



The Impact of Early Identification of Declining Patients: A Quality Improvement Study

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Abstract

This presentation focuses on the prevalence of failure to rescue in healthcare, that we have evidenced in the clinical setting. Proper identification of declining patient health plays a major role in early intervention, resulting in a positive patient outcome. Analyzing common themes in these issues provided a “bigger picture” of the need for proactive patient care.

Definition

Failure or delay in recognizing and responding to a hospitalized patient experiencing complications from a disease process or medical intervention.

Protocol

Early Identification of a Declining Patient 1

Simulation Through Advanced Technology
Nursing Training Center

The Impact of Early Identification of a Declining Patient: A Quality Improvement Project

Recommendations

Protocol: Early Identification of a Declining Patient

Policy: The goal of this protocol is to establish requirements of each hospital in the monitoring of each patient to ensure that a decline can be identified to improve patient outcomes. To increase the reaction time of the identification of a change in patient status, facilities will begin to use the Modified Early Warning System (MEWS). This protocol will involve continuing education to learn how MEWS works and implementing the use of this tool when assessing a patient's vital signs every 2 hours. This will help to assist nurses in easily recognizing trends or changes in the status of the patient, thus increasing patient safety and the quality of care given.

Purpose: To improve the identification of a change in patient status, helping to provide safe, timely and competent care.

Procedure:

- Modified Early Warning System (MEWS)
 - Nursing Staff will complete an educational course on the use of MEWS.
 - An online module or in-person seminar will be used to educate the staff on the use and implication of MEWS.
 - In this course, it will be informed that this tool is based on scores for six vital signs of the patient.
 - Respiratory Rate (per minute)
 - Heart Rate (per minute)
 - Systolic Blood Pressure
 - Conscious Level (AVPU)
 - Temperature (in Celsius)
 - Hourly Urine for 2 hours
 - They will be informed that each category can be given a score from 0-3, as seen on the tool below.

MEWS (Modified Early Warning System)						
Respiratory Rate	Heart Rate	Systolic Blood Pressure	Conscious Level	Temperature	Hourly Urine	MEWS Score
0-15	50-100	90-180	1-3	36.0-42.0	>30ml	0
16-20	101-140	181-212	4	43.0-44.0	20-30ml	1
21-30	141-160	213-220	5	45.0-46.0	10-20ml	2
>30	>160	>220	6	>46.0	<10ml	3

iv. Educating that when taking vital signs every 2 hours (or according to hospital policy), they will be prompted to score each patient to determine the path of care.
v. Being informed that adding up the scores from each category to have an overall sum, if the total is greater than or equal to 4 the nurse will need to notify the patient's healthcare provider.

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b. Nursing staff will have MEWS placed in each patient room to ensure that these are being used every time vital signs are checked.
iv. MEWS will be printed and hung in patient rooms, in a visible area.

c. Nursing staff will implement MEWS when assessing vital signs to easily identify a change in a patient.

d. Nursing staff will chart each patient's MEWS score after totaling to determine the need for further intervention from themselves or a healthcare provider.

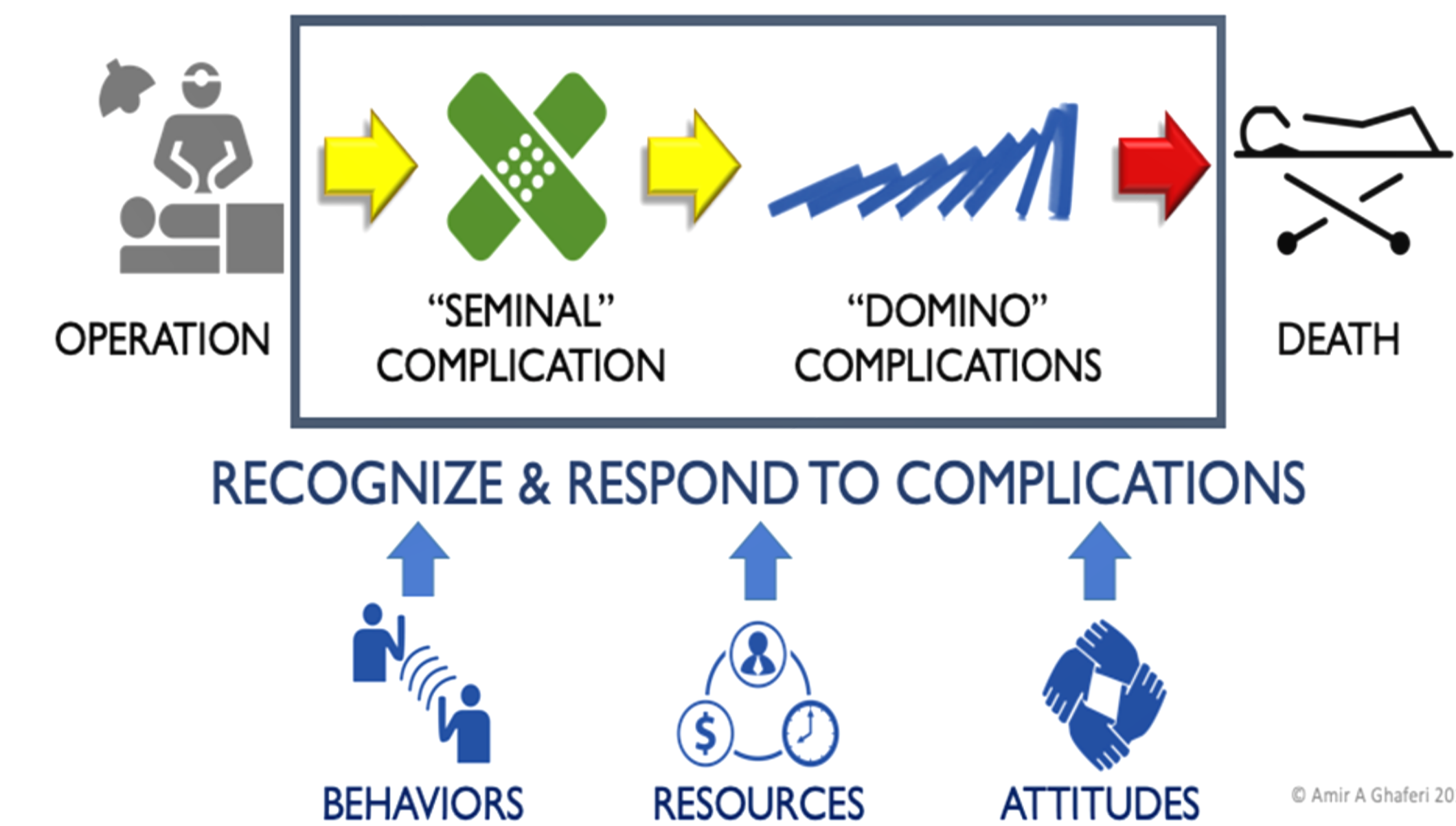
e. Nursing staff will notify the healthcare provider of any patient who has a MEWS score of greater than or equal to 4.



