AGING IN RURAL AND FRONTIER OREGON

Challenges Facing Rural and Frontier Home Health Agencies

September 2016



Senate Bill 21 (SB 21) was signed into law in 2013, requiring the Department of Human Services (DHS) to improve Oregon's publicly funded long-term care system (DHS, 2015). This bill requires strategic planning to: (1) serve seniors and persons with disabilities in their own homes and community settings of their choosing; (2) support independence and choice while postponing/avoiding the entry of individuals into publicly funded long term care; and (3) to serve individuals equitably, in a culturally and linguistically responsive manner. The Oregon Office of Rural Health compiled this report on the demographics of aging in rural and frontier Oregon, the availability of home and long-term care health services and, specifically, the challenges facing rural and frontier Home Health Agencies.

Acknowledgements

The Oregon Office of Rural Health would like to acknowledge the following for their contributions and review:

Rebecca Arce, Department of Human Services Aging and People with Disabilities

Joyce Bailey, St. Anthony Home Care Services

Dr. Max Brown, Oregon Department of Human Services

Keri Culhane, Coastal Home Health and Hospice

Sylvia Dowdy, Blue Mountain Home Health Agency

Stacie Dowell, Coastal Home Health and Hospice

Judy Falkowski, Bay Area Hospital Home Health Agency

Erin Gosnell, Harney County Home Health

Krista Harrington, Lakeview Home Health Care

Kathy Kahler, Visiting Health Services

Teresa Karlick, Samaritan Pacific Home Health

Brandi Martinez, Coquille Valley Hospital Home Health Care Agency

Peggy Meharry, Avalon Home Health

Dr. Carol Mendez-Luck, Oregon State University

Maeve McClellan, National Rural Accountable Care Organization

Kathy Murphy, Peace Harbor Home Health

Anne Norris, Samaritan North Lincoln Hospital Home Health

Jean Palmateer, Oregon Department of Transportation

Candye Parkin, Providence Home Services and Oregon Association for Home Care

Justine Piper, Coquille Valley Hospital Home Health Care Agency

Suzanne Stack, Federal Office of Rural Health Policy

Nora Stangel, Wallowa Memorial Hospital Home Health

Deb Stubblefield, Asher Home Health Agency

Joy Switlick, Adventist Home Health in Tillamook

Des Thew, Good Shepherd Home Health

Robin Warren, Pioneer Memorial Home Health

Eric Weathersbee, Sky Lakes Home Health

Department of Human Services Office of Licensing and Regulatory Oversight

Note about the contributors:

This research was the work of the Oregon Office of Rural Health's 2015 and 2016 summer interns, Callie Walsh-Bailey and Jamie Horst.

Callie Walsh-Bailey received a Bachelor of Arts in Biology and Spanish from Willamette University in May 2013. At the time of her internship in 2015, she was a graduate student at Oregon State University in the Master of Public Health Program. She graduated in March of 2016.

Jamie Horst received a Bachelor of Arts in Social Welfare from the University of Washington in 2009. At the time of her internship in 2016, she was a graduate student at Oregon State University in the Master of Public Health Program. She will graduate in September 2017.

Maps for the report were provided by the Oregon Office of Rural Health's Data and GIS Analyst, Emerson Ong.

This report was compiled by the Oregon Office of Rural Health's Director of Field Services, Meredith Guardino. We welcome your feedback - please direct any questions or suggestions to guardino@ohsu.edu.



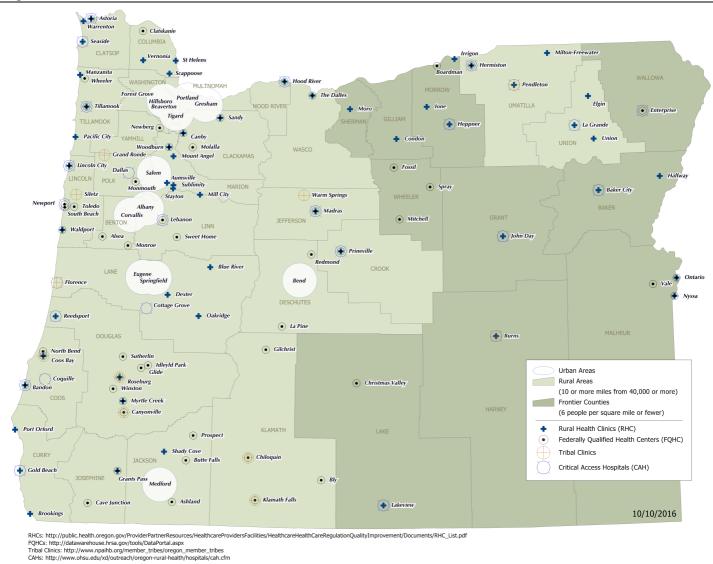
CONTENTS

WHAT IS CONSIDERED RURAL AND FRONTIER?	4
THE DEMOGRAPHICS OF AGING IN RURAL AND FRONTIER OREGON	5
MORTALITY AND LIFE EXPECTANCY	5
INCOME AND POVERTY	5
DISABILITY STATUS	5
SERVICE LANDSCAPE FOR THE AGING RURAL AND FRONTIER POPULATION	6
Oregon's Residential Care Options	6
EQUITABLE CARE	6
RURAL AND FRONTIER HOME HEALTH AGENCIES	7
Challenge 1: Home Health Care: Program Regulation and Reimbursement	8
Reimbursement: Prospective Payment and the Rural "Add-On"	8
FACE-TO-FACE REQUIREMENT AND PLAN OF CARE CERTIFICATION	9
PAPERWORK AND TECHNOLOGY	11
CHALLENGE 2: HOME HEALTH CARE: RURAL WORKFORCE	12
RECRUITMENT AND RETENTION	12
THERAPISTS AND SPEECH PATHOLOGISTS	12
Sufficient staffing	12
METHODOLOGY AND LIMITATIONS	13
APPENDICES	14
APPENDIX A. LIFE EXPECTANCY, INCOME, POVERTY AND DISABILITY BY COUNTY	14
Appendix B. Rural and Frontier Nursing Facilities	15
Appendix C. Rural and Frontier Adult Foster Homes	16
APPENDIX D. RURAL AND FRONTIER HOME HEALTH AGENCIES WITH CMS STAR RATINGS	17
SOURCES	18

What Is Considered Rural and Frontier?

