the data collection inquiries, analysis of key informant data and survey data revealed a layered training-needs landscape. The key informant protocol asked broader questions about the workforce as a whole and maintaining currency with emerging science on areas relevant to care needs for the subject populations and the overall challenges for meeting needs. In the context of those larger conversations, key informants discussed training needs on a variety of topics, including practice-level topics (e.g., rural practice). The survey, however, asked very specific questions about the individual respondent's feelings of confidence on specific listed topics with the goal of identifying those areas in which training support would be most welcomed. While we might infer some practice-level issues from the number of responses on competencies covered in the survey, the primary driver of the survey responses are each individual's self-perception of competency.

Key informants had a tendency to identify higher level support such as practice support for rural providers, supervisory and mentoring support, ageism and equity-related topics, including conceptual models of care addressing the needs of specific types of patients (e.g., trauma-informed care, discharge planning for behavioral health patients, dementia care training in long-term care settings). Similarly, a few recognized the need for training support for their community partners, such as emergency service staff, so that the community as a whole could provide more effective care and services.

On the other hand, survey respondents rated their confidence levels in a variety of competency areas. There was overlap among providers of behavioral health and providers of older adults on the low confidence areas of finding and connecting clients and patients to community resources, identifying and delivering certain interventions and treatments, and integrating age and equity-based care for specific populations, including those with trauma or those experiencing isolation and loneliness.

While the survey did not ask “why” individuals had a lack of confidence in, for instance, interventions and resources, the key informant data offers helpful explanations. For example, available community resources remain challenging due to labor shortages and the COVID-19 disruptions to much of the in-person networking that was taking place pre-pandemic. Some communities have moved to online collaborations, but due to labor issues, many others have not had the capacity to do so.

Across data collection activities, there is an interest in and need for training topics that reflect care models and the emerging science on certain health and social conditions, such as trauma-informed care, behavioral health-informed care, and understanding isolation and loneliness.

Similarly, there is interest in better understanding how to deliver culturally competent care, including competence around age-related impacts and ageism. Individual survey respondents expressed a need for information and connectedness to community resources so that care and services can be delivered effectively.

All key informant themes and the lowest scoring one-third of the survey responses, both quantitative and qualitative responses, are represented in the table below.

Table 7 - Training Priorities by Research Method

Care models & emerging science

Interventions

Population & equity

Practice issues

Resources

Key Informant	Survey Quantitative (older adult)	Survey Quantitative (behavioral health)	Survey Qualitative
Patient interaction & communication	Trauma-informed care	Awareness of resources	Finding and connecting with resources
Crisis intervention	Interventions for BH	Trauma-informed care	Interventions
Telemedicine, including dx issues	Awareness of resources	Understanding ageism	Understanding disease processes
Supervision support, including mentoring	Trauma-informed care for mental health	Trauma-informed care for mental health	Understanding isolation & loneliness
BH discharge planning	Resources for care planning	Interventions for social isolation	Understanding Medicare/Medicaid eligibility & benefits
Conceptual models of care (e.g., trauma-informed, BH-informed)	Diagnosing SU	Interventions for BH	
Emerging science in BH, SU	Cultural competency	Use of telehealth	
Age-specific care, including ageism	Connecting to community resources	Resources for care planning	
Population-specific, including risk assessments	Interventions for social isolation	Cultural competency	
Rural practice issues			
Dementia care in LTC			
First responder training			

Part Three - Implications & Recommendations for ECHO® Curricula

Recommendations for ECHO® Topics

The wealth of data from key informants and survey respondents about training needs has both broad implications for curricula structure and development and also suggests specific topics that could benefit providers in CARE2's service region.

The diverse views and perspectives of the 36 key informants and the 290 survey respondents provide a broad array of possible curriculum topics that will strengthen both the content knowledge and the competency of the health and social services provider workforce across the studied rural communities. The project team's initial approach to organizing the healthcare system offers a helpful framework for thinking about ECHO® curricula content; there are topics related to **system and sector issues**, topics related to **organizational and community issues and factors**, and topics related to **strengthening the practice of certain professions** and provider types. This ecological, *macro-meso-micro* level approach supports seeing our health and social sectors as a key part of a larger political and cultural landscape. Integrating the holistic-oriented ecological approach into the curriculum on more granular or field-related topics may be an effective way to support the integration of social determinants of health into clinical care (see, for instance, Black, et al., 2022) and create a provider community well-versed in recognizing the current complexities of health and social conditions and the corresponding treatment options.

