Quality Improvement Dashboard for Pathology

The Problem
Pathology is a clinical practice heavily regulated by governmental and accreditation organizations. In order to achieve the compliance to all external requirements and also seek internal improvements, the Department of Pathology at BIDMC has a total quality improvement plan which monitors all quality and safety indicators. However, the way we captured and tracked those indicators had been outdated, ‘siliced’, and difficult to interpret. We lacked standardized reporting templates, data-driven analysis, timely review, and were far too heavy on manual data collection. All these factors impeded the effectiveness of the annual quality planning and the initiation of new quality improvement projects. The Department of Pathology needed a digital dashboard in order to monitor and visualize quality measures over time. It was impossible for us to have real-time feedback on our performance, and we were not able to carry out continuous improvement efforts based on significant variation in data points.

Goal
The goal is to create a comprehensive digital quality dashboard for the entire department. All metrics will be reported in a visualized way and integrated into one dashboard. Once fully developed, the dashboard can tell us how we perform in all aspects in real time. Additionally, it is designed to help us identify the potential problems and serve as a trigger for future quality and process improvement activities.

The Team
- Yael K. Heher, MD, MPH – QA/QI Director, Pathology.
- Gina McCormack, MS, MT(ASCP) – Operations Director, Pathology.

The Interventions
- Reviewed existing quality metrics with lab managers, determining the rationale for measure selection.
- Mapped out the information/data flow for each metric. (Who? How? Where?)
- Redesigned data collection template and reconciled data for each metric. (1/13-9/14)
- Created run and control charts for applicable metrics.
- Designed an “Andon” system (visualized signboard) to present the data.

Lessons Learned
- Initial effort to summarize, reconcile, and redesign data presentation was time-consuming, but necessary to achieve performance awareness and optimize improvement initiatives.
- The project provided the process owners an opportunity to rethink quality measures, and make modifications based on their clinical and operational rationale.
- Straightforward infographics are extremely helpful in decision making processes.

Next Steps
- Modify the dashboard to incorporate new metrics for 2015.
- Expand metrics to contract services, adverse events, and more.
- Carry out QI projects based on dashboard information and Andon system.

For more information, contact: Yael K. Heher, MD, MPH; QA/QI Director for Pathology ykheher@bidmc.harvard.edu