Workforce Introduction

Robert Barclay, MPH; Annie Lemieux, MPH; Hannah MacDougall, PhD; Ira Moscovice, PhD; Megan Lahr, MPH

This toolkit seeks to provide background on health care workforce challenges in the U.S., to describe common workforce challenges faced by Critical Access Hospitals (CAHs), and to provide resources that CAHs across the country may reference to address their own workforce needs. Our toolkit contains five modules, including this introductory module, which each discuss key workforce challenges and strategies by topic. Module 1: Organizational Culture and Leadership explores the crucial role of effective CAH leadership and provides resources to foster leadership and improve organizational culture in CAHs in the context of workforce challenges. Module 2: Leveraging Partnerships demonstrates the immense potential CAHs have to collaborate with partners in their communities to address their workforce and other needs. Module 3: Emergency Medical Services Workforce focuses on workforce issues specific to both paid and volunteer Emergency Medical Services (EMS) personnel in rural communities. Module 4: Administrative and Support Staff Workforce examines current workforce challenges in recruitment and retention of administrative, support staff, and technicians in CAHs and provides resources to help CAHs address challenges with this segment of the workforce.

HEALTH CARE WORKFORCE CHALLENGES

Difficulties in recruiting and retaining the health care workforce are widespread across the U.S.. These challenges arise from a variety of factors, including demographic changes, staff shortages, employee burnout and stress, the long-term impacts of the COVID-19 Public Health Emergency, and various economic concerns, such as cost of living and high inflation. Harral demographic changes include a large aging population, which, in turn, increases the demand for health care, as well as the complexity of health care needs. This demographic shift creates two key concerns for hospitals. First, as the U.S. population continues to age, there will be increased demand for medical services, and hospitals will experience difficulties in providing accessible care as well as ensuring that they have the workforce to provide care. The Association of American Medical Colleges projects that patients 65 and older will account for 42% of medical demand by 2034. Second, just as the share of the U.S. patient population age 65 and older will increase in the coming years, the country's health care workforce will also continue to age. As the older generations of health care workers begin to transition into retirement, hospitals will struggle to proportionally replace them with new staff. The struggle is transition into retirement, hospitals will struggle to proportionally replace them with new staff.

The aging health care workforce is compounded by pre-existing shortages and high rates of turnover. Employee burnout and stress have been shown to be a major cause for staff shortages and high turnover rates across the health care field.⁴ Further, high turnover in the workplace and burnout have both been shown to increase the intention to leave a health care position.⁴ Turnover among hospital staff is associated with greater training and hiring costs and decreased productivity in hospitals.⁶ Turnover and burnout were negatively impacted by the COVID-19 Public Health Emergency, which compounded existing staff shortages and economic concerns.⁷



WORKFORCE CHALLENGES IN CRITICAL ACCESS HOSPITALS

CAHs face many unique challenges in retaining and recruiting a sustainable health care workforce. CAHs have 25 or fewer beds and are typically located in geographically remote and rural areas. Thus, many CAHs face challenges associated with their distance from larger cities, other medical institutions, and advanced training facilities. These challenges can include a lack of resources, the responsibility to provide care to a large geographic area, as well as difficulties recruiting and retaining staff due to financial struggles, turnover, and staff housing and childcare concerns. In many cases, CAHs are the only health care provider in their community and the first and only point of contact that local residents may have with the health care system. Compared to urban areas, rural communities are more likely to see negative impacts of workforce shortages. For example, while 20% of the U.S. lives in a rural community, only 10% of the U.S. physicians are available within this area. Health Professional Shortage Areas (HP-SAs) are defined as either geographic areas, populations, or facilities with significant shortages in primary, dental or mental health providers. The issue of geographic isolation is intricately connected to the designation of HPSAs, and workforce shortages in rural communities often intersect with the geographical remoteness of HPSAs, with approximately 66% of federally designated Primary Medical HPSAs in rural areas.

GENERAL RESOURCES

Below, we have compiled a list of general workforce resources (some nationwide and some rural-specific) that CAHs can use to address workforce challenges.

- <u>3RNET</u>: 3RNET is funded by the Federal Office of Rural Health Policy (FORHP) to support health care organizations with workforce issues by providing resources such as training, recruitment and retention guides, and technical assistance. 3RNET's website includes a health careers job board for employers to post to and an annual educational webinar series for employers to learn about marketing, retention, and recruitment.
- National Rural Health Resource Center Workforce Toolkit: This toolkit provides resources focused on recruitment, retention, employee engagement, and potential workforce models. The toolkit has links and descriptions to activities, resources, and planning tools targeted towards CAHs looking for support on workforce recruitment and retention.
- <u>United States Health Workforce State Profiles</u>: The United States Health Workforce State Profiles, created by the Health Services and Resources Administration (HRSA), provide workforce data on 34 health-related occupations organized by state.
- <u>Bureau of Health Workforce</u>: The Bureau of Health Workforce webpage houses a variety of pages focused on grants for health care institutions, and loan and scholarship programs for health care professionals. It also houses data on workforce shortage areas across the country by profession and geographic area.
- <u>U.S. Department of Agriculture (USDA)</u> Resource Guide for Rural Workforce Development: This Resource Guide offers strategies and resources for rural communities who wish to build a stronger, sustainable workforce. It provides support on workforce development planning, infrastructure and equipment financing, industry and employer engagement/entrepreneurship and local business development, and education/training/apprenticeships. At the end of the Resource Guide, the USDA also offers supplemental information on grants, other federally supported programs, and resources.
- <u>Rural Workforce Innovation Network (RWIN)</u>: RWIN was created by USDA to establish a collaborative space where public and private partners can connect to facilitate workforce development in rural communities. RWIN offers workshops, networking opportunities, and allows members to share best practices in rural workforce issues.



