

My improvement journey NHS Health Education East Midlands

Reducing Avoidable Time Delays in Stat Medication Administration

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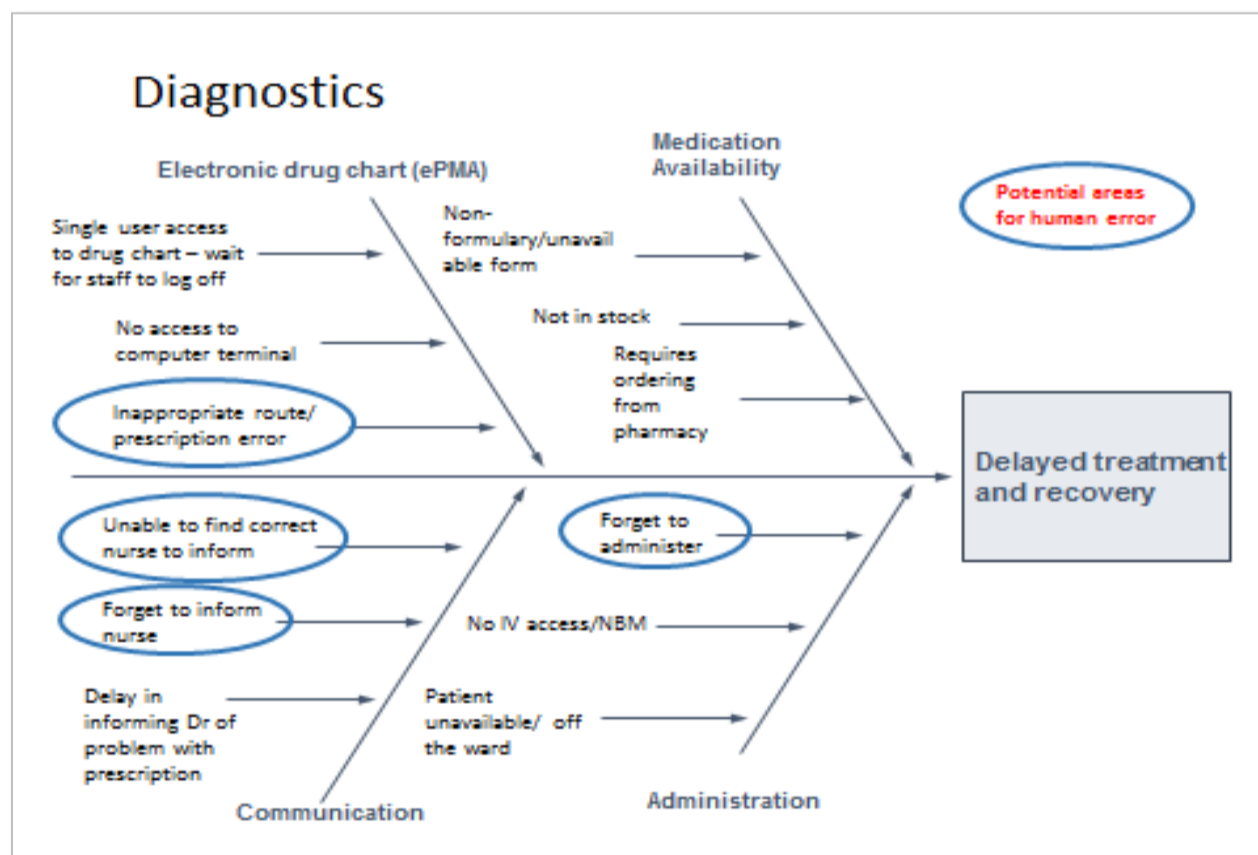
University Hospitals of Leicester NHS
Caring at its best

Initial problem

Delays in drug administration lengthens patient recovery times, prolongs admission and can lead to avoidable patient harm and suffering.

Evidence base

- Problem:**
 - There are often long time delays between stat medications being prescribed and administered
- Observation:**
 - I often find that patients have not received their stat medications, or have had them significantly delayed during ward rounds
- Extent:**
 - Occurs on a daily basis on ward 19 at the LRI
- Evidence:**
 - NPSA Rapid Response Alert - 1183 A | Reducing harm from omitted and delayed medicines in hospital supporting information | RRR | 2010.02.23 | v1



Improvement aim

- To reduce the time delays in stat medication administration, by providing a system that improves communication and acts as an aide memoire, to prevent the human errors that lead to delays in treatments being given on ward 19.

Unable to find correct nurse to inform Forget to inform nurse Forget to administer

Baseline measure

- Baseline measure:**
 - Identify all the stat medications given to patients on ward 19 over a 2 week period.
 - Identify the time prescribed and the time given to calculate the time delay in administration
 - Plot the delays on a run chart to see the pattern.
 - Implement a change and collect 2 more weeks of data to see how this change affects the delays in medication administration.
- Potential long term outcome measure:**
 - Effect on length of inpatient admission

Change idea

Introduce white boards at the entrance of each bay, where doctors can write when stat medications are required in addition to informing the nurses when they are prescribed

Nurses can then wipe these off once the medications are given.

Serves as a visual reminder to both doctors and nurses that medication are still pending.