Profession Level

The most frequently cited reason for not giving high ratings to the question: "on a scale of 1-5 - with 1 being the lowest - how would you rate how well are you and the staff [of your org or community] are able to keep up with the emerging science so you can meet the needs of the populations you serve?" was a lack of time for training and learning given current labor constraints. Despite challenges in service delivery, the level of dedication and commitment and the sincere desire to want better results for patients and clients was widely apparent. Key informants were also clear about the training topics that are most needed, and while the list is long, there was consistency in the responses. For obvious reasons, a workforce that has ready access to emerging science of treatment and support will be more effective and have a more complete toolkit for aligning interventions and community resources with the individuals who most need them.

Care models and emerging science

- Key informants indicated that telehealth has served to improve access to treatment, but limitations to this modality come in the form of interpreting non-verbal signals, engaging in therapies that might necessitate in-person interaction, working with people in crisis, and building rapport. Training that examines best practices in care through telehealth to overcome these limitations may be valuable.
- Trauma informed care, in terms of how a patient's trauma history impacts behavioral health challenges; how interventions can be designed to address trauma; and how secondary trauma and related concepts such as compassion fatigue can impact service provision.
- Education on the harm reduction model, in terms of its philosophy, benefits, practice, and overcoming stigma and bias that can be a barrier to a harm reduction approach.
- The current status of medication-assisted treatment, including the most recent regulatory framework governing opioid replacement therapy, the biological and philosophical foundations of this approach, and overcoming stigma attached to MOUD.
- Education on emerging trends in substance use and treatment implication. Xylazine and its mixture with other drugs was an example that was highlighted by key informants and survey respondents. From a systemic perspective, training can include emerging regulations on substances, such as the fluid status of recreational marijuana.
- For the older adult population specifically, building an understanding of the intersections and differences between cognitive deficits, including Alzheimer's disease and related dementia and mental health conditions.
- Study respondents identified a variety of diagnoses and disease processes that would be valuable to gain information on. Depression was the most commonly identified diagnosis, while interest was also identified in isolation and its relationship to behavioral health issues, as well as understanding and addressing substance use withdrawal.
- Use of community health workers and non-clinical staff to address behavioral health challenges in the community is an emerging model and training on the philosophy, intervention strategies, and available resources may be a valuable training topic.

Population and equity

- In terms of population-specific training and equity issues, key informants recommended the need for training on ageism in terms of how it impacts older adult wellbeing and willingness to access healthcare, patient-provider interactions, and strategies for recognizing and addressing ageism in healthcare and social service settings.

- Generally, building cultural competence related to serving marginalized and underserved populations that are prevalent in the state's CARE2 serves, including refugee and immigrant populations.

Interventions

Broadly, the data indicate that interventions related to mental health and substance use disorder is the area where providers feel like they lack the greatest amount of confidence in serving adults and older adults with behavioral health challenges, as well as older adults experiencing social isolation. This suggests that educating on interventions tailored to the credentials and role of the provider in the system of care may be a higher priority. For instance, training for clinicians on therapies such as assertive community treatment and psychoeducation, to training non-clinical professions on models such as mental health first aid.

Specific intervention focused areas where a high need was identified include:

- De-escalation strategies for people experiencing acute mental health challenges and steps for intervening during such crises in terms of meeting immediate safety needs and referral to appropriate resources.
- Intervention strategies for non-clinical professions such as mental health first aid and other models that can allow gaps in the continuum of mental health care to be addressed by professionals such as community health workers, first responders, and similar professions.
- Motivational interviewing was identified as an evidence-based approach where more training would be beneficial.
- Social isolation interventions that can be used to connect individuals to resources to overcome isolation, as well as strategies for overcoming distrust and cultural attitudes as a barrier to accepting services.

Community & Organization Level

The project team spoke to many key informants representing organization and community leadership about issues related to meso-level impacts, challenges, opportunities, and strategies. There was general consistency among organizational and community stakeholders on issues such as the need for strong community partnerships, collaborations, and communication to best serve the needs of all patients and clients but particularly those who need significant support or consistent or long term supports and services. ECHO® topics and skill building that address issues relevant to community or organizational level planning will jump start conversations that may have started pre-COVID or lead to the wider adoption of promising innovations and best practices. Most importantly, however, it is likely to generate new partnerships, opportunities, and networking.

