

Aim

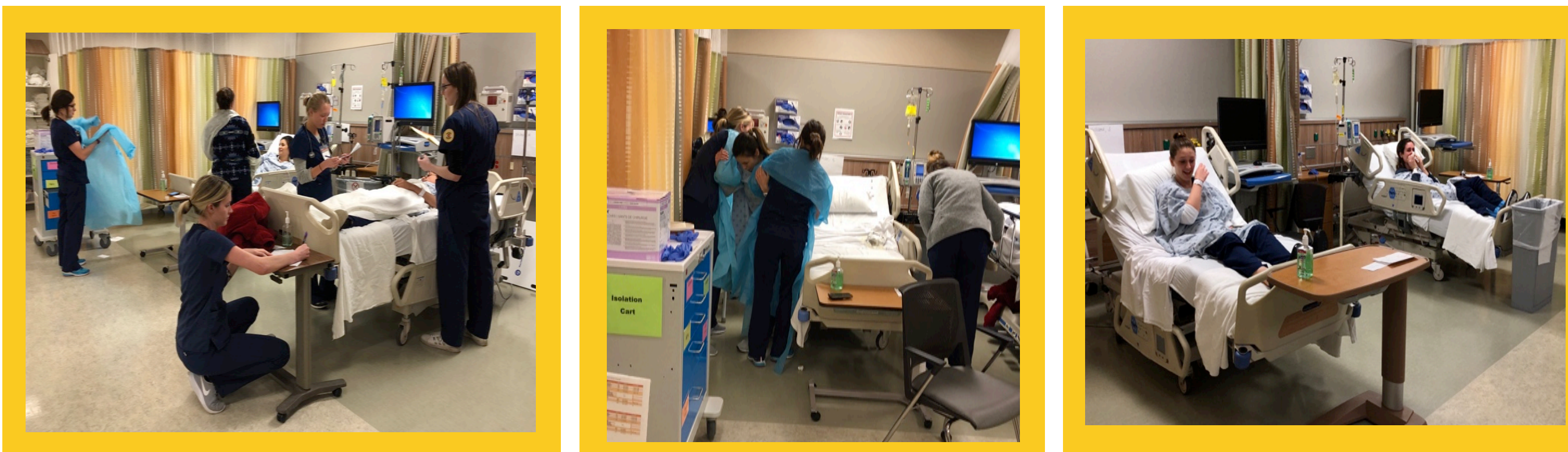
To improve an undergraduate baccalaureate nursing program senior level multi-environment, multi-patient capstone simulation to align with the International Association for Clinical Simulation and Learning (INACSL) standards.

Background

A new senior level simulation training consisting of a multi-environment, multi-patient simulation activity held during March – April 2018 was selected for this quality improvement project. Groups of 10-12 nursing students participated in the simulation within a complex nursing care course. The simulation activity was run 8 times during the final semester, facilitating the learning for 90 students.

The format was innovative and staged in various areas of the simulation lab to replicate the ER, ICU, and adult acute care settings. A high-fidelity human patient simulator was used for the first two environment settings with students in the role of the RN (2), family member (1), or observer. The last environment was staged in the acute care adult setting with all students participating in a role of either patient (4), family member (1), nurse (1), charge nurse (1), or nurse technician (1). Patient and family member roles were given cue cards for their character's behavior and how they were to respond in the simulation.

To provide consistency between all 8 simulation sessions, a dedicated faculty member paired with a simulation specialist were the core team that facilitated the pre-brief, scenarios, and debriefing of all 8 simulation sessions. This team collaborated with the student group's clinical instructor who was also present and assisted with the facilitation and debriefing after each scene.



