

Title: Increasing Breast Cancer Screening Rates at the International Community Health Center

Principal investigator: Amy Lee, MD, MPH, Professor and MPH Program Director

Location: NEOMED/International Community Health Center offices for root cause analysis sessions

Abstract: International Community Health Center is a Federally Qualified Health Center (IHC) that has seen a decline in breast cancer screening in the past year. To increase their screening rates, quality improvement project planning will be conducted this summer, which will include a root cause analysis, impact/effort matrix, and continued tracking of breast cancer screening rates.

Significance of the overall research: The International Community Health Center is a Federally Qualified Health Center based in northeast Ohio, with sites in Cleveland and Akron. It serves thousands of patients, including Asian American Pacific Islander and immigrant/refugee populations each year in northeast Ohio. Each month, between 300-400 women are eligible for breast cancer screening. However, screening rates have decreased from around 50-60% to about 20-30%, as shown in recent quality improvement data tracking. This project will investigate the causes in a staff root cause analysis exercise in two offices and prioritizing interventions from an impact/effort matrix to boost breast cancer screening rates.

Goals and objectives: This project will be for the summer fellow will be to conduct the “planning” step of the Plan-Do-Study-Act quality improvement cycle, which will include a root cause analysis (fish bone diagram and 5 whys, as appropriate), impact/effort matrix, and continued tracking of breast cancer screening rates at the International Community Health Center offices in Akron and Cleveland.

- SMART Objective 1: By August 31, 2026, conduct a root cause analysis that will provide at least 3 root causes for the decrease in breast cancer screening at IHC.
- SMART Objective 2: By August 31, 2026, provide at least 3 recommendations of interventions to increase breast cancer screening at IHC, prioritizing high impact/low effort actions.

Research methods that will be used/learned: An IRB application will be submitted. The student fellow will conduct two root cause analysis and impact/effort matrix development sessions at the Akron and Cleveland sites.

Proposed methods of data analysis: The student will provide a fishbone diagram (and 5 whys analysis, as appropriate) to recommend high impact/low effort interventions to increase breast cancer screening.

How the anticipated findings from the summer research fellow contribute to the success of the overall research being investigated: The products will be used by administrators of IHC to consider as a part of their strategy to increase their rates of breast cancer screening.

Appendix

- *Plan for training/mentoring the summer research fellow—individual, group, lab meetings, journal clubs, seminars, etc.* The student will do the following:
 - Attend regular meetings with the faculty advisor (remote or in person).
 - Demonstrate project management techniques, such as creating agendas and meeting summaries and adhering to a project timeline.
 - Take the Writing for the Sciences course offered by Coursera (free version) to improve their writing skills.
 - Submit a non-research determination form.
 - Conduct two root cause analysis and impact/effort matrix sessions—one at the Akron office and the other at the Cleveland office. Write a report
 - Submit an abstract for the NEOMED student research forum in the fall.
- *Description of resources available.* The student will be given guidance by the faculty preceptor on organizing these sessions.
- *Site where the research will be conducted.* The research will be conducted at NEOMED, remotely, and at the Akron and Cleveland offices of the International Community Health Center.

Sources

- Berger S, Huang CC, Rubin CL. The Role of Community Education in Increasing Knowledge of Breast Health and Cancer: Findings from the Asian Breast Cancer Project in Boston, Massachusetts. *J Cancer Educ.* 2017 Mar;32(1):16-23. doi: 10.1007/s13187-015-0911-3. PMID: 26373418; PMCID: PMC6528474.
- Brady LA, Tumiel-Berhalter LM, Schad LA, Bentham A, Vitale K, Norton A, Noronha G, Swanger C, Morley CP. Increasing Breast, Cervical, and Colorectal Cancer Screenings: A Qualitative Assessment of Barriers and Promoters in Safety-Net Practices. *J Patient Cent Res Rev.* 2021 Oct 18;8(4):323-330. doi: 10.17294/2330-0698.1857. PMID: 34722800; PMCID: PMC8530240.
- Yao N, Hillemeier MM. Disparities in mammography rate among immigrant and native-born women in the U.S.: progress and challenges. *J Immigr Minor Health.* 2014 Aug;16(4):613-21. doi: 10.1007/s10903-013-9798-4. PMID: 23430466; PMCID: PMC3772964.