There is no uniform definition of rural. As a result, data sources define rural areas and populations differently. This makes standardizing information on rural services difficult. The variance among these definitions must be considered when assessing the needs of the aging population. This report utilizes the ORH definition of rural whenever possible:

All geographic areas in Oregon ten or more miles from the centroid of a population center of 40,000 people or more. Frontier counties are defined as those with six or fewer people per square mile. Ten of Oregon's 36 counties are frontier.



Much of the data used in this report comes from the U.S Census Bureau. The U.S. Census Bureau defines rural as any area not included in an urban area. Urban areas are defined as densely settled areas of at least 500 people per square mile that total a population of 2,500 or more.

The Demographics of Aging in Rural and Frontier Oregon

Currently, Oregon is home to over half a million (667,498) residents aged 65 years and older, of which 43.5% reside in rural areas¹. The 65+ population in Oregon is expected to increase by 105% by 2050².

Mortality and Life Expectancy

- In 2015, the life expectancy in Oregon was 79.7 years. Life expectancy ranged from 82.8 years in Benton and Grant counties to 76.0 in Curry County.³
- o Twenty-three counties had a life expectancy below that of the state average. Eighteen of these were rural without urban areas⁴ (14) and frontier (4) counties.⁵

Income and Poverty⁶

- o Almost 9% of rural Oregon residents 60+ are living below the Federal Poverty Level (FPL).
- o Sixteen rural and frontier counties have a poverty rate among rural residents 60+ that is significantly greater than the state average of 9.2%.
- o The average median annual household income for seniors 65+ in Oregon is \$35,299, adjusting for inflation.
- o Thirteen counties had median household incomes among seniors significantly below the state average, all less than \$33,000 per year.

Disability Status⁷

- o Nearly 40% of all Oregonians 65+ report having one or more disabilities.
- o In Oregon, the disability rate among rural seniors is slightly lower (37%) than that of seniors residing in urban areas (38.9%).
- o The disability rates for aging persons are disproportionately higher among counties in Eastern Oregon, with Harney County having the highest in the state at 52.1%.
- o The correlation between median household income and disability status was moderate (r=0.571); however, of the 13 Oregon counties with median senior household incomes below \$33,000, all but one had disability rates of 40% or higher.

Information on life expectancy, income, poverty and disability by county is available in Appendix A.

¹ Nielsen Inc. ZIP Code Population Facts for Oregon, 2016.

² Shrestha, 2015.

³ Oregon Health Authority Center for Health Statistics, Vital Statistics Annual Report Volume 2, 2015.

⁴ See the map on page 4 for which rural counties have urban areas.

⁵ Oregon Health Authority Center for Health Statistics, Vital Statistics Annual Report Volume 2, 2015.

⁶ All data:

[•] United States Census Bureau (2013a). B19049: Median household income in the past 12 months (in 2013 inflation adjusted dollars) by age of householder. 2013 American Community Survey 5-Year Estimates.

[•] United States Census Bureau (2013b). B27010: Poverty Status in the past 12 months by age. 2013 American Community Survey 5-Year Estimates.

⁷ All data: United States Census Bureau (2013d). *C18108*: Age by number of disabilities. 2013 American Community Survey 5 Year Estimates.

Service Landscape for the Aging Rural and Frontier Population

Older rural residents face unique challenges to age in place, including lack of access to and availability of health and social services, limited transportation options and lack of financial resources. In a recent survey of Oregonians over the age of 45, eighty-five percent responded that as they age and begin to experience difficulties in basic tasks of life, they wish to remain in their own homes with caregiver assistance rather than relocate to institutional-based care⁸. Depending on the extent of assistance needed and services that are accessible, remaining in one's home is not always possible. In that situation, many rural seniors also face limited availability of residential care options within their communities.

Oregon's Residential Care Options9

- o Availability of residential options (Nursing Facilities, Adult Foster Homes, and Community-Based Care facilities which includes Assisted Living and Residential Care facilities) was lower per capita for seniors in rural Oregon than urban Oregon.
- o The availability of Adult Foster Homes (AFHs) is greater in urban communities than in rural ones. Sixty-four percent of Oregon's population lives in urban communities, where nearly three-quarters of the state's AFHs are located (see Appendix C).
- o There are 29.9 rural residents aged 65 and older for every bed available in rural Community-Based Care (CBC) facilities, as compared to 17.6 urban seniors for every available bed in urban
- Residents in Baker, Grant, Jefferson, and Tillamook counties had both Activities of Daily Living (ADL) scores and Nursing facility (NF) length of stays significantly higher than the state averages of 3.53 and 210.42 days respectively.¹⁰ (See Appendix B)

Equitable Care

 A search of services on the Aging and Disability Resource Connection (ADRC) of Oregon site returned results indicating that only 3% of service sites provided services in a language other than English. See Methodology and Limitations.

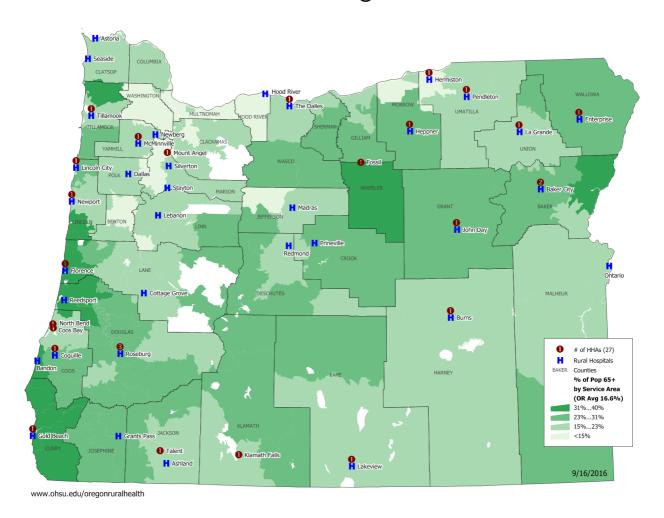
Maps of Oregon's rural and frontier Adult Foster Homes and Nursing Facilities are available in Appendix B and C.

