

Interprofessional Student Hotspotting During a Pandemic: Lessons Learned Working Remotely with Patients with Complex Health and Social Needs

Eliza Hendrix, OTD¹, Dennis Chang, MD², Gloria R. Grice, Pharm.D., FNAP, BCPS³, Heather Hageman, MBA⁴,
Janice L. Hanson, Ph.D., Ed.S., M.H.², Heather Jacobsen, MPH⁵, Melissa Krauss, MPH⁵, Ragini Maddipati, MSW, MPH⁶,
Duana Russell-Thomas, MSOT, OTD, OTR/L¹, Barbara J. Whitaker, DNP, MPH, BSN, RN⁷

(1) Program in Occupational Therapy at Washington University School of Medicine in St. Louis, (2) Washington University School of Medicine in St. Louis, (3) University of Health Sciences & Pharmacy in St. Louis, (4) Center for Interprofessional Practice & Education at Washington University Medical Center, (5) Brown School Evaluation Center at Washington University in St. Louis, (6) Brown School at Washington University in St. Louis, (7) Goldfarb School of Nursing at Barnes-Jewish College



Background

- Models of interprofessional learning experiences are well-supported in the literature as having significant benefits for healthcare profession students in terms of improved teamwork, communication skills, and understanding of own and others' professional roles and responsibilities.¹
- Student hotspotting is an established program involving interprofessional teams of students providing support to participants* with complex health and social needs.²
- The Center for Interprofessional Practice and Education (CIPE) piloted a student hotspotting program during the 2020-2021 academic year amidst the COVID-19 pandemic.

*In this program, patients are referred to as 'participants' due to the students providing unlicensed, supervised support.

