Improving Breast Cancer Screening Rates in Filipina, Native Hawaiian, and Pacific Islander Populations in West Oʻahu: A Quality Improvement Project

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Background

- **In the US, breast cancer is the most common cancer in women**, apart from skin cancer, and is the **second leading cause of cancer mortality in women**.
- **1 in 8 women** will develop breast cancer in their lifetime.
- Regular **mammography screening** can lead to early detection of breast cancer, which is associated with better outcomes and reduced mortality.
- While the **national goal is an 80%** screening rate, **Hawai'i's 2022 average was 78.5%**.
- **Baseline breast cancer screening rate** in a West Oʻahu primary care practice serving primarily Filipina, Native Hawaiian and Pacific Islander (NHPI) populations was **59%** as of May 1, 2025, highlighting a significant health disparity.

Objectives

- **Identify primary root causes** for low breast cancer screening rates in the Filipina and NHPI populations in West Oʻahu.
- **Develop and implement solutions** that target the main root causes to improve breast cancer screening rates.
- **Increase breast cancer screening rates** from 59% to 70% by December 31, 2025.

Methods

- A chart review was conducted on the electronic medical records of **318 HMSA-insured patients** at a West Oʻahu primary care practice, and cross-referenced with insurance claims data between May and June 2025.
- Patients were included in the analysis if they were **female, 50-74 years of age, and due for breast cancer screening per HMSA records**; they were excluded if they met HMSA breast cancer screening exclusion criteria, including receiving hospice or palliative care services.
- Observed and interviewed the primary care team and nearby imaging centers to understand their workflows for completing breast cancer screening.
- Conducted **four Plan-Do-Study-Act (PDSA) cycles** over two months to target the most common root causes through outreach:
  a. Text message outreach sent to patients due for mammogram with an active order, but no scheduled appointment
  b. Follow-up text messages sent to those from the first cycle who hadn't responded within 1 week
  c. Text message sent to patients due for mammogram who had not been seen in the past 12 months or contacted in previous cycles
  d. Called patients who did not respond in the previous 3 cycles
- Conducted additional chart reviews at the time of each PDSA cycle and on December 31, 2025 to calculate the final screening rate.