EDUCATION AND TRAINING

There are promising strategies that center around education and training for current and future health care workers. This section provides examples of these strategies, and additional resources are discussed in <u>Module 2</u>.

One such example is preferential selection in medical school admissions for applicants who commit to serving rural populations. Working to incorporate rural-focused admissions and creating interest in rural medicine prior to medical school could lead to an increase in rural practice physicians. Another key strategy to mitigate rural health care workforce shortages is expansion of residency slots for rural and/or underserved areas. The Rural Residency Planning and Development Program is funded by HRSA and seeks to expand residency programs and Rural Track Programs for specialties such as family medicine, internal medicine, psychiatry, obstetrics and gynecology, and general surgery.

Other programs without a specific rural focus include the <u>Primary Care Training and Enhancement Program</u>, which trains primary care physicians and physician assistants in behavioral and maternal health with the goal of expanding access to these services. This program funds fellowships for physicians and physician assistants practicing primary care in community-based settings. <u>The Nurse Education, Practice, Quality and Retention-Pathway to Registered Nurse Program</u> trains already licensed practical and vocational nurses to complete the pathway to an RN. Additionally, the <u>Advanced Nursing Education Workforce Program</u>, through a grant sponsored by HRSA, aims to train additional primary care nurse practitioners, certified nurse midwives and clinical nurse specialists, providing assistance with tuition for trainees in these disciplines. A variety of institutions are eligible to apply for this grant, including rural health clinics, accredited schools of nursing, academic health centers, and state or local governments.

Some states are turning to creative strategies to invest in the education of their current and future health care workforce. For example, the <u>Colorado Health Care Corps Program</u> provides participants in a range of clinical professions practicing in a HPSA with benefits such as additional training allowance, housing support, and monetary awards to be used for student loan repayment or future educational opportunities. Additionally, Colorado published <u>Colorado's Next Chapter: Our Roadmap to Moving Forward</u>, a statewide health care workforce plan that outlines specific actions the state will prioritize, including: training and apprenticeship funding, wage increases, and funding to support individuals pursuing a career in health care. While this action plan is not specific to rural workforce, it may help address shortages in rural Colorado.

Ohio is working to grow the <u>Behavioral Health Workforce</u> across the state by allocating \$85 million of American Recovery and Prevention Act funding toward recruitment, training, and retention initiatives for psychiatrists, nurses, therapists, social workers, and other personnel. This funding will be used to increase the number of paid internship and scholarship programs across Ohio's colleges, universities, and other educational settings. Funding will also be available to help Ohioans pay for fees associated with licenses, exams, and certificates.

Nebraska's Rural Health Opportunities Program and Kearney Health Opportunity Programs provide full scholar-ships at participating undergraduate institutions for students committed to practicing in rural areas of Nebraska. Upon completion of undergraduate education requirements, students in these programs are automatically accepted into the University of Nebraska Medical Center to continue their education. Additionally, The State University of New York (SUNY) has recently implemented their Pre-Medical Opportunity Program. This program, which aims to increase diversity in the medical field, takes a cohort of approximately 23 undergraduate pre-medical students and provides support through mentorship, tutoring, and MCAT preparation.



STUDENT LOAN FORGIVENESS/REPAYMENT RESOURCES

Another key resource for individual health care workers is student loan forgiveness and repayment options. There are a variety of programs available, some of which are specific to rural and underserved areas, and some of which are available regardless of geography. Some key programs are listed below, and a more comprehensive table with opportunities is included in the appendix at the end of this module.

- NHSC Loan Repayment Program: This program offers student loan forgiveness to primary care providers working in the medical, dental, and behavioral health fields. It supports these providers financially through both scholarship-based programs and loan repayment programs. All NHSC participants must work within designated HPSAs that provide outpatient primary care services within the community. Facilities (including CAHs and Rural Health Clinics) looking to become an approved site for the program can apply here.
- Nurse Corps Loan Repayment Program: This program offers student loan forgiveness to RNs, advanced practice registered nurses (APRNs) and nursing faculty. Participants must commit to serving in a Critical Shortage Facility located in a HPSA for two years or work for two years in an eligible nursing school as a faculty member. The program will pay up to 85% of nursing education debt.
- <u>Indian Health Service Loan Repayment Program</u>: This loan repayment program awards up to \$50,000 to eligible health professionals in exchange for a two-year commitment to working within American Indian and Alaska Native communities, many of which are in rural areas. The program can be extended based on the provider's interest in continuing their service.
- Public Service Loan Forgiveness Program (PSLF): The PSLF Program forgives any remaining Direct Loan balances held by the U.S. Department of Education after the borrower has made 120 qualifying monthly payments towards one of the PSLF accepted repayment plans. Qualifying payments are payments made while the borrower is working full-time for an eligible employer, which can include government organizations at any level, 501(c)(3) non-profit organizations, and other non-profit organizations that "devote a majority of their full-time equivalent employees to providing certain qualifying public services," which can include non-profit hospitals that are not 501(c)(3) organizations.