Design

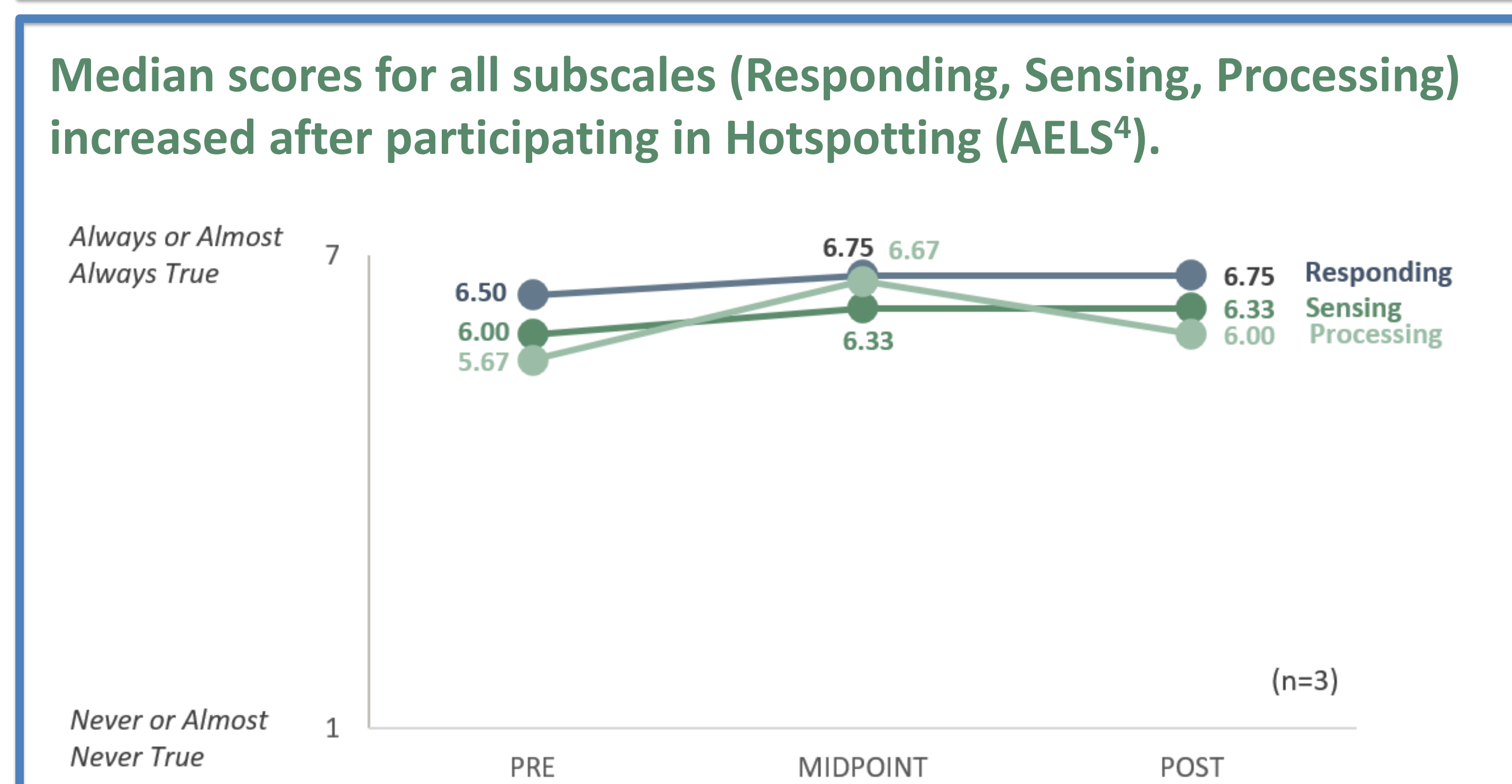
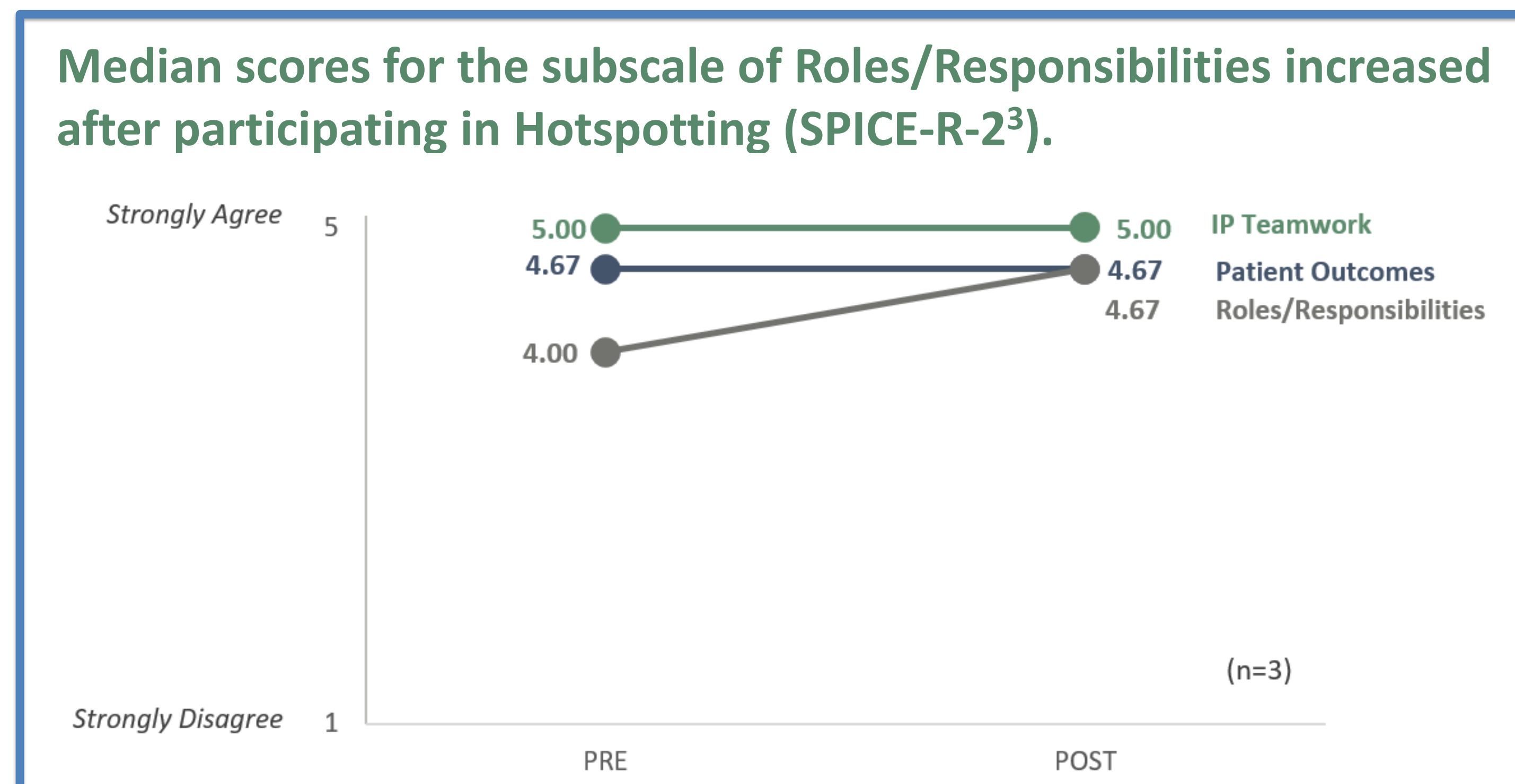
- Team Assembly**
- 4 healthcare profession students: 1 each from medicine, nursing, occupational therapy, and pharmacy
 - 1 coach: nursing faculty member
 - 1 community-based participant with complex health and social needs