Results

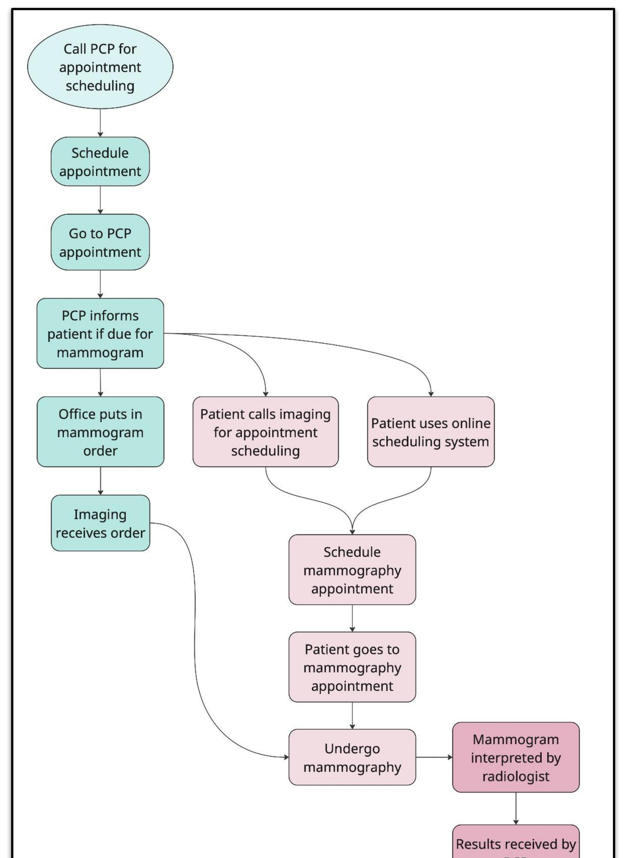

Figure 1: Process Map

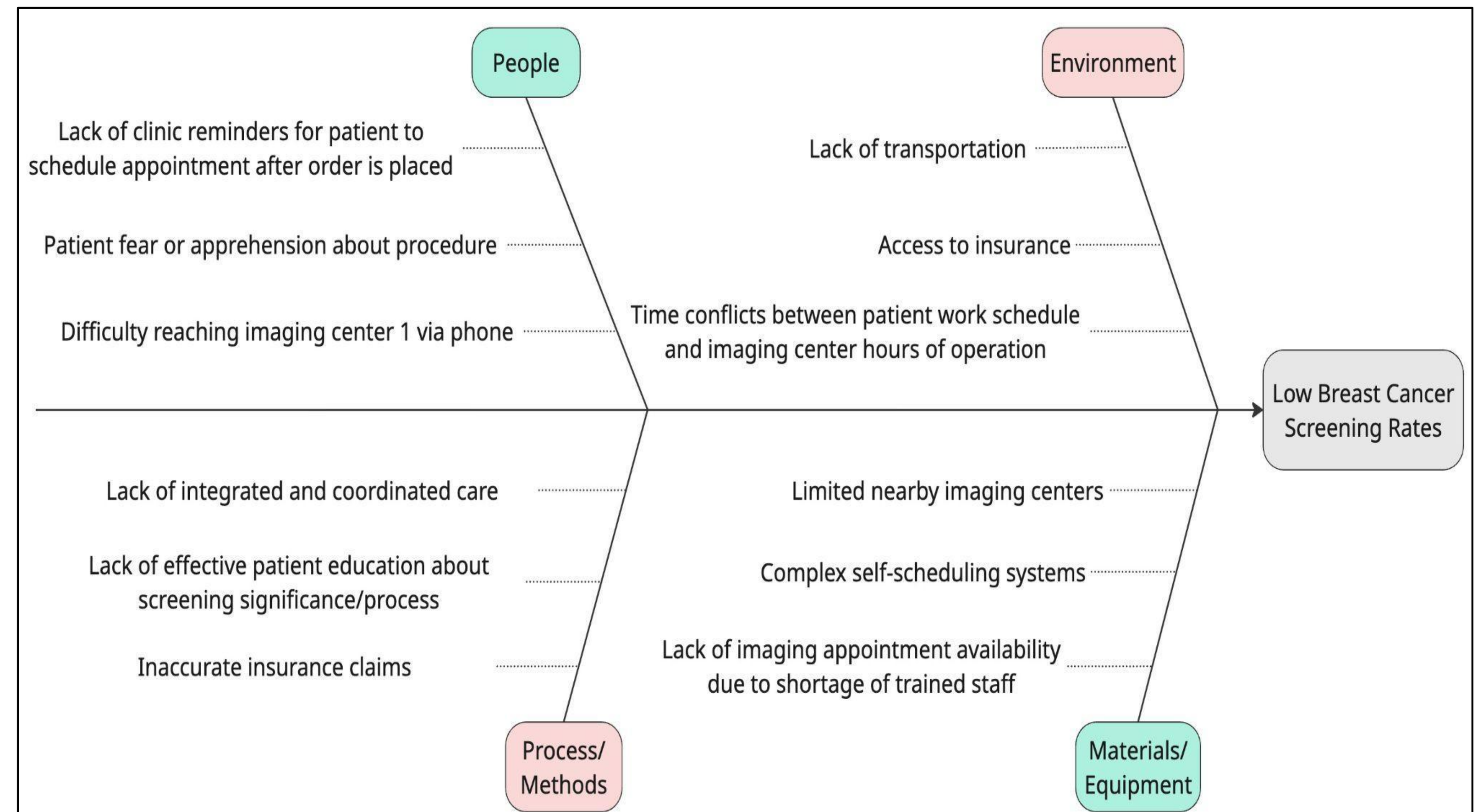

Figure 2: Ishikawa diagram for low breast cancer screening rates

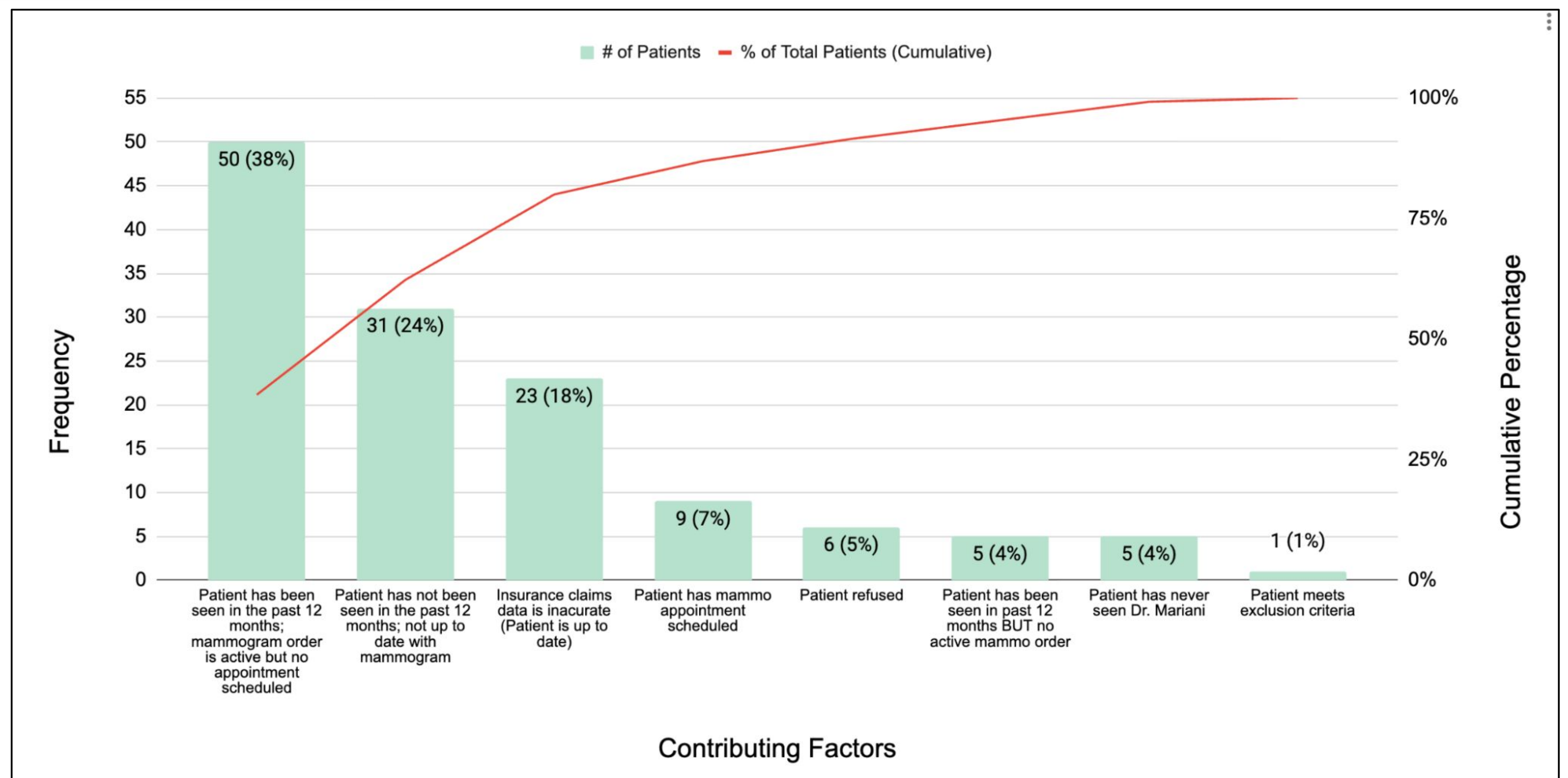

Figure 3: Pareto chart for root causes of low breast cancer screening rates

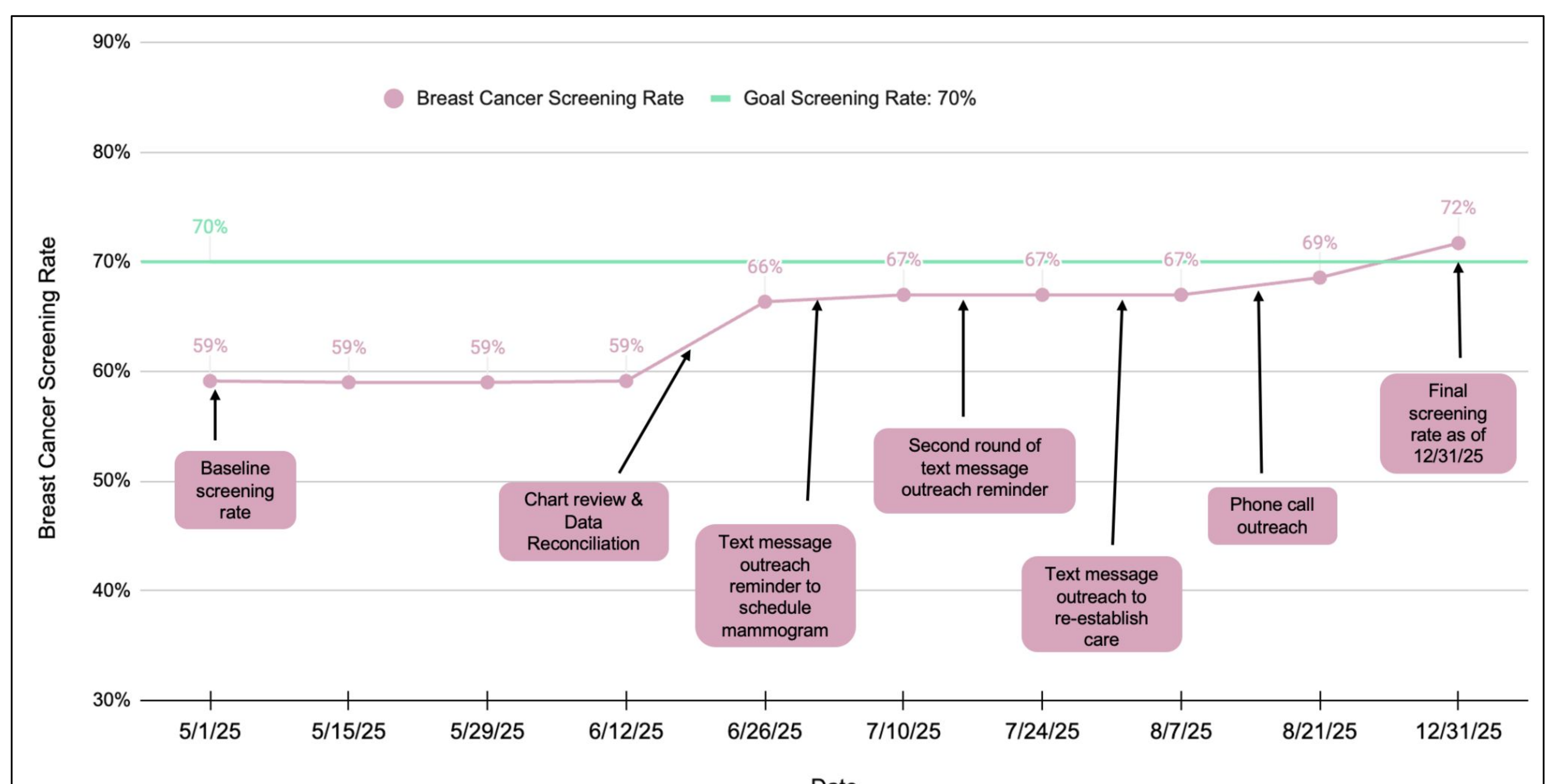

Figure 4: Run Chart

Key Takeaways

1) **Access to mammograms in West Oʻahu is limited, with significant scheduling challenges**. Wait times were found to be up to 1-2 months, and one center was not expected to schedule appointments for a 90 day period, due to staffing shortages.
2) **The process of scheduling is difficult**. The online option is challenging for those with limited English or reading skills, despite recent improvements to reduce complex medical questions. The phone option is not reliable, as calls may not be answered and/or patients have to navigate a complicated phone tree system.
3) **Discrepancies between insurance claims data and electronic medical records** lead to inaccurate breast cancer screening rates.
4) Cultural barriers such as fear of receiving bad news and pain associated with the imaging procedure may play a role in patients receiving biennial mammograms. **Patient education can play a key role in alleviating patient concerns and clarifying the screening process.**

Next Steps

1) Work with imaging centers to expand mammogram appointment availability and build streamlined scheduling workflows
2) Work with community partners to advocate for increased mammogram resource allocation

Acknowledgements

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Scan for abstract and references