⁸ AARP, 2015

⁹ Oregon Department of Health Services Office of Licensing and Regulatory Oversight (unpublished), 2015.

¹⁰ Data Source: MDSv3, Cost Reports and Revenue Statements for Oregon Fiscal Year 2014. Data provided by Oregon State University, College of Public Health and Human Sciences. Data unavailable for Gilliam, Harney, Sherman, and Wheeler counties. Data not stratified by rural vs. urban.

Rural and Frontier Home Health Agencies



Changes in healthcare payment policies through the Affordable Care Act and Oregon's healthcare transformation have resulted in shorter hospital stays, as well as primary care alternatives to avoid hospitalizations and improve post-discharge outcomes. Oregon's rural and frontier Home Health Agencies (HHAs) are a critical patient care service to help Oregon achieve these system goals and to help Oregonians remain independent, in their homes and communities.

There are currently 27 rural and frontier HHAs in Oregon. Five rural and three frontier counties do not have an HHA. This report distinguishes between two types of HHAs:

- o Hospital-Based (HB): Home Health Agencies that are owned by a hospital or hospital system, and
- Freestanding (FS): Independently owned or part of a larger chain organization.

Home Health Agencies are most commonly freestanding. Oregon, however, has one of the highest percentages of HB agencies in the United States. Of the 27 rural and frontier HHAs, 17 (63%) are HB. The Oregon Office of Rural Health (ORH) interviewed 20 HHAs, 13 HB and 7 FS to better understand the challenges rural agencies are facing. This report is a qualitative overview of their challenges. This report focuses only on licensed Home Health Agencies that are reimbursed by the Centers for Medicare and Medicaid Services (CMS). This does not include private and custodial care home health services.

ORH will work with the HHAs and partners to identify areas where they can support enhanced operational scale and efficiencies (e.g., Electronic Health Record implementation, incentives to providers, etc.) that are needed to meet administrative and regulatory requirements.

A list of Oregon's rural and frontier Home Health Agencies, the services they provide and their CMS star rankings are available in Appendix D.

Challenge 1: Home Health Care: Program Regulation and Reimbursement

Reimbursement: Prospective Payment and the Rural "Add-On"

When Medicare and Medicaid were established by Congress in 1965, both included cost-based reimbursement (CBR) for Home Health Agencies. Home Health Agency services expanded in the following decades as did the costs. The Balanced Budget Act of 1997 included a home health prospective payment system (PPS) to replace CBR and control HHA costs. Home health PPS was fully implemented in 2000. Under PPS, HHAs are paid a predetermined base payment that is adjusted for the health condition and care needs of the patient, as well as the geographic differences in wages for home health agencies. Several versions of a rural "add-on" payment have been implemented to supplement reimbursements for patients in rural areas where covering a large geographic area can result in much higher mileage and staffing costs. Add-ons have ranged from 10% (in 2001) and decreased steadily to 3% (2016). The current add-on expires at the end of 2017. (Rural Health Research Center, 2016)

Medicaid is a joint state and federal program and as a result, reimbursement varies by state. Oregon Medicaid is well-known for offering the most options of all of the states for receiving home care, including a unique program called 'Spousal Pay' to help pay spouses who are the primary caregiver.

Medicare is a federally governed program and the largest payer of Home Health Agency services, accounting for 80% of U.S. home health expenditures (Rural Health Research Center, 2016). Reimbursement rules are the same for all states. This section focuses on Medicare reimbursement.

Medicare Patients

o The HHAs interviewed for this report reported that Medicare patients were the majority of their census. Percentages ranged from 47% to 100% with an average of 76% (n=12 respondents).

Profitability

"I don't know how the independent agencies are doing it!"

- o Four (out of seven) FS HHAs reported financial losses. One (out of seven) FS HHAs reported breaking even (n = 5 respondents).
- Hospital-based HHAs were mixed: five (out of 13) reported financial losses. Two (out of 13) reported breaking even. Three agencies (out of 13) reported being profitable (n= 10 respondents).
- o Almost all HHAs, whether FS or HB, commented that home health services are not profitable but that they are maintained due to community need or a mission-driven service line.
- o Many of the HHAs rely on grants and fundraising as well as subsidies from their hospital or the county.
- Eleven (out of 20) HHAs provide hospice services in addition to home health services. All of these reported that without hospice reimbursement (a daily per diem rate), their agency would not survive (n= 19 respondents).
- o The up-front staffing and expenditure needed to set up hospice services prohibits many HHAs from doing so.
- o Some HB HHAs reported increasing their patient census and profits by working closely with physicians to identify soon-to be discharged patients and creating hospital integrated programs that include home care. Examples included: follow-up for patients with congestive heart failure or for patients who receive joint replacement surgery.

PPS Rate

o Almost all agencies reported that the PPS reimbursement rate is not adequate. They attribute this to the PPS system being designed for a case load in which the low acuity patients balance out the costs of the high-acuity patients. For many rural and frontier agencies, patient volume is

small and the majority of patients seeking assistance are high acuity, resulting in higher costs per episode.

Rural "Add-On"

- Agency staff reported driving an average of 60-180 miles per patient. Road conditions and weather can add to the time it takes to conduct a visit.
- o Most HHAs reported that the 3% add-on, while important, does not sufficiently cover costs for the extensive mileage required in large rural service areas, vehicle depreciation or staff time.

Face-to-Face Requirement and Plan of Care Certification

Face-to-Face Encounter: Beginning in 2011, all patients needing Medicare-reimbursed home health care services are required to have a documented face-to-face encounter within the 90-day period before or 30 days after the initiation of needed home health care services. In Oregon, this encounter may be with a certifying physician or other allowable non-physician provider (NPP) such as a nurse practitioner or physician assistant who is practicing in accordance with state law.

Certification: NPPs are not able to certify or recertify home health care services. A physician must write a plan of care and "certify" that a patient is homebound (confined to his or her home) and eligible for Medicare home health services (skilled nursing care, physical therapy, speech pathology, or occupational therapy on an intermittent basis). The physician must document that he or she, or an allowed NPP has had a face-to-face encounter with the patient in this time frame.

