Title: Reducing Interpretation Time for Breast Clinic Patients Presenting With Outside Materials

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Purpose: The purpose of this work is to describe our efforts to improve outside radiological material interpretation during a 100-day quality improvement project within the Division of Breast Imaging.

Methods: Using the IHI Model for Improvement and the DMAIC framework as guides, we were able to improve the process time for an outside material (OSM) interpretation for patients being seen in the Breast Clinic. Improvement methodologies such as a Value Stream Map, Pareto analysis, Customer-Centered Culture (C3) for satisfaction surveys, affinity diagram, and multiple PDSA cycles were performed. Process efficiency was assessed using electronic time stamp data.

Results: Baseline data showed a mean process time of 203.81 minutes from patient check-in to initial radiologic interpretation (primary measure). At the time of this submission, process times have been reduced by 14.3% with one additional test of change outstanding. An overall reduction of 30% or higher is predicted. Baseline data for OSM order to initial interpretation (secondary measure) have improved from 124.83 to 87 minutes (-30.3%) along with a significant reduction in variation. Baseline satisfaction data (balancing measure) was also analyzed and will be compared to post project results.

Conclusions: One hundred-day quality improvement efforts supported by the IHI Model for Improvement and DMAIC framework can yield positive improvement results by eliminating redundancy and unnecessary (waste) process steps.