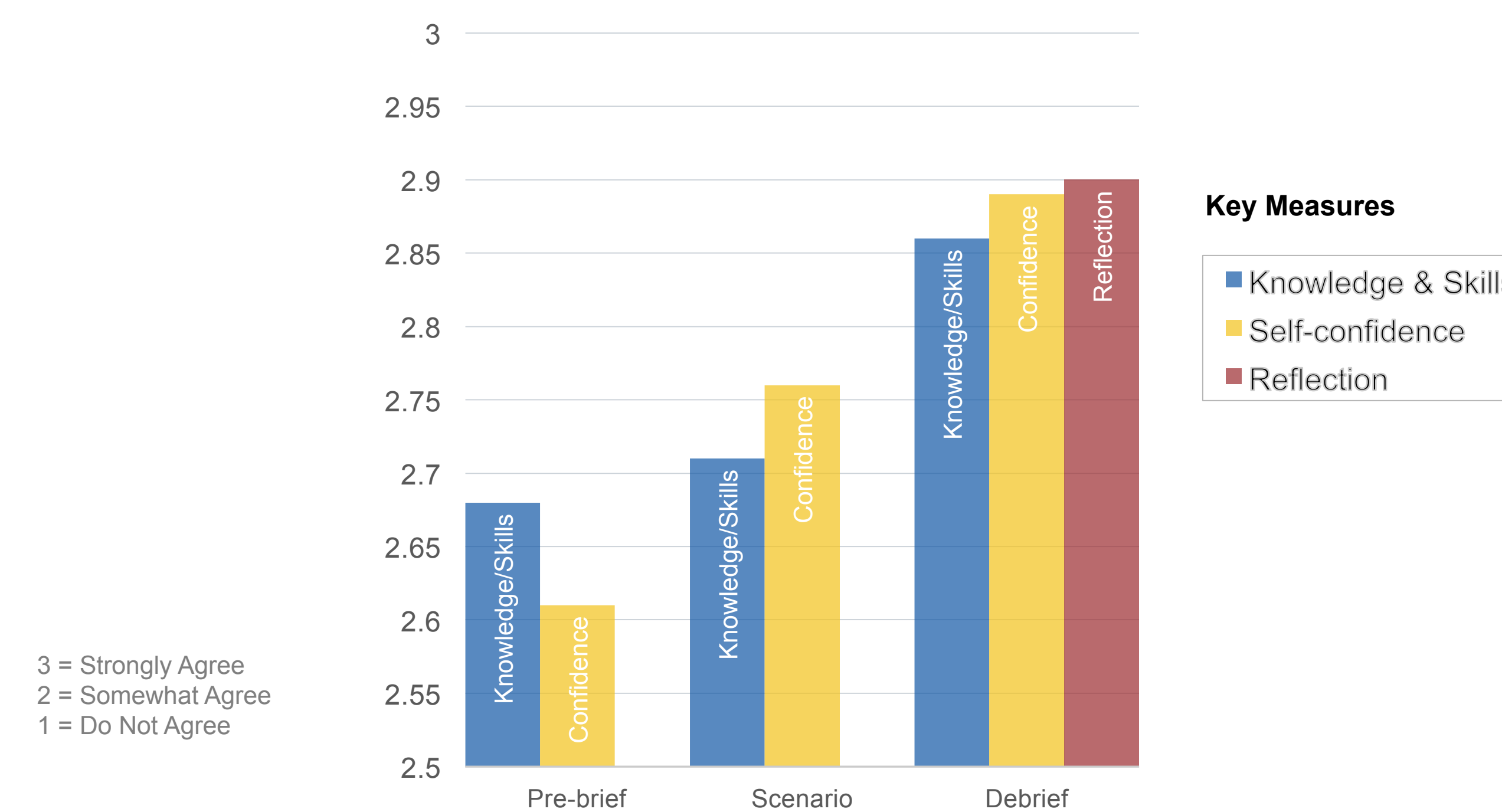
Works Cited

- Institute for Healthcare Improvement (IHI). (2018). QI Essentials Toolkit: PDSA Worksheet
- INACSL Standards Committee (2016, December). INACSL standards of best practice: SimulationSM Simulation design. Clinical Simulation in Nursing, 12(S), S5-S12. <http://dx.doi.org/10.1016/j.jecns.2016.09.005>
- INACSL Standards Committee (2016, December). INACSL standards of best practice: SimulationSM Debriefing. Clinical Simulation in Nursing, 12(S), S21-S25. <http://dx.doi.org/10.1016/j.jecns.2016.09.008>
- INACSL Standards Committee (2016, December). INACSL Standards of Best Practice: SimulationSM Outcomes and objectives. Clinical Simulation in Nursing, 12(S), S13-S15. <http://dx.doi.org/10.1016/j.jecns.2016.09.006>
- INACSL Standards Committee (2016, December). INACSL standards of best practice: SimulationSM Facilitation. Clinical Simulation in Nursing, 12(S), S16-S20. <http://dx.doi.org/10.1016/j.jecns.2016.09.007>

Results

Transition across care settings elicited key debriefing themes of assessment, communication, and critical thinking. Competing time demands and urgency was factored into scenario design for each scene and effectively stimulated students to prioritize, delegate, and make nursing judgments.