Plan of Care: The Plan of Care can only be certified by a physician. It includes: What services the patient will need, which health care professionals should give these services, how often the patient will need the services, the medical equipment needed, and what results the physician expects from the treatment.

Homebound Requirement: To receive Medicare-reimbursed home health services a person must be considered "homebound." Two criteria must be met: 1) The person is normally unable to leave home and doing so requires a considerable and taxing effort; 2) Leaving home isn't medically advisable or isn't possible without the aid of supportive devices, use of special transportation, or the assistance of another person. A person is still considered homebound if they leave home for short, infrequent absences for non-medical reasons, such as attending religious services (Centers for Medicare and Medicaid, 2016).

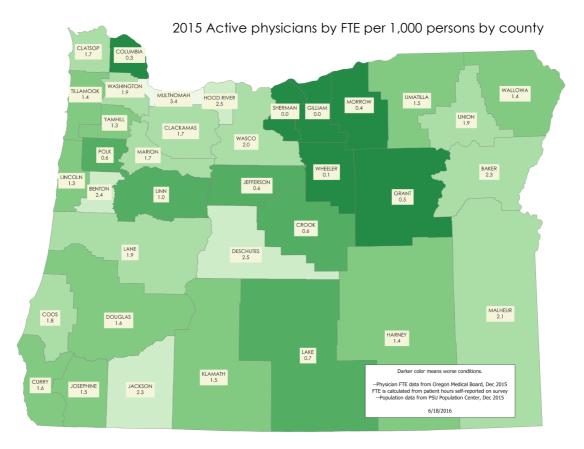
Access to Physicians

- o In many areas of rural and frontier Oregon, patients are seen by nurse practitioners and physician assistants for their regular care, but these providers cannot certify the plan of care for home health services.
- The certification/recertification requirements conflict with CMS regulations for Rural Health Clinics (RHCs). Many of the HHAs are within an RHC service area. RHCs are encouraged/required to be staffed by a NPP yet they are not able to certify/recertify patients. Many locations do not have a local physician to see/refer/certify the patient.
- o The dependence on limited numbers of physicians in rural and frontier Oregon cause significant delays in care (See map on page 10).
- o This is more of a challenge for FS HHAs. Hospital-based HHAs have easier access to the hospital or hospital system physicians.
- HHAs noted that patients new to the area or with out-of-area referrals must find a local primary care provider. With limited provider availability and the homebound eligibility requirements, being able to find a provider and remain eligible for services is a barrier for patients- especially those in poverty.

Physician Compliance

"Our numbers dropped significantly when they changed the requirements for documentation. The physicians started pushing back. We can't control the physicians and we're small so we can't afford to have to write things off because of documentation mistakes!"

o Incorrect physician documentation can result in denied claims. HHAs reported a range of claims denied over the past year from 0 to 11, with over half being a result of incorrect physician documentation.



- Appealing a claim denial can be a lengthy and complicated process with some HHAs reporting a process of up to one year.
- For small, low volume HHAs with limited support staff, the lack of payment due to claim denials severely impacts financial stability and can be time-consuming, which impacts the number of patients that can be seen.
- To correct this, HHAs report:
 - o Investing time into educating physicians on regulatory changes and service criteria.
 - Dedicating FTE to intake and billing processes only. Fourteen out of 20 HHAs (3 FS and 11HB) had at least one FTE dedicated to processing intake. Seventeen out of 20 HHAs had at least one FTE or hospital support for billing (n = 19 respondents). See also page 12.
- o Some HHAs report a decrease in patients due to physicians refusing to refer patients as a result of the cumbersome paperwork.

To address these regulatory barriers, there are two pieces of current legislation:

The Home Health Care Planning Improvement Act of 2015 (H.R.1342, S.578) would allow nurse practitioners and physician assistants to certify and recertify home health services. Introduced by Oregon Representative Greg Walden, H.R.1342 has been co-sponsored by all Oregon Senators and Representatives. As of April 2016 it had 50 co-sponsors in the senate, short one needed for a majority, and 183 in the House of Representatives.

The Home Health Documentation and Program Improvement Act of 2015 (S.1650) requires CMS to develop a standardized form for beneficiary eligibility which will allow home health agencies to complete the form to be reviewed and signed by the referring physician. This will ensure a more streamlined process for both home health agencies and referring physicians.

For more information and to keep up to date on policy solutions, visit the Oregon Association of Home Care website at: http://www.oahc.org/.

Paperwork and Technology

Outcome and Assessment Information Set (OASIS): At 96 questions, the OASIS patient assessment form is required for all Home Health Agency patients reimbursed by Medicare and Medicaid - in addition to regular physical assessments and the admission forms.

Recertification: Recertification is required at least every 60 days when there is a need for continuous home health care after an initial 60-day episode. Medicare does not limit the number of 60-day episodes for patients who continue to be eligible for the benefit. However, this necessitates additional paperwork every 60 days.

Home Health Star Ratings: Available in Home Health Compare, there are two types of star ratings. These were first published in July 2015:

- o The Quality of Patient Care Star Rating: based on OASIS assessments and Medicare claims data.
- o Patient Satisfaction Survey Star Ratings: based on HHCAHPS survey data.

Paperwork Burden and Operational Efficiency of Technology

- o Most HHAs reported that required admission, recertification and readmission paperwork took between 2 to 3 hours to complete. This does not include the time it takes to complete the visit.
- o For HHAs with limited staffing, this impacts the number of patients that can be seen.
- o Fourteen (out of 20) HHAs use an Electronic Health Record (EHR). Nine of these are HB. Only four of these have EHRs that "talk" to their hospital.
- o Fourteen out of the 15 HHAs with an average monthly census of 30 patients or more use an EHR.
- o Thirteen (out of 20) HHAs use laptops or tablets while out on their visits (n=18 respondents). All of these agencies have an average monthly census of 32 or greater.
- o Only one agency reported using telehealth services.
- In many areas, internet access and bandwidth is not sufficient to use real-time charting or telehealth.