EQUITY AND DIVERSITY IN THE WORKPLACE

Another critical issue is recruitment and retention of a diverse and representative health care workforce. Efforts to diversify the health care workforce are linked to improved care outcomes, with research suggesting that more diverse health care teams exhibit greater clinical decision making and that health care providers with greater cultural awareness see improved trust and communication with their patients. Additionally, promotion of diversity, equity, and inclusion (DEI) in a hospital setting is associated with greater accountability and a more positive work environment. In a hospital setting is associated with greater accountability and a more positive work environment.

Hospitals are beginning to prioritize a diverse workforce. Northern Light Mercy Hospital in Portland, Maine is making the conscious effort to recruit internationally and is partnering with the Portland community to ensure that international and non-local workers are integrated into the community. Additionally, Northern Light Mercy Hospital has worked with the Daniel Hanley Center for Health Leadership to create an action plan to address bias and inequity in their workplace and provide staff trainings on unconscious/implicit biases.



The South Carolina Hospital Association, in partnership with the Alliance for a Healthier South Carolina, created the <u>South Carolina Rural Hospital DEI Learning Collaborative</u>, which seeks to support rural hospital leaders and provide strategies for promoting DEI within their facilities. This Collaborative facilitated four listening sessions on advancing health equity, with topics including DEI within organizational leadership, data collection and use, cultural awareness, and community engagement. Several presentations from South Carolina hospitals with example DEI activities are presented at the link above.

The Rural Health Information Hub (RHIhub) has created a <u>Rural Health Equity Toolkit</u>, which contains a variety of tips and resources for advancing health equity in general, but also has a specific section on <u>Committing to Building and Retaining a Diverse and Inclusive Workforce to Improve Health Equity</u>. This page of their toolkit offers strategies CAHs can implement to support diversity among their staff, plus three examples of rural organizations that have taken action to diversify their workforce.

The American Association of Medical College's Group on Women in Medicine and Science published an Equity Recruitment Toolkit, which provides strategies for implementation of inclusive hiring practices in order to achieve health care workforce equity and diversity. This toolkit is geared toward recruitment of physicians, but much of the information provided can be applied to other health care careers as well. The American Hospital Association released their report titled Strengthening the Healthcare Workforce: Strategies for Now, Near, and Far, which includes a section with resources related to recruitment of a diverse workforce.

QUALITY OF LIFE

Despite perceptions that life in a rural community is less expensive, cost of living has increasingly become a concern for rural residents, and it can be difficult for some CAHs to retain staff due to rising cost of living. 17,18 Cost of living concerns are especially relevant for health care workers, as data show that health care compensation has not grown proportionately with other sectors. 9 Some examples of retention difficulties include securing child-care, housing availability, and a lack of employee advancement opportunities. Often, these personal considerations are the primary driver for potential employees when choosing where to work. In many rural communities, the need for childcare surpasses the availability of childcare. This leaves many families without access to childcare, which can cause lost work time and prevent parents or caregivers from seeking work at all. Some potential strategies to address cost of living for health care workers include providing low-interest home loans for staff, relocation stipends, assistance finding employment opportunities for staff's significant others, and connecting staff to local daycare options. On the staff of the local daycare options.

In recent years, employees of Wallowa Memorial Hospital, a CAH in Enterprise, Oregon reported difficulty finding affordable childcare. Near the start of the COVID-19 Pandemic, leadership of the hospital worked with the operator of an existing childcare facility in their community to open a new facility exclusively for use by hospital staff and their families. With a full-time director and two full-time teaching assistants, this facility is able to accommodate about 16 children of hospital staff, allowing these staff to report to work and serve their community without worrying about finding affordable childcare.



A lack of affordable housing and overall high cost of living were significant barriers for recruitment at Memorial Regional Health (MRH), a CAH in Craig, Colorado. To address their community's need for additional housing options, MRH transferred land from an old hospital site they were no longer using to the City of Craig Housing Authority. The Housing Authority is now utilizing millions of dollars in grant funding to develop 20 units of income-restricted, affordable housing that will be available to area residents, including hospital staff.

Staff at Providence Seaside Hospital, a CAH in Seaside, Oregon, have also struggled to find quality, affordable housing within a reasonable distance of their workplace. In response to housing concerns, CareOregon has purchased an unused hotel in the community and plans to create approximately 60 units of new housing, with two-thirds of units reserved for local health care workers. The community hopes that by having these available units for health care workers, the local hospital will be able to recruit and retain workers who have struggled to find affordable housing in the area.

UTILIZING ADVANCED PRACTICE PROVIDERS

With physician shortages making it more difficult to provide quality care, another strategy is the utilization of advanced practice providers, including nurse practitioners and physician assistants. These provider types can offer quality care for patients and contribute to primary care needs in rural hospitals. Additionally, the degree paths for both nurse practitioners and physician assistants are considerably shorter than for physicians and could be targets for pathway programs within rural communities.

