Improving ED operations with a performance dashboard at McLeod Health Clarendon Hospital

Who/where
McLeod Health Clarendon Hospital (MHCH) is an acute care hospital experiencing steady emergency department (ED) growth, Manning, SC.

Challenge
MHCH asked Philips to help improve their ED front-end operations, throughput, and patient experience as well as create a culture of accountability for their ED staff.

Solution
Philips consultants led a performance improvement engagement which included prioritized process change implementation, staff training, leadership development, and a custom ED performance analytics dashboard.

Results*
- Reduced arrival-to-triage by 87.5% (12 to 1.5 mins)
- Reduced arrival-to-provider by 51.5% (33 to 16 mins)
- Reduced LWBS by 65% (4% to 1.4%)

$567,000+ additional collectable revenue was generated from reduced LWBS

* Results from case studies are not predictive of results in other cases. Results in other cases may vary.
McLeod Health Clarendon Hospital (MHCH) provides exceptional care and has expanded to meet the growing needs of their patients. They looked to Philips to assist them in further improving their operational performance in the ED. Our consultants provided recommendations to increase process efficiency and developed a dashboard to guide decisions and monitor progress.

**ED Performance Improvement**

Philips consultants with expertise in ED Performance Improvement (PI) completed a comprehensive ED assessment. This process included data analytics, onsite observations, staff and leadership interviews, and identification of opportunities for process change.

Inconsistent practices and processes were identified, as well as gaps in staff education and leadership development. A 13-week performance improvement engagement with two onsite consultants followed to determine root causes and implement agreed upon process changes.

The consultants facilitated prioritized recommendations based on best practices as well as current performance metrics which were provided by the new ED dashboard. The dashboard helped the consultants drill-down to the root-causes of walkouts and other performance issues by hour, day, and month.

The consultants supported implementation of the following to improve overall ED performance:

- Revised triage processes
- Implemented split-flow processes
- Established new patient experience standards
- Enhanced charge nurse role
- Revised performance expectations
- Initiated novice nurse training

The impact of these changes was measured via the dashboard and additional modifications were made to the intake process and staff scheduling. As a result of implemented process changes, MHCH was able to achieve strong results including:

- Reduced arrival-to- triage from 12 to 1.5 minutes – an **87.5% improvement**
- Reduced arrival-to-provider from 33 to 16 minutes – a **51.5% improvement**
- Reduced LWBS by 65% (4% to 1.4%) which generated **$567,000+ in additional collectable revenue**
**TransformAnalytics Performance Dashboard**

As the performance improvement project was progressing, our solution analytics team began developing the online ED dashboard. The goal of the dashboard was to provide an at-a-glance view of daily operational performance, support data-based and sustainable changes, identify areas of concern for further process change, and measure results.

The TransformAnalytics ED Dashboard integrated data from the emergency department information and billing systems. Volume and arrival patterns could be seen with charts detailing the patient trends by acuity, disposition, and arrival method by hour, day, and month. Additionally, physician performance metrics provided the opportunity to address variations in patient care and process efficiency.

The dashboard sent out daily notifications to stakeholders including the CEO, CNO, COO, medical directors, and nursing leadership in the ED. The MHCH leadership team was able to identify performance gaps and encourage sustainable performance improvement through consistent automated reporting.

The dashboard became a ‘source of truth’ for the ED – supporting the performance improvement initiatives and replacing manual reporting. It also reduced unnecessary time spent by leaders compiling, pulling, requesting, and analyzing data in a limited fashion.

**Enhanced ED interim leadership**

The presence of an engaged leader to assist staff with ongoing change management and accountability within the department is paramount to the success of any performance improvement activity.

As process and staff changes were implemented and process improvement results achieved, Philips was asked to provide interim leadership in the ED/ICU. This interim leader was critical in holding staff accountable and maintaining the positive gains in performance.

The PI and interim leader consultants facilitated a staff team to recommend and lead the change implementation. This included rapid cycle tests of change, shift huddles, modification of staffing assignments, increased provider collaboration, and implementation of a split-flow process to maximize throughput of lower acuity patients.

The staff and management teams were pleased with the impact the consultant made as the Interim ED Leader and requested additional Philips consultants to serve as interim leaders for vacancies at other McLeod Health hospitals.

**Staff education**

As part of the performance improvement project, Philips consultants recommended education initiatives to which MHCH agreed. Our team educated staff on the 5-level Emergency Severity Index (ESI) triage system including inter-rater reliability, ED patient experience standards, and a customized novice nurse curriculum.

The courses provided ED-specific education on the accurate assignment of triage level on presentation which is important to patient treatment as well as supporting an improved use of resources. Additional education on patient experience supported improved communication and care delivery consistency.

Clarendon staff embraced the new training which supported the new performance requirements and enabled them to adhere to the new processes and workflow.

“The Philips team provided exceptional clinical and operational expertise and became part of our Emergency Department team. They collaborated with our staff to implement process changes, create an analytics dashboard, and develop training programs. Together, these initiatives have had a significant impact on our Quality Metrics performance and patient satisfaction scores with overall wait times.”

Debbie Locklair, MEd, FACHE
Sr. Vice President and Regional Administrator
McLeod Health
Results
As a result of the implemented changes based on Philips recommendations, McLeod Health Clarendon Hospital was able to significantly improve their performance metrics:

- **Reduced arrival-to-triage by 87.5%** (12 to 1.5 mins)
- **Reduced arrival-to-provider by 51.5%** (33 to 16 mins)
- **Reduced LWBS by 65%** (4% to 1.4%)

$567,000+
additional collectable revenue was generated from reduced LWBS

Learn more
Through collaborative and patient-focused engagements, Philips Healthcare Transformation Services can help you unlock insights and opportunities to solve your most complex challenges of care delivery. We can help you achieve meaningful and sustainable improvements in clinical excellence, operational efficiency, care delivery, and financial performance to improve value to your patients.

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