				Avg. Monthly	Electronic	to hospital	Laptops or Tablets	Telehealth used			
Provider	HB or FS	City	County	Census	Record	(Y/N)	used (Y/N)	(Y/N)			
TTOTIGOT						(171.5)		(1713)			
NO ELECTRONIC HEALTH RECORD											
Freestanding ASHER HOME HEALTH AGENCY FS FOSSIL WHEELER 11 N N											
AVALON HOME HEALTH, LLC	FS	ROSEBURG	DOUGLAS	3			N	N			
		Hospital									
COQUILLE VALLEY HOSPITAL HOME HEALTH CARE AGENCY	HB	COQUILLE	COOS	30			Y	N			
LAKEVIEW HOME HEALTH CARE	HB	LAKEVIEW	LAKE	5			N	N			
WALLOWA MEMORIAL HOSPITAL HOME HEALTH	HB	ENTERPRISE	WALLOWA	25			N	N			
PIONEER MEMORIAL HOME HEALTH	HB	HEPPNER	MORROW	12			N	N			
	EL	ECTRONIC HE	EALTH RECOI	RD							
		Freesto	anding								
ADVENTIST HEALTH TILLAMOOK HOME CARE SERVICES	FS	TILLAMOOK	TILLAMOOK	80	Cerner		Υ	N			
CARE AT HOME, INC	FS	BAKER CITY	BAKER	177	Home Solutions		N	N			
COASTAL HOME HEALTH & HOSPICE	FS	GOLD BEACH	CURRY	60	AllScripts		Y	N			
HARNEY COUNTY HOME HEALTH	FS	BURNS	HARNEY	32	Wizard		Y	N			
YAMHILL VALLEY HOME HEALTH	FS	MCMINNVILLE	YAMHILL	112	Aegis		Y	N			
		Hospital	-based								
BAY AREA HOSPITAL HOME HEALTH AGENCY	HB	NORTH BEND	COOS	180	AllScripts	N	Y	N			
BLUE MOUNTAIN HOME HEALTH AGENCY	HB	JOHN DAY	GRANT	30	Healthland	Y	N	N			
GOOD SHEPHERD HOME HEALTH (FORMERLY TLC)	HB	HERMISTON	UMATILLA	40	Meditech	Y	Y	N			
PEACE HARBOR HOME HEALTH	HB	FLORENCE	LANE	60	Horizon	N	Y	N			
SAMARITAN NORTH LINCOLN HOSPITAL HOME HEALTH	HB	LINCOLN CITY	LINCOLN	80	Epic	Y	Y	N			
SAMARITAN PACIFIC HOME HEALTH	HB	NEWPORT	LINCOLN	70	Epic	Y	Y	N			
SKY LAKES HOME HEALTH	HB	KLAMATH FALLS	KLAMATH	160	AllScripts	N	Y	N			
ST ANTHONY HOME CARE SERVICES	HB	PENDLETON	UMATILLA	52	Not identified	N	Y	Y			
VISITING HEALTH SERVICES	HB	THE DALLES	WASCO	215	Meditech	N	Y	N			

Concerns About CMS Home Health Star Ratings (see Appendix D)

"Does Medicare even want home health services? They create so many regulations! With homebound patients it is important to act fast and efficiently because the problems will only worsen. Instead of focusing on changing regulations, the focus should be on educating the public and doctors about what patients can be referred..."

- o The average CMS star rating across all 27 of Oregon's rural and frontier HHAs is currently 2.9.
- o The national and state average is 3.0.
- o Thirteen of Oregon's rural and frontier HHAs currently have a star rating of 3.0 or higher.
- o All HHAs noted that their patient satisfaction survey scores were high but the quality measures were based on improving patient outcomes that are unrealistic in situations where many patients will not improve.
- o Two HHAs reported that their star ratings were now being linked to insurance carrier payments.

Challenge 2: Home Health Care: Rural Workforce

Recruitment and Retention

"Our census is too low to be able to offer the full-time employment folks want."

- o The average nurse vacancy rate in 2015 for home health and hospice was 16.7%, an increase from 2004 and 2010¹¹.
- None of the HHAs reported significant challenges with retention but all of the HHAs reported significant challenges with recruitment.
- Three agencies (out of 20) reported posting positions that were not filled for a year or more. One HHA reported the possibility of closing if a replacement could not be found before she retires.
- o HHAs could benefit from tax credit and student loan repayment or forgiveness programs to incentivize providers.

Therapists and Speech Pathologists

- Due to the limited availability of physical and occupational therapists, as well as speech pathologists, HHAs that offer these services reported these positions as traveling, contracted or shared with the hospital.
- o Hospital-based HHAs reported using a portion of FTE of therapists and pathologists employed at their hospital or hospital system.

Sufficient staffing

- o The number of HHA clinical staff reported ranged from 1 FTE to 53 FTE.
- o For some agencies, a lack of nurses is negatively impacting their quality of patient care star rating. Staff are unable to meet the Medicare requirement for an initial assessment visit to be done within 48 hours of the referral or on the physician-ordered date.
- o The number of leadership and support staff ranged from 0.5 FTE to 12 FTE.
- o Fourteen HHAs (out of 20) have at least one FTE dedicated to intake work (n=19 respondents).
- Seventeen HHAs (out of 20) have at least one FTE dedicated to billing (n=19 respondents).
- There is a notable operational scale needed in order to be able to meet administrative and regulatory requirements while still seeing patients as needed.
 - O Hospital-based HHAs are able to create staffing efficiencies that are unavailable to FS HHAs. Many HB HHAs report that the hospital or hospital system provides billing services, IT support and recruitment/Human Resources assistance. Samaritan North Lincoln and Samaritan Pacific share staff when needed.

¹¹ Oregon Center for Nursing: The Demand for Nursing Professionals, 2016.

