

A Multi-Method Approach to Improving Preventative Care: Breast Cancer Screening at LVHN

Gina Provenzano
USF MCOM- LVHN Campus

Grant M. Greenberg M.D., M.H.S.A., M.A.
Lehigh Valley Health Network, grant.greenberg@lvhn.org

Melanie B. Johnson MPA
Lehigh Valley Health Network, Melanie_B.Johnson@lvhn.org

Kyle Shaak BS
Lehigh Valley Health Network, Kyle.Shaak@lvhn.org

Follow this and additional works at: <https://scholarlyworks.lvhn.org/select-program>

Part of the [Medicine and Health Sciences Commons](#)

Published In/Presented At

Provenzano, G. Greenberg, G. M., Johnson, M. B., Shaak, K. (2018, March). *A Multi-Method Approach to Improving Preventative Care: Breast Cancer Screening at LVHN*. Poster Presented at: 2018 SELECT Capstone Posters and Presentations Day. Kasych Family Pavilion, Lehigh Valley Health Network, Allentown, PA.

This Poster is brought to you for free and open access by LVHN Scholarly Works. It has been accepted for inclusion in LVHN Scholarly Works by an authorized administrator. For more information, please contact LibraryServices@lvhn.org.

A Multi-Method Approach to Improving Preventative Care: Breast Cancer Screening at LVHN

Gina Provenzano, Grant Greenberg MD, Melanie Johnson MPA, Kyle Shaak MPH
Lehigh Valley Health Network, Allentown, PA

Introduction

- Breast cancer is one of the most common cancers and leading causes of cancer deaths among women in the United States¹
- Mammograms are the best way to detect breast cancer early²
- The Department of Family Medicine at Lehigh Valley Health Network (LVHN) has a mammography rate of 67% which lags behind the Pennsylvania state screening rate of 77.4%³.
- Healthy People 2020 has a target of 81.1% for women aged 50-74 years who had a mammogram in the past 2 years⁴.
- Each LVPG location has a clinical coordinator who is in charge of the administrative aspects of the practice.
- The purpose of the study was to survey clinical coordinators to understand the workflow of primary care practices and identify potential individual and systemic barriers for mammography screening.

Problem Statement

Systemic barriers in the workflow of primary care locations need to be identified to better understand why female primary care patients aged 50-74 are not current with mammography screening.

Methods

- IRB approval was obtained.
- A practice survey was sent to all clinical coordinators at LVPG internal medicine and family medicine practices through REDCap email delivery.
- The survey remained available for seventeen days with four reminder emails sent.
- The anonymous survey was distributed in six geographic cohorts (Figure 1).
- Data was solicited to identify materials, process, guideline usage, outreach and barriers as related to breast cancer screening using four single-choice questions and several free-hand answers.
- No compensation was given.

Results

- 25 out of 36 (69.4%) surveys were completed.
- Figure 2 identifies how practices identify patients eligible for screening.
- 10 practices reported not having a reminder system to identify overdue patients. The other practices reported using metric reports and health maintenance reminders.
- 24 practices reported using outreach including letters, phone calls and emails while only one practice reported no outreach activities.
- All of the practices in the western and northern Lehigh Valley reported using the breast health service (BHS) handout when referring a patient for mammography. One location in the Eastern Lehigh Valley has a unique packet created by their physician.
- All practices reported using the BHS location list to notify patients of facility locations.
- 84% of practices are able to schedule mammography appointments for patients. Of the locations that do not schedule, patients are told to call either BHS or the general LVHN number.
- 72% of practices follow-up with patients who have scripts and have not completed their mammogram.
- 48% of practices track screening rates, varying from daily, weekly, monthly and random intervals.
- Barriers (Table 1): Patient compliance issues ranging from fear of results, pain of the test and unwillingness to take the time for an appointment (10 Practices)
 - Transportation and Faculty locations: All regions except 17th street
 - Cost: 3 Coordinators Only three coordinators reported cost as an issue.
- Resources (Table 2): Closer Facility: 4 of the 6 regions desires
 - More staff: 3 regions
 - More patient education in multiple languages: 1 region