- Training**
- Camden Coalition's Interprofessional Student Hotspotting Learning Collaborative Curricular Materials**
- 6 online learning modules: strategies for building trusting relationships and addressing complex needs; information about harm reduction, motivational interviewing, trauma-informed care
 - Supplemental support from Camden Coalition: case conferences, workshops, and regional meetings

- Partnership with Participant**
- Weekly team meetings between students/coach to discuss curricular materials and prepare for collaboration with participant
 - Partnership with participant for 8 months included frequent virtual communication to gather information about health, home environment, and social support, and to problem-solve challenges and address unmet needs
 - Navigating the healthcare system** (e.g., scaffolded steps for filling an orthotic shoe prescription)
 - Assessing resources and addressing barriers** (e.g., provision of a scale and daily log for monitoring weight for edema management)
 - Improving independence with self-advocacy and health management** (e.g., education about the importance of sharing electronic health records among separate health systems for improved continuity of care)

Outcomes

- Quantitative and qualitative outcomes collected from 3 surveys (pre, mid-point, post) were focused on student learning and development.



Free-text comments revealed that students appreciated the opportunity to learn with, from, and about each other while working on this interprofessional team; developed close interpersonal connections; and expanded their understanding of patients with complex needs.

"I think it helps provide a great way to connect with others and learn about the different healthcare professions."

"Learned a lot about the patient experience post-discharge."

"Learned more about each other's curriculum and learned to advocate for our own professional perspectives in relation to the group."

Conclusion

Strengths and Limitations

- Successful adaptations to a remote model included nearly 100% virtual communication via video conferencing, group messaging, and phone calls among the team and with the participant.
- All students exhibited commitment, engagement, and shared decision-making; developed trusting relationships; and demonstrated growth in interprofessional teamwork and problem-solving.
- Limitations: restricted in-person contact, technological barriers, scheduling challenges, and limited electronic medical record access.

Feasibility and Transferability for Adoption

- The CIPE Hotspotting Program provided a foundation for understanding complex participants, social determinants of health, and interprofessional collaboration.
- Teams who are not physically co-located, face scheduling barriers, or partner with participants in rural settings could be successful in adopting this program at their own institution.

Future Directions

- Pilot 2 is currently underway: 2 teams, each with 5 students, addition of MPH student team members and medicine resident as a coach.
- Future work will include assessment of participants' perceptions of the intervention, as well as an examination of potential impacts on patient care (e.g., healthcare costs, relationship with care team, number of visits, etc.).

References

- Guraya, S. Y., & Barr, H. (2018). The effectiveness of interprofessional education in healthcare: A systematic review and meta-analysis. *The Kaohsiung Journal of Medical Sciences*, 34(3), 160-165.
- Camden Coalition of Healthcare Providers. (2021). *Interprofessional education*. <https://camdenhealth.org/coalition-building/national-initiatives/interprofessional-education/>
- Zorek, J. A., Eickhoff, J. C., Steinkamp, L. A., Oryall, J., Kruger, S., & Seiberg, C. S. (2016, Apr. 23). *Student perceptions of interprofessional clinical education-revised instrument, version 2 (SPICE-R 2): Instrument validation*. University of Wisconsin Madison Interprofessional Health Summit 2016: Impact of Interprofessional Care on Chronic Conditions, Madison, WI.
- Keaton, S. A. (2017). Active - Empathic Listening Scale (AELS). In D. L. Worthington & G. D. Bodie (Eds.), *The Sourcebook of Listening Research*. doi:10.1002/9781119102991.ch8