

## Purpose

Annual screening (or screening every 1 to 2 years) with mammography beginning at age 40 is recommended for those who meet breast cancer screening guidelines. Since 2021, the Sidney Kimmel Comprehensive Cancer Center (SKCCC) Dietz & Watson Mobile Screening Unit (MSU), has provided free breast cancer screenings to 2000+ patients within the Greater Philadelphia region, particularly among minority and underserved populations.

As part of the 2023-2024 cohort of the Harvard Medical School Mobile Health Map and Mobile Healthcare Association’s Mobile Health Innovation Collaborative (MHIC), we partnered with our data science team to evaluate and understand if our MSU helps facilitate patient adherence to breast cancer screening guidelines (return for screening in <2 years), and potentially in the long term, reduce cancer burden and cancer disparities.

To answer this, we analyzed and compared the following rates for patients who were eligible for a subsequent screening:

- 1) percentage of patients who returned to the MSU for their next screening
- 2) percentage of patients who screened at our health system but not on the MSU (at a static site)
- 3) percentage of patients who screened at a different health system in the area (not our MSU nor our static sites)

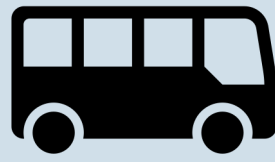


## Methods

- Patient demographic and clinical outcomes data for breast screening was pulled and analyzed from Epic and Epic Care Everywhere (external screenings) between September 30, 2021 and January 12, 2024
- Adherence rates for patients who returned to the MSU (1-2 years vs. 2+ years), patients who screened at a static site (1-2 years vs. 2+ years) and patients who screened at an external site (1-2 years vs. 2+ years) were calculated for those who had a full 2 years to return for screening (N=146)



## Results

### Mammography Adherence Rates (N = 146)

	1-2 Years	2+ Years	Total (%)
 Return to MCSU	10	0	10 (6.8%)
 Return to Static Site	23	2	25 (17.1%)
 Return to External Site	0	0	0 (0.0%)

\*Aggregate percentage: 23.9%

## Discussion

- Knowing the percentage of age-eligible women who received a subsequent breast cancer screening, and where that screening occurred, is vital evaluation information that can help guide future outreach efforts
- Our mobile cancer screening program now has a baseline rate of adherence
- Results suggest that our MSU has room for improvement for promoting consistent breast cancer screening among those who may not be familiar with routine cancer screening
- However, due to the relatively higher number of patients who returned to a static site for an annual screening (17.1%), we can conclude that our MSU has facilitated adherence to screening guidelines by serving as an entry point to the larger health system
- Mobile screening programs in general, may be the most effective at introducing screening to populations that are more difficult to reach

## Conclusion/Future Directions

Based on the results of our evaluation, we are considering implementing direct reminder communications for annual screenings through methods such as text messaging and/or mailed reminder postcards.

We plan on disseminating our evaluation results to various stakeholders who may be interested in understanding:

- how mobile cancer screening may play an important role in introducing our health system to underserved communities,
- how interventions can be implemented to increase adherence to cancer screening guidelines, and
- how we can potentially increase the number of repeat screenings, with the goal of contributing to early cancer detection and reduced costs of cancer care

## Acknowledgements

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