The State of Wisconsin is funding a grant program for Advanced Practice Clinician Training Grants (APC) across the state. The funding is available to plan, implement, or expand existing and new training programs in hospitals or clinics. The grant includes a 3-year performance period for \$500,000 annual funds and any grant recipients must match the grant amount received. This grant prioritizes hospitals or clinics located in towns with fewer than 20,000 residents and further prioritizes programs that would include rural hospitals and clinics. The State of California has implemented a scholarship program for advanced practice providers enrolled in California schools of up to \$25,000 in return for one year working in a direct patient care setting in a designated shortage area within California.

TRAVELING AND TEMPORARY STAFF

Traveling and temporary staff can provide expertise and mitigate shortages for short periods of time while hospitals seek permanent replacements. There are many benefits of utilizing traveling providers to fill workforce gaps in such a way. Traveling staff can address workforce shortages temporarily to ensure that essential medical services in rural hospitals and clinics are not impacted by vacancies. Additionally, they can enhance specialized care access by using specialized skills that local staff may not be readily able to provide during times of staff shortages as well as provide care during times of high patient demand and low staff supply.²³ It is important to note, however, that wages for traveling providers are often higher than in-house staff, which may result in higher expenses for the employer, and can cause some discrepancies in how direct hires are compensated in relation to traveling staff.²⁴



CONCLUSION

To identify key areas of support needs for CAHs to address their workforce-related challenges, the FMT conducted focus groups with staff from State Flex Programs (SFPs) and State Offices of Rural Health. Findings from these focus groups were used to choose the modules of focus for this toolkit. Each module topic was identified as an area where further resources and examples would be helpful to CAHs. Each module provides a brief background on the topic then presents resources and practical examples CAHs and SFPs can use to address workforce challenges in their communities. Each module also has an associated appendix, which presents additional resources related to each workforce topic that were not mentioned in the modules in detail but may be helpful for CAHs.

Module 1: Organizational Culture and Leadership explores the crucial role of effective CAH leadership and provides strategies to foster leadership and improve organizational culture in CAHs. Module 1 summarizes strategies and skills essential for effective CAH leaders and provides examples of steps CAHs can take to cultivate a positive organizational culture. The module also presents strategies to promote staff buy-in for organizational changes and to positively engage with staff. The module concludes with a discussion of leadership within the context of recruitment and retention, highlighting key resources for recruitment and retention, and recommending strategies to showcase positive culture when recruiting new employees.

<u>Module 2: Leveraging Partnerships</u> demonstrates the immense potential CAHs have to collaborate with other health care providers, schools and colleges, and community-based organizations to address their workforce and other needs. Module 2 discusses strategies for connecting with other organizations to address staffing shortages and emergencies, negotiate rates and purchasing agreements, conduct community health needs assessments, and strategize on quality improvement projects. This module then offers examples of workforce pathway programs where CAHs have partnered with local community colleges and other educational institutions to promote recruitment of health professionals in rural areas.

<u>Module 3: Emergency Medical Services Workforce</u> focuses on recruitment and retention issues specific to rural EMS agencies, including difficulties with reimbursement, rising operational costs, and declining participation among volunteers. The module discusses strategies used by EMS agencies to help individuals access scholarship and grant programs, bolster EMS training, education and exposure, support mental health for those in EMS, and effectively work with volunteers.

<u>Module 4: Administrative and Support Staff Workforce</u> examines current workforce challenges in recruitment and retention of administrative, support staff, and technicians in CAHs and provides resources to help CAHs address challenges within this population. The module discusses strategies to enhance recruitment and retention without raising wages, to decrease barriers of entry into the workforce, and promote employee safety and wellness.

For more information on this toolkit, please contact Robert Barclay, barcl052@umn.edu.

This toolkit was completed by the Flex Monitoring Team with funding from the Federal Office of Rural Health Policy (FORHP), Health Resources and Services Administration (HRSA), U.S. Department of Health and Human Services (HHS), under PHS Grant No. U27RH01080. The information, conclusions and opinions expressed in this document are those of the authors and no endorsement by FORHP, HRSA, or HHS is intended or should be inferred.



