

Paramedics help improve flow in emergency department

LOWELL GENERAL HOSPITAL

The emergency departments at Lowell General Hospital's Main and Saints Campuses have emergency medicine and surgical specialists available around-the-clock to care for patients experiencing serious acute illness and traumatic injuries.

Challenge

The emergency department (ED) at Lowell General Hospital struggled with the recurrent problem of patient flow during the 3-11 evening shift, when the patient arrival volume increases at the same time as many of the admitted ED patients are going upstairs to their inpatient beds. On an average day, Lowell General admits about 40 patients from the ED to the hospital's inpatient units. Roughly half of these patients require telemetry, which must be monitored continuously by a skilled member of the medical team as the patient transitions to the inpatient unit. As these telemetry patients moved upstairs, they would need to be accompanied by a nurse to complete the transfer to inpatient. The ED staff estimates that this process, on average, would take about 30 minutes per patient, leading to a significant investment of time for the nurses on that shift. At the same time, it would pull them away from other tasks, including triaging and processing new patients arriving at the ED.

Action

Recognizing the burden on nurses and the impact on patient flow, the ED leadership brainstormed solutions to this daily challenge that would enable them to free up nurses while maintaining patient safety. They decided to pilot a strategy of adding one EMT-paramedic to the 3-11 shift four days a week, replacing one tech position in the ED. The EMT-paramedic would be primarily responsible for escorting the admitted patients with telemetry upstairs. Since EMT-paramedics are trained to monitor telemetry, they are able to assist nurses in this responsibility. In addition to performing this task,

paramedics are also capable of helping with procedures, starting IVs, performing EKGs and helping with airway management, along with other tasks as needed to help the clinical team manage patients. Since the paramedics do not have specific patients assigned to them, they are able to float and can be called in to help on an as-needed basis.

In order to staff these positions, Lowell General has been able to draw on its own pool of hospital-trained EMT-paramedics, who are already hospital employees and are under the medical direction of the hospital. These EMT-paramedics staff the hospital's Advanced Life Support (ALS) ambulance crews that provide emergency medical services along with local first responders to the City of Lowell and the towns of Chelmsford, Dracut, Dunstable, Tewksbury, Tyngsborough and Westford. The ED shifts offer Lowell's EMT-paramedics the opportunity to increase their earnings while also getting the working in a different clinical environment. In addition to providing needed support to the ED team, introducing the EMT-paramedic into the ED has helped improve collaboration and communication between the ED and the ALS ambulance units, since the EMT-paramedics have a view of both worlds.

Outcomes

The pilot in 2018 demonstrated the effectiveness of the program. The Lowell General team acknowledges that the cost of having an EMT-paramedic on-staff instead of a traditional tech is higher, but they feel that the nursing-time saved more than makes up for the difference in cost. Since the paramedics are already trained by the hospital, the only additional training they need to step into the ED is a typical orientation to the ED processes. As a next step, the ED team is now looking to expand the EMT-paramedic coverage to be five days a week and to include some coverage on the weekends and overnights as well.