



ADVANTICS™ Workflow Optimization Solution at United Hospital

Because many patients are presenting with chest pain at the Emergency Department, United Hospital wanted to maximize patient safety and satisfaction when dealing with myocardial infarction. Boston Scientific's ADVANTICS solutions team partnered with the hospital to achieve door-to-first quantitative troponin time of less than 45 minutes – 90% of the time.

Challenge

A large percentage of Emergency Department patients present with chest pain, and when it comes to dealing with myocardial infarction, time is muscle. Getting a serum troponin level, which measures the amount of protein released in the blood, is a critical first step to assess the amount of heart muscle damage. With a focus on patient satisfaction, safety and quality, United Hospital wanted to improve performance and door-to-first quantitative troponin time to improve outcomes.

Solution

The ADVANTICS Workflow Optimization Solution identifies process challenges and supports solutions that maximize savings, increase capacity and eliminate waste.

Assessment

During an initial discovery session, the Boston Scientific ADVANTICS solutions team worked with hospital leadership to fully scope and understand the challenges and opportunities. The staff wanted to understand how they could improve service levels to patients who present to the Emergency Department with chest pain.

Workshop

A dedicated project team gathered for a two-day workshop facilitated by Boston Scientific and co-sponsored by an interventional cardiologist and championed by the hospital's ED director. The core team included two physician leaders, CVSL administration, nursing staff, lab manager and technologist, Patient Care Attendant and a leader from supply chain serving as the project manager.

About the Hospital

United Hospital, the largest hospital in the Twin Cities east metro area,

provides a full range of

healthcare and is

recognized nationally

and locally for its

expertise and support.

United Hospital serves more

than 200,000 patients and their

families each year.

Highly regarded for its clinical care,

United has earned a reputation for

supportive, patient-centered care

designed to create the most

comfortable, stress-free healthcare

experience possible.

33%
Reduction in
door to
troponin time

Capacity
to treat
200-250
additional patients
annually



Key deliverables that were defined and developed as part of the process included:

- Establish protocol and training for door-to-first quantitative troponin process
- Conduct financial benefit analysis
- Develop monthly report measuring arrival-to-disposition for chest pain patients

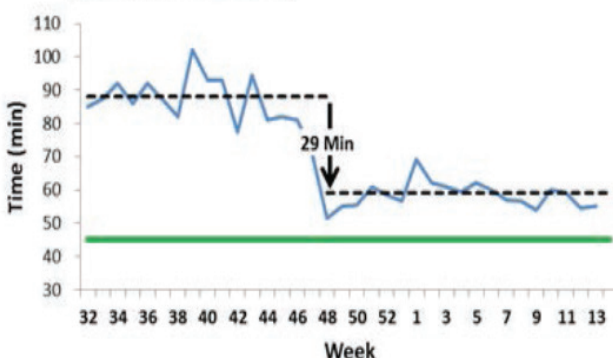
Outcomes

The team identified and implemented many improvements to the current process. Standing orders for lab testing now prevent delays in getting the process started. The qualitative I-stat POC test was eliminated to reduce delays in submitting labs and free up ED personnel to focus on patient care. In addition, lab tests are now replicated, with the blood sample dual-pipetted to eliminate delays in confirming false positives.

The result: 33% reduction in door-to-first quantitative troponin time, down to 29 minutes. This performance has been stable at the new baseline, and offers significant benefits including:

- Saving \$30k annually from elimination of POC test
- Increasing capacity to treat 200-250 additional Level 4 patients annually
- Eliminating >1,300 hours of waste to allow more focus on patient care

Time to 1st Quantitative Troponin
(Median Arrival to Result)



About ADVANTICS™ Innovative Healthcare Solutions

Boston Scientific's ADVANTICS solutions are tailored to accelerate change and sustain cost, quality and growth transformation in hospitals, strengthening a collaborative relationship for long-term success.



Improve
Financial
Health



Enhance
Patient
Experience



Build
Staff
Engagement



Strengthen
Quality
Outcomes



Increase
Operational
Efficiencies

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