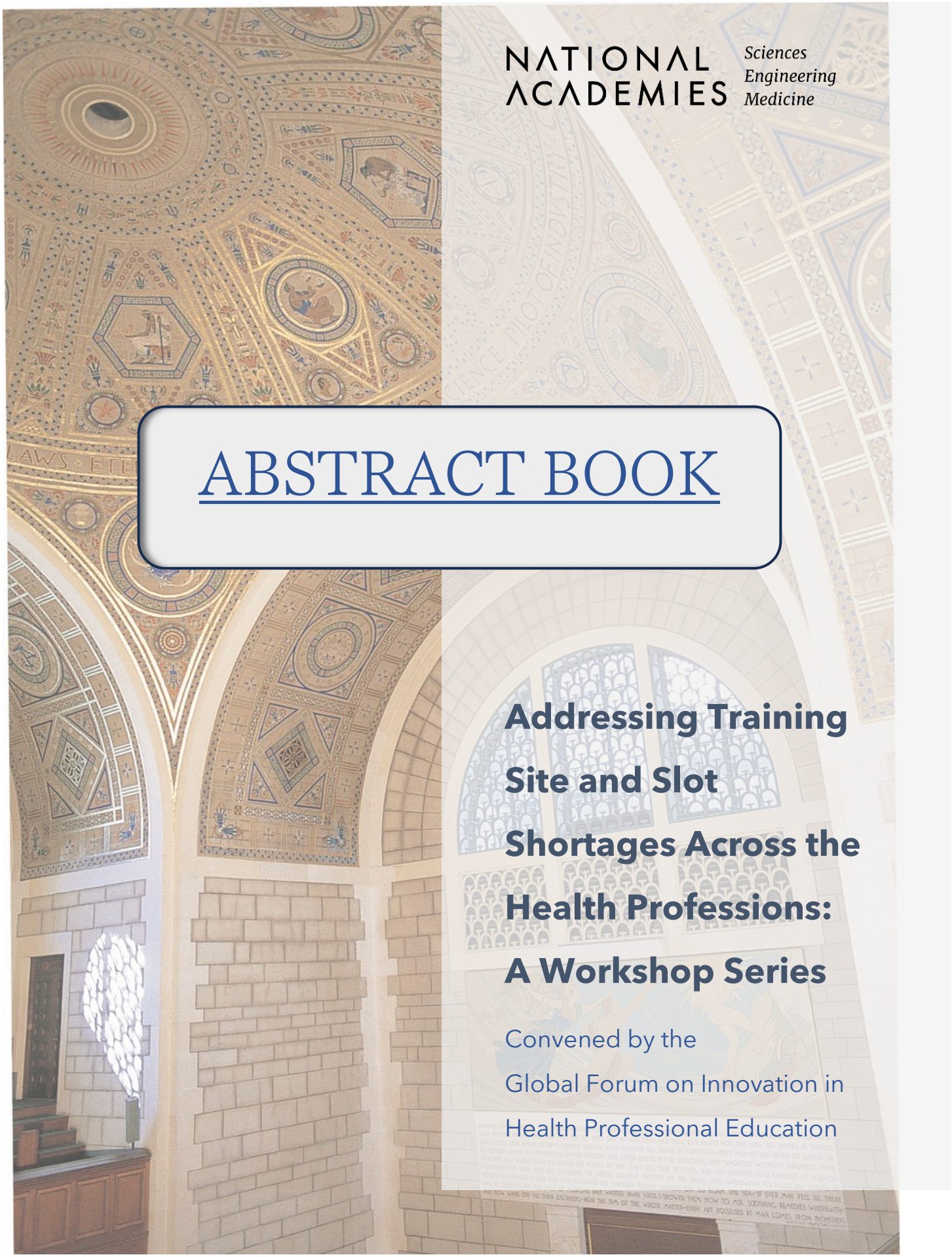

NATIONAL ACADEMIES Sciences Engineering Medicine

ABSTRACT BOOK

Addressing Training Site and Slot Shortages Across the Health Professions: A Workshop Series

Convened by the
Global Forum on Innovation in
Health Professional Education

CONTENTS

Workshop Series Dates

Session I August 28, 2025 | 12-2pm ET	Virtual
Session II September 10, 2025 | 12-2pm ET	Virtual
Session III October 15, 2025 | 4-6pm ET	Hybrid National Academies Keck Room 100 500 Fifth St. NW Washington, DC 20001
Session IV October 16, 2025 | 9-12pm ET	

Workshop Statement of Task

A planning committee of the National Academies of Sciences, Engineering, and Medicine will organize a public workshop series to explore shortages of clinical/experiential learning environments across health professions. Presentations will be framed around understanding the value of quality clinical/experiential education in the development of health professionals, root causes of site and slot shortages that differ by profession, and impacts the issue has on student learning, employer satisfaction, patient care, and population health. Discussions of innovative solutions to these challenges may draw upon a global audience for participation. The committee will select speakers and facilitators to moderate discussions throughout the series. These discussions could include exploring:

- Current and alternative training and preceptor models;
- Policy and finance considerations;
- Accreditation requirements;
- Clinician wellbeing and minimizing burnout of preceptors;
- Preceptor incentives;
- New academic-practice partnerships; and
- Technology/simulation to support clinical education

Following the series, a proceedings-in-brief of the presentations and discussions will be prepared by a designated rapporteur in accordance with institutional guidelines.

ABOUT

The National Academies of Sciences, Engineering, and Medicine's Workshop Planning Committee on *Addressing Training Site and Slot Shortages Across the Health Professions* invited concept submissions highlighting programs or innovations designed to expand access to high-quality clinical and experiential training placements. A multi-reviewer process was used to identify submissions that met this goal. Authors of the selected concepts were then invited to submit full abstracts of up to 500 words.

Submissions from a variety of health professions that each demonstrated characteristics of scholarly work (e.g., clear purpose, rigorous evaluation, sustainability, potential for scale or dissemination) and offered learning opportunities across one or more health professions, were further invited to create recorded presentations for inclusion on our Project Activity Page. In addition, some of the authors whose abstracts described effective strategies for overcoming challenges in expanding high-quality clinical and experiential training placements were invited to share their experiences during the workshop on October 15–16, 2025, convened by the Global Forum on Innovation in Health Professional Education.

Forum Staff:
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* Recorded presentations are available on the Forum's Project Activity Page

Abstracts

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VA Southern Nevada Healthcare System
Roseman University College of Dental Medicine

Addressing Training Site and Slot Shortages Across the Health Professions

The collaboration between Roseman University College of Dental Medicine and VASNHS represents the first partnership of its kind in the nation. This innovative program was designed to address two critical needs: improving access to dental care for dental eligible veterans while also providing quality clinical training and supervisory capacity for dental education. Through this collaboration, veterans are able to receive comprehensive dental services in Roseman's state-of-the-art clinical space, while Roseman students and residents gain valuable real-world experience under VA oversight.

Program Description: The program establishes a shared clinical model in which VA patients are treated in Roseman facilities, expanding care capacity beyond the VA's existing infrastructure. This model not only improves veterans' access to timely, high-quality dental care, reduces wait times for our veterans, and increases geographic accessibility; but also creates a robust teaching environment where Roseman faculty and VA providers collaborate in supervision and training. For Roseman, the partnership enhances clinical learning opportunities and ensures students/residents are better prepared for complex patient care. For the VA, it helps offset access and space shortages by leveraging Roseman's facilities.

Evaluation: Although the partnership has not yet launched, it includes a clear evaluation framework. Anticipated measures include increased numbers of appointments for veterans, reduced wait times, and expanded clinical experience for Roseman students/residents. Additional evaluation will assess student/resident satisfaction, quality of clinical outcomes, and faculty feedback to ensure the collaboration meets its dual mission of enhancing veteran care and advancing education.

Spread/Scale: The program has significant potential for replication at other academic institutions and VA systems nationwide. The framework is adaptable not only across

dental programs but also to other health professions where clinical training sites and access to care are limited. By demonstrating proof of concept, this partnership provides a roadmap for how academic and federal health systems can co-create solutions that serve both patients and learners.

Funding and Sustainability: This collaboration operates under a no-cost agreement between the VA and Roseman University as an affiliated school. The VA benefits by expanding access to care for veterans without incurring additional facility or infrastructure costs, while Roseman benefits from increased clinical training opportunities for its students and residents. Because the model is built on shared resources and mutual benefit, it has a strong likelihood of long-term sustainability and serves as a replicable framework for other VA - Academic partnerships.

Personal Observations: Lessons learned underscore the importance of flexibility and transparent communication across institutional cultures. Aligning VA processes with academic calendars and clinical structures required significant planning, but the mutual commitment to serving veterans made progress possible. One of the greatest takeaways has been the recognition that partnerships of this nature not only solve logistical challenges, such as access shortages, but also create meaningful, lasting impact for veterans and future dental professionals alike. This first-of-its-kind collaboration demonstrates that when academic institutions and the VA come together with a shared mission, the result is stronger healthcare, enriched education, and a sustainable model for addressing national needs.

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Virginia Commonwealth University
Yale University

The Precepting to Optimize Development (POD) Model

Program Description: The Precepting to Optimize Development (POD) model is an innovative interprofessional approach to clinical education designed to address the challenge of finding high-quality clinical placements for nurse practitioners and PharmD students. The POD model uses a 1:2 preceptor-to-student ratio and consistent teams of preceptors, students, and faculty that remain together for the duration of the student's academic clinical experiences. Preceptors supervise two students each clinical day. Students initially see patients together as a dyad and then transition to seeing patients independently, while remaining assigned to the same clinical site. One site in the VCU POD includes a dyad experience with PharmD students and both a PharmD and NP master-clinician-faculty. The preceptors oversee student progress to ensure a comprehensive clinical experience. The master-faculty-clinician also serves

as a preceptor, allowing real-time observation of student progression. Regular meetings with the master-faculty-clinician and preceptor team include curated training using the Stanford Framework for Clinical Teaching, discussions on student progression, precepting challenges, and team building activities. Students engage in standard curricular seminar group meetings. The POD model addresses preceptor shortage by deeply engaging preceptors in a learning community, enhancing academic engagement with clinician preceptors, and providing longitudinal structure and support for faculty, preceptors and students.

Evaluation: Mixed method evaluation data were collected. The null hypothesis, the POD model will have no effect on student graduation or board passing rates, was supported. POD students had graduation and certification board passing passing rates comparable to students receiving traditional education. Preceptor retention was measured. Themes uncovered through student focus groups included: PODs provide a safe learning environment, growth mindset, "everyone teaches, everyone learns" and teaming culture. Preceptor specific highlights: increased sense of engagement, responsibility and belonging; and seeing the fruits of their labor.

