

From Simulation to Service: A Multi-Modal Approach to Interprofessional Health Education on Houselessness in Hawai'i

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The Medical School Hotline of the University of Hawai'i John A. Burns School of Medicine was founded in 1993, by Satoru Izutu PhD (former vice-dean of UH JABSOM). It is edited by Kathleen Kihmm Connolly PhD, HJH&W Contributing Editor.

Background

Hawai'i has the highest rates of houselessness per capita in the US, at 81 per 10000 people classified as houseless, including both sheltered and unsheltered individuals.¹ A high percentage of the houseless population in Hawai'i is unsheltered at 76.2%.^{1,2} This includes single adults; families with children; and unaccompanied youth, a population that is the fastest growing among houseless people. The other 23.8% of houseless individuals reside in emergency shelters and transitional housing units. While a large percentage of those who are houseless are employed, the high cost of living in Hawai'i makes it difficult to maintain housing. Many have health conditions including diabetes and hypertension; mental health disorders (33.6%), which include anxiety and schizophrenia; and substance use disorders (28.3%), which include misuse of alcohol, tobacco, and cannabis.^{1,2} The average life expectancy for someone who is houseless in Hawai'i is 53 years, decades shorter than the average of over 80 years for the general population living in Hawai'i.³

Interprofessional education (IPE) is a foundational strategy for preparing future health professionals to address complex social and health challenges such as houselessness. Individuals experiencing houselessness often face a combination of medical, behavioral, social, and structural barriers that cannot be effectively addressed by a single discipline. IPE brings learners from multiple professions together to learn with, from, and about one another, fostering collaborative practice, role clarity, and shared responsibility in patient care. In 2014, the Hawai'i Interprofessional Education Workgroup (HIPE) at the University of Hawai'i (UH) was created and is comprised of representatives from the UH School of Nursing and Dental Hygiene (SONDH), John A. Burns School of Medicine (JABSOM), Daniel K. Inouye College of Pharmacy (DKICP), and Thompson School of Social Work (DSW) & Public Health (DPH).

Houseless Simulation Experience

To help prepare health professional students to work with houseless individuals, HIPE developed an IPE simulation experience for health professional students to collaborate as a team and develop innovative solutions to support individuals experiencing houselessness. HIPE team members who had experience working with houseless people and who had participated in other similar simulation experiences contributed to the creation of this simulation experience.

The simulation-based activity is an interprofessional immersive learning experience designed for health care professional students to uncover assumptions about houselessness and discuss the impact of social determinants of health (SDOH) through personal, professional, and policy lenses. Using a gamified "choose your answer" text-based online activity, first year JABSOM students, fourth year SONDH students, and graduate students from DKICP, DSW, and DPH step into the shoes of a single, houseless parent to experience some of the challenges and decisions likely to be encountered when experiencing houselessness. Following the interactive portion of the simulation, learners are placed in small groups in online breakout rooms, where they discuss emotional responses, preconceived notions, and implicit biases they may have uncovered during the exercise.

Groups then work together in a second activity to understand each profession's unique role in addressing social determinants of health and to apply their learning to macro-level policy issues that impact members of the community experiencing houselessness. Students are asked to collaborate on the creation of a plan of care and associated policy changes that could help the single parent experiencing houselessness. Each group chooses their top priority and corresponding policy solution, and one representative from the group shares with the larger group to close the interprofessional immersive learning experience. Since its inception in 2021, 366 learners have participated in the 38 sessions hosted by the HIPE team. This included medical students (n=158), nursing students (n=90), social work students (n=28), public health students (n=40) and pharmacy students (n=50). More details about this interprofessional learning event are explored in Teruya et al., 2024.

HOME Clinic

The Hawai'i Houseless Outreach and Medical Education (HOME) Project was established in 2005 at JABSOM with the intention of providing clinical experience for medical students in providing care to underserved populations, while addressing the health care needs of the growing houseless population in Hawai'i. The mission of the program is to improve quality and access to health care for individuals in Hawai'i experiencing houselessness, while increasing student and physician awareness and understanding of houseless individuals and their health care needs. Operating as a student-run clinic, the HOME Project offers free medical services to the houseless community across Oahu 7 days a week through mobile medical vans and a standalone clinic in Iwilei, providing care that is high-quality, accessible, inclusive, and compassionate.