REFERENCES

- 1. Supporting Health Care Teams for Today and Pathways for Tomorrow: 22nd Annual Report to the Secretary of the United States Department of Health and Human Services and the Congress of the United States. Advisory Committee on Interdisciplinary, Community-Based Linkages; 2023. https://www.hrsa.gov/sites/default/files/hrsa/advisory-committees/community-based-linkages/reports/acicbl-22nd-report.pdf
- 2. Ratna H. The Coronavirus Pandemic Has Highlighted a Severe Healthcare Staffing Shortage. HPHR. Published 2021. doi:10.54111/0001/GG8
- 3. Alam F. Addressing Workforce Shortages Through Equitable Design of Education and Opportunities. Journal of Science Policy & Governance. 2022;20(02). https://doi.org/10.38126/JSPG200201
- 4. de Vries N, Boone A, Godderis L, et al. The Race to Retain Healthcare Workers: A Systematic Review on Factors that Impact Retention of Nurses and Physicians in Hospitals. The Journal of Health Care Organization, Provision, and Financing. Published online March 13, 2023. https://journals.sagepub.com/doi/10.1177/00469580231159318
- 5. The Complexities of Physician Supply and Demand: Projections From 2021 to 2036. Association of American Medical Colleges; 2024. https://www.aamc.org/media/75236/download?attachment
- 6. Waldman JD, Kelly F, Arora S, Smith HL. The shocking cost of turnover in health care. Health Care Management Review. 2010;35(3):206-211. doi:10.1097/HMR.0b013e3181e3940e
- 7. Jalili M, Niroomand M, Hadavand F, Zeinali K, Fotouhi A. Burnout Among Healthcare Professionals During COVID-19 Pandemic: A Cross-Sectional Study. International Archives of Occupational and Environmental Health. 2021;94(6):1345-1352. doi:10.1007/s00420-021-01695-x
- 8. Critical Access Hospitals (CAHs). Rural Health Information Hub. Published April 25, 2024. Accessed June 12, 2024. https://www.ruralhealthinfo.org/topics/critical-access-hospitals
- 9. Putnam T, King N, Auxier B. Healthcare Leadership and Rural Communities: Challenges, Strategies, and Solutions. Health Administration Press; 2023.
- 10. Bureau of Health Workforce. What Is Shortage Designation? HRSA. Published June 2023. Accessed April 6, 2024. https://bhw.hrsa.gov/workforce-shortage-areas/shortage-designation
- 11. Bureau of Health Workforce. Designated Health Professional Shortage Areas Statistics: Third Quarter of Fiscal Year 2024 Designated HPSA Quarterly Summary. Health Resources and Services Administration; 2024.
- 12. Butler L, Rosenberg ME, Miller-Chang YM, et al. Impact of the Rural Physician Associate Program on Workforce Outcomes. Family Medicine. 2021;53(10):864-870. doi:10.22454/FamMed.2021.563022
- 13. Rains J, Holmes GM, Pathak S, Hawes EM. The Distribution of Additional Residency Slots to Rural and Underserved Areas. JAMA. 2023;330(10):968-969. doi:10.1001/jama.2023.14452
- 14. Gomez LE, Bernet P. Diversity Improves Performance and Outcomes. Journal of the National Medical Association. 2019;111(4):383-392. doi:10.1016/j.jnma.2019.01.006
- 15. Nair L, Adetayo OA. Cultural Competence and Ethnic Diversity in Healthcare. Plast Reconstr Surg Glob Open. 2019;7(5):e2219. doi:10.1097/GOX.000000000002219
- 16. Kayingo G, Bradley-Guidry C, Burwell N, Suzuki S, Dorough R, Bester V. Assessing and Benchmarking Equity, Diversity, and Inclusion in Healthcare Professions. Journal of the American Academy of PAs. 2022;35(11):51-54. doi:10.1097/01.JAA.0000885184.50730.94
- 17. Stermer B. Housing Shortages Are Making Recruitment and Retention Even More Challenging for Some Rural Healthcare Providers. Rural Health Information Hub. https://www.ruralhealthinfo.org/rural-monitor/healthcare-workforce-housing. Published December 13, 2023. Accessed June 12, 2024.
- 18. Taking Stock: Rural Housing. Housing Assistance Council; 2020. Accessed June 12, 2024. https://takingstockrural.org/taking-stock/rural-housing/
- 19. Cantor J, Whaley C, Simon K, Nguyen T. US Health Care Workforce Changes During the First and Second Years of the COVID-19 Pandemic. JAMA Health Forum. 2022;3(2):e215217-e215217. doi:10.1001/jamahealthforum.2021.5217
- 20. Recruitment and Retention for Rural Health. Rural Health Information Hub. Published May 15, 2024. Accessed April 21, 2024. https://www.ruralhealthinfo.org/topics/rural-health-recruitment-retention
- 21. Damian AJ, Porter KP, Matthews KL, Lindo E, Fields S. Health Equity Experts Weigh In: Recommendations for Building Up a Diverse and Inclusive Health Care and Health Services Research Workforce. AcademyHealth. Published October 11, 2023. Accessed April 6, 2024. https://academyhealth.org/blog/2023-10/health-equity-experts-weigh-recommendations-building-diverse-and-inclusive-health-care-and-health-services-research-workforce
- 22. Werner M. Rural Child Care Solutions: From the Ground Up. Center for Rural Policy and Development. Published September 13, 2022. Accessed April 6, 2024. https://www.ruralmn.org/rural-child-care-solutions-from-the-ground-up/
- 23. Yang YT, Mason D. COVID-19's Impact On Nursing Shortages, the Rise Of Travel Nurses, and Price Gouging. Health Affairs. https://www.healthaffairs.org/content/forefront/covid-19-s-impact-nursing-shortages-rise-travel-nurses-and-price-gouging. Published January 28, 2022. Accessed July 11, 2024.
- 24. Gan I. Understanding the Causes and Consequences of Envy Among Nurses: A Scoping Review. Journal of Nursing Management. 2022;30(7): 2825-2832. doi:10.1111/jonm.13695

Appendix

This appendix lists all resources referenced in the above module, organized according to the module headings. This appendix also features additional resources that were not included in the module. Each of the listed resources includes a description and link to the corresponding resource.