Spread/Scale: The success of the interdisciplinary model with PharmD and its replication with a second school show its scalability. Initial planning and implementation are labor-intensive, requiring curated preceptor training, schedule coordination, and additional support.

Sustainability relies on a motivated faculty champion to maintain the model's infrastructure and processes. Funding Source: The original feasibility study received internal funding from Virginia Commonwealth University (VCU). The replication study received internal funding from Yale University. No funding was required for sustaining the POD clinical model at either VCU or Yale.

Personal Observations: Preceptors observed and contributed to student growth, enhancing their work satisfaction. Initially, dyads provided student comfort; later, students learned by discussing cases and observing each other. Through longitudinal interactions, preceptors became more engaged and connected with the students. Preceptors were not overwhelmed by supervising multiple students from different schools and found no negative impact on preceptor productivity. Challenges included dyad personality dynamics and relational dynamics between preceptors and students. Focus groups addressed these issues, with both preceptors and students viewing them as valuable growth opportunities.

Kenya Beard, EdD AGACNP-BC ANEF FAAN FADLN
Sindy Louisma, MPA

Mercy University

The Health Equity Influencer Program: A Dual Approach to Addressing Placement Shortages and Improving Health Outcomes

Program Description Nursing students can create and advance conditions where everyone has an opportunity to attain their full health potential. However, clinical placement shortages threaten this endeavor by limiting opportunities for students to gain the critical experiences they need. Nursing students are an untapped resource with the potential to reshape the health equity landscape. However, clinical education must evolve to prepare students in new settings and innovative ways that lessen competition for sites while improving health outcomes. One of the most impactful innovations in clinical education at Mercy University School of Nursing is the Health Equity Influencers Program (HEIP, pronounced "hype"), an ecosystem that expands placement capacity while advancing health equity. HEIP in acute care (HEIP-AC) and community (HEIP-C) settings, strategically immerses nursing students in real-world environments where they improve patient safety and community health outcomes. In hospitals, faculty and students collaborate with staff on safety measures such as fall prevention. In the community, HEIP places students where people live, shop, learn, and pray. Students host "health equity tables" in high-traffic spaces like supermarkets and malls. In partnership with the American Lung Association, students initiate conversations about asthma prevalence, listen to experiences, ensure that everyone who has asthma or knows someone with asthma has an action plan, and teach about rescue inhalers.

Evaluation: HEIP-AC strengthened interdisciplinary collaboration and prioritized fall prevention. Notably, no falls occurred among high-risk patients assigned to nursing students. The program's acute care impact was recently published in Nurse Leader in the article, How Forward-Thinking Leaders Advance Patient Safety: The Health Equity Influencer Program at an Acute Care Setting. HEIP-C facilitated student engagement with 300+ community members weekly. Students explained and disseminated asthma action plan templates and increased recognition of rescue inhalers. Students reported enhanced communication skills, clinical judgment, and chronic disease management knowledge, as well as a deeper understanding of their role in promoting health for all.

Spread/Scale: HEIP's framework is adaptable to different regions, health professions, and clinical environments. Built on strategic partnerships, AWARETM Patient Safety Program for Clinical Nursing and Education (fostering recognition and addressing of assumptions), quality improvement integration, and community engagement, HEIP can be tailored to address other health priorities (hypertension, diabetes, and opioid abuse).

Funding Source: The HEIP-C is funded by the Phelps Community Foundation and receives in-kind contributions from partners, including the American Lung Association.

The HEIP-AC was funded by the Josiah Macy Jr. Foundation President's Grant. Current funding and strong partner engagement secure short-term sustainability, with efforts underway to integrate HEIP into institutional budgets and expand partnerships for long-term viability.

Personal Observations: HEIP's outcomes are measurable and impactful. One student recounted a supermarket customer thanking her for discussing asthma action plans; saying her late daughter might still be alive if she had one. Beyond compelling reasons to broaden HEIP's impact, lessons learned include aligning nursing education with partner priorities, investing in strong clinical coordination, and balancing academic requirements with the community's healthcare priorities. Despite logistical challenges, embedding HEIP into clinical education increased clinical placement sites while improving health outcomes.

Ashley Cassel, PT, DPT, OCS

Veterans Administration

Expanding Primary Care Physical Therapy Training Opportunities

Early intervention for Physical Therapy (PT) improves function and patient satisfaction while reducing costs and opioid prescriptions.4 Musculoskeletal complaints in primary care often lead to increased imaging, specialist referrals, and pain medication use. The Department of Veterans Affairs (VA) has been integrating PTs into primary care patient aligned care teams (PACT), especially in rural areas. A study of 206,775 Veterans demonstrated that primary care physical therapy significantly increased PT visits, reduced imaging use, and decreased opioid prescriptions.

Outside the VA, evidence supports the integration of PT as a first-contact provider in primary care for musculoskeletal disorders, showing benefits in resource utilization, patient satisfaction, and comparable clinical outcomes to physician-led care.1-9 Recognizing the importance of this model, the APTA 2025 House of Delegates has designated Primary Care Physical Therapy (PCPT) as a recognized specialty practice. Applications for residency programs through the American Board of Physical Therapy Residency and Fellowship Education (ABPTRFE) will open in Fall 2025, with training set to begin in 2026.

The VA has two programs applying for ABPTRFE candidacy to start PCPT residency programs in 2026. With over 85 VA healthcare systems integrating PT in primary care and funding support from the Office of Academic Affiliations (OAA) for approved programs, there is significant potential to expand primary care residency training opportunities. With PCPT recently established as a recognized area of specialty practice, it is anticipated that community hospitals and clinics outside the federal system will also begin offering PCPT residency training opportunities.

This initiative will provide interdisciplinary training at both the entry-level clinical rotation and post-professional residency program levels, aiming to train and retain a

highly qualified workforce. This development supports the broader implementation of embedded PTs in primary care across the VA system, and ensures that PTs are well-equipped to handle the complexities of primary care, ultimately leading to improved patient outcomes and more efficient use of healthcare resources.

Edward Co, DO, FACP

VA of Southern Nevada
Kirk Kerkorian School of Medicine at University of Nevada Las Vegas

Addressing training site and slot shortage across the health professions

Program description: With the support of the academic affiliate, I have developed an innovative solution to address shortages in clinical placements while simultaneously enhancing resident education and reducing burn out. Our internal medicine residency functions with an X+Y schedule (x – inpatient weeks and y – outpatient week). During each Y week, we designate an "alert resident". This individual not only manages their own continuity clinic but also responds to all outpatient alerts on behalf of their co residents who are on their X (inpatient) rotations. This dual responsibility mirrors the real-world balance of outpatient practice, where physicians must manage scheduled visits while also addressing incoming patient messages. This approach allows inpatient residents to focus fully on their inpatient training, and In effect, the alert resident functions much like an independent primary care physician (with attending oversight), triaging/managing patient concerns, coordinating care, and ensuring continuity. Reviewing and responding to alerts reinforces effective documentation, sharpening clarity and efficiency within the medical record. It cultivates strong time management skills, as residents learn to prioritize and address competing demands, further supporting the transition into independent practice. By the end of residency, all trainees experience the demands/responsibilities of a front-line outpatient physician within the VA system. This structure not only prepares residents for independent practice but also encourages confidence in pursuing careers in the VA healthcare system, addressing shortages in this critical workforce.

Evaluation: Program evaluation is built into the workflow. The volume of alerts completed by each resident can be tracked, along with timeliness of response. These metrics can then be compared to non-teaching primary care physicians, allowing the program to assess both resident progress and system impact. Monitoring these outcomes creates opportunities for feedback, targeted teaching and continuous improvement in efficiency and quality of care.

Spread and scale: This model is highly adaptable and could be easily implemented across other VA teaching clinics that use an X + Y schedule. With collaboration from clinic administrative teams, the alert resident role can be replicated without significant structural changes. The model represents a scalable, low-cost strategy to optimize both clinical training and patient care across the VA system and potentially in other academic settings.

Funding: No additional funding is required for implementation. Expansion relies primarily on dissemination through professional networks and peer-to-peer sharing of best practices. The model capitalizes on existing structures and personnel making it sustainable and cost neutral.

Personal observations: Residents consistently describe the alert resident role as one of the more challenging aspects of their ambulatory training, yet their feedback is overwhelmingly positive. They report feeling better prepared for independent practice, more confident in managing high volumes of clinical communications and more attuned to the real world demands of outpatient medicine. From the perspective of patients and the health system, this model has enhanced care continuity, responsiveness, and patient satisfaction. Ultimately the alert resident model fosters stronger, more comprehensive training while simultaneously supporting workforce development in primary care.

Denise Cochran, MSN, CNM
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Georgia College & State University

Implementing a Physiologic Labor Support Simulation in an Undergraduate Nursing Program

Fifty percent of undergraduate Baccalaureate Nursing students at a southeastern United States university expressed dissatisfaction with their obstetric clinical rotation due to limited clinical time and experiences on labor and delivery units. This data, collected from senior practicum students between the years 2020 and 2024, motivated the Principal Investigators (PI) to develop and implement a labor simulation into the Undergraduate nursing program as their Doctor of Nursing Practice (DNP) project. Graduating practicum students reported that their experiences were inadequate to determine if they would like to pursue the labor and delivery specialty after graduation. This sentiment is echoed by multiple researchers who state that many undergraduate nursing students leave obstetric courses without having seen a birth. Additionally, students are often not taught methods to support a woman in physiologic (spontaneous onset, no intervention, resulting in vaginal birth) labor, as high-risk situations are the focus, and technology utilized in obstetrics is discussed over physiologic labor support. Therefore, nurses on labor and delivery units are unprepared to provide adequate support to patients in physiologic labor.

Program Description: To address the lack of clinical sites in this rural state and to enhance student clinical experience, the PIs are implementing a labor support simulation into the undergraduate nursing curriculum. This NLN-created simulation is being introduced in the Fall 2025 semester. Clinical questions for the DNP project include evaluating knowledge gained, confidence and satisfaction in learning, and self-efficacy. Students enrolled in the obstetric course will complete the simulation experience as part of the clinical hours for the semester; participation in study questions is optional. Simulated Participants (SP) are trained to act as a patient in

physiologic labor, a support person, and a Midwife. Two nursing students will participate in the simulation, where labor support is provided to the patient. INACSL's standards of best practice guidelines are used throughout simulation design and implementation.