As a student-run initiative, the HOME Project provides an excellent platform for interprofessional education. Participation in student-run free clinics is an effective method to increase students' role awareness of other health profession students.^{4,5} Students from various health-related fields can collaborate in a real-world health care setting, learning to work effectively as a health care team. Although students outside of JABSOM (eg, students of social work, psychology, and pharmacy) have worked at the HOME clinics with the medical students, these have been individual student experiences rather than part of a structured interprofessional educational program. The primary barriers to establishing a fully coordinated interprofessional experience have been space limitations and the availability of faculty supervision from different professions. Although medical students receive supervision from faculty and volunteer community physicians, other disciplines have struggled to secure adequate supervisors for their students.

HOME clinic recently relocated to a larger facility in the Iwilei area, through a partnership with the City and County of Honolulu's Crisis Outreach Response and Engagement (CORE) team. The previous clinic location lacked private discussion areas, and its patient exam spaces only fit up to 3 individuals beyond the patient, which limited the ability to facilitate comprehensive team-based learning. The new facility features private patient rooms large enough to fit more students and faculty members. It also includes more learning spaces and a large conference room that can

accommodate full teams of interprofessional students and faculty. While faculty supervision remains a challenge, potential grant funding could support additional faculty presence, and there are also opportunities to recruit volunteer clinical supervisors from various disciplines beyond medicine.

Future Plans

An overarching goal is to create new designated IPE sites with immersive learning environments that go beyond the traditional concept of health care services. HIPE would also like to expand houseless IPE experiences to include perspectives from disciplines outside the traditional health care workforce, including students of urban & regional planning, architecture, law, education, nutrition, and agriculture to creatively develop innovative communities designed to support vulnerable populations of individuals and families impacted by houselessness. For example, communities designed to support housing, health care, and wrap-around services for people with behavioral health or physical disabilities would be a helpful resource. The goal is to create immersive experiential learning opportunities that allow students to use their professional knowledge to collaborate on innovative models of health care and service delivery.

The state of Hawai'i needs a comprehensive plan to tackle houselessness, with collaboration from the city, state, university, and private organizations. The best way to address these difficult policy issues is by working as an interprofessional team, where all team members can leverage each other's strengths. By engaging health care students early in their training, the HIPE experiences aim to inspire sustained commitment to working with houseless populations and to empower learners to recognize their capacity to effect meaningful change. By modeling interprofessional policy engagement and discourse, HIPE hopes to inspire the creation of interprofessional workgroups among students who will shape collaborative structures in the future. Exposure to barriers, such as with houselessness, allows creative minds to explore solutions that could become future plans. These experiences will help students learn how to address health care challenges in the future as they graduate and take their skills into the community as professionals.

References

1. The 2024 Annual Homelessness Assessment Report (AHAR) to Congress, Part 1: Point-in-Time Estimates of Homelessness. December 2024. Accessed September 23, 2025. <https://www.huduser.gov/portal/sites/default/files/pdf/2024-ahar-part-1.pdf>
2. 2024 Statewide Point-in-Time Count Report. Accessed June 23, 2025. https://www.hawaiihealthmatters.org/content/sites/hawaii/2024_PITC_report.pdf
3. Center for Disease Control and Prevention. U.S. Life Expectancy by State and Sex for 2021. Accessed September 23, 2025. https://www.cdc.gov/nchs/data-visualization/state-life-expectancy/index_2021.htm
4. Tsu L, Buckley K, Early N, Jackowski R. Evaluation of multidisciplinary and pharmacy-only student-run clinics on student's perceptions of interprofessional roles. *Curr Pharm Teach Learn*. 2018;10(6):785-794. doi:10.1016/j.cptl.2018.03.018
5. Wilson OWA, Broman P, Tokolahi E, Andersen P, Brownie S. Learning outcomes from participation in student-run health clinics: a systematic review. *J Multidiscip Healthc*. 2023;16:143-157. doi:10.2147/JMDH.S385709