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Getting Mammograms Shouldn't Be So Bumpy- Improving Mammogram Workflow in VA Community Care

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Title: Getting Mammograms Shouldn't Be So Bumpy- Improving Mammogram Workflow in VA Community Care

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Background

The interplay between Community Care (CC) and VA-based care has long been important for continuity of patient care, though transitioning care between the two is often fraught with problems. Mammograms ordered at VA San Diego (VASD) are often deferred to community care; while this process should be smooth and seamless, the process is instead convoluted and ripe for errors. The lack of standardization, disconnect between the interface between VASD and CC, and splintered tracking systems has led to delays in care, delays in results, and at worst, patient harm and delays in diagnosis. VA mammograms completed in the community have inconsistent rates of completion, with errors ranging from unscheduled appointments, delayed provider notification, and loss to follow up leading to late diagnoses of breast cancer. To reduce patient harm and increase fluidity of VA mammograms in the community, we applied extensive QI methodology towards overhauling the VA Community Care Mammogram workflow.

Methods

We evaluated the process of CC mammograms at VA San Diego. An A3 was used to process map the VA CC Mammogram process, beginning with VA provider entering a mammogram order to the community and ending with mammogram result release to the patient. A virtual Gemba walk was performed, during which the author evaluated how the CC team processed consults and results. Using Lean Six Sigma process improvement strategies, we identified several problematic areas within the CC Mammogram workflow that are prone to errors and can lead to patient safety issues. Weekly meetings and interviews were set up to identify pain points with the primary users, with continuous evaluation of new systems implemented.

We standardized workflow by developing a Standard Operating Procedure (SOP) that would allow standardization of tracking and intake of consults, as well as release of results. We also created redundancies that would allow for backup systems and medical assistants to reach out to patients so that appointments were made and results obtained in a timely manner. We incorporated the use of the Coordinated Care Tracking System (CCTS), a new tool that being incorporated in some departments for tracking patients and creating reminders for follow up, while storing all patient data in a unified place. We also redesigned the ordering menu within CPRS for mammograms, which was a pain point for ordering providers.

Results

Process mapping of the VA CC mammogram process revealed significant amounts of waste and several failure modes. Notably among these was the splintered tracking systems used within the CC team and lack of automated follow up or reminders; prior to our intervention, patient tracking was done on individual Excel sheets across multiple users. We implemented a standardized practice whereby the CC team would enter every patient into the CCTS system and create task reminders within CCTS to remind when follow up was required, which helped reduce follow up errors. We also redesigned the CPRS mammogram ordering menu to remove misleading information and to streamline CC mammogram ordering. Implementation of the standardized process and transitioning patient tracking into CCTS increased monthly rates of timely mammogram reporting from a median of 60% to 100% in all BIRADS groups (Figure 1). Subjective reports by the CC primary users was overall positive within this new workflow; while we did have challenges getting buy in and training to use the software, once trained, users found CCTS to be accessible and reminders helpful. CCTS also facilitated unification of all patient data, rather than individual spreadsheets.

Conclusions

Standardization of workflow and incorporation of Coordinated Care Tracking System software into the Community Care Mammogram process has led to an improvement in rates of CC mammogram scheduling and results notifications. Improved tracking of community care patients has the potential to prevent loss of patients to follow up, and more importantly prevent unnecessary patient harm. It is worth considering whether CCTS and a similar standardized process should be incorporated into other community care programs, as the issue of inconsistent patient tracking is not one that is isolated only to mammograms. There remain many challenges with the CC system, especially with transitioning records and imaging from outside facilities to and from the VA; we are working on incorporating cloud-based software to further facilitate communication between the VA and the community.

Figure 1- Run Chart of Monthly mammogram results released in a timely manner. Denominator represents all community care mammograms completed in a month, numerator represents # of mammograms that were reported to the patient in the expected time range (BIRADs 0,3,4,5,6 < 7 days AND BIRADS 1,2 < 14 days). Intervention began September 2022

Monthly rates of CC Mammogram reports released to patients in a timely manner (BIRADS 0,3,4,5,6 <7 days AND BIRADS 1,2 <14 days)