Evaluation: Several evaluation tools are available to measure knowledge, confidence and satisfaction in learning, and self-efficacy. This project uses author-created tools and existing instruments that have well-documented reliability and validity. Author-created instruments include a demographic survey and a pre- and post-module knowledge quiz. Existing instruments include the Self-Confidence and Learning Satisfaction scale, the Creighton Competency Evaluation Instrument, and the General Self-Efficacy scale.

Spread/Scale: This simulation is transferable to any undergraduate nursing program that utilizes simulation. It can also be used to train labor and delivery orientees who may have no experience supporting a woman in physiologic labor.

Funding Source: Additional funding needs over faculty and staff workload amounts are minimal for a nursing program that currently utilizes simulation. Practicum student volunteers are trained as SPs and receive clinical hours and valuable learning experiences. This significantly reduces the cost of the simulation.

Personal Observations: Initial interest and responses from practicum and obstetric students are overwhelmingly positive. By providing an alternative experience, the PIs desire to increase student satisfaction and learning while creating holistic, well-rounded graduates and potentially inspiring careers in women's health.

Ann Gaba, EdD

City University of New York, Graduate School of Public Health and Health Policy

CUNY Simulated Hospital Unit

The CUNY Simulated Hospital Unit was developed as a 10-bed virtual general-medicine unit to introduce dietetic interns to clinical practice. Having virtual practice before clinical placements can facilitate rapid integration into practice settings and make the time spent there more effective. The basic characteristics of simulated patients and staff were determined by rolling multi-sided dice typically used in fantasy gaming. These characteristics then formed the basis for each character's back story. That information was revealed in the simulated conversations, as well as in the social work notes in the simulated EMR. Names were derived from an online random name generator. Each character was then placed into a situation where they found themselves admitted to the hospital with a particular medical diagnosis, as well as one or more randomly selected comorbidities. They were then randomly assigned to meet with 2 of the simulated staff, 1 MD and 1 RD. Once these basic scenarios were set up, encounters were scripted and then rendered as animated short videos. The videos were closed captioned to be compliant with the Americans with Disabilities Act.

Evaluation: Assessment of the simulation was carried out using a mixed-methods approach. This included a participant questionnaire with both closed- and open-ended questions, data usage "hits" from tracking software in the course pages, and post hoc key informant interviews with participating faculty. Overall results showed that students were highly engaged with the simulation and that it was regarded favorably by both students and faculty. Details of the evaluation were published by Gaba et al. (Topics in Clinical Nutrition Vol. 38, No. 2, pp. 133–143.)

Spread/Scale: As a virtual simulation, the CUNY Simulated Hospital Unit can be utilized asynchronously to be accessible to a wide range of programs. While the current iteration is focused on dietitians and physicians, characters representing other disciplines could be added. Since the voices are computer generated and the videos are captioned, they could potentially be rendered into languages other than English.

Funding Source: Funding for creation and evaluation of this simulation was provided through internal grants by the City University of New York to the first author. It continues to exist in the form in which it was evaluated, located on a server at the CUNY School of Public Health. It will remain in its current location for as long as it continues to be needed and useful in the Dietetic Internship.

Personal Observations: Training via simulation can bridge the gap between didactics and practice. It can offer experiences tailored to include patients and diseases that may not be available in on-site clinical settings. It allows students to learn remotely, making practice experiences more accessible. These are also repeatable in ways that are not possible with live patients. By gaining basic skills through a simulation of practice, students begin real-world practice at a higher level of functioning, with a more consistent level of preparation, and can carry their practice understandings forward into professional roles.

Amber Heimberger, DNP, RN, CNE

Missouri Baptist University

Redefining the Senior Practicum: The Earn as You Learn Program as a Solution to Clinical Placement Shortages

Background: The transition from nursing student to professional practice requires intentional, high-quality clinical experiences. Traditional senior practicum placements often assign students to units based on availability rather than preference, resulting in limited alignment with long-term career goals and challenges in workforce retention. To address this gap, an "Earn as You Learn" (EAYL) program was piloted in 2019, designed to integrate clinical education with workforce development pipelines.

Intervention: In collaboration with a local hospital, the EAYL program allowed students to interview for preferred units and be hired as Nurse Externs. Participants completed 168 senior practicum hours one-on-one with a registered nurse preceptor while being

paid for their clinical shifts. In exchange, students agreed to work on the same unit for at least six months post-graduation. Unlike traditional placements, the EAYL model ensured alignment between student career goals and hospital workforce needs. The program required no financial investment from the university, as hospitals funded student wages through Nurse Extern positions.
Results: The program addressed shortages in both the quality and availability of clinical placements while simplifying practicum coordination. For the School of Nursing, the EAYL model significantly reduced the burden of securing practicum sites by shifting placement responsibility from faculty-driven assignments to a structured hospital-based hiring process. Hospitals reported reduced turnover and orientation costs due to extended onboarding time during the practicum period. In the first cohort (n=17), the hospital estimated $20,000 in orientation cost savings; in the second year (n=8), the savings totaled approximately $9,000. While broader data across multiple hospitals are not available, metrics from the pilot group suggest improvements in retention and cost efficiency.

Scale: Following the pilot, the model scaled rapidly; within two years, nearly every major hospital in the region implemented a version of EAYL, recognizing its value as a recruitment and retention strategy. Hospitals that did not participate faced disadvantages in attracting new graduates.

Lessons Learned: Implementation required time for each hospital to develop and refine its own processes for adopting the EAYL model, with procedures often evolving every six months as hospitals adjusted criteria. While institution-specific tailoring allowed for flexibility, the lack of consistency across hospitals occasionally created challenges for faculty and students. Greater standardization would enhance efficiency and ensure smoother scaling of the program. From the academic perspective, EAYL streamlined the placement process and deepened partnerships with healthcare systems. For hospitals, the program offered a measurable return on investment and strengthened workforce pipelines.

Conclusion: The Earn as You Learn program represents a scalable, innovative model that bridges academia and practice to prepare practice-ready graduates while addressing nursing workforce shortages. By enhancing the quality of clinical placements, aligning educational experiences with student career goals, and reducing orientation costs for hospitals, EAYL demonstrates the potential of academic–practice partnerships to transform nursing education and workforce readiness.

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Valparaiso University College of Nursing and Health Professions

Immersive Virtual Reality Simulation Pilot Study in Undergraduate Nursing

Program: During the 2024-2025 academic year at a private university in the Midwest, we conducted a pilot study implementing an immersive virtual reality simulation (IVR-sim) program for undergraduate nursing students. IVR-sim is an engaging, innovative teaching method that places the student at the center of a three-dimensional environment using a head-mounted display (HMD) and hand controllers. While we ran our IVR-sims with only nursing students, IVR-sims have the potential to engage a variety of healthcare professional students from various locations, as the student only needs a headset, controllers and an internet source to join a scenario alone or with others.
Evaluation: Our IVR-sim process was designed following the Healthcare Simulation Standards of Best Practice® (HSSOBP) (INACSL, 2021), including a prebrief, scenario facilitation, and a debrief. Sessions lasted two hours and involved eight students. Students arrived having completed a preparatory assignment. The IVR-sims used a dual-run method: half of the students participated directly with head-mounted displays (HMDs), while the other half observed the session on a large monitor. After about 20 minutes, the groups switched roles and the same scenario was repeated.

Spread/Scale: 150 pre-licensure nursing students participated in IVR-sims aligned with their courses, then completed voluntary surveys consisting of the System Usability Scale (SUS) (Brooke, 1996) and the Simulation Effectiveness Tool-Modified (SET-M) (Leighton et al., 2015). Of the 141 responses, SUS results supported "good" usability (M = 74.5) (Bangor et al., 2008). On the SET-M, the majority of students reported increased confidence in clinical decision-making, prioritization, and communication, and most strongly agreed that prebriefing and debriefing contributed to their learning. They described the experience as realistic and engaging, suggesting more frequent access despite minor issues such as motion sickness, limited hands-on practice, and occasional technical challenges. After reviewing pilot study results, our college's Undergraduate Nursing Curriculum and Evaluation Committee voted to include an IVR-sim in every clinical nursing course within our BSN program. IVR-sims were run at the end of the semester to make up for missed clinical experiences that students could not complete in the clinical setting for various reasons.

Funding: Initially our IVR-sim equipment and subscription was funded by a Health Resources and Services Administration grant. Our college owns the equipment and will renew the software subscription, which breaks down to about $50 per student, making it highly sustainable.

Observations: These IVR-sims supplement inpatient and outpatient clinical experiences and traditional simulations, but could be used in shortage areas by various healthcare professional students. IVR-sims require less faculty involvement, minimal space, and less time for setup and cleanup than traditional simulations. Some IVR-sim programs allow students to independently complete scenarios. IVR-sim allowed us to engage students in specialty areas that are difficult to place students in, as well as opportunities to participate in rare but critical clinical situations, such as caring for patients experiencing seizures, mental health crises, or mass casualties. We view IVR-sims as innovative opportunities to help healthcare students practice and strengthen

their clinical judgment skills in safe environments, preparing them for the complexities of modern healthcare.

Shiloh Jordan, PhD, ABPP

VA Pacific Islands Health Care System

Using Technology to Address Care Challenges and Improve Clinical Supervision Practices

Program: Rural populations experience health disparities that are exacerbated by a lack of trained health care professionals and services.1,2 The quality improvement project examined the use of telesupervision (clinical supervision via synchronous audio-video format) in eleven rural and one urban U.S. Department of Veterans Affairs (VA) psychology internship and postdoctoral training programs. Telesupervision was used to expand clinical placements, provide clinical expertise in specialized areas, and increase resources in locations of supervisory shortage. The project utilized a competency-based supervision framework to (a) provide structure and support (e.g., training on clinical supervision and a checklist tool for implementation), and (b) develop and evaluate a quality assurance system (Competency-based Assessment Reporting for Effective Supervision; CARES) to monitor and support supervision practices. Measurement was conducted via monthly online questionnaires completed by trainees and supervisors, as well as quarterly queries from training directors. Measured elements included frequency of direct observation, access to supervisors, addressing learning goals/needs, multicultural practice, engagement in experiential supervision, supervision relationship, monitoring patient progress, patient safety, and the impact of telesupervision use on rotations/clinical opportunities. Thus, the project created and measured a structured approach for telesupervision implementation, as well as a systematic way to measure quality of supervision within training programs.

Evaluation: Over three training years,154 supervisors and 105 trainees completed 3,196 monthly questionnaires representing 416 mental health rotations. Most important, the findings documented the successful implementation of telesupervision. Elements of quality supervision were present in the majority of sessions, with some variability. No safety or quality of care deficiencies were identified in the use of telesupervision, with several identified benefits. Further, use of a checklist of key supervision elements improved supervision session content and quality of working alliance. Across the training programs, 67 of 182 (36.8%) of all rotations were implemented due to the use of telesupervision. Sites further reported an increase in patients served and involvement of supervisors not located at the main training site.

