Scholarly Project Final Report

Introduction

Adequate health care workforce staffing is an important topic worldwide. The World Health Organization estimates that there will be a shortage of more than 14 million health care workers by 2030[1]. In the United States, approximately 92 million people live in primary care health professional shortage areas (HPSA) with rural and non-metro areas experiencing the most severe shortages[2]. To assess the healthcare workforce needs for the state of Oregon, a needs assessment is conducted biennially[3]. Unsurprisingly, the most recent needs assessment for 2025 continues to follow the national trend with greatest unmet health care needs in rural and remote areas of the state[3]. These findings highlight the ongoing need for greater work in developing and supporting the rural healthcare workforce for the state of Oregon and beyond.

To improve health equity and outcomes for the state of Oregon, a vital first step is to obtain an adequate health care workforce. In order to do so, it is necessary to identify effective recruitment and retention strategies. Our research question focused on identifying what factors best support the recruitment and retention of healthcare providers in rural Oregon. Following a review of existing literature and resources, we aimed to better understand and map the landscape of this issue in Oregon through the use of key informant interviews. Our aims included identifying strategies commonly used in rural healthcare recruitment and retention and gaining local perspectives through key informant interviews. Through these interviews we hope to better inform future workforce projects and policy as well as promote collaboration to achieve better health outcomes for the state of Oregon.

Methods

This was a qualitative study that used key informant interviews and thematic analysis to gain a better understanding of what is being done across the state of Oregon to better inform future workforce projects and policy.

Subjects

In order to effectively map the landscape of what is being done across the state of Oregon, it was decided to focus on key informants that work directly with rural workforce recruitment and retention in Oregon and who have interest and expertise on this issue. 9 individuals were interviewed whose work is directly related to rural healthcare provider recruitment and retention in the state of Oregon.

Interview subjects were identified from an existing database of past collaborators with Oregon Rural Practice-based Research Network (ORPRN), whose work is related to rural healthcare recruitment and retention. Snowball sampling in which an interviewee recommended an additional person to be interviewed was also used. Participants were contacted and recruited via email. Participation was voluntary and no compensation was offered. Information sheets were provided and all participants provided consent prior to being interviewed.

Interviews

Interviews were conducted virtually on a secure platform. They were 30 minutes long and semi-structured, following an interview guide. The interview guide was informed by an initial review of literature on rural healthcare workforce recruitment and retention strategies using papers published between 2004-2023 that were found using PubMed. Interview transcripts were coded with unique identifiers and stored on a secure network only accessible to the research team.

Data Analysis

A qualitative assessment and thematic analysis of interview answers was conducted to identify common

themes using the following steps. First, transcription of interviews and familiarization of interview content. Second, a combination of deductive and inductive coding was utilized on first and second passes of interview transcripts. Third, codes were organized and observations and connections were made. Finally, findings were condensed and themes emerged and were defined.

Results

Following an initial review of literature, several categories of recruitment and retention strategies were identified and compiled as seen in Table 1. This table helped inform the interview guide and provide additional structure for exploring current work being done in the state of Oregon.

Table 1. Strategies for Recruitment and Retention of Rural Health Providers

Education	Pathways programs: Pre-medical school rural and underserved programs
	Admissions/Student Selection
	Rural Clinical Immersion/Exposure (and rural health curriculum)
	Rural Medical Schools-Comprehensive Medical Training Programs, Rural Residencies
Financial Incentives	Loan Forgiveness/Repayment and Return of Service Agreements (Bonded Scholarships)
	Other- Competitive salaries, hardship allowances or rural health bonuses, housing grants and more
Regulatory/Government Policies	Rural tax credits and Funding for Rural Financial Incentives and Programs
	Compulsory Rural Service for Licensure
	Increased Scope of Practice for Health Professionals in Rural Areas
	Funding for increased residency or internship training locations in rural/underserved locations
Professional Development	Continuing Education Opportunities and Professional Skills Development
	Professional Networking and Recognition, availability of senior positions at rural sites
Social and Community Support	Better living and working conditions- Investment in infrastructure and resources in rural communities
	Community Integration and Mentoring Programs
	Finding "good fits" connecting prospective healthcare workers with rural settings that are good lifestyle matches (recreational interests, opportunities for family members)

Throughout the coding process and analysis several themes emerged and were identified: Retention through community, Retention through empowerment, Growing the rural workforce, Passion as the driver, Tools and commitment for success, and Collaboration is key (Table 2).