Student Responses to Post-simulation Quantitative Questions



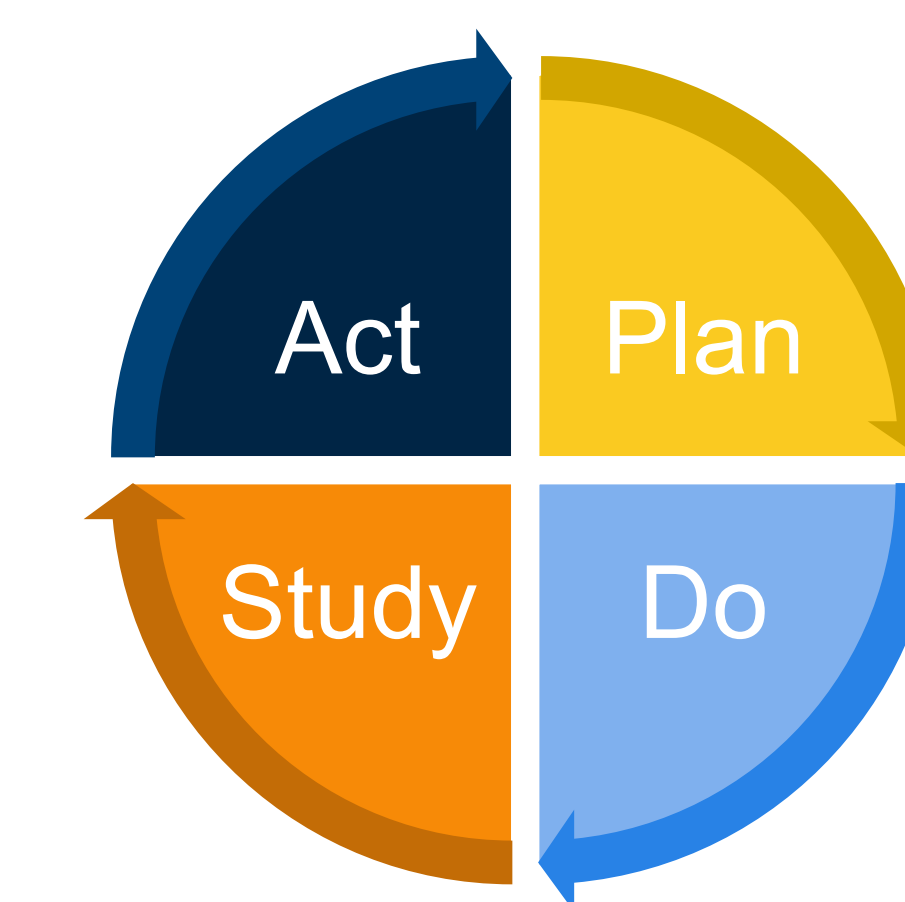
With 93% of the students completing the post-simulation survey, the process of debriefing immediately after each scenario yielded the highest positive agreement scores for knowledge and skill application, and self-confidence. Comparison to pre-brief activities and the scenario itself, student confidence increased .21 points overall (nearly a 10% increase) from between pre-briefing and debriefing sessions; and knowledge and skill increased .15 points overall. Both measures increased over the 4-hour simulation.

Student Comments

- “Great simulation;” “Loved it;”
- “Less repetitive than others in the past.”
- “I learned a lot;” “Best sim by far.”
- “More student participation and interaction, less simulator.”
- “More realistic;” “I need to keep calm and trust myself.”
- “.... practical and helpful delegation and prioritization are concepts we as new grads we are nervous about, this SIM helped me feel more prepared.”
- “Informative, stressful, but great.”

Goals

- Change 1 – Revise simulation outcomes and objectives to include pertinent concepts (Fall 2018; simulation design/outcomes & objectives)
- Change 2 – Update post-simulation feedback form to align with measurable objectives of this simulation (Fall 2018; simulation design/outcomes & objectives)
- Change 3 – Revise simulation objectives in SMART format (Fall, 2018; outcomes & objectives)
- Change 4 – Professional development for faculty involved in debriefing, consider formal training and certification (Fall 2018; debriefing)
- Change 5 – Recommend keeping consistent faculty for facilitation & debrief for large scale simulations (Winter, 2018; debriefing)



Plan, Do, Study, Act (PDSA) (IHI, 2018)

- What are we trying to accomplish?
- How will we know that a change is an improvement?
- What change can we make that will result in improvement?

Conclusions

- The Model for Improvement (Plan, Do, Study, Act [PDSA]) is a simple and powerful method for testing change. The initiation of this quality improvement project marked the first step in establishing baseline criteria for the multi-environment, multi-patient simulation.
- Following the INACSL Standards of Simulation for 1) simulation design, 2) outcomes and objectives, 3) facilitation, and 4) debriefing, we were able to objectively identify strengths, weaknesses, and omissions relating to each criterion within the respective standards.
- Analysis of student feedback using a generic survey, combined with anecdotal clinical instructor feedback, we were able to evaluate our simulation and recognize improvement opportunities.
- We were pleased to learn the favorable perceptions held by the students about the simulation; the concept and design of a multi-patient simulation was a hit amongst senior level nursing students.
- Identifying improvement goals and creating a timeline for testing change through the PDSA model will assist faculty with accountability and keeping on track with our quest for standardization and implementation of best simulation practices.
- Commitment to align and follow the INACSL Standards of Simulation has been an eye-opening experience that will benefit and enhance our student's learning through simulation in a more rich and robust nature as a result of this reflection and quality improvement initiative.