Spread/Scale: The project procedures and outcomes are applicable to other health care disciplines and training programs. The project telesupervision implementation elements provide a format for successful telesupervision, while the supervision checklist provides a low-cost and low-effort tool to support session content. The

CARES system measures the quality and safety of supervision from the perspective of the supervisor and trainee, with the option to scale according to program needs

Funding Source: The project is funded by the U.S. Department of Veterans Affairs (VA) Office of Rural Health, PROJFY-008358, and conducted in collaboration with the VA Office of Academic Affiliations. The project's developed resources and outcomes can be used in part or in whole by other training programs and disciplines to implement this innovation.

Personal Observations: Multiple challenges exist to implement effective supervision, with supervisor competency and allocated time for supervision being paramount. Further, the type of supervision modality should match the clinical intervention and trainee learning need. This project provides a multi-dimensional evaluation of supervision processes and outcomes. Thus, knowledge gained is applicable to telesupervision and broader supervision practices.

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UT San Antonio Health Science Center

A Clinic Without Walls: Expanding Clinical Learning Environments Through Community-Based Partnerships

Program Description: Traditional graduate-level speech-language pathology programs follow a campus-based clinic model. The Clinic Without Walls program was designed to meet facility, funding, and personnel barriers by establishing an innovative approach to meet clinical placement needs. It provides unique and beneficial opportunities for graduate-level clinicians without compromising hands-on clinical learning. This model serves two purposes; it provides rich clinical experiences for graduate student clinicians in speech-language pathology and provides needed services to communities impacted by the social determinants of health (SDOH). The Clinic Without Walls program addresses clinical site shortages by establishing summer clinical placements embedded within community-based locations (e.g., under-resourced housing organization, Down Syndrome Association, and donated church facilities). Graduate SLP students provide screenings, prevention, intervention, and caregiver training directly within the community, eliminating transportation barriers and access to healthcare, while expanding training opportunities for graduate clinicians. This non-traditional model strengthens cultural responsiveness and can be adapted for other health professions to address placement shortages in diverse, underserved communities.

Evaluation: Clinical competencies are consistently assessed throughout all practicums whether community or traditional clinic-based practicums. Additional graduate clinician outcomes are measured through pre- and post-program self-assessments in areas such as cultural responsiveness, social determinants of health

knowledge, and clinical confidence when working with lower socioeconomic populations. Participant outcomes include descriptive statistics, screening and intervention results, and caregiver participation. Data indicate consistent gains in graduate clinician and participant outcomes across the variety of community programs.

Spread and Scale: This program is easily adaptable for any profession that requires clinical experience and could be easily replicated with a variety of community partnerships (e.g., housing organizations, local nonprofits, etc.). Programs such as these require limited infrastructure, making it feasible for a variety of disciplines in urban and rural areas. Opportunity for interprofessional practice would increase spread and scale without significant resource and infrastructure changes.

Funding Source: Community foundation grants and internal institutional grants provide the funding for program costs such as supplies and materials. Community partners provide no cost administrative support, marketing, and participant recruitment. Department level funds are utilized to hire licensed and certified speech-language pathologists who serve as clinical supervisors alongside faculty. Current program funds maintain sustainability. However, expansion to additional sites would require increased funding and support.

Personal Observations: Programs with this design provide innovative and unique clinical training opportunities that meet student learning and training needs while providing a robust beneficial community program. A key aspect to successful community partnerships is a shared mission and vision between the educational program and non-profit organizations. Frequent, specific, and direct communication is essential during program development. It is important to discuss all details ensuring shared responsibility, costs, and goals. Specific agreements that integrate feedback have been essential to program growth, sustainability, and continued community collaboration.

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Cuyahoga County Healthcare Sector Partnership (HSP) & New Growth Group

<u>HSP Nursing Clinical Adjunct Faculty Initiative</u>
Program Description: The Nursing Clinical Adjunct Faculty Program was developed by the Cuyahoga County Healthcare Sector Partnership (HSP) in collaboration with Northeast Ohio hospital partners, including Cleveland Clinic, University Hospitals, MetroHealth, and Southwest General, and 16 academic institutions to address the critical shortage of qualified clinical nursing adjuncts. The region maintains nearly 1,000 clinical adjunct positions. However, the occupation experiences approximately 25% annual turnover, with dozens of slots remaining unfilled each year, resulting in cancelled clinical rotations and missed opportunities to prepare the nursing workforce needed to meet regional demand. The program introduces a structured "Boot Camp"

designed to recruit, prepare, and support practicing nurses to serve as high-quality adjunct clinical faculty. Training includes evidence-based teaching strategies, assessment methods, and approaches to create supportive learning environments in busy clinical settings. The goal is to grow and strengthen the pool of clinical adjunct faculty.

Evaluation: Launched in June 2025, the program has recruited and trained over 110 participants across three Boot Camps hosted at the Cleveland Clinic or University Hospitals locations. Participant feedback surveys indicate that 96% of attendees reported increased confidence in teaching and precepting students, and 92% felt better prepared to balance patient care with instructional responsibilities. Participants are being actively matched to teaching opportunities, with placements secured and more expected in Spring 2026. An impact evaluation is currently being administered to capture data on placements, faculty retention, and capacity created, including tracking faculty placed into teaching roles, students supervised, term-to-term retention, and student feedback.

Spread and Scale: The program is positioned to conduct additional Boot Camps as needed, based on ongoing demand assessments in Northeast Ohio. Considerations for program enhancement include revising the curriculum based on stakeholder feedback, exploring asynchronous delivery formats to increase accessibility, and strengthening mentoring components for faculty. A structured curriculum and facilitator guide enable replication across other regions facing similar nursing faculty shortages with minimal customization. The program demonstrates strong potential for national scaling through collaboration with hospital associations, workforce partnerships, and professional organizations focused on nursing education and clinical placement expansion.

Funding Source and Sustainability: Hospital systems have contributed $250,000 to design and implement the program. The program is housed and administered by New Bridge Cleveland, a nonprofit healthcare workforce development provider serving as the Healthcare Sector Partnership intermediary organization. The Cuyahoga County Workforce Funders Group provides operating support for HSP. Health system investment reflects recognition of direct workforce benefits: expanded capacity to train future employees, reduced reliance on agency staff, and strengthened academic partnerships. Long-term sustainability is anticipated through continued health system funding, integration into workforce development budgets, and potential support from state and federal workforce initiatives.

Lessons Learned and Challenges: Given the multi-stakeholder nature of the program, establishing clear governance and decision-making processes was an important early step. The program has established a streamlined structure, where each participating hospital designates a lead responsible for coordinating with academic institutions and the partnership backbone team, thereby improving communication flow and delegating responsibility.

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Accreditation Council for Graduate Medical Education (ACGME)

ACGME Rural Track Program Designation Project

Building capacity for graduate medical education (GME) can be challenging in rural communities, many of which are in medically underserved areas. GME partnerships between participating sites in urban, rural, and other settings play an important role in enhancing physician supply in workforce shortage areas. Under Centers for Medicare and Medicaid Services (CMS) regulations, teaching hospitals have opportunities to obtain new GME financing by forming partnerships of urban and rural sites to create Rural Track Programs (RTPs). Until 2022, criteria for funding included being separately accredited by the Accreditation Council for Graduate Medical Education (ACGME) and sending all residents to the rural location for more than half of the length of their program. While CMS did not limit the creation of RTPs to specific specialties, they have historically been in Family Medicine only. One reason for this is that the ACGME did not have a process to separately accredit RTPs outside of Family Medicine. There is a lot of interest in RTPs outside of Family Medicine and the need for other specialties in rural areas (as well as the need for sustainable funding). The ACGME responded to these challenges by creating a Rural Track Program designation that would allow programs in any clinical specialty to pursue a separately accredited RTP and be identified as a RTP in publicly available reports. The ACGME's RTP designation was built to align with the CMS definition and criteria as explained in federal regulations at 42 CFR §413.79(k). The definition of a Rural Track Program was updated in CMS policy with the implementation of the Consolidated Appropriations Act of 2021, which removed the requirement for separate accreditation. The ACGME also updated their definition of a RTP to align with the CMS definition and created another process to obtain designation as an expansion of an existing ACGME-accredited program. A Rural Track Program is "an ACGME-accredited program in which all or some residents/fellows gain both urban and rural experience with more than half of the education and training for the applicable resident(s)/fellow(s) taking place in a rural area (any area outside of an urban Core-Based Statistical Area (CBSA))." By providing a standardized method for identifying RTPs in a variety of specialties, the ACGME RTP designation supports hospitals seeking to create new pathways for physicians who wish to practice in rural areas; enhances the ACGME's understanding of the unique aspects of rural GME; provides opportunities for the ACGME to develop closer collaborations with community, regulatory, and other partners working to eliminate geographic health care inequities; and allows for the identification of GME practices that contribute to health equity to serve as a basis for shared learning. To date, 44 programs have received the designation across 6 clinical specialties and 25 states (and 1 in Puerto Rico), with many more in progress. Of these, 29 were designated at the time of application as a new program, and 15 were as an expansion of an existing ACGME-accredited program. Note: The ACGME RTP designation is independent of any RTP designation by CMS.

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Leveraging Military Healthcare Infrastructure to Advance Workforce Preparedness in Nursing Education

Program: Understanding patient care and movement by air, land, and sea is a key part of training advanced practice registered nursing students in the military. The Transitions of Care Course is a four-day intensive clinical that uses existing military healthcare infrastructure to expand experiential placements for clinical nurse specialist (CNS) students at the Uniformed Services University, Daniel K. Inouye Graduate School of Nursing. In partnership with the United States Air Force 86 Aeromedical Evacuation system and the United States Army Landstuhl Regional Medical Center in Germany, students are trained in patient movement, care coordination, and emergency response, skills that are sometimes limited in civilian settings.

Evaluation: Since 2020, this clinical has provided students over 672 clinical hours, exposing them to specialized care for combat casualties and humanitarian patients during land and air transport. Student feedback is collected through reflection assignments and formal course evaluations. The feedback received has consistently emphasized the significance of operationally immersive experiences that enhance comprehension of the complex patient movement system.

Spread/Scale: By utilizing existing federal healthcare resources, this model provides a relevant solution to increase clinical placement capacity, improve workforce readiness, and promote interagency collaboration in health professions education.

Funding Source: The Transitions of Care Course is primarily supported through funding from the university. Leveraging existing infrastructure, personnel, and training platforms has promoted the sustainability of this clinical for over five years.