Practice Issues

- Individuals with behavioral health challenges or experiencing social isolation may be unconnected to treatment or supportive services or experience access barriers to treatment, from a lack of basic needs fulfilled that serve as a foundation for substance use or mental health treatment, to stigma and distrust of the healthcare system which lead to reluctance to utilize service. Providers could benefit from training on identifying and engaging high needs individuals into programming, including those actively using substances.
- Building good rapport with patients/clients was highlighted as a beneficial area of skill development that includes consciously building empathy and cultivating compassion for providers for better provider-client interactions and better customer service.
- The issue of stigma as it relates to behavioral health was identified as a training priority by respondents. This includes training providers on the concept of stigma and how it can impact patient outcomes and access to care, as well as training for providers services to individuals with substance use disorder on the biological foundations of addiction and its impact on patient behaviors.
- Staff turnover compromises the ability to provide effective supervision and mentoring. Training on models for mentoring and supervision and resources for mentoring and development of supervision skills may be beneficial for building capacity for these skills in the workforce.
- Discharge planning from one care setting to a lower level of care is an area where respondents indicated a need for skill building. This includes building a knowledge of the full spectrum of available mental health, substance use disorder, and isolation supportive services, as well as strategies for discharge planning when there are gaps in the spectrum of services, as is common in rural areas.
- As telehealth has resulted in situations where providers in urban areas may be treating individuals in rural communities, it is important for these providers to receive training in trends in behavioral health challenges; healthcare access barriers individuals in rural communities face such as transportation, provider shortages; and social and cultural environment and its relationship to behavioral health.
- Training for first responders who may be particularly likely to encounter acute behavioral health needs, including de-escalation tactics.
- Providers often do not have a good understanding of Medicare and Medicaid as they relate to behavioral health. Providers could benefit from training about the behavioral health-related benefits offered through these programs and how clients can access them.

Resources

- Lack of knowledge of the full spectrum of services available to individuals facing behavioral health challenges or social isolation was an area where providers indicated a low level of confidence. Due to the local nature of these resources, this could potentially be a difficult topic area for an ECHO® session which would be bringing providers together from a large geographic region, but may be an area where CARE2 could have impact through other training opportunities. However, educating on the general spectrum of services for these populations, while referring providers to local clearinghouses could potentially be a way to incorporate this as an ECHO® topic.
- In addition, ECHO® participants are likely to benefit from hearing about best practices or innovations across the region or in other parts of the country that have supported successful networking and communication about resources among provider communities.
- Integration of service providers with age-friendly community initiatives provides many opportunities for filling gaps in the service delivery landscape including programs offering volunteer transportation, home-repair, and social connection services.

System & Sector Level

Key informant feedback makes clear that there is a lot of frustration about system factors that are outside of community, organizational, or individual control but that impact their ability to provide services effectively and efficiently. However, understanding or brainstorming how systems could be changed in the future may provide opportunities for brainstorming innovative programs or research projects that could influence important federal, state, or local policy or advocacy activity in the short or longer term. In addition, provider understanding of system factors can validate provider experiences and may also translate into better patient and client education. A failure to acknowledge the constraints and limitations imposed by macro-level system factors could lead to a waste of organizational or community resources meant to solve issues that require larger policy or political-level interventions or activity. The frequency with which system factors were raised in both key informant conversations and in the survey respondents is evidence that these issues hold a high degree of relevance for possible ECHO® conversations.

- Unstable housing or housing with high cost burden have a variety of detrimental health and social effects of which providers should be aware, including techniques for reaching and following these clients and how to connect them with housing resources.
- Similarly, a lack of transportation, high-cost transportation, or unreliable transportation are all factors that make accessing care and services more difficult for people who have health and social challenges. Understanding transportation systems at all levels of

government offers meaningful context for provider staff and may present work-around opportunities or generate innovative solutions.

- Demographic and systemic issues influencing labor shortages across the health and social service sectors

Limitations

For both the interview and survey process, a convenience sample was used for the purposes of study recruitment which can introduce the risk of bias due to using a non-random sample. Because it is difficult to identify and access the full population of providers serving individuals with behavioral health needs of older adults experiencing social isolation, it was necessary to utilize convenience sampling for the purposes of key informant interviews.

To minimize bias, researchers attempted to make the electronic survey available broadly across the survey region and also used a survey panel with the goal of including participants from a broad range of professions. Similarly, with key informant interviews, an attempt was made to access a broad cross-section of relevant providers in each of the states being examined. To further minimize the bias from any one data source, the researchers focused on triangulating data sources so that multiple sources of evidence are drawn on to identify challenges and unmet needs that can inform CARE2 programming.