Table 2. Thematic Analysis Results from Key Informant Interviews

Themes	Codes	Quotes
Retention through Community	Community Development	"We can sell an opportunity, right? And it looks wonderful, but if that community piece isn't a part of that, you're not gonna retain them" P5
	Community and Social "Fit"	
	Housing	"It's a community effort to place someone exactly where they belong and where their skills are the most useful" P9
	Services and Supports	
Retention through Empowerment	Mentorship	"Not only have mentorship within your clinic, but also have some mentorship or some, some belonging aspect in the community" P6
	Professional Development	"They're getting to build their skills in areas that they're interested in, and then they go on and then they treat patients" P8
	Transparency and Communication	
Growing the Rural Workforce	Pathway Programs	"I don't think in practice that you can recruit a workforce that doesn't exist. And so I really think we need to create a rural workforce from the beginning" P1
	Rural Curiculum/Exposure	"To get medical students the training that they need to thrive in rural communities and be successful and stay there long term. They need more opportunities to be able to go out into those rural communities and experience what it's like. So more preceptors and preceptor sites is needed." P2
	Admissions	
Passion as the Driver	Health Care Access	"Rural people need to have the right to quality health care. And that starts with having quality professionals in positions and enough of them to serve their patient population." P3
	Representation and advocacy	
	Lived Experience	
Tools and Comittment for Success	Funding	"I think we need to continue in investing in incentives that attract providers, but also will help retain them. Oregon has some really good incentive programs..Oregon's been doing good on that" P5
	Financial Incentives	
	Government/legistlation	"We're kind of starting to develop pathway programs now, but it's a long-term investment and it's a hard sell. When loan forgiveness and loan repayment programs have these immediate benefits" P2
	Leadership	
Collaboration is Key	Communication and Collaboration	"Get everybody at the same table.. and then see how we can support one another versus trying to duplicate efforts" P6
	Ownership	"And I think that if we're really gonna meet the needs of rural Oregon and rural tribal communities from like a physician standpoint, we gotta be bringing other partners to the table" P4
	Policy	"I think because it's a patchwork system, it's inherently difficult to run because no one person's in charge of it. They all do their part and if they do their part and the part shrinks, then the patchwork quilt falls apart" P1

Theme 1: Retention through Community

Across the interviews, a common thread emerged on the importance of community factors particularly in the retention of healthcare providers in rural areas. Topics included challenges with housing, availability of services and support, need for further economic and infrastructure development in rural areas, and the importance of social and community "fit". "It is so important to help integrate... that provider and their family into the community because that is what's gonna help connect them and help sustain them in the longer run" (P5). "The food in [small town] is not gonna keep you there. But maybe the people will" (P6). Many interviewees emphasized the importance of thoughtful recruitment efforts to ensure that job seekers end up in areas that best align with their values and interests to improve retention rates as well as the importance of continued investment into improving rural communities and access to services. "There's a lot that can go into making sure that providers and people that are wanting to commit to serving in rural communities are the right fit, so that we can sustain them" (P7).

Housing and lack of services were noted to be a challenging barrier. "Housing is a gap, services for families is a gap and transportation" (P9). "We also need to help support small towns to have vibrant communities so that people feel supported when they get there" (P1). Unfortunately, it was noted that these are not problems that have easy solutions. "I think it's getting the community development teams on your side, and collaborating with the community colleges and local transportation companies as well as collaborating with potential opportunities for workers coming in" (P9).