Personal Observations: Implementing the course has reinforced the advantages of immersive, operationally relevant training while also highlighting key challenges. Students consistently reported that participating in aeromedical flights was the most rewarding experience. Meanwhile, patient and aircraft simulation training during the course provided a safe yet realistic environment for applying clinical and decision-making skills. Challenges included coordination across military systems and reliance

on real-world operational tempo. At the last minute, changes such as flight delays affected students' scheduled learning opportunities, showing them the realities of military operations. Students gained insight into the value of being flexible and resilient in these unique situations. Faculty recognized the importance of structured debriefings focused on topics such as combat casualty care or humanitarian crises, and they have maintained this element in the course. Students reported in their reflections that they understand the critical role of the CNS in direct patient care and system-level coordination, reinforcing the impact they have across tri-service military healthcare environments. These lessons emphasize the importance of preserving the course's immersive, hands-on approach while continuously updating it to meet evolving mission needs and global health challenges.

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University of Minnesota

Scalable Solutions: Pushing Boundaries to Deliver High-Quality, Low-Burden Interprofessional Clinical Training for All

The **"Collaboration in Action" interprofessional education (IPE) portfolio** through the University of Minnesota Center for Interprofessional Health (CIH) is pushing the boundaries and challenges in delivering authentic collaborative practice training in the clinical learning environment.

- The **Collaboration in Action: Interprofessional LEAP (Learning through Engaging Actively in Practice) Experience** is an IPE opportunity designed to allow learners from different professions to engage in collaborative activities authentically in the clinical learning environment. This novel model leverages clinical partners as the "owners" of IPE on site, with a clear, shared understanding of the intentional IPE experiences and debriefing/reflection in line with national best practices. The LEAP Experience webpage offers a visual representation of the progression from minimal to ideal IPE integration. A parallel program is the LEAP IPE Champion model, which offers a cohort-based stipend partnership with a healthcare system representative who receives University support and expertise to develop and advance IPE in the clinical learning environment in their own organizational context.
- The **Collaboration in Action: Rural and Underserved Practice experience** pairs Doctor of Physical Therapy (DPT) and MD Rural Physician Associate Program (RPAP) learners identified as co-located in rural clinical environments to learn about, from, and with each other as providers in a rural context and as applied to their future careers. Interactions include social engagement, shadowing, navigation of an interprofessional case in a rural or underserved setting, and reflection. In the first 5 years, about 70 learners participated total. In AY 2025-26, the experience grew to include all learners from RPAP and MetroPAP programs paired with DPT learners, yielding 74 learners in a single year. Learners reported an increased understanding of each others' roles and responsibilities and improved clarity in the timing and ways in which they may collaborate in future rural practice.
- Because many learners are not co-located, the **Collaboration in Action: Learner-Driven Curriculum** is designed to support IPE during clinical rotations for learners from any profession, in any location, with no burden to the preceptor or site. In AY 2025-26,

nearly 900 learners from 12 health professions (required) are assigned in groups of 4-5 during one 4-6 week block over the course of an academic year to engage together virtually in IPE activities, increased from 164 learners from 6 professions (half volunteer, half required) in the first year AY 2021-22. Evaluation outcomes and lessons learned are described in this 2024 journal publication. Additionally, a self- and peer-evaluation component was added in AY 2025-26 to explicitly assess collaborative practice competency behaviors.

All three **Collaboration in Action** experiences were designed to be immediately scalable to additional clinical organizations/sites and health professions, including both co-located and non-co-located learner placements. Each began as a small pilot with significant growth in participation and impact in each year of implementation. Funding represents CIH leadership and staff time, sustainably supported by the University's Academic Health Sciences and Academic Clinical Affairs units. Academic-clinical partnerships and innovative approaches to address challenges in IPE in the clinical learning environment are imperative to train a collaborative practice-ready workforce.

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Rhode Island Department of Health

Expanding Rhode Island's Primary Care Workforce: First-Year Outcomes and Implementation Lessons from the Primary Care Training Sites Program

The Primary Care Training Sites Program (PCTSP) was created with a clear goal: to enhance and expand Rhode Island's ability to train the next generation of healthcare professionals. The program supports primary care sites and their preceptors through targeted grant funding, incentivizing practices to accept and train more clinical students. By doing so, the program strengthens Rhode Island's healthcare workforce and builds a pipeline of skilled professionals who are trained locally and more likely to practice here after graduation.

Sites may select from three compensation models. The Stipend Model provides direct payments to preceptors for mentoring, recognizing their time and expertise. The Reduced Clinical Time Model offsets revenue lost when preceptors dedicate blocks of time to teaching rather than patient care. The Innovative Model allows sites to design strategies for supporting training, provided these align with program objectives and are detailed in the project narrative. Each model ensures preceptors are fairly compensated while sites maintain normal operations. The program also provides a specialized training curriculum developed by the Care Transformation Collaborative – Rhode Island. This curriculum exposes trainees to the principles of the Patient-Centered Medical Home model, complementing clinical and community-based rotations required of medical students, residents, nurse practitioners, and physician assistants. By combining academic instruction with applied practice, the program ensures participants develop both technical competencies and patient-centered skills.

In its inaugural year, the PCTSP awarded $2,022,500 in grant funding to 34 primary care

sites statewide. This investment is projected to increase clinical training capacity by 68% during the 2025–2026 academic year, based on anticipated enrollment. This initiative is unique nationally, and we are proud to have successfully launched it.

The PCTSP also has strong potential for replication and scaling beyond Rhode Island. Its design—anchored in flexible compensation options, discipline-agnostic structures, and adaptable processes—makes it suitable across regions and health professions. Its framework, combining regulatory authority, financial mechanisms, and preceptor support, is transferable to areas facing placement shortages and workforce gaps. Importantly, the PCTSP serves as a model that other states and regions can adopt to tackle similar challenges, and states interested in developing comparable initiatives are encouraged to reach out to us for guidance and support.
This program is supported by $2.7 million in Rhode Island State General Revenue, covering both grants and administrative costs. Continued operation depends on state budget priorities and willingness to sustain investment.

A major lesson from the first year is that administrators cannot assume sites will move forward independently, even when funding is performance-based. Some sites were slower to take students despite contracts specifying enrollment targets, and there was occasional confusion about whether the program itself placed students. While we clarified that sites would not be compensated for unfilled placements, this reinforced the need for proactive administration—consistent communication, check-ins, and hands-on guidance. With 34 sites, this oversight is demanding but critical to program success and will remain essential to strengthen the program in future years.

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<u>Expanding Capacity While Elevating Practice Readiness: A 50/50 Simulation–Clinical Model in Undergraduate Nursing</u>
Program Description: At the University of North Carolina at Chapel Hill School of Nursing, a required upper-level medical-surgical course for prelicensure BSN students was redesigned to address significant shortages in clinical placements and faculty. The new model allocates 50% of clinical time to high-quality simulation and 50% to traditional clinical settings. Grounded in the International Nursing Association for Clinical and Simulation Learning (INACSL) Standards of Best Practice and the National League of Nursing (NLN) Jeffries Simulation Theory, this redesign ensures that all students consistently engage with high-acuity, low-frequency clinical scenarios, regardless of live placement variability. Innovation Components:

- High-Fidelity Simulation & Standardized Patient Experiences: Progressive scenarios (e.g., shock, diabetic ketoacidosis) and deliberate practice (e.g., rapid-cycle CPR, medication administration refreshers) are delivered with structured prebriefing,

role clarity, and guided debriefing focused on clinical judgment, safety, social drivers of health, and interprofessional development.

- Immersive Virtual Reality Modules: VR experiences in cases such as myocardial infarction, pulmonary embolism, morphine overdose, and cerebrovascular accident allow learners to rehearse teamwork, closed-loop communication, and prioritization when clinical exposures are limited.
- Faculty Development & Reliability: Standardized facilitator guides, debriefing rubrics, and scenario packets promote inter-rater reliability and scalability across semesters and sections.

Evaluation and Early Indicators of Success: The program has demonstrated consistent achievement of scenario objectives aligned with course outcomes. Students and faculty report enhanced realism, clinical preparedness, and confidence in interprofessional collaboration. Importantly, disruptions from last-minute placement cancellations have been reduced due to the flexibility of simulation-based scheduling. Ongoing evaluation includes learner performance metrics, faculty calibration sessions, and qualitative feedback.

Impact on Capacity and Quality: The 50/50 model reduced dependence on external clinical sites and faculty by 40%, allowing expansion of enrollment capacity without sacrificing quality. Simulation blocks also provide scheduling flexibility and resilience against clinical site cancellations.

Quality & Readiness: All students are guaranteed exposure to high-acuity scenarios that may not arise during traditional placements, ensuring equitable, evidence-based learning opportunities that strengthen readiness for practice.

Spread and Scale This framework is designed for replication. With existing simulation labs, standardized patients, and VR headsets, the model is resource-efficient and adaptable to other undergraduate nursing courses and health disciplines. The reliance on standardized materials and facilitator training enhances scalability to other schools, regions, and health systems facing similar site shortages.

Funding and Sustainability: The program is supported through institutional funding, faculty workload reallocation, and grant-supported investments in immersive technologies. Sustainability is reinforced by reduced reliance on external sites and faculty, integration into the standing curriculum, and ongoing investment in simulation infrastructure.

Lessons Learned: Challenges included initial faculty development needs, technology integration, and scheduling adjustments across multiple sites. Lessons learned emphasize the importance of structured facilitator training, early stakeholder buy-in, and clear communication with clinical partners and school leaders. Ultimately, the redesign demonstrated that simulation is not only a substitute for placement shortages but also a transformative tool for enhancing practice readiness, equity, and educational resilience.

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MGH Institute of Health Professions

Telesupervision: A Scalable Solution to Clinical Education Placement Shortages
Program Description: To address the national shortage of high-quality clinical placements and supervisors, the MGH Institute of Health Professions has invested in telehealth research, curricula, professional development workshops, and innovative placement experiences. After a literature review revealed health professionals feel underprepared for telehealth, we began researching telehealth and telesupervision, starting with speech-language pathology (SLP). We conducted a national survey to understand SLP preceptors' comfort with telesupervision. We found they largely felt capable of meeting ASHA's supervision standards through telesupervision (Pittmann et al., 2025). We built on those findings and developed an interprofessional workshop, focusing on telehealth etiquette development, which resulted in significant improvements in participants' perceived readiness to use and teach these skills (Pittmann et al., 2024). Subsequently, a semester-long telehealth etiquette pilot curriculum was created and implemented. By the end of the semester, SLP and nurse practitioner students demonstrated notable gains in patient-centered skills and in fostering patient-provider relationships to improve outcomes (manuscript under review).