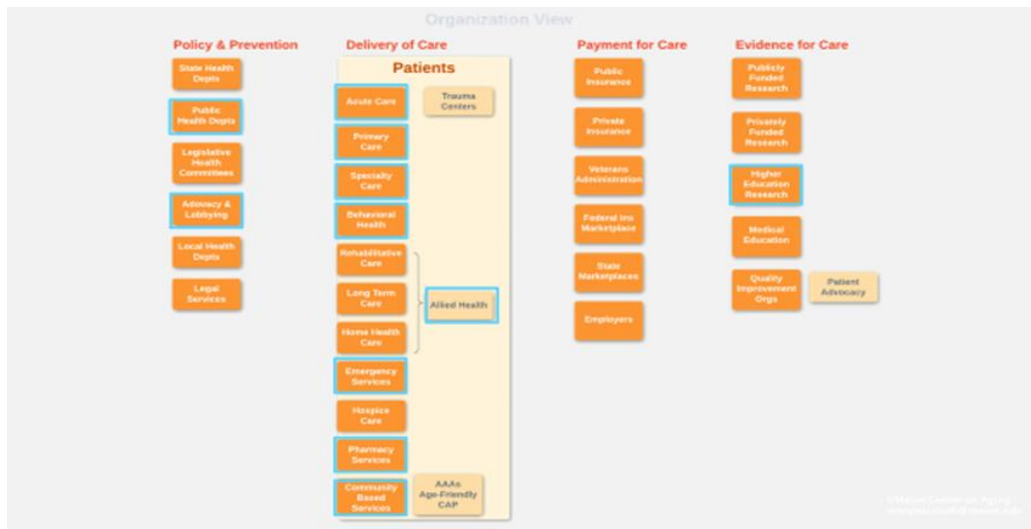
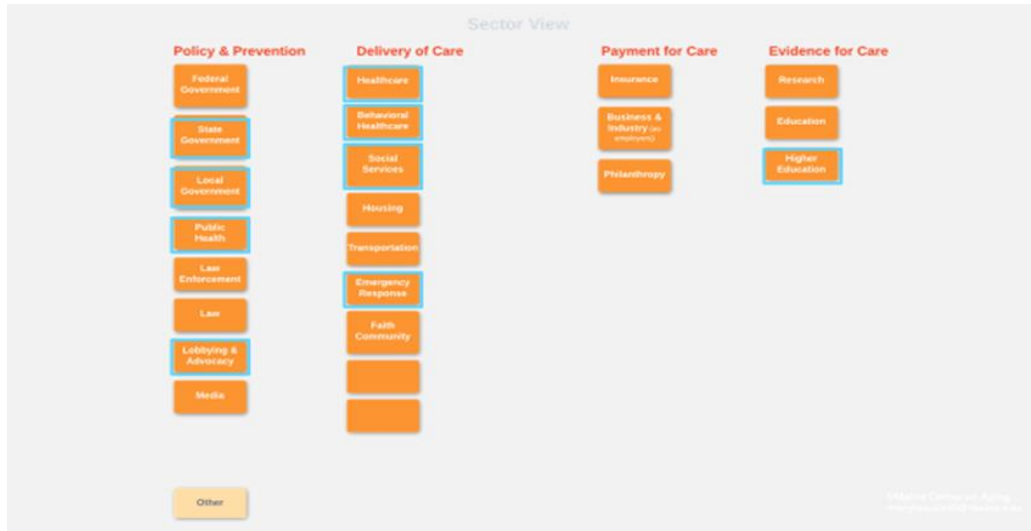
References

- Baker, E., Lester, L., Mason, K. & Bentley, R. (2020). Mental health and prolonged exposure to unaffordable housing: a longitudinal analysis. *Social Psychiatry and Psychiatric Epidemiology*, 55, 715–72. <https://doi.org/10.1007/s00127-020-01849-1>
- Black, K., Levine, M., & Veal, B. (2022). Equitable Healthy Aging in Public Health Toolkit Report. University of South Florida.
- Brabson, L. A., Harris, J. L., Lindhiem, O., & Herschell, A. D. (2020). Workforce turnover in community behavioral health agencies in the USA: A systematic review with recommendations. *Clinical Child and Family Psychology Review*, 23(3), 297–315. <https://doi.org/10.1007/s10567-020-00313-5>
- Buecker, S., & Horstmann, K. T. (2022). Loneliness and social isolation during the COVID-19 pandemic. *European Psychologist*.
- Centers for Disease Control and Prevention. (2022). *Drug overdose mortality by state*. Retrieved from: https://www.cdc.gov/nchs/pressroom/sosmap/drug_poisoning_mortality/drug_poisoning.htm
- Centers for Disease Control and Prevention. (2023, May 18). Provisional data shows U.S. drug overdose deaths top 100,000 in 2022. NCHS: A Blog of the National Center for Health Statistics. Retrieved from: <https://blogs.cdc.gov/nchs/2023/05/18/7365/#:~:text=The%20only%20state%20in%20which,82%2C310%20in%20the%20previous%20year>
- Feijt, M., de Kort, Y., Bongers, I., Bierbooms, J., Westerink, J., & IJsselsteijn, W. (2020). Mental health care goes online: Practitioners' experiences of providing mental health care during the COVID-19 Pandemic. *Cyberpsychology, Behavior, and Social Networking*, 23:12, 860-864.
- Godin, K., Stapleton, J., Kirkpatrick, S. I., Hanning, R. M., & Leatherdale, S. T. (2015). Applying systematic review search methods to the grey literature: a case study examining guidelines for school-based breakfast programs in Canada. *Systematic reviews*, 4, 138. <https://doi.org/10.1186/s13643-015-0125-0>
- Hwang, T. J., Rabheru, K., Peisah, C., Reichman, W., & Ikeda, M. (2020). Loneliness and social isolation during the COVID-19 pandemic. *International psychogeriatrics*, 32(10), 1217-1220.

