Tick Tock Tick Tock Says the Critical Clock
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Purpose
The purpose of this project was to improve compliance and increase awareness of the nursing staff when administering time-sensitive medications. According to Sentara Medication Administration Policy, due to the risk of harm if a time-sensitive medication is not administered within a 30-minute window, the attending physician must be notified, and the event documented in the electronic medical record. Enoxaparin is an anticoagulant and dofetilide is an anti-arrhythmic medication, both of which are time sensitive medications. Delays in administration of critical medications for conditions could potentially lead to life-threatening complications.

Significance & Background
On a 24-bed medical unit in a community hospital in Eastern Virginia, nurses were often challenged with meeting the policy requirements of administering time-sensitive medications such as enoxaparin and dofetilide within the thirty (30) minute window of set medication administration times. To increase awareness and improve compliance, the team determined there was a need to create a process to eliminate confusion and empower RNs to administer time-sensitive medications within the required time frame. An evidenced-based project was designed to assist nurses in identifying patients with time-sensitive medications.

Intervention
Patients receiving time-sensitive medications were identified during shift huddle and were written on the unit huddle board. Emphasis during bedside handoff and increased visual cues were initiated. The Charge Nurse or Primary Nurse placed the laminated clock icons (figure 1) on doors of patients receiving time-sensitive medications and used erasable markers to mark the scheduled due time.

Findings

![Figure 1. Use of the time clock](image1)

![Figure 2. Future state, implementing call responder system](image2)

Post-intervention, compliance of time-critical medications increased by 62%.

Conclusions and Implications
Prior to implementation, time-sensitive medications were given correctly less than 22% of the time. On the second week of January, the team initiated the time sensitive medication education during huddle and usage of visual cues such as the clock icon outside patients’ door which demonstrated an improvement to 43.5% compliance. Furthermore, the target goal of 100% compliance was achieved by February 2018. In the months of March, April and May, data shows a decline in compliance, however improvement was sustained from baseline. Limitations include the data gathered were generated only for a span of five (5) months. The barriers that were identified were most of the delay on the first dose administration were from verification of the medication order prior to dispensing and medication availability in the unit medication room.

Recommendations
Utilization of the current nurses’ call bell system (figure 2) has the capability to set an alarm to alert RNs on the required due time. This system will send a text message on the patient’s primary nurse’s phone. A future consideration is to explore the electronic medical record to determine other options that will alert RNs through a flag or symbol on the Medication Administration Record (MAR) for time-sensitive medications. Another opportunity is to redesign workflow in medication order verification and availability of these drugs on the unit.

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