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Journey to High Reliability Pulmonary Hypertension Nursing Practice

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Background

Hospital admissions for Pulmonary Hypertension can be dangerous. The smallest of medication errors could mean serious injury or death. Developing a nursing care program that keeps PH patients safe from harm is not an easy task. High Reliability principles when applied to healthcare result in stunning improvement in quality, safety and outcomes. High Reliability healthcare has been described as a “passionate commitment to excellence” that permeates the daily actions of healthcare workers, producing a culture so effective that nearly perfect safety procedures are the norm.

Introduction

Organizations have pursued high reliability concepts for more than 20 years, but these concepts have a shorter history within health care. The biggest challenge in becoming a high reliability organization is that there are no concrete steps to take. This transformation must occur over a period of time and take into account various factors, including training and oversight of staff; processes for planning, implementing, and measuring new initiatives. A high reliability mindset views each of these levels as important and as a source of opportunities and threats to achieving exceptionally high-quality patient care. There are five key concepts essential for any improvement initiative to succeed:

1. Sensitivity to Operations- preserving constant awareness by leaders and staff of the state of the systems and processes that affect patient care. Awareness is key to noting risks and preventing them.
2. Reluctance to Simplify- all members of the PH team are encouraged to recognize the range of things that might go wrong and not assume that failures and potential failures are the result of a single, simple cause.
3. Preoccupation with Failure- all members of the team constantly entertain the thought that they may have missed something that places the patient at risk. Near-misses are viewed as areas in need of more attention, rather than as proof that the system has effective safeguards.
4. Deference to Expertise- staff at every level are comfortable sharing information and concerns with others; and are commended when they do so.
5. Resilience- members of the team assume that despite considerable safeguards, the system may fail in unanticipated ways.

References

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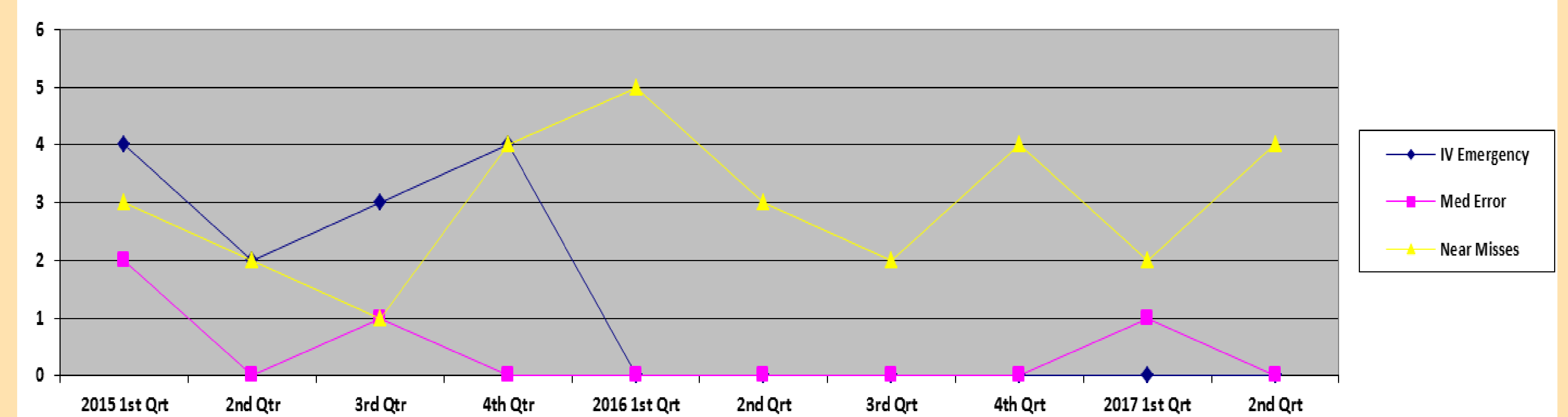
Methods

High Reliability principles were applied in the development of:

1. PH nursing policies and procedures with yearly reviews to continuously improve processes and performance
2. PH nursing onboarding and annual education and training at three levels of competence
 - a. Orientation-Competent Level: 8 hour class consisting of 4.5 hours of lecture, 1.5 hours of skill stations and 1.5 hours of Simulation
 - b. Proficient Level (Level 2): 8 hour class consisting of 4.5 hours of lecture, 1.5 hours of skill stations and 2.5 hours of Simulation
 - c. Expert Level (Level 3): Prerequisite pretest using online or printed material. 4 hour class consisting of 1.5 hours of skill stations and 2.5 hours of Simulation
3. Expert Level PH nurses precept, assist to teach skill stations and simulation and updating policies and procedures.
4. Blended learning approach to nursing education with emphasis on high fidelity simulation that pulls together knowledge, equipment skills and PH safety practices.

Results

Elimination of Prostacyclin emergencies and medication errors related to nursing practice in the two core PH nursing units within the first 12 months of program launch. A significant increase in near-miss reporting through nursing and pharmacy channels.



Conclusion

High Reliability Pulmonary Hypertension Nursing practice is possible when leadership, Medical Staff, Pharmacy staff and Nursing staff share the culture and practice where all members of the PH team are acutely aware that even the small failures in safety protocols or processes are unacceptable where ZERO is the goal. Maintaining excellence is as difficult as attaining excellence. High Reliability principles provide the tools and guidance to successfully maintain excellence as long as Zero defines the attitude of the organization.

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