- Jan Horsfall, Michelle Cleary & Glenn E. Hunt (2010). Stigma in mental health: Clients and professionals. *Issues in Mental Health Nursing*, 31:7, 450-455, DOI: 10.3109/01612840903537167
- Jozaghi, E. (2022). The opioid epidemic: task-shifting in health care and the case for access to harm reduction for people who use drugs. *International Journal of Health Services*, 52(2), 261-268.
- KFF. (2023). *The implications of COVID-19 for mental health and substance use*. Retrieved from: <https://www.kff.org/mental-health/issue-brief/the-implications-of-covid-19-for-mental-health-and-substance-use/#anxietyanddepression>
- Levy, B. R., Slade, M. D., Chang, E. S., Kanno, S., & Wang, S. Y. (2020). Ageism amplifies cost and prevalence of health conditions. *The Gerontologist*, 60(1), 174-181.
- Manchia, M., Gathier, A. W., Yapici-Eser, H., Schmidt, M. V., de Quervain, D., van Amelsvoort, T., Bisson, J. I., Cryan, J. F., Howes, O. D., Pinto, L., van der Wee, N. J., Domschke, K., Branchi, I., & Vinkers, C. H. (2022). The impact of the prolonged COVID-19 pandemic on stress resilience and mental health: A critical review across waves. *European neuropsychopharmacology : the journal of the European College of Neuropsychopharmacology*, 55, 22–83. <https://doi.org/10.1016/j.euroneuro.2021.10.864>
- National Low Income Housing Coalition. (2023). Housing needs by state. Retrieved from: <https://www.nlihc.org/housing-needs-by-state>
- New Hampshire Department of Health & Human Services. (2023). DHHS roadmap 2023. Retrieved from: <https://www.dhhs.nh.gov/sites/g/files/ehbemt476/files/inline-documents/sonh/dhhs-roadmap-2023.pdf>
- New Hampshire Employment Security Economic & Labor Market Information Bureau. (2022.) The great resignation: Assessing change in labor markets. Economic Analysis Report. Retrieved from: <https://www.nhes.nh.gov/elmi/products/documents/economic-analysis-2022.pdf>
- Norouzi, M., Ghorbani Vajargah, P., Falakdami, A., Mollaei, A., Takasi, P., Ghazanfari, M. J., ... & Karkhah, S. (2022). A systematic review of death anxiety and related factors among nurses. *OMEGA-journal of Death and Dying*, 00302228221095710.
- Pourat, N., Chen, X., Wu, S. H., & Davis, A. C. (2019). Timely outpatient follow-up is associated with fewer hospital readmissions among patients with behavioral health conditions. *The Journal of the American Board of Family Medicine*, 32(3), 353-361.
- Powell, K.G., Chaple, M.J., Henry, M., Morton, C., Becker, S.J., Gotham, H.J., ... & Yanez, R. (2022). Virtual training and technical assistance: a shift in behavioral health workforce

- access and perceptions of services during emergency restrictions. *BMC Med Educ* 22, 575 <https://doi.org/10.1186/s12909-022-03598-y>
- Rural Health Information Hub. (2023a). Map of health professional shortage areas: Mental health, by county, 2023 - Maine. Retrieved from: <https://www.ruralhealthinfo.org/charts/7?state=ME>
- Rural Health Information Hub. (2023b). Map of health professional shortage areas: Mental health, by county, 2023 - New York. Retrieved from: <https://www.ruralhealthinfo.org/charts/7?state=NY>
- Shapira, S., Aharonson-Daniel, L., Clarfield, A. M., & Feder-Bubis, P. (2020). Giving a voice to medically vulnerable populations: A mixed-methods investigation of their unique perceptions and needs in emergency situations. *Health & Social Care in the Community*, 28(3), 811-822.
- Sickel, A.E., Seacat, J.D., & Nabors, N.A. (2014) Mental health stigma update: A review of consequences, *Advances in Mental Health*, 12:3, 202-215, DOI: 10.1080/18374905.2014.11081898
- Substance Abuse and Mental Health Services Administration. (2021). Competencies for supervision in substance use disorder treatment: An overview. Retrieved from https://store.samhsa.gov/sites/default/files/SAMHSA_Digital_Download/PEP20-02-01-018.pdf
- Substance Abuse and Mental Health Services Administration (2023). Overview of the impacts of long covid on behavioral health. Retrieved from: <https://store.samhsa.gov/sites/default/files/pep23-01-00-001.pdf>
- United Health Foundation. (2022). America's Health Rankings. Retrieved from: https://www.americashealthrankings.org/explore/measures/isolationrisk_sr_b
- University of Vermont Center on Rural Addiction. (2023). Stigma and opioid use disorder in Northern New England. Retrieved from: <https://www.uvmcora.org/wp-content/uploads/2023/06/UVM-CORA-Stigma-and-OUD-Data-Brief-May-2023.pdf>
- World Health Organization. (2021). *Global report on ageism*. World Health Organization. Retrieved from: <https://www.who.int/teams/social-determinants-of-health/demographic-change-and-healthy-ageing/combating-ageism/global-report-on-ageism>