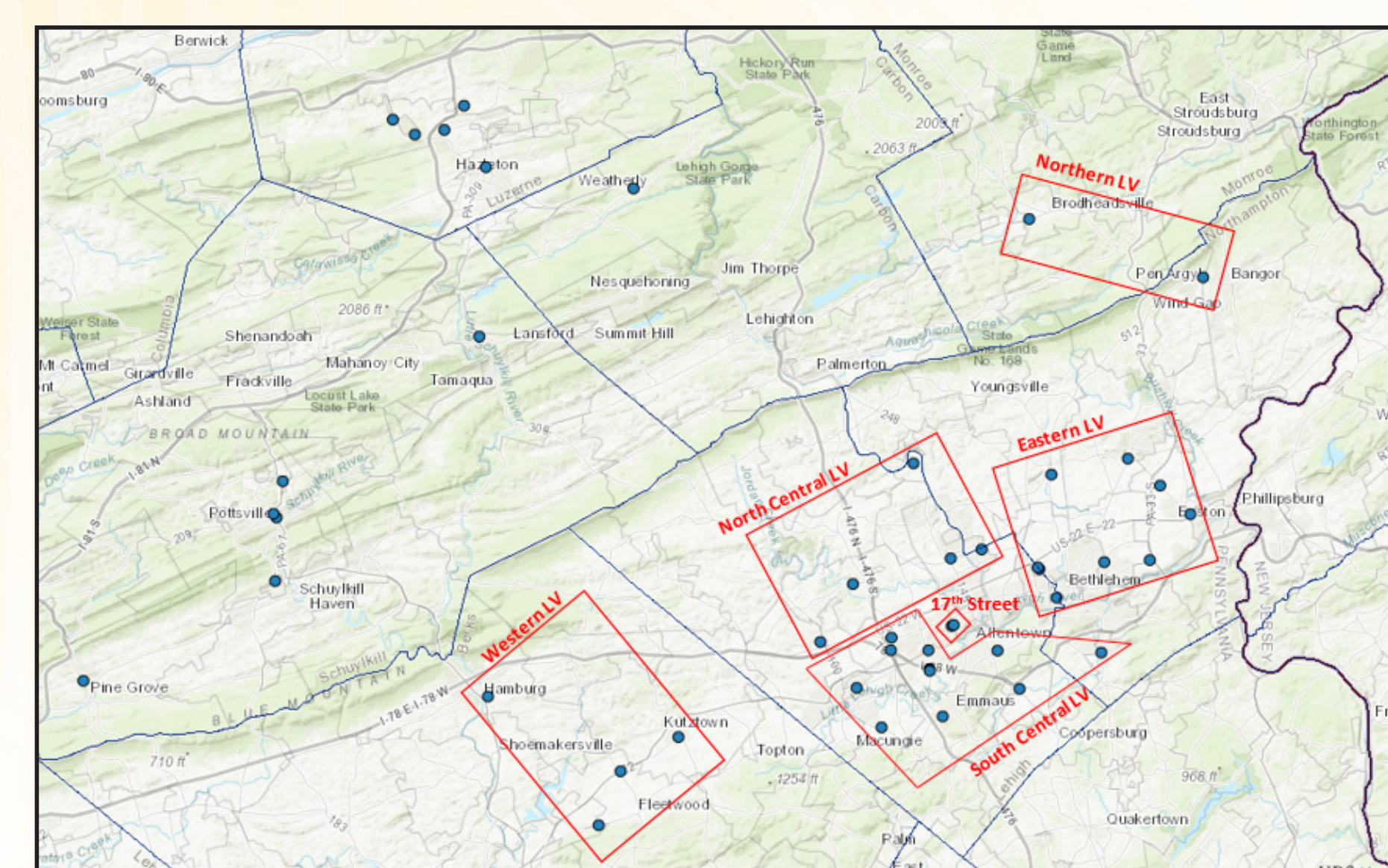


Figure 1: Map demonstrating the 6 geographic cohorts of LVPG practices.