This curriculum is now embedded in all on-campus telehealth placements. Additional innovative placement experiences involving telesupervision have also been developed across SLP, nurse practitioner, and occupational therapy (OT) programs. This abstract highlights two signature initiatives from occupational therapy fieldwork. In partnership with a partial hospitalization program within our health system, OT students facilitate telehealth wellness groups for clients while our faculty telesupervise. Through this model, students build skills in treatment planning, documentation, and adapting interventions. A second partnership with a national home rehabilitation company provides OT students with experience with older adults. Through telesupervised telehealth sessions, our students observe live home care visits, engage in concurrent faculty-facilitated discussions and reflect on practice in real time. This experience, once available to a few, now provides equitable access for the entire 30+ student cohort while reducing supervisory burden on clinical sites.

Evaluation: Faculty preceptors evaluate the OT students in the above placements and students complete placement, preceptor, and self-evaluations. Results from these telesupervised experiences demonstrate student growth in resilience, confidence, and clinical reasoning. Faculty observations highlight that students learn to tolerate discomfort and problem-solve in real time - essential skills for success in OT Level II placements.

Spread/Scale: These telesupervised placements have been so effective that the OT program anticipates phasing out many observation-only placements, which often encourage passive learning. In contrast, our telehealth models promote active engagement and clinical reasoning, better preparing students for full-time practice. With modest additional support, these telesupervised models could expand by offering more opportunities and smaller group sizes, creating richer learning experiences. They are highly adaptable across regions, disciplines, and health systems.

Funding and Sustainability: The partial hospitalization and home health programs have been sustained through allocating workload credit within faculty FTEs. Future growth may involve modest adjunct investment or additional workload credits, maintaining a cost-conscious model.

Personal Observations: Our multipronged approach to address placement shortages, by identifying barriers, developing preceptors and students through training, and creating innovative partnerships, has reduced strain on clinical partners while providing students with invaluable, often superior, learning opportunities. Together, these telesupervised models demonstrate sustainable, scalable, and transformative solutions to clinical placement and supervisory shortages.

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Development and Evolution of Two Community Engaged Programs: Addressing Clinical Placement Quality and Supervisory Capacity

Program Description: The University of Northern Colorado developed two innovative community-engaged programs—Treasure Chest and Project L.I.F.E. (Literacy for Immigrant Families Everyday)—to address clinical placement shortages while enhancing the quality of experiential learning for speech-language pathology graduate students. These programs evolved from simple volunteer experiences to comprehensive Community Engaged Learning (CEL) initiatives that provide mutual benefit to students and underserved community populations. Treasure Chest serves families with children birth-5 years through biweekly 30-minute parent coaching sessions, where graduate clinicians provide evidence-based early language intervention strategies and developmentally appropriate materials. Project L.I.F.E. partners with the Migrant Education Program to deliver structured literacy programming for children of English language learning parents, incorporating science activities and take-home materials to support skill generalization. Both programs are integrated into the "Language Disorders in Early Childhood and Preschool" course, where first-semester graduate students apply classroom learning in real-world settings while developing critical parent coaching competencies. Students rotate through both programs, ensuring comprehensive exposure to diverse populations and service delivery models.

Evaluation: Rigorous evaluation demonstrates significant program impact. Student self-efficacy measures using adapted surveys showed statistically significant improvements in confidence coaching parents with early intervention strategies ($p < .001$) and knowledge of typical development. Post-program surveys revealed high satisfaction scores (4.3-4.7 on 5-point scale) across domains including real-world application, clinical coursework integration, community benefit, problem-solving skills, and communication abilities. Community partner feedback validates program effectiveness. The Migrant Education Program Coordinator reports improved child focus in reading and math, enhanced parent engagement, and better school readiness. Parents emphasize volunteer patience, quality childcare, and meaningful learning experiences for their children.

Spread/Scale: Potential The programs demonstrate strong scalability across health professions, regions, and healthcare systems. The community-engaged model addresses universal challenges in clinical education: placement shortages, supervision capacity, and meaningful community connections. Key scalable elements include partnership with existing community organizations, integration with academic coursework, and sustainable funding models through nonprofit partnerships. The pandemic revealed additional telepractice opportunities for serving rural populations, expanding geographic reach.

Funding Sources and Sustainability: Initial funding began modestly with a $5,000 private foundation pilot grant for Treasure Chest. Current sustainable funding includes $50,000 annually for Treasure Chest and $39,000 yearly for Project L.I.F.E. through a different private foundation. This funding covers clinical supervision, program management credits, materials, and take-home resources. The evolution from unfunded volunteer work to substantial nonprofit partnerships demonstrates proof-of-concept leading to sustainable support.

Personal Observations and Lessons Learned: Key lessons include the critical importance of planning for supervision workload and coordination challenges with school schedules and weather. Academic faculty should "begin with the end in mind," considering student outcomes, mutual benefit, research opportunities, and tenure/promotion implications. Success requires committed colleagues and strong advocacy for community engagement value. Unplanned benefits emerged including child identification for additional services, enhanced family trust, interpreter experience for students, undergraduate recruitment opportunities, and graduate assistant development in program management and training delivery. These programs successfully transform the traditional clinical education model while addressing community needs and building sustainable partnerships.

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Innovative Clinical Model for Online Speech-Language Pathology Graduate Students

Program Description: The University of Northern Colorado launched an innovative online Speech-Language Pathology master's program in 1995 to address critical SLP shortages across Colorado and western states. Unlike traditional programs, our model requires students to work as Speech-Language Pathology Assistants while completing their graduate education. This three-year asynchronous program allows working professionals to complete coursework outside employment hours while gaining clinical experience through their SLPA positions. We develop partnerships with employing school districts so certified SLPs can provide clinical supervision. Students also complete an unpaid adult medical placement during their final semester to ensure comprehensive training across the SLP scope of practice. Building on thirty years of success, we're launching the Online Colorado Schools Consortium, exclusively serving Colorado residents with priority for SLPAs in cooperating school districts. This targeted approach aims to graduate 40 to 60 new Colorado school-based SLPs every six years through cohorts admitted every three years.

Evaluation: Our program demonstrates strong outcomes with an 84% graduation rate across the last three cohorts from 2015 through 2025, and students who don't graduate on schedule typically complete with the next cohort. We maintain a 100% Praxis pass rate for all reported scores. The program's appeal is evident in our consistently high application numbers: 523 in 2015, 376 in 2017, 545 in 2020, and 328 in 2023, significantly exceeding applications to our traditional on-campus program.

Spread and Scale: While some universities have developed similar shortage-response programs, few focus specifically on the SLPA-to-SLP pipeline we've pioneered. Our model has broad scalability potential across any health science field with assistant-level positions, as the core concept of leveraging current employment for clinical training addresses workforce shortages universally. The employment-integrated approach with flexible, asynchronous education can be adapted across various healthcare settings and geographic regions.

Funding Source: The program operates sustainably through tuition revenue, with some students receiving employer reimbursement on a case-by-case basis. This tuition-based model ensures financial sustainability without relying on external grants, and our thirty-year track record demonstrates long-term viability with growing demand supporting continued operation and expansion.

Personal Observations: Through three decades of program development, we've learned several critical lessons. We eliminated volunteer-based practicum after discovering that employment creates significantly stronger buy-in from both students and clinical sites. Clinical sites require education about our model since they're accustomed to supervising advanced students rather than training new graduate student clinicians. We dedicate the entire first fall semester to developing affiliation agreements before students begin clinical hours in spring. For our new Colorado Schools Consortium, extensive upfront relationship-building with school district administrators proved essential. Having team members who understand public education systems was invaluable for building trust and securing partnerships. While the model requires significant initial investment in relationship-building and system education, it creates sustainable, mutually beneficial partnerships that simultaneously address workforce shortages while providing high-quality, flexible graduate education for working professionals.

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Addressing Shortages in Clinical Training Sites through Academic-Practice Partnership and Innovative Teaching Models

Addressing the shortage of clinical training sites and qualified clinical faculty remains a critical challenge in health professions education. In response, the University of Cincinnati College of Nursing (UC CON), in collaboration with Cincinnati Children's Hospital Medical Center (CCHMC), has implemented a scalable and sustainable academic-practice partnership that leverages full-time clinical nurses as clinical instructors. This innovative model aims to optimize existing clinical resources, reduce administrative burdens, and expand high-quality clinical learning opportunities for prelicensure nursing students.

In this model, full-time staff nurses at CCHMC divide their responsibilities between direct patient care and clinical instruction. For example, nurses may work two 12-hour clinical shifts and devote an additional 12 hours per week to supervising nursing students. CCHMC then bills UC CON for instructional hours aligned with course requirements. This eliminates the need for traditional adjunct faculty hiring and maximizes the clinical expertise of practicing nurses actively engaged in patient care.

Program Evaluation has shown positive outcomes. Internal surveys indicate high student satisfaction, citing improved continuity in instruction and increased clinical relevance. Nurse instructors report enhanced job satisfaction and reduced burnout due to the diversification of their roles. Early data suggests improved student performance in clinical competencies, though formal longitudinal studies are in development to further assess impact on learning outcomes and workforce retention. The model also integrates virtual reality (VR) simulation as a complementary instructional tool. VR scenarios offer safe, immersive environments for students to develop critical thinking and clinical judgment. This is particularly effective in

supplementing gaps in clinical exposure due to capacity limitations or case scarcity, such as pediatric emergencies or rare conditions. Student feedback highlights increased confidence and preparedness following VR-enhanced sessions.

The potential for spread and scale of this model is high. It can be adapted across other healthcare systems and academic institutions by modifying staffing patterns, billing mechanisms, and partnership agreements. The model supports workforce development while addressing the ongoing shortage of clinical faculty and placements—a challenge faced nationwide across multiple health professions.

Funding for the program is primarily supported through a reallocation of clinical education budgets at UC CON, which pays instructional time directly to the hospital. This billing structure eliminates adjunct hiring costs, increasing financial efficiency and improving sustainability. Additionally, the hospital benefits from improved nurse retention and engagement, creating a mutually beneficial investment.

Lessons learned include the importance of structured onboarding and faculty development for clinical instructors. Nurses transitioning into educator roles require support in pedagogy, curriculum alignment, and student assessment. Flexibility in scheduling and strong academic-practice communication have proven essential to sustaining the program. Challenges remain in balancing workloads and integrating evolving clinical realities with academic objectives, necessitating continuous collaboration.