Literature Review

- Lack of communication
 - According to research, one of the main causes of healthcare issues is that healthcare professionals don't have enough time. It has been demonstrated that having the appropriate communication tools, such as SBAR, helps healthcare providers convey information to doctors and inform them of what the nurse is contemplating doing next for the plan of care.
- Lack of funding
 - Research shows that financially stable hospitals have a higher degree of safety and better patient outcomes in situations that require lifesaving action. Adequately funded hospitals are shown to have better access higher quality equipment therefore cutting down on the response time in a situation where patient decline is occurring.
- Lack of education
 - According to research, hospitals that have a higher percentage of nurses with BSN degrees (Magnet Hospitals) are associated with lower patient mortality rates. This is due to the increase in clinical hours and competencies that they complete upon graduation.
- Lack of timely reaction
 - Through research, it is noted that timely reaction is essential to the patient's safety and quality of care. Improving the education of healthcare professionals, maintaining adequate organization in hospitals/emergency departments, and fully staffing competent nurses are key to ensuring an increase in staff reaction to a vital change in a patient. In doing so, the staff is more focused on patient safety and quality care.
- Lack of competence
 - Research has suggested that there are multiple factors that affects a nurses' competence. These factors include workload, burnout, work experience, and education. If a nurses' competency is hindered by any of these contributing factors then the chance of them being able to identify the decline in a patient decreases drastically.
- Lack of EBP
 - Research has proven that evidence-based practices in the health care setting greatly improve patient outcomes. Studies found that nurses using evidence-based practices had a higher knowledge of clinical skills. Some barriers to implementation of evidence-based practices are lack of time, lack of resources, and inadequate staffing. Some hospitals still struggle to implement evidence-based practices due to these barriers, which can cause a decline in patient outcomes.
- Lack of staffing
 - Research suggest that understaffing leads to a lack of time for correct hand hygiene resulting in increased infection and mortality.

FAILURE TO RESCUE



Clinical Implications

- Facilitate strong communication amongst the staff members in the clinical setting
 - Ensuring that members of the healthcare team obtain adequate time management skills is vital in strong communication, such as proper SBAR technique.
- Promote higher education level amongst staff
 - When staff is up-to-date on their continuing education and is aware of the newest EBP that is in place for procedures, they are able to react timely to changes in the patient, improving patient safety goals. Encourage magnet status certification in facilities.
- Funding
 - Ensuring that facilities receive an adequate amount of funding will promote better care and better opportunity to receive better equipment and ability to provide quicker, higher quality care in life-saving situations.
- Ensure complete staff understanding of signs and symptoms of early decline in patients to guarantee timely reaction and preservation of patient health.
 - Providing early identification tools and establishing reactive protocol to the type and degree of decline will allow staff to quickly provide life saving measures and promote positive patient outcomes.
- Staffing
 - Through adequate nurse to patient ratios, there will be enough time for proper hand hygiene. This will decrease infection and mortality rates.
 - Providing all day rapid response teams that specialize in timely reactions to emergencies lowers the mortality rates during code situations.
- Competence
 - For a nurse to maintain their clinical competency it is critical for them to continue their education. Hospitals should provide educational modules and skills competency check offs frequently to ensure the competency of a nurse.
- The use of evidence-based practice (EBP)
 - When EBP is used in nursing practice it has shown to improve patient outcomes and the quality of care
- Improving the education and competence of staff
 - When staff is up-to-date on their continuing education and is aware of the newest EBP that is in place for procedures, they are able to react timely to changes in the patient, improving patient safety goals.
- Organization in Hospitals
 - When hospitals have policies in place to prioritize patients based off monitoring, it is likely that a change in a patients status will be recognized and reacted to in a timely manner, improving the quality of care and safety of the patient.

References

MRescue | United States | Improving-surgery. (n.d.). Improving-surgery. <https://www.improvingsurgery.com/mrescue?lightbox=dataItem-jx0k67zn>

Leonardi, B. C. di. (n.d.). Home. RN. Retrieved April 6, 2023, from <https://www.rn.com/nursing-news/patient-deterioration-early-warning-signs/>