

Date: March 27, 2018

QUALITY IMPROVEMENT PROJECT COMPLETION DOCUMENT

IMPACT

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

The daily rates of ordering LDH across both ED sites was 75.1 tests per day prior to the intervention and dropped to 23.2 tests per day afterwards (69.1% relative reduction, $p < 0.00005$). The rates for the controls did not change significantly. Using run charts, it is shown that the intervention reduced the rate by more than 3 standard deviations away from the pre-intervention mean, signifying special cause variation that was sustained for the duration of our project (2 months post-intervention). In our analysis of add-on rates, there was an average of fewer than one instance per day, signifying minimal workflow disruption. At UHN it costs \$1.76 CAD per LDH test run, translating to savings of \$33,340.56 annually.

MILESTONES

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

We modified the CPOE system on June 22, 2017, as planned, in cooperation with UHN Digital/SIMS.

LESSONS

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

Given the complexity of UHN and its processes as it interfaces with multiple departments and resources, it is prudent to pause and re-evaluate existing systems to ensure that we are not inadvertently causing unnoticed problems. The order sets modified in EPR in this project is likely the tip of the iceberg of potentially wasteful or dangerous processes that have been in place for years, whether IT related or otherwise.

RECOMMENDATIONS

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

This project again showcases the power of CPOE and FFs in modifying provider behaviours. Our IT system can be further studied and leveraged to improve compliance to best practices, improve testing stewardship, improve ED operations, and improve patient care. Regularly scheduled review of existing policies is necessary to ensure that we are complying to best practices and removing inefficiencies.

DISSEMINATION

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

This project has been accepted to multiple presentations locally, nationally, and internationally, and is about to be published in BMJ Open Quality as a short report.