Appendix A - Key Informant Categories



Appendix B - Key Informant Interview Protocol

Instructions for Interviewers:

Before the interview

Review the questions before each interview and tailor them to the sector, organization, professional status of the interviewee, and the likely patient characteristics and demographics the interviewee sees in their professional life.

Part 1 - Welcome and Project Context

***Script:** Thank you for your willingness to participate in an interview for this project. My name is [interviewer] and I am from the University of Maine Center on Aging and I [describe position]. My role in the project is [X]. The Project name is CARE2, which stands for Collaborative for Advancing Rural Excellence and Equity. The overall project develops and facilitates evidence-based training through Project programs, and provides collaborative training resources through an open-access e-Learning portal. The project is funded by the federal Health Resources and Services Administration (or HRSA). The project is a collaboration headed by Medical Care Development (or MCD) and involving several partners including the University of New Hampshire, the University of Maine, The University of New England, and [others?].*

One part of the project is to interview healthcare and other service providers in northern New England and in NY's North Country to help us better understand existing knowledge and skills gaps in their capacity to serve rural-residing:

- 1) adults or older adults with substance use disorder and/or behavioral health needs; and**
- 2) older adults who are socially isolated, including those living in long-term care settings**

We expect to interview approximately [X] key informants across the region. The information we gain from these interviews will inform the structure and content of future ECHO® training.

I have a dozen or so questions and the interview should take about 30-45 minutes. It will be recorded. Please provide as candid and detailed information as possible. Your identity will remain confidential within the project and will not be used in any public-facing report. You are free to decline to answer any question and your participation is completely voluntary.

When you are ready, I will start the recording. **RECORD**

Part 2 - Interviewee Background and Role

Script: My first few questions are about you, your role in your organization and the patient or individual populations you serve directly or indirectly in your role.

Questions:

1. What is your title and your role in the organization?
 2. [for providers] What direct contact do you have with the populations I've mentioned **[people w/ BH needs, people with SUD, older people who are isolated]**
 3. [If not known] Which of the relevant populations - older people w/ substance use issues, older people who are isolated or lonely, or older people with symptoms of long COVID - does your organization primarily serve?
 4. [If not known] What types of services and resources does your organization provide to those individuals?
-

Part 3 -

Script: The next set of questions is about the work your organization currently does.

Questions:

1. Considering the emerging science on supporting these health and QoL circumstances, on a scale of 1-5 - with 1 being the lowest - how would you rate how well are you and the staff [of your org] able to keep up with the emerging science so you can meet the needs of these patient populations [relevant population]?
 2. From your perspective, how well do the resources and services you offer - or that are available to you and your staff - [or your organization] meet the needs of [relevant population]?
 - a. What more do you need? What other resources or support would help?
-

Part 4 -

Script: The next set of questions is about improving current practice.

Questions:

1. What are some of the current challenges you experience serving the [relevant population]
 - a. "Are they internal challenges? e.g., related to your organization, or service delivery processes?"
 - b. Or are they more external and related to attributes of the people you serve, or community factors? or other?"
2. Tell us about some ways that your support of [relevant population] could be more effective and result in better outcomes?
 - a. Ways that your support of [relevant population] could be more efficient, (more timely, less costly, reach more people)?

If a LTC KI

1. What are the challenges of supporting LTC residents who have social or behavioral health needs? [or SUD]?
2. How well-informed or equipped are LTC staff (i.e., clinicians, direct care, or activities staff) to support residents who have social or behavioral health needs? [or SUD]?
3. What are the challenges of supporting LTC residents who are socially disconnected?
4. How easy or difficult is it to connect residents to community or health services?

