

# 2022 Forum on Aging in Rural Oregon



## Presents

### *Mental Health Services for Rural Homebound Elderly*

#### Speakers:

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OPAL Program  
(Oregon Psychiatric Access Line)  
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# Mental Health Services for Rural Homebound Elderly

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SCHOOL OF GRADUATE PSYCHOLOGY

PACIFIC UNIVERSITY





# Intent

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Introduction

The homebound rural older adult in need of mental health services

Obstacles to receive mental health services

Impact of the pandemic on older adults in rural areas

Primary care provision of mental health services to homebound elderly

Clinical examples





# The Scope ....

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According to the U.S. Census Bureau the population of Oregon in 2020 was about 4.23 million; about 24% were 60 yrs. or older. The estimated growth is about 0.2 per year.

According to the U.S. Census Bureau 19.3% of the U.S. population is rural. In Oregon, 33% of the population is rural and 2% is frontier (Oregon Office of Population Center, 2021). This estimate indicates about 1.48 million Oregonians live in rural and frontier areas, and

Several studies estimated that more than 19% older adults are homebound (for example, Musich et al., 2015). Given this estimate, about 355,000 rural elderly in Oregon are homebound.

We chose one county in Oregon to offer a more specific example.

# Lincoln County Demographics - (2020; US Census Bureau)

	Total		65+	
	Estimate	Margin of error	Estimate	Margin of error
Total population	49,336	*****	14,185	98.0
Sex and Age				
Male	48.1	0.2	46.5	0.4
Female	51.9	0.2	53.5	0.4
Median age (yrs)	51.8	0.3	71.5	0.5
Race				
One Race	94.2	0.6	98.0	0.7
White	87.1	1.2	92.6	2.8
Black or AA	0.3	0.2	0.3	0.2
American and Alaskan Natives	2.5	0.4	1.8	0.5
Asian	1.1	0.2	0.9	0.2
Pacific Islanders	0.2	0.1	--	0.3
Other races	3.0	1.2	2.5	2.8
Two or more races	5.8	0.6	2.0	0.7
Hispanic or Latin Origin	9.4	*****	2.6	0.7
White alone, not Hispanic/Latin	81.4	0.8	90.5	2.9
Educational Attainment				
Population 25 yrs. and over	38,143	126.0	14,185	98.0
Less than H.S. graduate	7.7	1.1	5.2	1.1
H.S. grad., GED or alternative	24.9	1.6	21.1	2.1
Some college or AA	39.6	1.9	39.1	2.7
Bachelor's degree or higher				
Disability status				
Civilian noninstitutionalized	48,952	125.0	14,185	98.0
With disability	22.4	1.6	37.5	3.8
No disability	77.6	1.6	62.5	3.8



# The homebound rural older adult in need of mental health services

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A survey of new enrollees in AARP Medicare Supplement plans (Musich et al., 2015) found 19.6% classified as homebound, when the strongest predictors for being homebound included having ambulatory problems, memory loss, being older, having multiple chronic conditions, polypharmacy, and having multiple hospitalizations.

The U.S. Census Bureau from 2014 reported 40% of individuals over 65 yrs. of age had at least one disability; difficulties with walking and climbing was found in 2/3 of disabled older adults. WHO studies project the growth of global population of older adults (60+) from 2015 to 2050 from 12% to 22%, when the proportion of immobile and homebound people will increase by 19%.

Ornstein et al., 2020, identified and followed for 7 years (2012-2018) a cohort of over 7000 non homebound community-dwelling Medicare beneficiaries and found 12.7% have become homebound, when the risk of becoming homebound was higher than the risk of becoming a nursing home resident. Causes for becoming homebound were multiple chronic conditions, dementia, functional impairments, social and financial difficulties. 77% of homebound elderly suffered from cognitive impairments and/or ADL difficulties, 47.3% suffered from heart and cardiovascular problems, and 28.61% had dementia.

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Homebound older adults suffer from metabolic, cardiovascular , cerebrovascular, and musculoskeletal diseases, as well as from cognitive impairment, dementia, and depression, at higher rates than the general elderly population (Qiu et al., 2010)

Older adults suffer from depression, consequent to social isolation, loneliness and grief (Choi & Kimbell, 2009). Close to 30% of Homebound older adults reported high levels of depression (Musich et al., 2015). Cognitive impairment was associated with elevated symptoms of anxiety and depression (Petkus et al., 2013).