Amongst the existing gaps and areas for continued work, there were also several successes highlighted. This included the creation of a complimentary recruiter for rural and underserved communities through the Office of Rural Health who works to match job seekers with rural openings that are the best fit, nonprofit recruitment tools like 3RNET, and regional efforts such as HARRP (Healthcare Access Recruitment and

Retention Project), SOAPP (Southern Oregon Alliance of Physicians and Providers) that work to help applicants find their best fit and to help establish families in the community after accepting a job, as well as Oregon iSector who works to facilitate housing innovation and rural housing assistance. Participants acknowledged that while there is a lot of work happening in this sphere there continues to be lots of opportunity and gaps for continued efforts and collaboration.

Theme 2: Retention through Empowerment

Another theme that emerged is that if we can empower and encourage rural healthcare providers in their professional journeys, we will be better able to retain them. “Having more CME work, more mentorship for new providers I think will be very, very helpful… I think a lot of people my age are not only looking for a career but also like how can they grow… and I think the professional development is super important” (P6). Many healthcare workers in rural settings can feel professionally isolated, which can create hurdles for retention. “Especially if you're just graduated and you're fresh new into this new position and there's no one there to kind of double check your work or make sure that you’re following policy or helping guide you through some quick tried and true ways of doing certain things” (P7). This applies to various health professionals including nursing. “So when somebody comes out of a nursing program, the average, right now of them staying in their nursing career is three years. So you put all of that investment in that person to get three years and then they're out. And a lot of that is because they're not feeling supported when they get into a hospital or clinical setting, and so there are mentoring programs that do an effective job of pairing an experienced nurse with a new nurse so that they can basically be the Sherpa or guide them through and be that sort of support mechanism” (P3).

A bright spot for professional development is the success of Oregon’s ECHO program and ORPRN. “ORPRN meets these providers and clinics where they are and where they need support… They feel like their opinion and their work that they're sharing and supporting as part of a ORPRN research project or an ECHO… is really valued” (P7). Not only does this professional development opportunity help retain and empower clinicians, but has also led to improved patient care. “Through ECHO, we have trained primary care clinicians about how to prescribe hepatitis C medications and then we've cured hepatitis C, we've done that through ECHO” (P8).

Theme 3: Growing the Rural Workforce

Growing the rural workforce “from the beginning” (P1) was one of the strongest and most common themes that emerged across the interviews. All key informants emphasized the importance of educational opportunities as one of the best areas for further efforts. “If you are raised in a rural county and you have a passion and a heart there, and even if you're getting your schooling or your hours in the rural county, you tend to stay” (P9). Pathway programs provide essential opportunities for students that are most likely to serve in rural areas to have the exposure and opportunities needed to pursue a career in the healthcare field. “I'm all for pathway programs” (P6).

“Other gaps out there, lack of grow your own pathway programs… Pathways programs, would encourage those kids financially at an earlier age and also provide mentorship at an early age to show them that a career in healthcare is possible… We’re kind of starting to develop pathway programs now, but it's a long-term investment and it's a hard sell” (P2). Oregon AHEC was noted to be a great organization working to develop pathway programs but often faces inadequate funding due to the challenges of obtaining funding for programs that require many years before seeing the return on investment. “I would just reiterate the importance of pipeline programs and the importance of the affordability of the education to go into health careers or pay back your loans after you graduate. Because we’re not going to be able to solve this issue without those basic things in place (P3).”

Beyond pathway programs, it is necessary to have sufficient spots in healthcare training programs as well as to have admission committees that prioritize selecting students that are most likely to serve in rural

areas. “We don't have super dedicated, robust rural health training at this time, for physicians in Oregon, for medical students in Oregon, now there's bright spots. You've got Cascades East Family Medicine Residency program… However, from like a medical school standpoint, if the current state of things was effective for rural and tribal communities in Oregon. Then there wouldn't be talk of starting more medical schools in the state of Oregon to meet the needs of rural communities” (P4).

Rural exposure and curriculum throughout medical education and residency was noted to be another area where Oregon could continue to improve to better meet the needs of their rural population. “Have curriculum that's devoted to rural and underserved education and then offer loan forgiveness… extra education like AHEC scholars that creates a system of support for rural and underserved… Having education, whether it's admitting people from rural backgrounds, whether it's training people in rural places… I think that those are big pieces that we can address” (P1).

