Competencies:

- Perform effectively on interprofessional teams;
- Understand the effects of markets and political processes on the allocation of resources to health services and public health programs;
- Demonstrate an ability to synthesize complex information for a decision maker, addressing the issues of costs, benefits, distribution, effectiveness, efficiency, administrative ease, legality, equity, and political acceptability and make and support recommendations affecting health policy and practice;
- Appraise the ways in which sociocultural contexts influence the understanding and expression of mental and substance use disorders, as well as, help seeking behaviors and response to treatments

Hotspotting Case Analysis:

For the past several months, I participated in a program known as Community Interprofessional Care Coordination, or "Hotspotting." My Hotspotting team was composed of myself (a public health student), an occupational therapy student, a pharmacy student, a nursing student, and a medical student. We were supported throughout the program by our mentor, Keely Finney, who is both a community health worker and a social worker. Together, we worked with two participants from the community who expressed a desire for extra support navigating the healthcare system and improving their health status.

In the United States, 5% of the population accounts for 50% of annual health care spending, and 1% of the population accounts for nearly 25%.[1] This small segment of the population is often referred to as "superutilizers." Superutilizers are "patients with high medical costs from recurring, preventable inpatient or emergency department visits."[2] In Missouri, superutilizers are more likely to be on Medicaid insurance, have one or more psychological disorders, and be experiencing housing instability.[3]

Hotspotting is a healthcare strategy developed in Camden, New Jersey by Dr. Jeffrey Brenner to reduce healthcare utilization among superutilizers. Hotspotting programs connect superutilizers directly with primary care and community resources in order to abate the social

and structural determinants of health that contribute to high healthcare utilization and expenditures (e.g., lack of transportation, lower income, housing instability, etc.).[2] Hotspotting has demonstrated efficacy in multiple settings; Coburn et al. reported that Medicare beneficiaries in eastern Pennsylvania who were randomly sorted into Hotspotting had a 25% lower relative mortality risk and lower healthcare expenditures compared to controls.[4]

Our Hotspotting participants were both low-income individuals from minoritized populations. They experienced the compounding effects of poor health, economic disadvantage, and racism, particularly in healthcare. One of our participants (henceforth referred to as Participant A) suffered from hypertension, hyperlipidemia, pre-diabetes, vertigo, arthritis, anxiety, and insomnia. Participant A lived in Section 8 housing for older adults, and she expressed that she felt unsafe in her building, as non-residents would often convene or sleep in the hallways. The building was also infested with vermin, posing an additional safety hazard. Participant A tried to alert her caseworker to these issues but was repeatedly ignored. These factors exacerbated Participant A's anxiety and insomnia, causing her significant distress. Working with Patient A was a powerful reminder that our social, cultural, and built environments play a powerful role in shaping health and help seeking behaviors. Accordingly, my Hotspotting team worked with Participant A to improve her environmental conditions. For example, we helped her search for new housing, encouraged her to advocate for herself with her caseworker, and assisted her in accessing specific benefits through Medicaid.

Our other participant (henceforth referred to as Participant B) was overweight and suffered from Type II diabetes, hypertension, beta-thalassemia minor, hemorrhagic ovarian cysts, and a Vitamin-D deficiency. She expressed that she did not "feel seen" for her medical concerns and shared several anecdotes of past racial bias from healthcare professionals. These experiences

prevented Participant B from receiving follow-up care for her various conditions, as she felt reluctant to engage with other health professionals. Additionally, she cited cost as a barrier to seeking out care (e.g., an X-ray of her uterus). We worked with Participant B to find a new primary care practitioner, as well as track her blood pressure to have "evidence" of her progress in order to eventually stop taking hypertension medication (one of her personal goals).

Overall, my experience with Hotspotting was challenging, yet highly rewarding and instructive. Working with an interprofessional team allowed me to clarify the roles and responsibilities of the various health professions represented. For example, the occupational therapy student on my team stepped in to field questions about activities of daily living, mobility, and social participation. As a public health student, I felt confident supporting our participants with questions related to the social determinants of health, Medicare and Medicaid, and health behaviors. However, my colleagues in nursing, medicine, and pharmacy were better positioned to respond to specific medical questions. With this mutual understanding, my team worked very effectively to brainstorm interventions for our participants.

At the end of the program, our participants expressed that they felt empowered and equipped to navigate the healthcare system with confidence, as well as implement changes in their health behavior. Additionally, they expressed that our team made them feel seen and heard, a disappointingly rare experience for these participants in the context of healthcare. In light of this experience, I recommend Hotspotting be expanded to reach more students and more community members in St. Louis. Although we communicated with our participants mainly through Zoom, I strongly recommend dispatching Hotspotting teams to visit participants in their homes. Not only would this improve accessibility for participants, but engaging with participants

in their homes might allow Hotspotting team members to better identify the social and environmental factors impacting participants' health or help-seeking behaviors.

References

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