Methodology and Limitations

Demographics

Demographic information on Oregon's rural aging population was collected using the U.S. Census Bureau's Fact Finder tool. Rural census tracts were determined by matching ORH rural zip codes to their corresponding census tract. When data by census tract was unavailable, data was sorted by county. All statistical analyses of demographic data were performed using Stata (StataCorp, 2013. College Station, TX). R-values were determined by performing a pairwise correlation analysis of the 65+ population living below FPL by county (U.S. Census Bureau, 2013b) and the percentage of rural seniors living with one or more disabilities by county (U.S. Census Bureau 2013d). The same analysis was performed for the median household income for the population aged 65 years and older by county (U.S. Census Bureau, 2013a). Pairwise t-tests were performed in determining which counties had statistically significant disability rates among the rural 65+ population higher than the state average. The same analysis was also performed in order to determine which Oregon counties had ADL scores among patients admitted to NFs and lengths of stays among NF residents higher than the state averages. Statistical significance for these tests were determined at alpha level p=0.05.

Community-Based and Long-Term Care Services

Services to support aging in place were inventoried from:

- Licensing information including facility location, capacity, Medicare acceptance was provided by Oregon DHS Office of Licensing and Regulatory Oversight (unpublished, 2015).
- Rural hospitals, clinics, and critical access pharmacies were collected from Oregon Office of Rural Health databases.
- In order to maintain standardization across counties as best as possible, the Aging and Disability Resource Connection (ADRC) was utilized to conduct a search of rural services: https://www.adrcoforegon.org/consite/index.php. The search was conducted by county utilizing the registered service terms provided by the Administration for Community Living (ACL) (2013). For institutional based care, the ratio of rural and urban seniors to rural and urban beds was calculated by dividing the total number of seniors in each area by the total number of beds in the corresponding area.

<u>Challenges Facing Rural Home Health Agencies</u>

In-person and telephone interviews were conducted with 20 rural home health agencies between July and September 2016. Interviews included questions on the organization type, patient census, staffing, regulatory requirements, administrative and clinical processes and overall challenges.

Limitations

There is no standard for tracking the availability of services by community and ensuring the same types of information, such as location, services provided, cost, etc. are made readily available to consumers. The ADRC relies heavily upon the state Area Agencies on Aging (AAAs) to add the services in their areas to the registry. The funding and staffing of each AAA greatly impacts the completeness of the information provided. Additionally, many services provided by non-governmental agencies are not listed in the ADRC, thus limiting the utility of this search tool. The inventory of services may not be a complete catalog of all services available to rural seniors. However, because the ADRC search tool used is the same one available to seniors, it provides an accurate representation of the services for which seniors could most readily access information.

Appendices

Appendix A. Life expectancy, income, poverty and disability by county

				P	OVERT'	DISA	ABILITY		
	Population 65+1	Percentage of 65+ in a rural census tract ²	Life Expectancy (Gray = life expectancy below the state average)	Number of 60+ below FPL ⁴	Percentage of 60+ below FPL ⁵ (Gray= poverty rate is significantly grater than the state average (p<0.05))	$\begin{tabular}{ll} \textbf{Median 65+Household Income}^t \\ (Gray= \begin{tabular}{ll} \textbf{Median household incomes significantly below the state average} \end{tabular}$	Number with disability?	Percentage of population with disability ² Gray=Disability rates significantly higher than the statewide average (p<0.05))	County Disability Ranking*
Baker	3,635	100.0%	78.6	416	9.1%	\$33,784	1,568	43.1%	10
Benton	1,290 15,964	11.8%	82.6	160	7.4%	\$50,787	470 5,698	36.4%	28
Clackamas Clatsop		29.2% 100.0%	80.7 78.1	1,329	7.2% 12.0%	\$44,069 \$37,930	2,387	35.7% 37.1%	30 26
Columbia	7.166	100.0%	79.4	761		\$35,281	2,831	39.5%	19
Coos		100.0%	76.9	2,196	12.9%	\$32,543	5,982	43.7%	8
Crook		100.0%	79.4	941	17.0%	\$31,634		40.5%	17
Curry	6.344	100.0%	76.5	929	11.8%	\$29,863	2,693	42.4%	13
Deschutes	10,543	41.6%	80.6	1,159	8.3%	\$40,087	3,302	31.3%	33
Douglas		100.0%	77.6	2,971	9.9%	\$33,693	9,958	43.2%	9 4
Gilliam		100.0%	80.5	60		\$26,654		46.4%	4
Grant Harney		100.0% 100.0%	82.4	280 167	12.9% 9.5%	\$29,448 \$28,984		45.7% 52.1%	6
Hood River	2,289	100.0%	77.7 80.9	167	9.5%	\$38,494	891	30.8%	1 34
Jackson	19,801	52.8%	79.2	2,538	10.5%	\$37,561		38.7%	21
Jackson Jefferson	3,358	100.0%	76.8	339	7.5%	\$43,148		42.6%	12
Josephine	18,613	99.5%	77.3	2,609	9.4%	\$31,864	6,726	36.1%	29
Klamath	11,545	100.0%	77.1	1,532	9.9%	\$32,724		41.2%	16
Lake	1,574	100.0%	79.1	249	12.8%	\$22,123	692	44.0%	7
Lane	19,675	35.6%	79.5	2,659	10.8%	\$35,744		36.8%	27 22
Lincoln Linn	10,251 11,257	100.0%	78.1	1,324		\$37,041		38.1% 41.5%	22
Malheur		60.4% 100.0%	78.5 78.7	1,531 886	10.4% 16.7%	\$35,424 \$31,494		41.7%	15 14
Marion		30.2%				\$38,242			
Morrow									
Polk	8,695	73.9%	80.3	840		\$41,347		34.3%	31
Sherman	444	100.0%	82.3			\$35,438		37.4%	
Tillamook		100.0%				\$33,694			
Umatilla		100.0%				\$35,180			20
Union		100.0%				\$31,959			25
Wallowa Wasco		100.0% 100.0%				\$38,030 \$34,881		37.2%	
Washington			82.1	36		\$41,188		30.3%	35
Wheeler		100.0%				\$31,033		42.9%	
Yamhill	10,273	73.1%	79.8	988	7.5%	\$38,743	4,934	48.0%	2
STATE	256,146	47.4%	79.7	33,323	9.2%	\$35,299	102,256	40.0%	

^{*} Multnomah county does not contain any completely rural census tracts (U.S. Census Bureau, 2013e)