General Websites and Resources		
Resource	Description	Link
3RNET	3RNET is funded by the Federal Office of Rural Health Policy (FORHP) to support health care organizations with workforce issues by providing resources such as training, recruitment and retention guides, and technical assistance. Their website includes a health careers job board for employers to post to and an annual educational webinar series for employers to learn about marketing, retention, and recruitment.	https://www.3rnet.org/
3RNET Job Board	This job board, hosted by 3RNET and funded by the Federal Office of Rural Health Policy (FORHP), is one place where CAHs and other rural facilities can post openings for all health care providers and staff, including administrative and clerical staff, technicians and medical assistants, and maintenance professionals.	https://www.3rnet.org/jobs
3RNET Recruiting for Retention Academy	This program provides online training and resources specifically targeted for recruitment and retention of health care workforce in rural areas.	https://academy.3rnet.org/
Bureau of Health Workforce Website	The Bureau of Health Workforce website houses a variety of pages focused on grants for health care facilities, and loan and scholarship programs for health care professionals. It also houses data on workforce shortage areas across the country by profession and geographic area.	https://bhw.hrsa.gov/
Grow Your Own Toolkit – Washington State Department of Health	This toolkit offers strategies to implement homegrown recruitment programs for health care positions in rural areas.	https://doh.wa.gov/sites/default/files/2024-03/609027-GrowYourOwnToolkit-RuralHealth.pdf
Health Workforce Technical Assistance Center (HWTAC)	HWTAC is funded by the Bureau of Health Workforce and offers resources to assist with data and analytic needs in support of health workforce planning. Additionally, HWTAC manages a listserv which periodically sends out health workforce research updates.	https://www.healthworkforceta.org/
Recruitment and Retention for Rural Health Facilities - RHIhub	This webpage provides background information on recruitment and retention of the rural health care workforce and offers some general workforce resources available to CAHs.	https://www.ruralhealthinfo.org/ topics/rural-health-recruitment- retention
Resource Guide for Rural Workforce – U.S. Department of Agriculture	This resource offers strategies for rural communities who wish to build a stronger, more sustainable workforce. It provides support on workforce development planning, infrastructure and equipment financing, industry and employer engagement and local business development, and education/training/apprenticeships.	https://www.rd.usda.gov/sites/default/files/usdard_ruralworkforceguide508.pdf

General Websites and Resources		
Resource	Description	Link
Rural Tools and Resources – American Hospital Association	This webpage lists a myriad of resources, tools, and case examples for rural health care leaders. Some items on this page are more general in nature, but there are several case examples describing rural hospitals' efforts to address workforce shortages.	https://www.aha.org/rural-tools- and-resources
Rural Workforce Innovation Network (RWIN)	RWIN was created by the U.S. Department of Agriculture to establish a collaborative space where public and private partners can connect to facilitate workforce development in rural communities. RWIN offers workshops, networking opportunities, and allows members to share best practices in rural workforce strategies.	https://www.rd.usda.gov/rwin
Staff Sustainability Guide and Toolkit for Rural Health Care Organizations – The National Rural Health Resource Center	This toolkit focuses on the Staff Sustainability Cycle, a model that seeks to enhance retention and engagement of health care staff. It provides strategies rural health care providers can use to address workforce challenges through staff recruitment, onboarding, development, retention, and succession planning.	https://www.ruralcenter.org/ programs/rhptp/staff-sustainability- guide
United States Health Workforce State Profiles	These profiles were created by the Health Services and Resources Administration (HRSA) and provide workforce data on 34 health-related occupations organized by state.	https://bhw.hrsa.gov/data-research/ review-health-workforce-research/ state-profiles
What Is Shortage Designation? – Bureau of Health Workforce	This webpage provides background information on Health Professional Shortage Areas (HPSAs) and discusses implications for health care facilities located in a HPSA.	https://bhw.hrsa.gov/workforce- shortage-areas/shortage-designation
Workforce Webpage – The National Rural Health Resource Center	This webpage provides links to resources focused on recruitment, retention, employee engagement, and potential workforce models, including some activities, resources, and planning tools targeted towards CAHs looking for support on workforce recruitment and retention.	https://www.ruralcenter.org/ resources/toolkits/workforce
Education and Training Resources		
Resource	Description	Link
Addressing the National Rural Health Care Worker Shortage with a Focus on Kindergarten Through 12th Grade Educational Strategies – National Rural Health Association	This policy brief discusses the importance of employing educational strategies in the K-12 setting to inspire and prepare rural students for careers in health care. It also explores the potential to develop partnerships and mentorship programs to overcome barriers and build a sustainable rural health care workforce.	https://www.ruralhealth.us/ getmedia/47a40e1e-e08a-46b8- a0a3-00037dd998f9/2024-NRHA- Rural-Workforce-Pathway-Programs- policy-brief.pdf
Advanced Nursing Education Workforce (ANEW) Program	The ANEW Program, sponsored by HRSA, aims to train primary care nurse practitioners, certified nurse midwives, and clinical nurse specialists, by providing assistance with tuition for trainees in these disciplines.	https://www.hrsa.gov/grants/find- funding/HRSA-23-014
Colorado Health Service Corps	This program provides participants in a range of clinical professions practicing in a Colorado-based HPSA with benefits such as additional training allowance, housing support, and monetary awards to be used for student loan repayment or future educational opportunities.	https://cdphe.colorado.gov/ colorado-health-service-corps