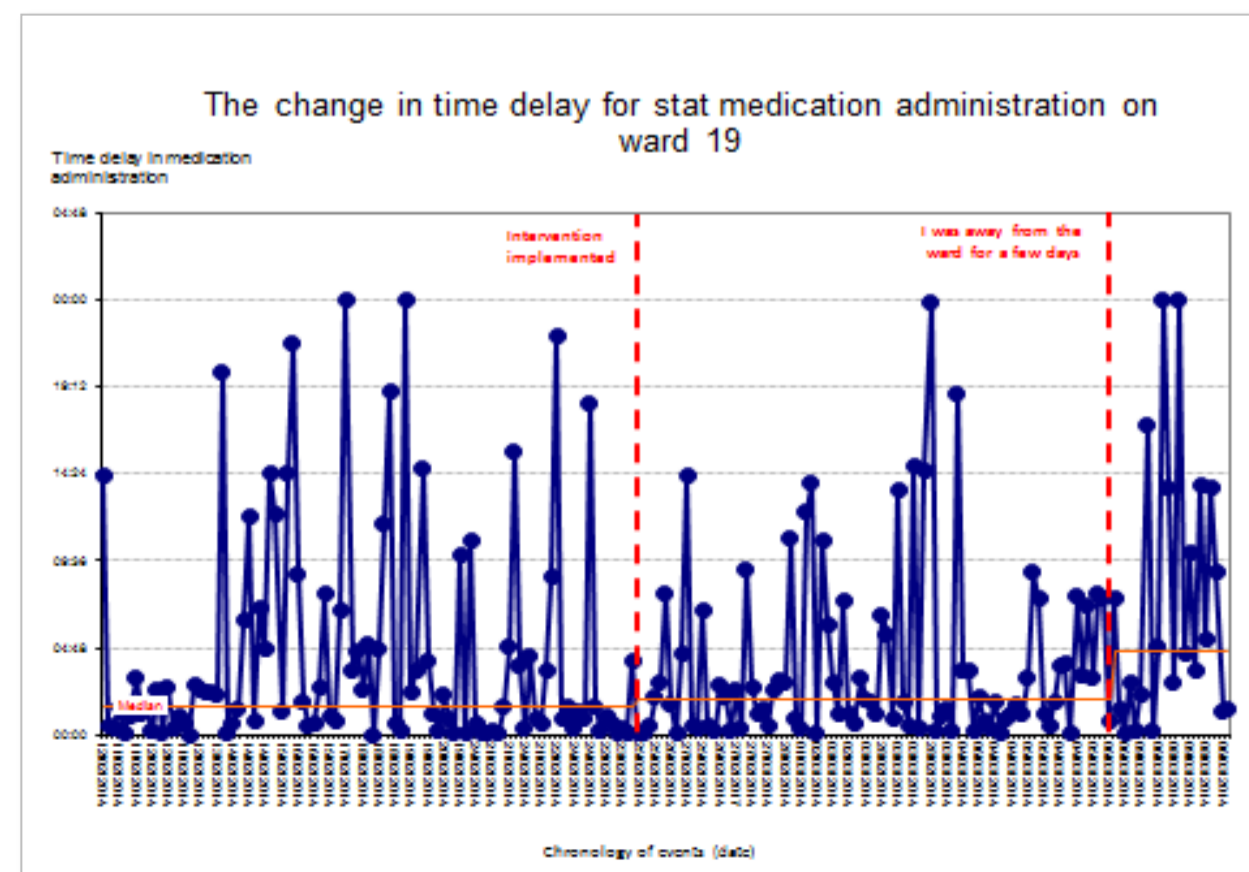
PDSA

Plan:
To collect data, produce charts for each bay on ward 19 and inform staff of the project and get team on board

Do:
Speak with nurses and doctors. Ask for their opinions and input. Get consultants and key nursing staff to agree with my project.

Study:
Found a few nursing staff willing to try my intervention. Gained support from junior and senior doctors after explaining my intentions in detail.

Act:
Recognised that not all staff are keen to try new system therefore provided gentle reminders that it is only a 2 week trial. Explored their reservations and provided reassurances.



Reflections/learning

- Outcome:**
 - My intervention **increased** time delays in stat medication administration, which actually worsened while I was away from the ward.
- Conclusion:**
 - The intervention was **unsuccessful** and could easily be bypassed by staff if they chose not to engage with it. Things likely worsened while I wasn't on the ward due to the fact that when I was present, I would actively encourage staff to use the charts/administer stat medications.
- Reflection:**
 - Staff did not find the intervention useful and it actually worsened communication, as doctors did not inform nursing staff verbally and instead wrote stat medications on the wall chart only. Nurses in turn did not look at the wall chart, leading to an increase in the delay of stat medication administration. The extent of the worsening effect was dampened by my persistent reminding of staff to use the wall charts. This was highlighted by the worsening effect on the time delays for stat medication administration, whilst I was away from the ward for a few days toward the end of the project. Incidentally staff found the wall charts more useful for recording other information i.e. patients requiring bladder scans, OT/PT etc, as a reminder for themselves.
- Recommendations:**
 - Stop using wall charts for stat medication communication
 - Try a different intervention i.e. an electronic system similar to the "nerve centre" currently being used to assign jobs to on-call staff at the hospital. This would allow stat medications and other communications to be sent directly to iphones that the nursing staff could carry. Ideally the messages regarding stat medications would get sent automatically, when prescribed on the electronic prescribing software. The iphone could then continue to remind nursing staff at time intervals if the medication is not given within an acceptable time period. This may address communication and memory lapse human errors contributing to delays in medication administration. A potential barrier to this intervention would be the cost of setting up such a system.