¹ U.S. Census Bureau, 2013c and d

² U.S. Census Bureau, 2013c and d

³ Oregon Health Authority Center for Health Statistics, 2015

⁴ U.S. Census Bureau, 2013b

⁵ U.S. Census Bureau, 2013b

⁶ Median household income for the population aged 65 years and older by county (in 2013 inflation-adjusted dollars) determined using U.S. Census Bureau data (2013a)

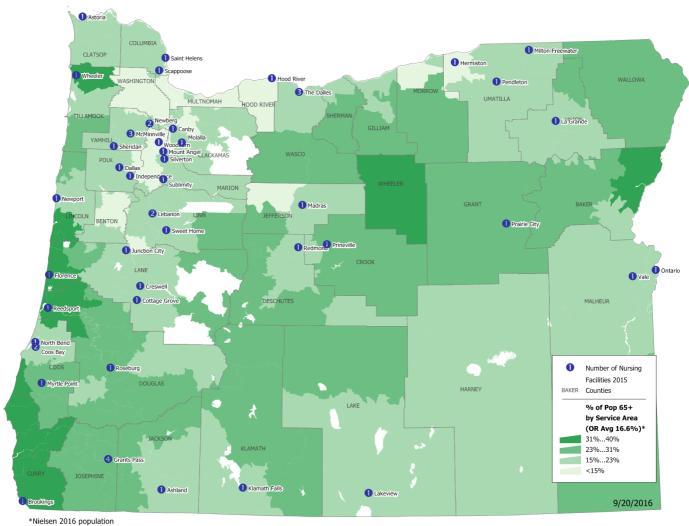
⁷ U.S. Census Bureau, 2013d

⁸ U.S. Census Bureau, 2013d

⁹ Rural disability ranking based on percentage of population with disability. The highest disability rate among the rural 65+ population ranks as 1.

Appendix B. Rural and Frontier Nursing Facilities¹²

Licensed Nursing Facility Characteristics	Rural	Urban	State
Number of facilities	54	83	137
Percent of Oregon facilities	39.4%	60.6%	100.0%
Total capacity	4,705	7,309	12,014
Percent of Oregon capacity	39.2%	60.8%	100.0%
Average capacity/facility	85.5	87	86.4
Percent accepting Medicare	94.5%	86.9%	89.9%

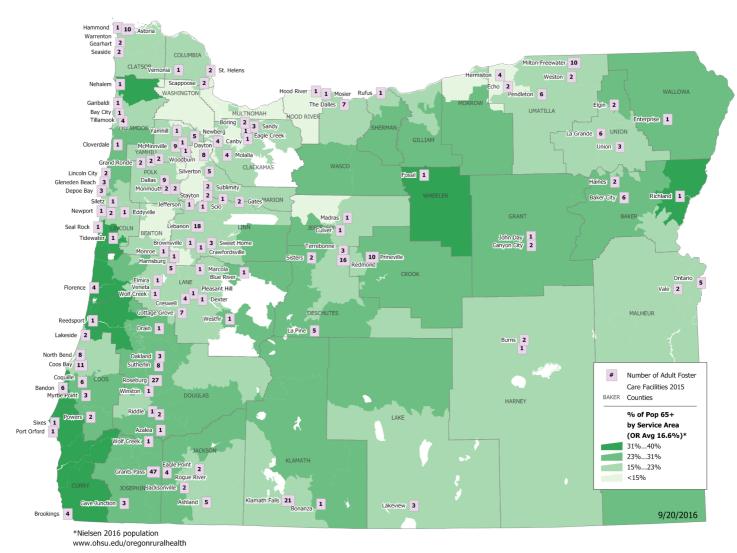


^{*}Nielsen 2016 population www.ohsu.edu/oregonruralhealth

 $^{^{\}rm 12}$ Oregon Department of Health Services Office of Licensing and Regulatory Oversight (unpublished), 2015. ACCESS TO HOME HEALTH CARE IN OREGON

Appendix C. Rural and Frontier Adult Foster Homes¹³

Adult Foster Home Characteristics	Rural	Urban	State
Number of Adult Foster Homes	463	1,273	1,736
Percent of Oregon Adult Foster Homes	26.7%	73.3%	100.0%
Total capacity	1,797	5,814	7,611
Percent of Oregon capacity	23.6%	76.4%	100.0%
Average capacity/facility	3.9	4.6	4.4



¹³ Oregon Department of Health Services Office of Licensing and Regulatory Oversight (unpublished), 2015. ACCESS TO HOME HEALTH CARE IN OREGON

