Problem Statement:
Rural facilities face unique challenges due to their distance from large tertiary centers, staffing limitations, recruiting challenges and lack of specialization because they “do it all”. By augmenting these teams through Critical Care TeleHealth, we are adding an additional team member, mentor and support to rural clinicians during critical patient events.

Background:
Extending critical care services to Intermountain’s rural facilities supports our Shared Accountability and Intensive Medicine Clinical Program aims by ensuring access to critical care expertise to rural communities and assistance with patient care. Involvement of the Critical Care TeleHealth Team early in the process of critical illness will provide an opportunity to clinically optimize the patient care. This engagement creates a new teamwork of support for bedside decision making and intervention during critical illness.

Implementation:
Sevier Valley Hospital (SVH) in Richfield Utah and Bear River Hospital (BR) in Tremont Utah were identified as Pilot sites.

Process:
1. Pilot Rapid Response Team (RRT) simulation.
2. Train Critical Care TeleHealth RNs in iCentra Rapid Response Team (RRT) documentation.
3. Implement simulation and training in Sevier
4. Implement simulation and training in Bear River

Desired Impact:
- Support to the bedside teams during emergent patient events such as a rapid response calls and Code Blue activities through critical care management and documenting as indicated by bedside needs.
- Support of specific disease management (sepsis, diabetic ketoacidosis, etc.).
- Critical care consultation on patients that do or might require critical care transport, (referred to herein as “enhanced medical control management”).
- Support implementation of the “In-Patient Stroke protocol to expedite access to the Neurologist on duty.

Objectives:
1. Train staff at SVH and BR to the In-Patient Stroke protocol followed by simulation to practice these new skills.
2. Train staff to document, initiate and record rapid response order sets appropriately based upon patient indicators.
3. Simulate 3 Rapid Response calls which require assessing the patient and initiating the rapid response algorithms. (Stroke, Hypotension, Over-sedation)
4. Demonstrate ability to activate RR process in collaboration with Critical Care TeleHealth nurse effectively.
5. Demonstrate understanding and consistent use of role clarity in Rapid Response and Code Blue situations where TCC and bedside teamwork is utilized.

Participants:
Participants included Critical Care TeleHealth Nurses, Nurses at Sevier Valley and Bear River Hospitals, Simulations Coordinators and technologists from different regions, and members from the education team.

Results:
Since implementation in August and September of 2016 we have had 39 TeleHealth interactions at Bear River. At Sevier we have had 101 TeleHealth interactions since implementation.

Lessons learned through simulation

Equipment storage:
The leadership at Sevier established a Rapid Response procedure for their facility and identify a central location to store the TeleHealth/Critical Care cart.

Important Pharmacy implications:
Altaplas was not in the drug library for Acute Care. This concern was taken to the Central Pharmacy team and Altaplas has been added to the library.

Acute Care Pharmacy library:
There were two different practices identified for administering Narcan in their crash cart. They quickly noted that this could cause potential harm and standardize to one concentration.

Comments:
- I love that the RRT bands are available to document in Centra.
- I need to be aware of the flow of communication to incorporate the TCC RN into our circle of care.
- I appreciate all the support (resources) I have available to help me care for me patient. The algorithms, TCC RN and Stroke protocol.
- I like the RRT standing orders!
- The simulations were great. It’s so much better to see it in action rather than just presenting the information in a meeting or lecture and sent on your way.
- This is a different way of thinking for me. I don’t call for help and always manage on my own. I see this as a big support for me.
- I see Tele-Critical Care as a great resource for us. I can’t over emphasize the importance of closed loop communication. It keeps us all on the same page.
- I like that a second person is there to help with charting and a second set of eyes on the patient in case I am missing something.
- I love that the algorithms are there to back us. I feel comfort in knowing they are there to help me to save lives.

Conclusion:
Our goal was to augment the bedside team by applying the approach of using simulation and telehealth technology. We were successful in bringing together two teams on either end of the state, illustrating that we could easily integrate telehealth clinicians as part of a bedside team. This training improved the integration and efficiency that are part of the “One Intermountain” strategy. The teams worked together to identify areas for improvement that wouldn’t have been without the simulation-based approach. The training helped them ensure the right medications were used in the right situations, practices and procedures were standardized, equipment and technology were working, and communication and teamwork between the two teams were preparing them for real-life events.

The benefits of telehealth simulations are being replicated in multiple programs inside and outside of Intermountain.

Thank you to all the people who helped make this happen:

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