Education and Training Resources		
Resource	Description	Link
Nebraska's Rural Health Opportunities Program and Kearney Health Opportunity Programs	These programs provide full scholarships at participating undergraduate institutions in Nebraska for students committed to practicing in rural areas of the state. Upon completion of undergraduate education requirements, students in these programs are automatically accepted into the University of Nebraska Medical Center to continue their education.	https://www.unmc.edu/rural- health/workforce/index.html
Nurse Education, Practice, Quality and Retention- Pathway to Registered Nurse Program	This program, funded by HRSA, trains already licensed practical and vocational nurses to complete the pathway to an RN.	https://www.hrsa.gov/grants/find- funding/HRSA-23-016
Pre-Medical Opportunity Program – The State University of New York	This program aims to increase diversity in the medical field by taking a cohort of approximately 23 undergraduate pre-medical students, and providing support through mentorship, tutoring, and MCAT preparation.	https://www.suny.edu/attend/ academics/eop/pre-med/
Primary Care Training and Enhancement (PCTE) Program	The PCTE program trains primary care physicians and physician assistants in behavioral and maternal health with the goal of expanding access to these services. This program funds fellowships for physicians and physician assistants practicing primary care in community-based settings.	https://bhw.hrsa.gov/programs/ptce-training-primary-care-champions
Rural Residency Planning and Development (RRPD) Program	This program is funded by HRSA and seeks to expand residency programs and Rural Track Programs for specialties such as family medicine, internal medicine, psychiatry, obstetrics and gynecology, and general surgery.	https://www.hrsa.gov/rural- health/grants/rural-health- research-policy/rrpd
	Student Loan Forgiveness/Repayment Program	s
Resource	Description	Link
Indian Health Service Loan Repayment Program	This program awards up to \$50,000 to eligible health professionals in exchange for a two-year commitment to working within American Indian and Alaska Native communities, many of which are in rural areas. The program can be extended based on the provider's interest in continuing their service.	https://www.ihs.gov/ loanrepayment/
National Health Service Corps (NHSC) Loan Repayment Program	This program offers student loan forgiveness to primary care providers working in the medical, dental, and behavioral health fields. All NHSC participants must work within designated HPSAs that provide outpatient primary care services within the community.	https://nhsc.hrsa.gov/loan- repayment/nhsc-loan-repayment- program
Nurse Corps Loan Repayment Program	This program offers student loan forgiveness to RNs, advanced practice registered nurses (APRNs) and nursing faculty. Participants must commit to serving in a Critical Shortage Facility located in a HPSA for two years or work for two years in an eligible nursing school as a faculty member. The program will pay up to 85% of nursing education debt.	https://bhw.hrsa.gov/funding/ apply-loan-repayment/nurse-corps
Public Service Loan Forgiveness Program (PSLF)	This program forgives any remaining Direct Loan balances held by the U.S. Department of Education after the borrower has made 120 qualifying monthly payments towards one of the PSLF accepted repayment plans.	https://studentaid.gov/manage- loans/forgiveness-cancellation/ public-service

Equity and Diversity in the Workplace		
Resource	Description	Link
Daniel Hanley Center for Health Leadership Health Inequity Training	This organization offers resources to support health care leaders in advancing health equity, including a training on implicit bias.	https://www.hanleyleadership. org/leadership-courses/health- inequity-training/
DEI Webpage – Northern Light Health	This webpage summarizes some of the steps taken by a CAH to increase diversity, equity, and inclusion in their hospital for staff, patients, and community members.	https://northernlighthealth.org/ Our-System/Acadia-Hospital/ For-Medical-Professionals/Acadia- Hospital-Psychiatry-Residency/DEI
Equity Recruitment Toolkit – American Association of Medical College Group on Women in Medicine and Science	This toolkit provides strategies for implementation of inclusive hiring practices in order to achieve health care workforce equity and diversity.	https://www.aamc.org/ media/23651/download
Rural Health Equity Toolkit – RHIhub	This toolkit contains a variety of tips and resources for advancing health equity, including a specific section on "Committing to Building and Retaining a Diverse and Inclusive Workforce to Improve Health Equity".	https://www.ruralhealthinfo.org/ toolkits/health-equity
South Carolina Rural Hospital DEI Learning Collaborative	This initiative provides resources and strategies to support rural hospital leaders in promoting diversity, equity, and inclusion within their facilities.	https://www.z-strategies.com/ rural-hospital-dei-lc
Strengthening the Healthcare Workforce: Strategies for Now, Near, and Far – American Hospital Association	This report includes a section with resources related to recruitment of a diverse hospital workforce.	https://www.aha.org/system/files/media/file/2022/09/Strengthening-the-Health-Care-Workforce-Complete-20220909.pdf
	Quality of Life	
Resource	Description	Link
Affordable Housing Example – Memorial Regional Health	This article outlines a community's efforts to increase housing options, which has frequently been an issue for hospital staff in their community. The hospital transferred land from a site they were no longer using to the City of Craig Housing Authority. The Housing Authority is now utilizing grant funding to develop 20 units of affordable housing that will be available to area residents, including hospital staff.	https://www.ruralhealthinfo. org/rural-monitor/healthcare- workforce-housing
Child Care Example – Wallowa Memorial Hospital	This article outlines how a CAH worked with the operator of an existing child care facility in their community to open a new facility exclusively for use by hospital staff and their families.	https://www.wallowa.com/news/local/hospital-to-open-child-care-facility/article_2b33b890-f92c-11ea-a004-4776266a03d6.html
Hospital Housing Example – Providence Seaside Hospital	To address a lack of housing for hospital staff in their community, CareOregon purchased an unused hotel and plans to create approximately 60 units of new housing, with two-thirds of units reserved for local health care workers. The community hopes that by having these available units for health care workers, the local hospital will be able to recruit and retain workers who have struggled to find affordable housing in the area.	https://www.colpachealth.org/ about-us/news/2023/03/08/ careoregon-purchases-red-lion- inn-suites-in-seaside-increasing- access-to-housing-in-northwest- oregon