In summary, the UC CON–CCHMC model presents a replicable, innovative approach to clinical education that addresses both faculty shortages and placement limitations. By combining real-world clinical teaching with virtual simulation, the program enhances student learning while promoting workforce sustainability—a timely and scalable solution for the future of health professions education.

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George Washington University

George Washington University Interprofessional Education Model at Cedar Hill Regional Medical Center

The Program George Washington University (GW) is preparing to launch an innovative interprofessional education (IPE) initiative at Cedar Hill Regional Medical Center (CHRMC), the first new hospital to open in Washington, DC, in 25 years. Located in Wards 7 and 8, CHRMC serves historically underserved communities with a state-of-the-art, 136-bed facility and plans for expanding ambulatory services. The proposed

IPE program addresses shortages of high-quality clinical placements and supervisory resources by embedding interdisciplinary teams of learners, including medical, physician associate, and nursing students, into diverse clinical environments. Guided by the Interprofessional Education Collaborative (IPEC) Core Competencies, students will practice team-based, person-centered healthcare delivery. Supervision will be provided by board-certified physicians, nurse practitioners, and physician associates. All CHRMC faculty preceptors will complete structured orientation modules (e.g., Fostering a Psychologically Safe Clinical Learning Environment, Teaching on the Fly, Feedback that Sticks) and receive training on IPE competencies and shared team-based care expectations. Students will complete preparatory modules covering the IPE model, IPASS handoffs, and evidence-based communication strategies such as huddles, debriefs, conflict resolution, in a framework guided by TeamSTEPPS 3.0. This structured approach fosters alignment among faculty and learners, expands placement capacity, and equips students with critical skills for collaborative clinical practice.

Evaluation: Evaluation will focus on both instructional design and learner outcomes. Faculty and student modules will be assessed on clarity, relevance, usability, and achievement of instructional objectives. Student and faculty satisfaction surveys, collected at rotation and academic year-end, provide feedback on the effectiveness of the IPE model in preparing learners for team-based practice. Data analysis will incorporate both quantitative (e.g., satisfaction ratings, competency attainment) and qualitative methods (e.g., open-ended feedback). These findings will inform ongoing program improvements and assess the model's impact on clinical learning and interprofessional collaboration.

Spread and Scale: This initiative posits a scalable framework for interprofessional training. Its adaptable structure is positioned for adoption by other academic medical centers and health systems across the United States and globally. The model could also be extended beyond acute care settings to ambulatory and community-based care, broadening its reach and impact.

Funding Source: Currently, funding for student clinical placements is provided by each participating academic program. A centralized administrator/project officer will be responsible for managing over 300 clinical placement slots annually across 18 specialties with funding from the GW School of Medicine and Health Sciences and School of Nursing.

Personal Observations: Several lessons have emerged from early program development and proposed implementation. Creating a shared vision for IPE requires time, engaging champions across acute and community settings, and intentional dialogue. Program developmental milestones seem to align most closely with second-year physician associate and nurse practitioner students and third-year medical students, in support of academic learning objectives and facilitating team integration. Centralized scheduling of a cohort of students is essential to ensure a structured coordination of interprofessional learners across multiple settings. These observations highlight both

the promise and complexity of implementing a sustainable, equitable interprofessional training model.

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VA Pilot Program for Graduate Medical Education and Residency
The Maintaining Internal Systems and Strengthening Integrated Outside Networks (MISSION) Act Section 403 of 2018 established a new Pilot Program for Graduate Medical Education and Residency (PPGMER) designed to help expand health care access for Veterans and provide quality clinical placements in rural, tribal, and underserved areas across the country. As a part of this pilot, the Department of Veterans Affairs (VA) Office of Academic Affiliations (OAA) will fund the salaries and benefits of at least 100 physician residents who will rotate to non-VA health care facilities operated by Indian tribes or tribal organizations, the Indian Health Service (IHS), the Department of Defense, and federally qualified health centers. Recognizing that physicians often choose to practice in the location where they last trained, the PPGMER aims to increase rural, tribal, and underserved training opportunities within existing GME programs and support the development of new GME programs in these priority areas to strengthen the health care workforce pathway.

Through an initial Request for Proposals (RFP), VA authorized academic year 2025 – 2026 funding for 61 unique residents from 15 accredited GME training programs across six clinical specialties and seven accredited GME sponsoring institutions to rotate at seven separate covered facilities (five IHS facilities and two facilities operated by tribes or tribal organizations). The majority (86%) of covered facilities are located in communities designated by the Secretary of Health and Human Services (HHS) as primary care health professional shortage areas (HPSAs) and 100% of covered facilities are in communities designated by the Secretary of HHS as mental health HPSAs.

Sponsoring Institution participants in the PPGMER are required to collect and submit specific program data to, as mandated by statute, to support VA's annual report to Congress on the pilot program through its conclusion on August 7, 2031. The data includes required elements, such as the number of patients seen per day by each resident assigned to the covered facility under the PPGMER.

OAA intends to expand and scale the pilot program to additional regions and covered facilities through a second RFP, released on September 19, 2025. This RFP will new resident rotations at covered facilities during academic year 2026 – 2027. GME

programs selected through this process may be eligible for continued funding in future academic years provided they remain compliant with all Congressional requirements.

The pilot program funding is funded by OAA through the President's Budget; however, funding is not sustainable and will cease when the pilot program ends on August 7, 2031. The unique federal funding mechanism authorized by MISSION Act Section 403 is designed to improve access to care, workforce disparities, and clinical placements in low-resource, rural, tribal, and underserved areas through GME expansion.

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Innovative Clinical Education Through Partnerships with Rural Critical Access Hospitals

Program Description: Rural communities face persistent nursing shortages, worsened by limited clinical placements and a shortage of preceptors in larger systems. To address these challenges, our program partnered with two rural Critical Access Hospitals (CAHs), leveraging underutilized facilities to expand high-quality experiential learning. Students gain hands-on experience across a variety of clinical areas. The smaller scale of CAHs fosters closer mentorship, stronger engagement, and a broader scope of practice than is often possible in urban hospitals. By introducing students to rural healthcare delivery, the program builds a sustainable pipeline of nurses prepared and motivated to serve rural communities.

Evaluation: A comprehensive evaluation process measures the program's impact through pre- and post-experience surveys and guided reflections that capture competency development, clinical confidence, and interest in rural practice. CAH staff and leadership evaluate student engagement, performance, and the program's value to the hospital community. Early findings demonstrate increased student confidence, stronger skill application, and heightened interest in rural nursing careers. Job placement data within 12 months of graduation will further assess the program's contribution to CAH workforce retention.

Spread/Scale: The program's design emphasizes adaptability, making it transferable to other regions, health professions, and healthcare systems. The model can be applied across disciplines facing placement shortages, including physical therapy, occupational therapy, and physician assistant training, by pairing students with rural healthcare facilities in need of workforce development. Scalability is supported by relatively low infrastructure costs and the program's ability to meet critical needs for both academic institutions and healthcare employers.

Funding: The program is funded through nursing program operational budgets. While state workforce development grants remain an option for future consideration, they

have not been pursued due to additional training requirements and restrictions on eligible nurses, which limit flexibility. As a nurse-led clinical experience, all students rotate through rural hospitals, ensuring equal exposure. This model prevents the financial burden that would fall on a small group of students if assigned to a rural site for the entire semester. Sustainability is reinforced by institutional commitment, potential workforce impact, and hospital interest in retaining trained graduates.

Lessons Learned: Key lessons include the importance of collaboration with CAH leadership to align student objectives with hospital capacity and flexibility in scheduling to accommodate both academic calendars and clinical staffing. A major benefit has been strengthened collaboration between academia and rural healthcare, along with orienting students to the realities of rural practice, particularly the broad scope of responsibilities carried by rural nurses. Challenges remain, particularly in transportation and coordination of clinical days, yet the program has proven feasible and mutually beneficial. Early outcomes demonstrate strong student engagement, increased confidence, and growing interest in rural practice, underscoring its potential to strengthen the workforce.

Conclusion: Partnerships with rural CAHs offer a sustainable, replicable approach to addressing nursing education placement shortages and rural workforce needs. Although broader adoption will take time and continued evaluation, early success demonstrates clear potential to scale while strengthening academic capacity, supporting healthcare systems, and sustaining rural communities.

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COMPADRE: Bridging UME to GME to Train a Physician Workforce for Rural, Underserved and Indigenous Communities in California and Oregon.

The California Oregon Medical Partnership to Address Disparities in Rural Education and Health (COMPADRE) is a cross-state collaboration between University of California, Davis, Oregon Health & Science University, and over 30 graduate medical education (GME) programs and community health centers across Northern California and Oregon. Supported by a grant from the American Medical Association (AMA), COMPADRE was established in 2019 to address persistent physician workforce shortages and health disparities in rural and underserved communities by reshaping the medical education to independent practice continuum. COMPADRE shifts infrastructure away from large academic medical centers to community-based clinical sites, building long-term capacity where future physicians are most needed. Program

Description: COMPADRE addresses shortages of clinical placements and teaching capacity by creating a shared network of community-based training sites supported by a Community of Practice and centralized resources in curriculum design, educator development, learner well-being, and holistic admissions. This network supports clinical educators in community settings while ensuring that medical trainees receive high-quality experiences in rural and underserved communities, aligning their training with their passion to serve.

Evaluation: COMPADRE tracks longitudinal workforce outcomes with key metrics of whether medical students match to regional residency programs and if they remain in the region to practice after completing training. Early outcomes are promising. In the first five years, COMPADRE supported the launch of four new GME programs in Family Medicine and Psychiatry. The program has enrolled 154 UME students and thus far 48 have entered residency. Of those, 38 ranked COMPADRE GME specialties and 19 (50%) matched into COMPADRE-affiliated residency programs, an early sign of progress in strengthening the regional physician workforce. Ongoing evaluation will include retention data to better understand long-term sustainability of these workforce development efforts.

Spread and Scale: The COMPADRE model is highly adaptable with significant potential for dissemination beyond Northern California and Oregon. Its design—leveraging academic-community partnerships, pooling shared resources, and embedding clinical training in underserved settings—can be replicated in other regions experiencing health professions shortages. This framework could also be expanded to include interprofessional trainees, including nurse practitioners, physician assistants, or behavioral health providers, further enhancing regional capacity for team-based care.

Funding and Sustainability: COMPADRE was launched with grant support of the AMA's ChangeMedEd Initiative between 2019-2025. The initial funding allowed for cost-sharing and mutual investment by participating institutions, positioning COMPADRE for long-term success. New GME programs in the COMPADRE network are supported via federal GME funding once accredited, further ensuring sustainability. Future efforts include institutionalizing COMPADRE into medical school and health system operations, while pursuing additional partnerships with health plans to maintain growth.