Part 5 - 7

Script: *The next set of questions is about the gaps that might exist in providing optimal services to this population.*

Based on your role at [org]:

Questions:

1. What are the most significant unmet needs for [the relevant population]?
2. What are the most significant gaps in knowledge and skills for supporting [the relevant population]?
3. What are the most significant resource/service gaps in supporting [the relevant population]?
4. What do you see as emerging needs for supporting [relevant population] over the next couple years?
5. What support would you need to confidently apply new knowledge about [fill in topics identified by KI]?
 - a. For example, training, mentorship, a TA site, opportunities to practice?

6. What support would you need to adopt or implement new resources or services?
 - a. For example, funding, staff capacity, training, patient education?
-

Part 8 -

Script: The next question is about the impact of Covid -19.

Questions:

1. Overall, how has COVID-19 affected your work with [relevant population]?
 - a. What are the ongoing **challenges** of providing support to people your organization serves in the context of COVID?
 - b. What are the biggest **organizational challenges** to supporting the relevant populations that continue to result from COVID?
 - c. What are the biggest challenges at the individual patient care level that continue to result from COVID?
-

Part 9 -

Script: The next set of questions is about the optimal learning environment for you and your organization

Questions:

1. How do you prefer to receive potential trainings on supporting the relevant populations?
 - a. What about in terms of timing, frequency, synchronous or asynchronous, online platform
 2. What about other individuals in your organization?
-

Part - Wrap-up

Script: I have finished with my formal question, but before we end I want to ask:

Question: Whether there is anything further you would like to add about any of the things we talked about?

Question: Is there any individual or organization we should be reaching out to for the needs assessment that is supporting individuals with substance use disorder or behavioral health needs?

1. What role does this individual or organization have in supporting the relevant populations?
2. What perspective would they bring to the needs assessment?
3. Do you have contact information you can share?

Appendix C - Electronic Provider Survey

Survey Introduction

The federally funded Collaborative for Advancing Rural Excellence and Equity (CARE2) is working to identify training needs for professionals in Maine, New Hampshire, Vermont, and Northern New York who are supporting rural-residing:

- 1) Adults and older adults with substance use disorder and/or behavioral health needs
- 2) Older adults who are socially isolated

The results of this assessment will be used to develop new no-cost training opportunities for you and other professionals working with these populations.

This survey is open to anyone who, individually or in a larger organization, provides supportive services or cares for the above-described individuals. You may find that some questions do not apply to your profession. Please indicate “Does not apply” as your response option if appropriate.

The information you submit through this survey is anonymous. Answers you submit will be used in the development of a report about needs in the study region. This survey should take less than 10 minutes.

Thank you for your time.

If you have any questions, please contact Senior Project Manager at the UMaine Center on Aging David Wihry at david.wihry@maine.edu

Screening Question

1. Which of these community groups do you serve most frequently? The following survey questions will be specific to the group you select.
 - Adults (Age 18+) with behavioral health needs and/or substance use disorder
 - Older adults (Age 60+) with behavioral health needs and/or substance use disorder
 - Older adults (Age 60+) experiencing social isolation
 - None of the above (survey ends)

Demographics

2. **What best describes the sector where you are employed?**

3. **In which of the following locations does your place of employment provide services? (select all that apply)**
 - Maine
 - New Hampshire
 - New York's North Country (Clinton, Essex, Franklin, Hamilton, Jefferson, Lewis, or St. Lawrence counties)
 - Vermont
 - Other (please write in)

4. **What is your profession?**
 - Community Health Worker/Community Health Representative
 - Dentist
 - Doctor/Physician (MD/DO)
 - Medical Assistant
 - Mental/Behavioral Health Professional
 - Nurse/Nurse Practitioner
 - Nutritionist/Registered Dietician
 - Patient Navigator/Care coordinator
 - Peer Support Worker/Peer education
 - Pharmacist
 - Physician Assistant
 - Practice administrator or leader (i.e. chief executive officer, nurse administrator)
 - Psychologist
 - Social Worker/Case Manager
 - Teacher
 - Other allied health professional
 - Other public health professional
 - Other non-clinical professional (i.e. front desk staff, grant writer)
 - Student
 - Other

5. **What is your profession? (please write-in)**

- 6. How many years have you worked in your profession?**
 - Less than a year
 - 1-5 years
 - 6-10 years
 - 11-20 years
 - More than 20 years

- 7. What is the size of your employer?**
 - 1-50 employees
 - 51-100 employees
 - 101 - 500 employees
 - More than 500 employees
 - Not sure

- 8. Which of the following best describes your role in the organization?**
 - Senior leadership
 - Manager
 - Professional staff
 - Clinical staff
 - Clerical/support staff
 - Other (please write-in)

Training Needs and Population Needs

Instruction: When answering the following questions, please consider the population of [Displays population selected in question 1].