Several studies have found that homebound older adults have a higher risk of mortality compared to non-homebound older adults (Cohen-Mansfield et al., 2010; Sakurai et al., 2019; Soones et al., 2016). Mortality in this population was found to be associated with loss of executive functioning (Soones et al., 2016), social isolation (Sakurai et al., 2019), and lower frequency of hope (Zhu et al., 2017).

Celerio et al., 2017, found that architectural barriers at home entrance and walking ability were associated with homebound status.





# Obstacles to receive mental health services

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Rural elderly in general suffer from difficulties receiving health and mental health services for many reasons. Our personal clinical experiences found the following barriers:

1. Reaching services located in a distance,
2. Need to take time off from work or caring for somebody,
3. Financial difficulties,
4. Lack of confidence in communicating needs to health providers (especially if not fluent in English),
5. Health literacy,
6. Lack of trust and belief that providers will listen and offer good services,
7. Fear of stigma involving rural communities and mental health issues and substance abuse

For homebound rural elderly the obstacles in receiving services are even more serious, when mental health services are practically non-existent or extremely limited.

Homebound adults are an underserved population (Qiu et al., 2010). A survey of home health nursing agencies and home care agencies found a lack of psychiatric services, under-diagnosis of various mental health disorders, and difficulty with addressing behavioral problems (Zeltzer & Kohn, 2006). Despite the increased prevalence of depression and other psychiatric conditions within this population, mental health service use has been markedly low (Alkincigil et al., 2011; Byers et al., 2012; Choi et al., 2013; Choi & Kimbell, 2009).

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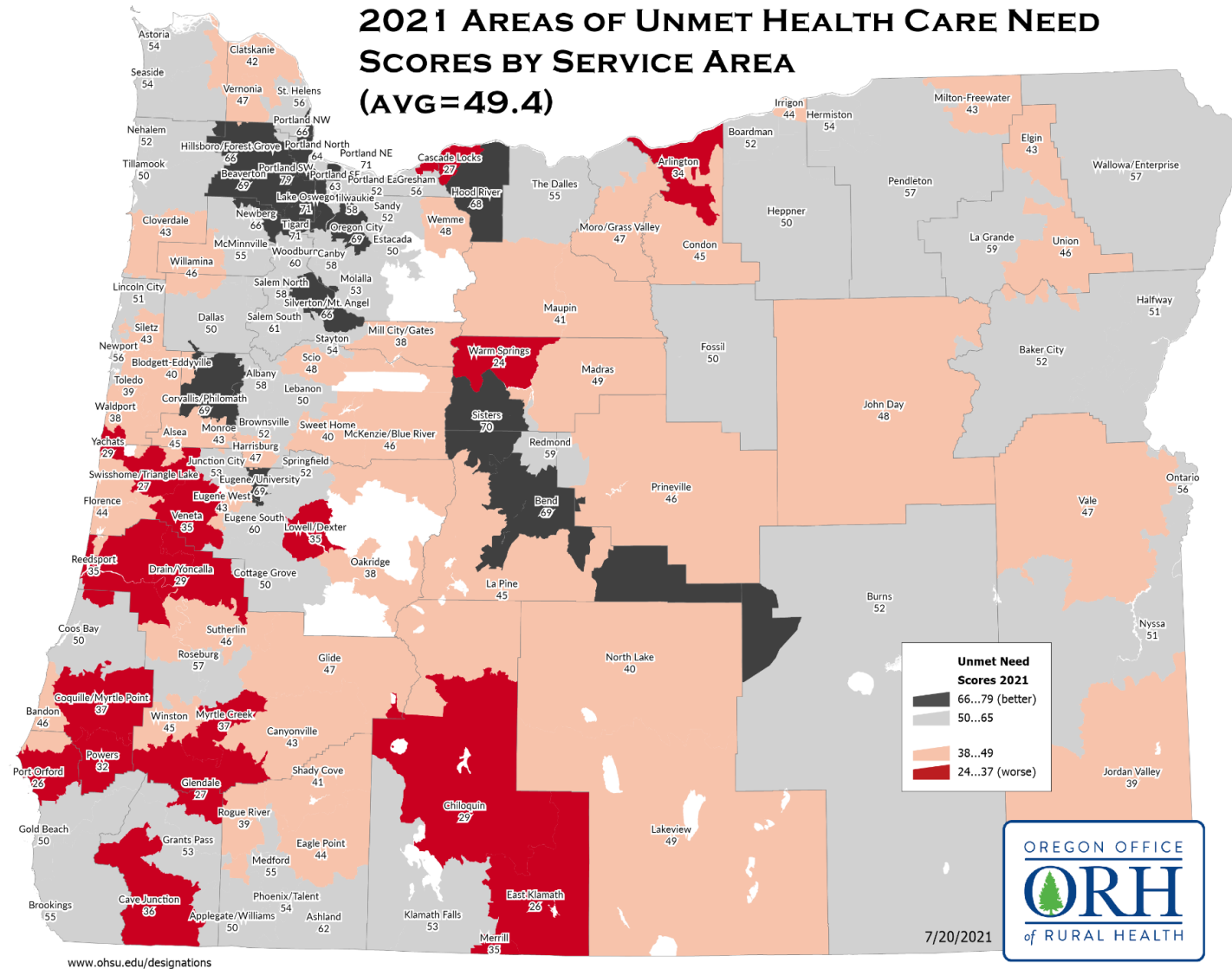
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A study into the treatment of homebound older adults with depression found that the proportion receiving psychotherapy nearly halved between 1992 to 2005 (26.1% to 14.8%), while the proportion prescribed antidepressants increased in the same timeframe (53.7% to 67.1%) (Alkincigil et al., 2011). Low-income, homebound older adults are particularly vulnerable due to lacking access to transportation, cost of services, and lack of home-based psychotherapy (Choi & Kimbell, 2009; Ornstein et al., 2020). It was also found that non use of mental health services was associated with being married or cohabitating, being a racial minority and having a middle income (Byers et al., 2012).