Provider	Quality of Patient Care Star Rating As of September 20, 2016	Hospital-based (HB) or Freestanding (FS)	City	County	Offers Nursing Care Services	Offers Physical Therapy Services	Offers Occupational Therapy Services	Offers Speech Pathology Services	Offers Medical Social Services	Offers Home Health Aide Services
ADVENTIST HEALTH TILLAMOOK HOME CARE SERVICES	3.5	FS	TILLAMOOK	TILLAMOOK	Υ	Υ	Υ	Υ	Υ	Υ
AMEDISYS HOME HEALTH CARE	3.5	FS	ROSEBURG	DOUGLAS	Υ	Υ	Υ	Υ	Υ	Υ
ASANTE ASHLAND COMMUNITY HOSPITAL HHA	3	HB	TALENT	JACKSON	Υ	Υ	Υ	Υ	Υ	Υ
ASHER HOME HEALTH AGENCY	4.5	FS	FOSSIL	WHEELER	Υ	Υ	Ν	Ν	Ν	Υ
AVALON HOME HEALTH, LLC	NA	FS	ROSEBURG	DOUGLAS	Υ	Ν	Ν	Ν	Ν	Υ
BAY AREA HOSPITAL HOME HEALTH AGENCY	2.5	HB	NORTH BEND	COOS	Y	Υ	Υ	Υ	Υ	Y
BLUE MOUNTAIN HOME HEALTH AGENCY	2.5	HB	JOHN DAY	GRANT	Y	Υ	Υ	Υ	Υ	Y
CARE AT HOME, INC	2	FS	BAKER CITY	BAKER	Y	Υ	Υ	Υ	Υ	Υ
COASTAL HOME HEALTH & HOSPICE	2.5	FS	GOLD BEACH	CURRY	Y	Υ	Υ	Υ	Υ	Υ
COQUILLE VALLEY HOSPITAL HOME HEALTH CARE AGEN	2	HB	COQUILLE	COOS	Y	Υ	Υ	Υ	Υ	Y
ENCOMPASS HOME HEALTH OF OREGON	4	FS	BAKER CITY	BAKER	Y	Υ	Ν	Υ	Υ	Y
GOOD SHEPHERD HOME HEALTH (FORMERLY TLC)	3	HB	HERMISTON	UMATILLA	Y	Υ	Υ	Υ	Ν	Υ
GRANDE RONDE HOSPITAL HOME CARE SERVICES	3	HB	LA GRANDE	UNION	Y	Υ	Υ	Ν	Υ	Υ
HARNEY COUNTY HOME HEALTH	3	FS	BURNS	HARNEY	Y	Υ	Ν	Υ	Υ	Υ
LAKEVIEW HOME HEALTH CARE	2.5	HB	LAKEVIEW	LAKE	Y	Υ	Ν	Υ	Υ	Υ
MERCY MEDICAL CENTER HOME HEALTH AGENCY	2.5	HB	ROSEBURG	DOUGLAS	Y	Υ	Υ	Υ	Υ	Y
PACIFIC HOME HEALTH & HOSPICE	2	FS	COOS BAY	coos	Y	Υ	Υ	Υ	Υ	Y
PEACE HARBOR HOME HEALTH	3	HB	FLORENCE	LANE	Y	Υ	Υ	Υ	Υ	Y
PIONEER MEMORIAL HOME HEALTH	2.5	HB	HEPPNER	MORROW	Υ	Υ	Υ	Ν	Ν	Y
PROVIDENCE BENEDICTINE HOME HEALTH	2.5	HB	MOUNT ANGEL		Υ	Υ	Υ	Υ	Υ	Υ
SAMARITAN NORTH LINCOLN HOSPITAL HOME HEALTH	3	HB	LINCOLN CITY	LINCOLN	Υ	Υ	Υ	Υ	Υ	Υ
SAMARITAN PACIFIC HOME HEALTH	2.5	HB	NEWPORT	LINCOLN	Υ	Υ	Υ	Υ	Υ	Υ
SKY LAKES HOME HEALTH	3	HB	KLAMATH FALLS		Υ	Υ	Υ	Υ	Υ	Y
ST ANTHONY HOME CARE SERVICES	2.5	HB	PENDLETON	UMATILLA	Υ	Υ	Υ	Υ	Υ	Y
VISITING HEALTH SERVICES	3	HB	THE DALLES	WASCO	Y	Υ	Υ	Υ	Υ	Y
WALLOWA MEMORIAL HOSPITAL HOME HEALTH	NA	HB	ENTERPRISE	WALLOWA	Y	Υ	Υ	N	N	N
YAMHILL VALLEY HOME HEALTH	3.5	FS	MCMINNVILLE	YAMHILL	Υ	Υ	Υ	Υ	Υ	Υ

Average Star Rating 2.9

 $^{^{14}}$ Centers for Medicare and Medicaid. (2016, September 21). Home Health Compare Datasets.

Sources

Administration for Community Living (2013). State Program Reports. Aging Integrated Database (AGID).

Averill, J. (2012). Priorities for action in a rural older adults study. Family and Community Health, 35(4), 358-372.

Bonner, A. (2014). The growing dimensions of caregiving in America: 2014 AARP Oregon caregiving survey.

Brundisini, F., Giacomini, M., DeJean, D., Vanstone, M., Winsor S., & Smith, A. (2013). Chronic disease patients' experiences with accessing health care in rural and remote areas: a systematic review and qualitative metasynthesis. Ontario Health Technology Assessment Series, 13(15), 1-33.

Carder, P.C., Elliot, S., Limburg, A., Kohon, J., Zimam, A., West, M., & Neal, M.B. (2015a). Resident and Home Characteristics Report 2014: Adult Foster Homes. Oregon Department of Human Services.

Carder, P.C., Kohon, J., Limburg, A., West, M., & Neal, M.B. (2015b). Oregon Community-Based Care Resident and Community Characteristics Report 2014. Oregon Department of Human Services.

Centers for Medicare and Medicaid. (2016, September 21). Home Health Compare Datasets.

Centers for Medicare and Medicaid. (2016). Home Health PPS.

Mendez-Luck, C.A., Luck, J., Alvarado, C. S., & Larson, A. E. (2015). The state of nursing facilities in Oregon, 2014. Oregon Department of Human Services.

Oregon Department of Human Services (2015). Senate Bill 21 – Final Report.

Oregon Health Authority Center for Health Statistics (2016). Oregon vital statistics annual report 2015: Volume 2.

Oregon Association for Home Care. (2015). Preserve Access to Rural Home Health Services.

Rural Health Research Center. (2016, Feb.). Access to Rural Home Health Services: Views from the Field.

Ryser, L., Halseth, G. (2012). Resolving mobility constraints impeding rural seniors' access to regionalized services. Journal of Aging & Social Policy, 24(3), 328-344.

Shrestha, B. (2015). How to encourage more 'lifelong' housing. AARP Livable Communities.

Singh, G.K., & Siahpush, M. (2014). Widening rural urban-disparities in all-cause mortality and mortality from major causes of death in the USA, 1969-2009. *Journal of Urban Health*, 91(2), 272-292.

United States Census Bureau (2013a). B19049: Median household income in the past 12 months (in 2013 inflation adjusted dollars) by age of householder. 2013 American Community Survey 5-Year Estimates.

United States Census Bureau (2013b). B27010: Poverty Status in the past 12 months by age. 2013 American Community Survey 5-Year Estimates.

United States Census Bureau (2013c). B27010: Types of health insurance coverage by age. 2013 American Community Survey 5-Year Estimates.

United States Census Bureau (2013d). C18108: Age by number of disabilities. 2013 American Community Survey 5 Year Estimates.

United States Census Bureau (2013e). S0103: Population 65 Years and over in the United States. 2013 American Community Survey 5-Year Estimates.

United States Department of Agriculture Economic Research Service (2015). Poverty Demographics.