- 9. What topic area do you feel the least confident in your knowledge or skills in supporting this population? (open-ended)**

- 10. What are the most pressing unmet needs you encounter among this population? (open-ended)**

- 11. What other training topics or resources would benefit yourself or your colleagues? (open-ended)**

Confidence Ratings

Instruction: Please consider the following questions as they apply to your experiences working with [Displays population selected in question 1].

Please rate your confidence in engaging in the following areas of support for this population. Please select “does not apply to me” if there is an activity you don’t engage in (for instance you don’t treat substance use or mental health issues). (Scale: 1 = Not at all confident to 5 = very confident)

- 12. Effectively listening with clients/patients to understand needs and preferences for support.**
- 13. Clearly communicating health information in a way that’s understood by the client/patient.**
- 14. Identifying and managing personal biases that can impact support for clients/patients.**
- 15. Working/collaborating with different professions to meet the needs of clients/patients.**
- 16. Recognizing the characteristics of the most common mental health conditions.**
- 17. Recognizing the characteristics of the most common substance use conditions.**
- 18. Assessing the nature of the client/patient's family and social support system.**
- 19. Screening for health and social service needs of clients/patients**
- 20. Knowing the full spectrum of resources in the community that can meet client/patient behavioral health needs.**
- 21. Developing care plans that draw on the full range of health and community resources available to clients/patients.**
- 22. Connecting clients/patients to community services (such as benefits and financial counseling, transportation, home care, and access to social services, peer support, and treatment, including medications).**

- 23. Educating clients/patients and their families on health, prevention, and available treatments.**
- 24. Delivering trauma-informed treatment for mental health.**
- 25. Delivering trauma-informed treatment for risky or harmful substance use, including misuse of prescriptions.**
- 26. Providing interventions to manage behavioral health crises.**
- 27. Adapting services to a client/patient’s language, culture, and personal preferences**
- 28. Using telehealth or remote program delivery to engage with clients/patients**
- 29. Understanding how ageism shapes older adults' perceptions of their own care needs**
- 30. Delivering interventions to reduce social isolation**
- 31. If you would like to elaborate on any of your ratings, please do so here (open-ended)**
- 32. Please select the top three most significant barriers to accessing support among the clients/patients you serve.**
 - Lack of knowledge about what supports are available
 - Stigma associated with conditions/illnesses that lead to reluctance to accessing support
 - Not believing they have a condition/illnesses they could benefit from support
 - Not believing in the value of supports that are available
 - Lack of trust in healthcare or other service providers
 - Access barriers (transportation, distance, etc.)
 - Perceiving free or subsidized services as “charity”
 - Other (please write-in)

Appendix D - Literature Review Protocol

Inclusion Criteria

1. Deals with the following populations:
 - a. Older adults
 - b. Adults
 - c. Healthcare and/or social services professionals
2. Deals with the following settings:
 - a. Long-term care
 - b. Community-based settings
3. Deals with the following main topics:
 - a. Behavioral health needs
 - b. Substance use disorder
 - c. Loneliness/isolation
4. Should include one of the following issues as a subset of the main topics:
 - a. Challenges experienced by populations.
 - b. Organizational level challenges in serving populations.
 - c. Workforce needs/challenges of professions serving study populations.
 - d. Service gaps for study populations
 - e. Challenges presented by Covid in serving study populations.
 - f. Existing partnerships/interventions to support study populations.
 - g. Existing or potential policy changes impacting study populations.
5. Deals with the following geographies either statewide or county level or higher:
 - a. Maine (all counties)
 - b. New Hampshire (all counties)
 - c. New York North Country (Clinton County, Essex County, Franklin County, Hamilton County, Jefferson County, Lewis County, St. Lawrence County)
 - d. Vermont (All counties)
6. Produced by:
 - a. Government (state/local)
 - b. Nonprofit
 - c. Healthcare/social service organizations
7. Time period
 - a. 2018 - present

Exclusion Criteria

Deals with non-geographically specific issues related to study populations.

Solely reports on pediatric issues within targeted conditions or targeted geographic areas.

Sources

1. Databases with potential grey literature
 - a. Google Scholar

- b. Pub Med
 2. Google
 3. Targeted websites
 - a. State government websites
 - i. Rural Health
 - ii. Aging and Disability
 - iii. Substance Use and Mental Health
 - b. County health rankings
 4. Consultation with content experts.
 - a. Ask for key informants to identify reports and other documents that speak to literature review aims.

Keywords

1. [State] Behavioral health + needs/challenges/policy/workforce/covid
2. [State] Substance use + needs/challenges/policy/workforce/covid
3. [State] Older adults/seniors + isolation + needs/challenges/policy/workforce/covid



ruralcare2.org



mcd.org



mainecenteronaging.umaine.edu