Choi & Kimball, 2009 indicated that barriers to seeking treatment in older adults included denial or lack of understanding about depression, a sense of stigma, mobility problems and financial difficulties. Homebound status predicted future depression and both ADL and IADL difficulties (Cohen-Mansfield et al., 2010)

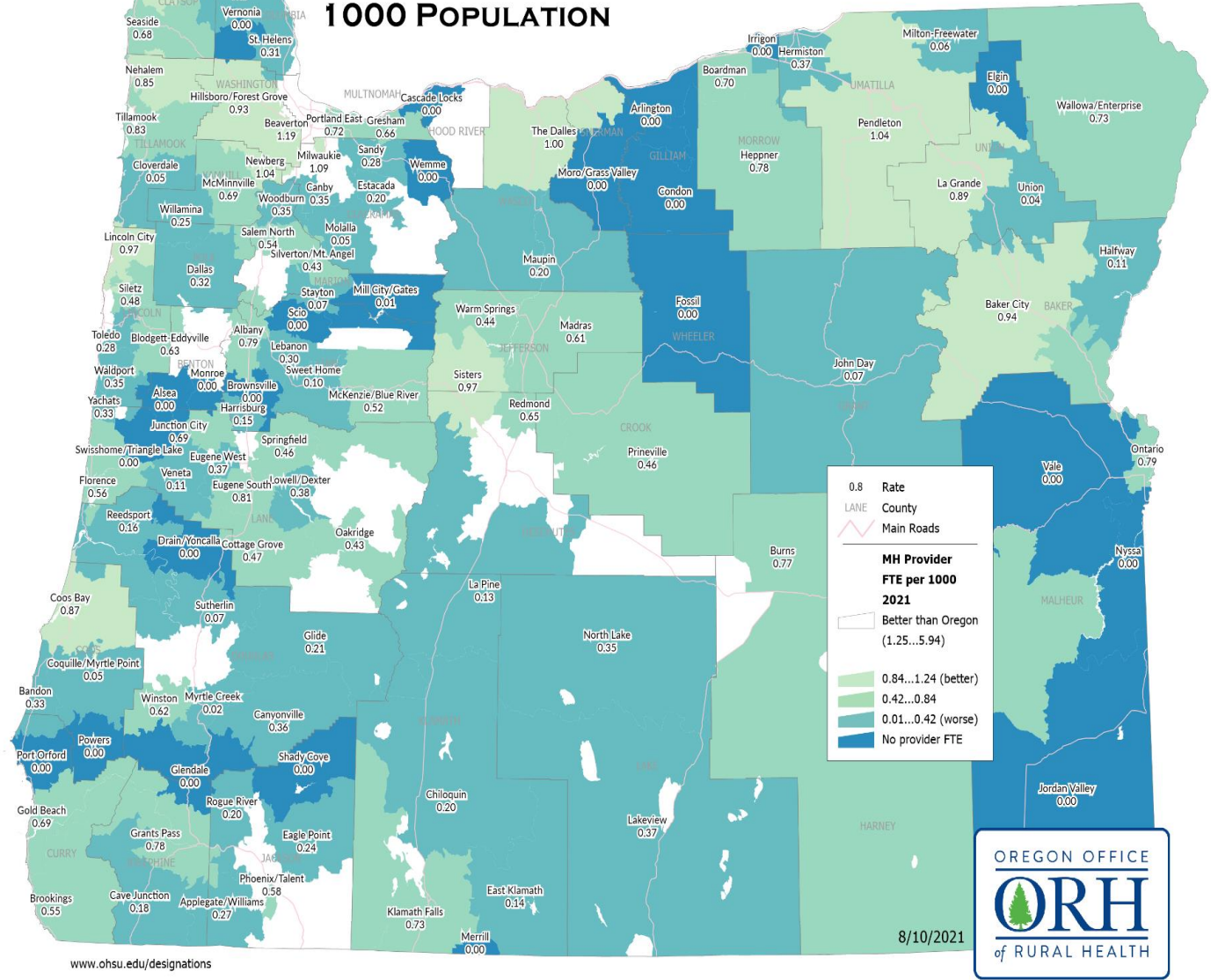
The following maps will offer some information about the situation in Oregon.