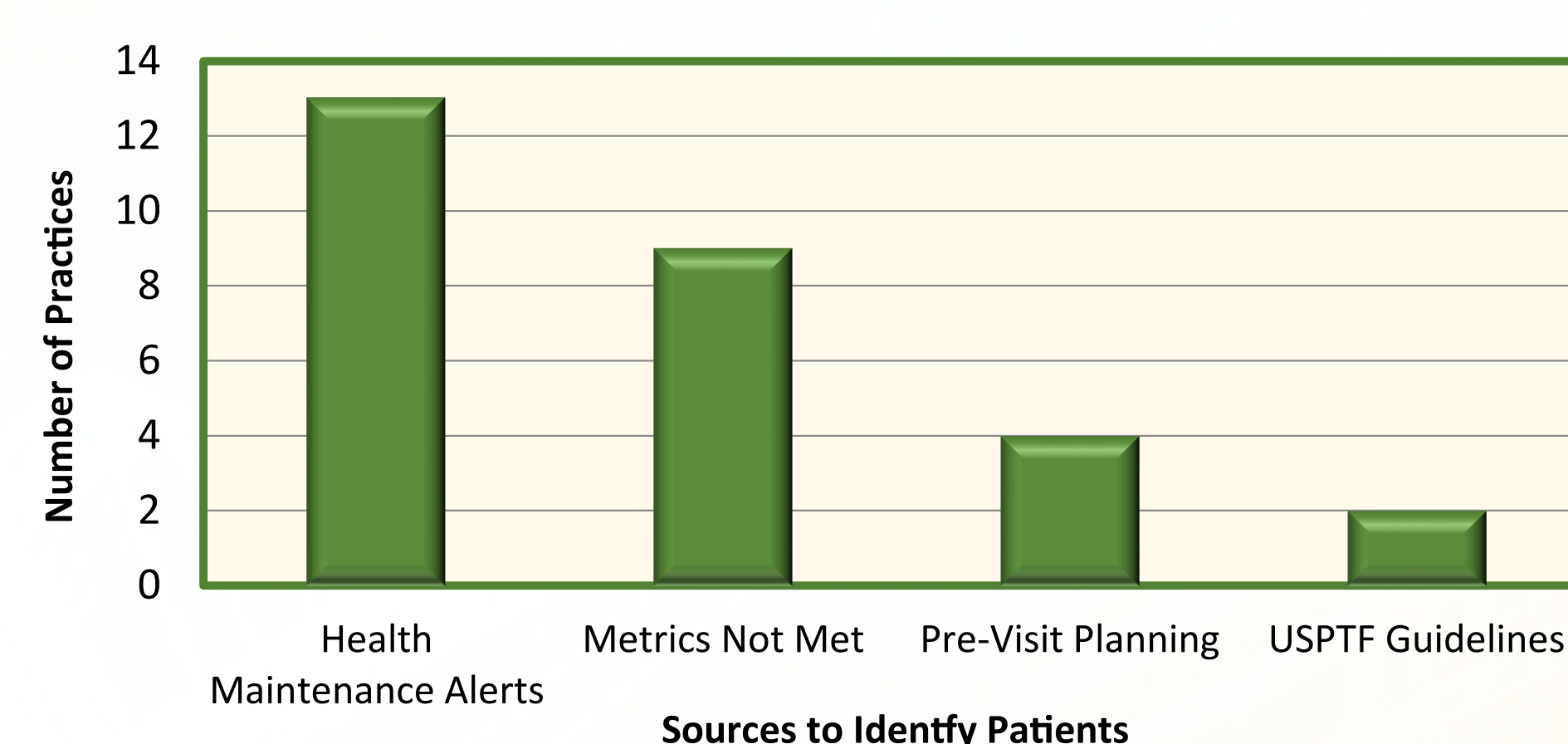


Figure 2: Sources utilized to identify eligible patients by practice

Barriers of Mammography Screening	
Patient factors - fear, pain, time	(17, E, NC, N, SC, W)
Cost	(E, N, SC)
Transportation	(E, NC, N, SC, W)
Location	(E, NC, N, SC, W)
Scheduling	(17, E, SC)

Table 1: Barriers identified by clinical practice coordinators to mammography screening once an order is placed

Opinions of Needed Resources	
Additional staff to educate patients	(17, E, SC)
Same-day or next-day availability	(E, N, SC)
Patient education	(E, SC)
Better ways for practice to track screening rates	(NC)
Location closer to practice	(E, NC, N, SC, W)
Spanish Literature	(17)

Table 2: Resources identified by Clinical Coordinators that may improve screening rates

Conclusions and Future Implications

- Education on the use of the electronic health record existing tools and reminders to facilitate identification, of patients who are due or overdue for breast cancer screening needs to be disseminated throughout LVPG practices.
- Development and reinforcement of standard workflows is needed across LVPG to support mammography referrals and completion.
- Mammography results available through the EHR system, including those done outside of LVHN, would help eliminate staffing needs to maintain updates to health maintenance section of the medical record and would provide more accurate metrics. The Health maintenance section is the primary means identified by clinical coordinators to identify patients, up-to-date.
- Additional mammography locations could be considered based on geographic demand.
- Processes to improve rates of other screening tests already developed for other modalities and topics such as colon cancer screening at LVHN can be modified for application to breast cancer screening.
- This study is limited to only health care staff. Additional research to understand barriers from the patient perspective is warranted.
- Further research on need for resources, marketing, and availability and preference of hours by the patients is required.

References:

- Centers for Disease Control and Prevention. (2016). *Breast cancer statistics*. Retrieved from <https://www.cdc.gov/cancer/breast/statistics/index.htm>
- Centers for Disease Control and Prevention. (2016b). What is a mammogram. Retrieved from https://www.cdc.gov/cancer/breast/basic_info/mammograms.htm
- Office of Disease Prevention and Health Promotion. (2017). Cancer. In *Healthy People 2020*. Retrieved from <https://statecancerprofiles.cancer.gov/>
- Office of Disease Prevention and Health Promotion. (2017). Cancer. In *Healthy People 2020*. Retrieved from <https://www.healthypeople.gov/2020/topics-objectives/topic/Cancer/objectives#4055>

© 2018 Lehigh Valley Health Network