Theme 4: Passion as the Driver

When asked about their passion and how they found themselves working in rural workforce development, eight out of nine participants identified rural background or significant rural living experience as the starting place of their interest in this topic. “I'm from a town of about ten thousand people, and, you know, I saw struggles in my hometown in terms of access to health care” (P3). “My interest, gosh, it probably comes from being born and raised in rural” (P5). Coming from rural backgrounds gave interviewees first-hand experience and exposure to the challenges with healthcare access in rural communities, inspiring many to work towards improving access and outcomes. “Rural people need to have the right to quality health care” (P3).

For the interview participants, they found that their lived experience propelled them to serve as leaders and advocates for the advancement of rural health equity. “It’s really important to be that voice for people who just kind of got looked over” (P7). Interviewees mentioned a well-known association that those from rural backgrounds are the most likely to end up in careers related to improving rural healthcare access. “We found through our loan forgiveness programs like PCLF (primary care loan forgiveness), the majority of people who apply for PCLF, which requires students to go into a rural community once they graduate, are from rural communities themselves. And usually return to the rural community that they grew up in” (P2).

Therefore, identifying and supporting those students most likely to serve in needed areas was a commonly proposed solution in need of greater funding and support. “I'm basically trying to change the world by training those who are the most likely to work in rural and tribal communities, i.e. the places in this country that need high quality, safe, affordable, culturally congruent healthcare the most. I am trying to make sure that the people who are most likely to work in those places, get a chance to train in medical school” (P4). To achieve better rural healthcare outcomes, it is vital to acknowledge and support those with passion and lived experience. From pathway programs up through admission committees and rural training programs. “If you really want the outcome that you want, which is having people and training people for rural and tribal areas, you have to behave like it and you have to set up systems that support that” (P4). “Get in front of legislators, tell people that it is possible…. And show folks that there is a want and desire out there, it's just all of these barriers for these folks in rural communities to grow their own health care providers” (P2).

Theme 5: Tools and Commitment for Success

When discussing strategies and areas where work is being done to increase the rural healthcare workforce, funding, financial incentives and policy are commonly raised topics. “Investing in the workforce, having a long-term view of it, so that, that we are healthier because of how we train people, where we train people, what we pay for healthcare, what we're getting out of it, like that's the overall picture we need. The downside is that it's really hard to invest in healthcare because, you know, honestly,

the politicians' election cycle is faster than that. Most CEOs of hospitals only last about three years, so it's really hard" (P1).

Financial incentives including "loan repayment programs, loan forgiveness programs, tax credits and insurance subsidies" (P2) have long been considered a core component of rural provider recruitment, however their effectiveness has been debated. "I think when we surveyed different people, we get different results about whether loan forgiveness and repayment works or not" (P1). It was generally agreed to be helpful for the initial recruitment of providers in high-need areas, but the long-term results and retention were more debatable. However, most participants considered financial incentives to be an important tool in the battle to increase the rural workforce and emphasized the need for continued and increased investment. "The reality is only a percentage of those folks who apply will get awarded. So in, you know, my little dream would be that we're awarding closer to like eighty or ninety percent per cycle" (P2).

Amidst the rising costs of education, financial incentives play an even more crucial role in supporting students interested in health careers. "We're really very cognizant and aware of tuition rates and trying to figure out how to support students from high levels of diversity or lived experience" (P7). It is also important to be constantly evaluating and reevaluating our current strategies to improve outcomes. "Some of the ancillary goals of the incentive program is to… to continue with these programs, but we also want to make sure that they're flexible and that they're working with the provider and the student and not working against them" (P7). An exciting new source of funding mentioned was the rural health transformation program that comes with the hope that over the next five years Oregon can invest newly available federal funds into addressing rural healthcare shortages. In particular, there was a lot of excitement regarding using these funds to assist in "developing more rural residency programs" in Oregon for family medicine and general surgery (P5). Another important source of funding for local projects is Oregon's Coordinated Care Organizations (CCOs). CCOs are funded largely through federal Medicaid dollars and are locally governed making it possible "to support grassroots projects in these communities" (P7). The Oregon ECHO program is one example of a success story from CCO funding.

