

Date: May 22, 2019

QUALITY IMPROVEMENT PROJECT COMPLETION DOCUMENT

Please include the PROJECT CHARTER and PROJECT UPDATES with submission of this document

IMPACT

Describe the EVALUATION of the outcomes of the project as they relate to the project's aim and deliverables.

The rate of hemolysis remains unchanged at this time. The last change idea was fully implemented at the beginning of April 2019; therefore, more time may be required to see improvement.

The number of hemolyzed coags were consistently beneath the baseline median of 54 from December 2018 – April 2019.

The number of coags sent have been reduced from a baseline monthly average of 1,857 to 1,524; an 18% reduction only one-month after the electronic change. The rate of coags sent in the ED at baseline was 42% and since November 2018, there have been 6 consecutive months indicating a reduction of this rate. A few more months of data are required to be certain special cause variation exists.

MILESTONES

Describe the various MILESTONES delineated in your project charter and when/how they were achieved.

Baseline data collection complete: October 2018

Root cause analysis complete: October 2018

Nursing education provided on hemolysis: November 2018

Supply carts redesigned PDSA 1: January 2019

Supply carts redesigned following PDSA 2 - usability test: March 2019

Nursing education provided on the advance directive indications for sending coags: March 2019

Coags removed electronically from EPR: April 2019

LESSONS

Describe the LESSONS, individual or organizational, learned through this project.

This project required nurses to change a process that is deeply ingrained in how they perform their work and there was not enough frontline ownership to achieve that. The change ideas to address hemolysis in the ED were developed by the project lead instead of involving frontline nurses to develop their own ideas.

Communications about the project were fragmented and inconsistent. This led to some misinterpretation and misunderstanding by the frontline, which caused some nurses to resist the changes at first.

RECOMMENDATIONS

Describe the IMPLICATIONS of this project for patient care or for future projects.

Additional QI work could be done to reduce hemolysis rates below 2% by working with frontline staff to develop ownership of the change ideas. It would also be beneficial to incorporate the hemolysis data from all blood specimens, particularly serum potassium, to gain a more accurate picture of the ED's hemolysis rate.

Project name: Reducing coagulation blood sample hemolysis in the ED

**University Health Network
Emergency Department**

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Updating the advance directive criteria for sending coags should be considered by the ED leadership. The current criteria is vague and would benefit from clarification. Making these changes would improve the sustainability of knowledge transition for reducing unnecessary testing.

The current written laboratory rejection logs need replacement with an electronic documentation system in order to improve accuracy, accountability, and track improvement of the rejected laboratory specimens.

DISSEMINATION

Describe the completed or planned steps for DISSEMINATION of this project's findings (e.g., presentations, posters, manuscripts, etc).

Project dissemination includes a presentation to the QI committee in June 2019 and discussions with the Toronto Western Hospital ED leadership about spread. Other opportunities to present or share the project's findings will also be considered.