

# A team-based response for patients with suspected sepsis

## MASSACHUSETTS GENERAL HOSPITAL

Massachusetts General Hospital Emergency Department (ED) is a busy Level 1 Trauma Center located in downtown Boston that sees over 100,000 patients each year. In June 2018, the ED team at MGH decided to form a department-level sepsis committee to look at their performance on the CMS sepsis quality (SEP-1) measure and identify opportunities for improvement. After analyzing their SEP-1 data, the team decided to adapt the idea of a sepsis rapid response team from Duke University Medical Center, and moved forward with developing a system that would rapidly mobilize staff to a patient's bedside to run through a sepsis treatment checklist.

### Building the checklist

The goal of the revamped process is to expedite identification of sepsis in the ED and ensure that the care team is both aware of the patient's risk of sepsis as well as the appropriate next steps to take to complete the diagnosis and treatment.

Once the triage nurse identifies a patient as being at-risk of sepsis, the patient gets a purple flag in Epic, and a message is sent out via the care team's Voalte phones, notifying them that the patient is being moved into a bay in their treatment area. Once the clinical team receives the message, they are expected to go to the patient's bedside for a huddle with other members of the team. Ideally, the huddle team includes the nurse, the attending physician and the pharmacist. During the huddle, the team will run through the sepsis treatment checklist to make sure they are all on the same page about next steps.

The new process rolled out in October 2018 and is already making a difference. According to Lauren Black, RN, who participated on the implementation team, the checklist and bedside huddle "have been really helpful in making sure that we are identifying all patients at risk for

sepsis and working as a team to be sure that we address every element of the bundle in their care. We have a very busy, overwhelming system, so it is helpful to have tools to help make sure we don't miss anything."

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She notes that having the checklist and the pre-built order set for sepsis in Epic has helped to make treatment of sepsis more systematic.

### Ingredients for success

Several aspects of the MGH approach helped to make the project successful. First, the team worked together to build the necessary IT infrastructure before roll-out of the new process. They developed the interdepartmental communication system to allow for the sepsis alert, and designed the order sets in Epic so that the team could easily choose the right treatments for patients.

In addition, the team invested considerable time in making sure that they proactively educated the ED care team in advance of implementation. They used Sepsis Awareness Month events in September to highlight the importance of identifying and treating sepsis quickly, and held an interdisciplinary skills day for the whole ED team. They designed and gave away "Stop Sepsis, Save Lives" t-shirts as well as badge-backers with the sepsis checklist on it. They used a Survey Monkey quiz to do myth-busting about sepsis and set up an in-situ sepsis simulation and skills lab. In all, they had participation from over 150 members of the clinical team in sepsis-related educational activities.

The team also implemented a feedback system to the clinical team. The project team collects data on core sepsis metrics – for example, initial lactate, blood cultures, and antibiotics within a three-hour time. The Quality Assurance Committee reviews cases and provides directed feedback to the clinical team in confirmed sepsis cases. The team receives an email summarizing care and whether metrics were met. The feedback loop helps to identify areas where team is doing well and where improvement is still needed.

### Hardwiring the process

Since beginning the new process, the team has been working to hard-wire it as much as possible into the electronic systems and to identify ways to make sure the huddle happens. Recently, the vice chair of the ED has begun to track the use of the huddle by attending physicians so it has become a process that they get credit for using in their performance review. In addition, they've added some "dot phrases" in Epic that allows the physicians to pull in the documentation they need to demonstrate that they have done reassessments on a patient. While still a work in progress, the team is pleased with the improvements they have seen so far in the SEP-1 bundle data and plan to continue to look for opportunities for improvement.



Massachusetts General Hospital