Theme 6: Collaboration is Key

Through each interview, it was apparent that a lot of work is being done to improve rural healthcare access. However, throughout conversations, a theme emerged regarding the need for increased communication and collaboration regarding these efforts. "People are thinking about this and I don't think that they are thinking about it in a very comprehensive way. I think that they're just kind of working and plugging away on their slice" (P8). "Those kinds of structures where people are coming together to find the most natural fit are the best… Filling those gaps isn't a one man job. It's funding and then getting everybody on the same page coalition style" (P9). In order to achieve the biggest impact, it is necessary for everyone to come together and communicate. "There's missed opportunities across the board… getting people at the same table, and then explaining like what they've been doing, what's the challenges… And then see how we can support one another versus trying to duplicate efforts, and I think there's a lot of duplicating of efforts" (P6).

Additionally, interviewees highlighted the need for everyone to come together as a state to renew our commitment to rural health and come up with innovative ideas. "And I think that if we're really gonna meet the needs of rural Oregon and rural tribal communities from like a physician standpoint, we gotta be bringing other partners to the table… We just gotta be thinking about a whole lot more than we are. And I think just a different way of doing things, because in many ways I feel like we're not always asking like the right questions to determine who's going to be the best person to meet a need and we need to revive our rural training program… I don't know of a large-scale commitment to rural Oregon that is led by people that truly understand rural communities" (P4).

Discussion

Growing and sustaining Oregon's rural healthcare workforce is a large challenge that is being addressed by various organizations across the state through a myriad of strategies (Table 1). Through the insights of our key informant interviewees, 6 themes emerged regarding how to better support retention and recruitment in the state of Oregon (Table 2). It was highlighted that there is no easy or quick solution, but through collaboration and dedicated efforts we can make progress. To improve workforce recruitment and retention it is necessary to address all categories listed in Table 1 including education, financial incentives, regulatory/government policy, professional development and social and community support.

Standout points included the need to leverage the lived experience and passion of our youth growing up in rural communities to grow our next generation of rural health professionals. It was noted repeatedly that "you can't recruit a workforce that doesn't exist" (P1) but instead must start from the beginning. It is necessary to nurture our youth and help them to navigate and overcome the many barriers in their way. Students from rural or tribal backgrounds often encounter barriers when pursuing health careers such as less access to resources and not always fitting with admission committees' definitions of an ideal candidate. To create and sustain the rural healthcare workforce we must start at the beginning by supporting our rural and tribal youth as well as increasing health trainee spots, involving diverse perspectives, and rethinking admission committee priorities.

While it is important to have a big picture view of rural workforce development starting with pathway programs, it is also necessary to find short-term solutions to address immediate needs while working to grow the workforce over time. Strategies with quicker results include financial incentives, thoughtful and intentional recruitment strategies and community and professional mentorship. Additionally, improved communication and collaboration is needed to avoid duplication of efforts and to overcome the fragmented nature of the current system. Other areas for continued funding and investment include improved access to housing and services in rural communities, expanding funding for pathway programs and creating additional preceptorship and rural residency spots. It is important for the many organizations and individuals working to improve access to rural healthcare across the state of Oregon to come together to renew their commitment to rural health to achieve the best possible future for our rural communities and our state as a whole.

It is hoped that the findings from this work can be used to better inform ongoing workforce projects and policy as well as to encourage discourse and conversations on this topic. Limitations of this work include the small size of this qualitative study with 9 key informants. Future work could include interviewing more health professionals and additional stakeholders that represent a diverse range of roles and responsibilities to elicit further insights and ensure that diverse perspectives are represented.

Conclusions

Increased collaboration is needed to improve recruitment and retention of the rural healthcare workforce in Oregon. More investment is needed in education and mentorship opportunities targeted at those most likely to serve. Effective retention starts with thoughtful recruitment and ensuring optimal "fit".

References

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