Lessons Learned: COMPADRE offers several key lessons for developing successful regional medical education collaborations. A Community of Practice helps engage and cultivate relationships across institutions, offering invaluable support to new and existing GME programs seeking to expand faculty, student, and resident training opportunities. Collective resource development, centralized access, and educator development are crucial tools in establishing high-quality clinical training sites. Ultimately, COMPADRE demonstrates that regional collaboration can alleviate shortages in clinical placements, expand training opportunities, and ultimately strengthen the physician workforce in rural and underserved areas.

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Innovation in Proactive Partnership Relationship and Advance Practice Partnerships

In response to the growing challenges of securing high-quality clinical and experiential placements—particularly in the face of supervisory shortages and increasing demand for advanced practice experiences—our program introduces a proactive, relationship-driven model that strengthens partnerships between academic institutions and healthcare organizations. This innovative approach focuses on enhancing the marketability of placements for students while simultaneously addressing transition-to-practice gaps through strategic integration with advanced practice partners.

The program leverages a tiered partnership framework that includes traditional clinical sites, advanced practice providers, and alternative experiential **opportunities that** align with course and program learning outcomes. When supply does not meet demand, the model incorporates validated alternatives such as simulation-based experiences. These alternatives have demonstrated high student satisfaction and strong self-reported readiness to transition into practice.

Evaluation metrics include student satisfaction surveys, faculty feedback, placement fill rates, and readiness-to-practice assessments. Over the past academic year, the program achieved a 100% placement rate for all students attending a course with a clinical component, with 96% of students reporting confidence in clinical decision-making and professional role transition. Faculty and leaders noted improved preparedness and engagement among students, and healthcare partners reported enhanced alignment with workforce development goals.

Scalability is a core strength of the model. The framework has been successfully piloted across multiple regions and is adaptable to various health professions, including nursing, physician assistant programs, and allied health disciplines. Its modular design allows for customization based on local workforce needs, regulatory requirements, and institutional capacity, making it a viable solution for healthcare systems nationwide.

Funding for the program is currently supported through a combination of institutional and healthcare partner investment. Sustainability is reinforced by the mutual benefit to academic and clinical stakeholders, with ongoing efforts to ensure long-term support through value-based partnerships and shared outcome metrics.

Lessons learned include the importance of early and intentional relationship-building with clinical partners, the need for flexible placement models that prioritize student learning outcomes over traditional site structures, and the value of integrating advanced practice providers into the educational ecosystem. Challenges encountered involved initial resistance to non-traditional placement formats and the need for robust

faculty development to support alternative supervision models. However, these were mitigated through transparent communication, shared governance, and continuous quality improvement processes.

This program exemplifies how innovation in clinical education—grounded in collaboration, adaptability, and outcome-driven design—can effectively address placement shortages while enhancing student readiness and satisfaction.

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Innovating Clinical Access Through Immersive Perioperative Education

Description: The Peri-Operative Immersion program is a collaborative between Ursuline College's Breen School of Nursing and local clinical partners to address clinical site shortages while ensuring high-quality learning for undergraduate nursing students. Designed to supplement traditional clinical placements, this structured experience, phased across the curriculum, introduces students to the perioperative care continuum—an area often underrepresented in pre-licensure nursing education. Students work one-on-one with perioperative nurses who serve as clinical preceptors and mentors. The experience emphasizes the nursing process, safety protocols, interprofessional collaboration, and critical thinking under supervision. To further enhance learning, an interprofessional simulation is used to engage undergraduate nursing students, physician assistant students, and nurse anesthesia residents in managing an obstetrical emergency. This simulation addresses access in clinical learning by placing students in a psychological safe environment with which to practice both clinical and interprofessional teamwork competencies while maintaining clinical realism.

Evaluation: The peri-operative experience is evaluated through course and end of program evaluations. Students have consistently ranked program outcome of "Integrate effective communication processes in collaboration with interdisciplinary team members to coordinate and improve the delivery of health care", as 4.5/5 since the Peri-Operative Immersion Program began in 2021. Students also state that the immersion program assisted in their understanding of patient care in an intra-operative environment and highlighted the importance of communication with patients before surgery. The IPE simulation was evaluated using the SPICE-R2 instrument. Ninety-two percent of students strongly agreed or agreed that the simulation strengthened their ability to work within an interprofessional team. Seventy-seven percent of students strongly agreed or agreed that the simulation helped them understand their role and the role of others within the interprofessional team. Eighty-nine percent of students

strongly agreed or agreed that the simulation helped them understand how interprofessional collaboration can impact patient outcomes.

Spread/Scale: These innovative experiences address gaps in both the quality and accessibility of clinical learning opportunities while minimizing the strain on traditional site placements. Its modular design and strong health system partnerships make it replicable across institutions facing similar placement challenges.

Funding Source: Both the perioperative immersion and simulation experience utilize existing resources within academic and clinical institutions. There is no cost to the university related to the immersion experience; any cost to the clinical site could be recuperated by considering the experience part of recruitment initiatives. The simulation experience requires at least one high-fidelity manikin, equipment, supplies, and at least 1 person trained in simulation methodology. While there is a start-up cost associated with any simulation program, the specific expenses related to this IPE scenario were minimal.

Personal Observations: There were no challenges related to the simulation experience. The only challenge related to immersion has been availability of perioperative preceptors, which can be limited due to hospital census, onboarding of new RNs requiring direct precepting, or large student cohort sizes. However, by partnering with multiple clinical agencies, this challenge has been minimized to ensure all students are able to benefit from the immersion experience.

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Saint Louis University Interprofessional Geriatric Assessment Clinic – Mobile Health Van Delivery Model

Describe the Program: The Interprofessional Geriatric Assessment Clinic (GAC), established in 2017, has traditionally been offered in both in-person and virtual formats. The program transitioned to a mobile clinic in 2024, via the Saint Louis University (SLU) Mobile Health Van. This innovation addresses persistent healthcare disparities by reaching communities with limited healthcare access, transportation, or digital technologies and is a valuable training platform for future healthcare professionals, preparing them to meet older adults' complex health and wellness needs.

Process evaluation: To accomplish operational goals, the number of clinical sessions conducted, sites visited, and individuals served is tracked. Range of services provided (e.g., screenings, assessments, referrals), record interprofessional student participation by discipline, year, and role, and collect feedback from key stakeholders, including faculty, community partners, and students, are documented. Outcome evaluation: Program outcomes are assessed at the community and educational levels.

Community Impact (Older Adults Served): Health access indicators evaluate the program's reach (i.e., number of new patients who otherwise may not have received care). Additional measures include patient satisfaction, perceived access to services, understanding of care plans, and completion of referrals to primary care, social services, or specialty providers. Program reach is measured by disparities addressed (e.g., geographic coverage and populations served).

Educational Impact (Student Training): Student learning outcomes include pre/post surveys using validated interprofessional competency frameworks (e.g., IPEC domains, Age-Friendly 4Ms), reflective assessments (journals, focus groups, qualitative analysis), and training quizzes. Key competencies assessed include communication, teamwork, cultural humility, and geriatric skills.

Impact & sustainability evaluation: Broader system-level impacts are measured by examining program contributions to SLU's GWEP and Age-Friendly Health System goals, strength of community partnerships, and evidence of reduced healthcare access gaps in targeted communities. Sustainability is measured by both the number of older adults served and the follow-up site visits performed by both faculty and students.

Spread/Scale: The Mobile Health Van delivers comprehensive clinical assessments, interdisciplinary services, and connections to community resources. Clinic staff includes a six-discipline collaborative team that evaluates a wide range of geriatric health indicators, including the 4Ms framework (What Matters, Medication, Mentation, and Mobility). To date, the Mobile Health Van has completed six community visits across four partner sites in St. Louis City, expanding its reach and impact in underserved areas.

Funding Source: This project is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) under grant number U1QHP28716 Geriatrics Workforce Enhancement Program for $1,000,000. This information or content and conclusions are those of the author and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS, or the U.S. Government.

Personal Observations: We observed patients engaging warmly with student providers, appreciating the time spent listening to their concerns. We observed interprofessional students learning to communicate effectively across disciplines, sometimes struggling at first, but then demonstrating improved collaboration. Site directors communicated the added value of this community service while on-site at these locations.

Workshop Planning Committee: Workplace Constraints and Innovation for Experiential Training of Health Professional Learners

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Thank You

We would like to extend our heartfelt gratitude to all the authors who submitted abstracts showcasing their programs and innovations. Your important scholarly work reflects a shared commitment to advancing high-quality clinical and experiential training across the health professions.

We are particularly grateful to those who also submitted recorded presentations to further illustrate their work. Your willingness to share your experiences and insights plays a vital role in fostering interprofessional learning and deepening our collective understanding of how to address training site and slot shortages.

While we recognize the efforts of all contributors, we would be remiss not to acknowledge the critical role of Planning Committee Members in bringing this Abstract Book to fruition. Special thanks to Dr. Pommer and Dr. Kayingo for their leadership, vision, and sustained commitment throughout this process. Your dedication made this resource possible and ensures it reflects the collaborative spirit and academic rigor of our shared mission.

With appreciation,
Carl Sheperis & Cheryl Hoying
Committee Co-Chairs

Global Forum on Innovation in Health Professional Education

This workshop was convened by The Global Forum on Innovation in Health Professional Education, an ongoing, convening activity of the National Academies of Sciences, Engineering, and Medicine that brings together diverse stakeholders to network, discuss, and illuminate issues for the benefit and promotion of health professional education. The IHPE Forum is an innovation collaborative with the task of applying an ongoing, multi-national, multi-disciplinary approach to proposing and exploring promising innovations for achieving recommended reforms in the instructional and institutional spheres. Currently, there 30 member-sponsors comprised of affiliations that represent 15 different health professions disciplines. Visit the IHPE Forum website to view our list of members and contact Patricia Cuff (pcuff@nas.edu) if you and your organization are interested in joining this global collaborative.

On behalf of the IHPE Forum Co-chairs and member sponsors, thank you for attending our workshop, Addressing Training Site and Slot Shortages Across the Health Professions!

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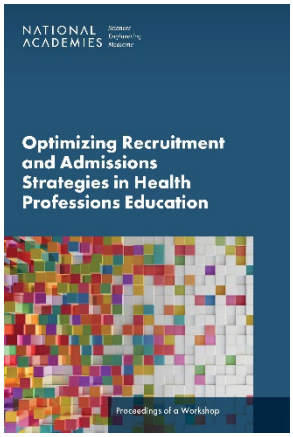

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