## 2021 AREAS OF UNMET HEALTH CARE NEED SCORES BY SERVICE AREA (AVG=49.4)





SHADED AREAS ARE BELOW OREGON'S RATE OF  
1.25 MENTAL HEALTH PROVIDER FTE PER  
1000 POPULATION









## Impact of the pandemic on older adults

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Tyler et al., 2021, studied mental health issues in older adults related to personal characteristics and COVID-19 pandemic in 33 countries. Anxiety and depression were found to be predicted by “separation from and having conflicts with loved ones,..... getting medical treatment for severe symptoms and having decreased work responsibilities.”

Bailey et al., 2021, surveyed the impact of COVID-19 pandemic on the physical and mental health of elderly. 40% of sampled adults reported significant decline in mental health, and about the same number reported a decline in physical health. Study participants attributed such decline to increased loneliness, reduced physical activities, and decrease in social engagement.

Ankuda et al., 2021 recognized that the homebound population in U.S. (about 2 million never or rarely leave home, and about 5 more million have difficulties leaving home, and need assistance) was severely impacted by the pandemic. They were disproportionally socially isolated, with significant increase of anxiety and depression.

# Primary care provision of mental health services to homebound elderly

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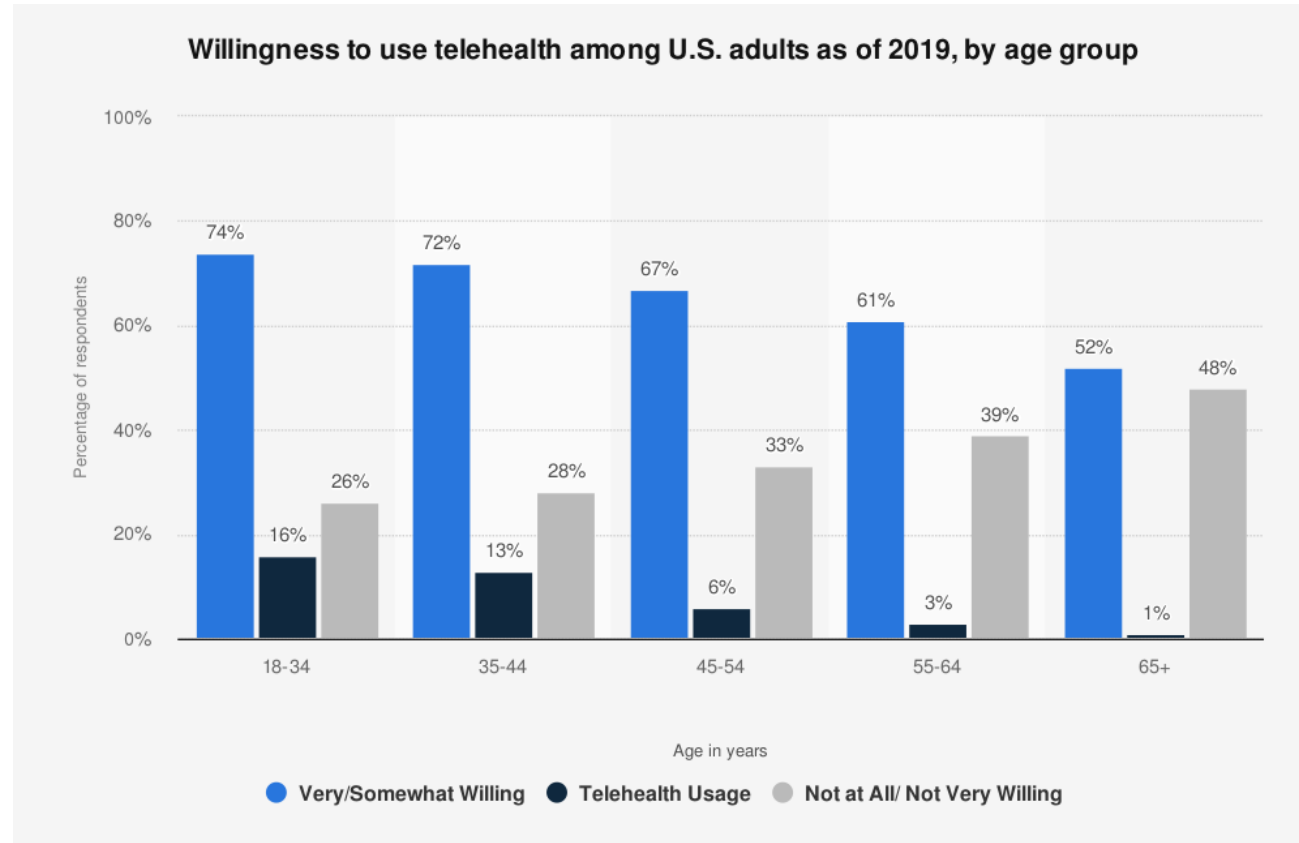
The pre-pandemic statistics on the use of telehealth are well presented in the following graph (from 2019), indicating that in spite of declared willingness to use such technologies, only 3% of 55 to 64 yrs. old and 1% of 65 yrs. and older actually used it.