Utilizing Advanced Practice Providers		
Resource	Description	Link
Advanced Practice Healthcare Scholarship Program (APHSP) – State of California	The program provides a scholarship of up to \$25,000 to advanced practice providers enrolled in California schools in return for one year working in a direct patient care setting in a designated shortage area within the state.	https://hcai.ca.gov/workforce/ financial-assistance/scholarships/ aphsp/
Primary Care Program: Advanced Practice Clinician (APC) Training Grant – State of Wisconsin	Funds from this grant program are available to plan, implement, or expand existing and new training programs in Wisconsin hospitals or clinics.	https://www.dhs.wisconsin.gov/primarycare/apc-grant.htm
	Physician Workforce	
Resource	Description	Link
The Complexities of Physician Supply and Demand: Projections From 2021 to 2036 – Association of American Medical Colleges	This report includes projections for the U.S. physician workforce broken down by specialty. It also provides background on the physician workforce and identifies key predicted shortage areas.	https://www.aamc.org/media/ 75231/download?attachment
Midwest Retention Toolkit	This toolkit includes resources and strategies to support Midwestern National Health Service Corps sites with the retention of providers.	https://www.health.state.mn.us/facilities/underserved/recruit/docs/toolkit.pdf
Retention of Physicians and Surgeons in Rural Areas – What Works?	This article summarizes key factors and strategies associated with retention of physicians in rural communities.	https://pubmed.ncbi.nlm.nih. gov/32140721/
Rural Physician Recruiting Challenges and Solutions	This white paper explores challenges and solutions associated with recruitment of physicians in rural communities.	https://www.ihaconnect.org/ news/Documents/4-27%20News/ mhawhitepaper%204-27%20 news.pdf
Rural Practice, Keeping Physicians In	This paper discusses best practices in recruitment of rural physicians based on the findings from academic literature.	https://www.aafp.org/about/ policies/all/rural-practice-keeping- physicians.html
Toolkit for Recruitment and Retention of Primary Care Physicians in Rural Areas – National Organization of State Offices of Rural Health (NOSORH)	This toolkit provides resources to rural health care facilities for addressing workforce challenges. It lists key federal resources related to physician workforce and provides examples of state activities and programs targeting recruitment and retention of physicians.	https://nosorh.org/wp-content/ uploads/2015/03/Recruitment- and-Retention-Toolkit-Draft.pdf

Nursing Workforce		
Resource	Description	Link
2022 National Sample Survey of Registered Nurses Snapshot – Bureau of Health Workforce	This document summarizes key statistics related to the U.S. registered nurse workforce, plus projections for future challenges associated with this workforce.	https://bhw.hrsa.gov/sites/default/files/bureau-health-workforce/Nurse-Survey-Fact-Sheet-2024.pdf
Advanced Nursing Education Workforce (ANEW) Program	The ANEW Program, sponsored by HRSA, aims to train primary care nurse practitioners, certified nurse midwives and clinical nurse specialists, providing assistance with tuition for trainees in these disciplines.	https://www.hrsa.gov/grants/find- funding/HRSA-23-014
Building a Rural Nursing Workforce with Fisher- Titus Medical Center	This podcast episode includes leaders of a hospital in rural Ohio discussing their success in recruiting international nurses to address shortages in their community.	https://www.aha.org/advancing- health-podcast/2023-08-23- building-rural-nursing-workforce- fisher-titus-medical-center
Nurse Education, Practice, Quality and Retention-Pathway to Registered Nurse Program	This program, funded by HRSA, trains already licensed practical and vocational nurses to complete the pathway to an RN.	https://www.hrsa.gov/grants/find- funding/HRSA-23-016
Rural Nursing Recruitment & Retention Program (RNRR) – Texas Department of Agriculture	This program supports rural health care facilities in recruitment and retention of nurses through financial stipends.	https://texasagriculture.gov/ Grants-Services/RNRR
	Mental and Behavioral Health Workforce	
Resource	Description	Link
2023 Behavioral Health Workforce Brief – HRSA	This brief summarizes key issues related to the U.S. behavioral health workforce, including challenges specific to rural communities, projected shortages, and rural access to care.	https://bhw.hrsa.gov/sites/default/files/bureau-health-workforce/Behavioral-Health-Workforce-Brief-2023.pdf
Recruitment and Retention of Mental Health Care Providers in Rural Nebraska: Perceptions of Providers and Administrators	This article presents findings from focus groups with hospital administrators and mental health providers in Nebraska. Focus group participants discussed several potential strategies to address provider shortages, including expansion of rural-specific training opportunities, loan repayment programs, and other financial incentives.	https://pubmed.ncbi.nlm.nih. gov/26567807/
Workforce Considerations for Rural Mental Health Programs – RHIhub	This webpage within RHIhub's Mental Health in Rural Communities Toolkit addresses key considerations for rural health care facilities related to recruitment and retention of mental health care providers.	https://www.ruralhealthinfo.org/ toolkits/mental-health/4/workforce