The pandemic changed somewhat this situation, and the use of technology for health and mental health provision of services definitely increased. However, several studies found that the older the patient, the less likely that they will use telehealth, and in many situations, telehealth will not be effective. For example, Kruse et al., 2020 lists several barriers for the use of telehealth: technical literacy, lack of motivation or desire, cost, lack of technical support, visual acuity, social implications of using tele monitoring devices, ownership of technology, privacy and security concerns, medical literacy, trust of the internet, mental acuity, hand-eye coordination, auditory acuity, and computer anxiety. Svistova et al, 2021, suggest that cultural normality and generational comfort of face-to-face services are a serious impediment for telehealth use. Sekhon et al., 2021 questioned the reliability and validity of cognitive tests offered via telemedicine to rural dementia patients.

According to Herrler et al., 2020, surveyed homebound elderly indicated the following two important characteristics of desired provision of services: feeling safe and feeling valued by care givers. They specified that these two characteristics need to be manifested through 1) coordinated care, 2) high continuity of care givers, 3) personal attention, and 4) interactions based on trust and respect

# Telehealth Index: 2019 Consumer Report

## Harris Poll, commissioned by American Well



# Lessons learned from HBPC programs

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Very few programs in U.S. are Home-Based Primary Care, offering at different levels of complexity interdisciplinary and holistic services to homebound patients. Since 1974, The Department of Veterans Affairs operates the largest HBPC program in U.S. serving about 60,000 patients per year. The experiences of these programs can teach us a few things:

1. Serving such a vulnerable population must be person-centered, and based on all patients' needs.
2. It has to be interdisciplinary across all levels of need: health, mental health, social services, spiritual services, support services, etc.
3. The overall goal of such programs must be to improve quality of life of the patient.
4. HBPC models of delivery of service are costly; however, they reduce significantly number of hospitalizations and hospitalization costs.
5. Mortality rate among homebound patients is by definition high; however, in keeping quality of life in mind, many elderly prefer to die at home, without unnecessary medical interventions. Therefore, mortality cannot be considered as an outcome for the effectiveness of then program.
6. Regular home visits allow for the development of relationships, gaining patients' trust and cooperation, with opportunities to use one provider as the source of contact with another provider.
7. Consequently, it is possible to achieve a more thorough and realistic appraisal of patient's needs across all levels.
8. Such holistic services require training, leadership, case coordination, communication among providers and social services, and a thorough understanding of the demographics, the diversity, and the cultural nuances of the area served.





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# Implications

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1. We estimate that the State of Oregon has about 355,000 home bound rural elderly.
2. We estimate that the majority of home bound rural elderly are in need of mental health services, when the availability of such services is significantly limited
3. Research and clinical practice indicate that home bound elderly can benefit from tele-mental health; however, when taking in consideration the many reasons why tele-mental-health is not available or not utilized, only a small percentage of rural elderly are serviced by such technologies
4. Research and clinical practice demonstrate that services provided in house (including mental health) are more preferred by home-bound elderly and their families and the outcomes are favorable.
5. Psychology and Psychiatry “on wheels” needs to be practiced, funded and promoted.

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