ORGANIZATION: ST AGNES MEDICAL CENTER

SOLUTION TITLE: Can Critical Care Become A Restraint Free Environment?

PROGRAM/PROJECT DESCRIPTION INCLUDING GOALS: The critical care environment is perhaps the last department in the hospital in which physical restraint remains a common, and often time’s unquestioned practice. This is despite the numerous regulations and accrediting standards that have limited the use of physical restraints in health care settings. The decision to use physical restraint in the care of critically ill patients can be complex and is influenced by patient characteristics, nurse caring for the patient, the physician and the environment. Critically ill patients are at high risk for the development of delirium and agitation, resulting in non-compliance with life-saving treatment. The culture in the intensive care setting surrounds stabilization and protection of patient harm. The use of physical restraint appears to be a useful and simple solution to prevent any interruption with treatment and prevention of self harm. Restraint use is a complex process, which encompasses physical, psychological, legal and ethical issues.

Use of restraints has been to shown to increase delirium, patient’s length of stay and has not been shown to reduce unplanned equipment removal including self extubations. For many years our unit and nursing services have monitored documentation associated with continuous use of restraints and has achieved favorable compliance. One year ago, we began to review the data surrounding restraint incidence and reviewed comparison data to other hospitals. Our intensive care unit was well above the national comparison at 65.07% in December 2012. Our goal was to reduce restraint use by 50 % in 6 months.

Process: Initially when the topic was discussed, many of the staff were uncomfortable and cited barriers to reducing the number of restraints raising concerns over potential harm to patients. Monthly data on restraint prevalence in critical care was reviewed with the nursing staff during staff meetings. We added monthly usage to our quality metrics on our critical care dashboard which was reviewed monthly at the critical care committee and department head meetings. Then we turned the problem over to the shared governance council to review literature, review comparison data and develop a plan for restraint reduction.

Solution: The current problem was reviewed with the staff, presenting the argument to limit and reduce restraints. Restraint education is part of critical care orientation. The unit created an algorithm (see below) for management of behavioral and cognitively impaired patients which also outlined alternatives to the use of restraints and interventions for potential physiologic changes that may be contributing to behavioral impairment. Restraint application is reviewed with the charge nurse before application to see if the nurses followed the algorithm. Daily restraint use was reviewed at our board rounds. This is a multidisciplinary huddle that occurs at 8:45 am and 8:45 pm daily. This discussion is led by the intensivist, whereby a brief summary is reported on all patients in
the centralized nursing station. All disciplines (nurses, respiratory therapists, patient care technicians, unit secretaries and residents) are expected to participate in this 15 minute huddle to hear about the patient’s status and plan of care. A white board in the middle of the nursing station contains real time patient information including type of restraints. The need for restraints is discussed at this time. This is not to be confused with bedside rounds. Additionally, near misses and safety events are also reported by any staff member. Restraint documentation as well as justification for restraints was added to our peer to peer end of shift checklist. Peer to peer accountability was critical for sustainability and outcome change. This was accomplished through the end of shift checklist in which two nurses ongoing and outgoing reviewed the restraint criteria and documentation. This form would then be reviewed by unit leadership to validate compliance.

**Measurable outcomes**

In 6 months, significant reduction in restraint usage to 31.95% (October 2013 data)

![ST AGNES HOSPITAL % of Patients Restrained -- AICU](image)

**Sustainability:** Daily board rounds are an expectation for all staff to attend and restraint use is part of the discussion. Restraint education has become a part of critical care orientation. Plan to have an annual competency on management of behaviorally and cognitively impaired patients. A critical care dashboard is presented quarterly at hospital Quality and Performance Improvement Council and at the monthly critical care committee meeting to enhance
organizational awareness. This process and review has been adapted in IMCU and Coronary Care unit and the metrics have been added to the unit based dashboards. Review of the restraint records has now prompted further data collection on sedation practices including type and consistency in the critical care environment. We are hopeful that this will provide further insight into better management of our behaviorally and cognitively impaired patients and further reduce our need for restraints.

Role of Collaboration and Leadership: The medical director of the AICU was supportive of the initiative and has educated the intensivist on the initiative. This was critical to our success because the physician and nursing culture in AICU was to restraint patients to prevent harm. There was reeducation of the physicians and residents on alternatives to restraints. Overall unit compliance was reviewed with the manager and director monthly. The daily huddle led by the medical director of AICU. The restraint reduction initiative is presented quarterly at the hospital l Quality and Performance Improvement Council with the senior nurse executive team in attendance. Leadership support was demonstrated by executive rounding in the AICU monthly. Next steps are to monitor the effectiveness of current sedation practices.

Innovation: Restraints are a common practice in the critical care environment because there is a tendency of the staff to focus on prevention of patient harm. The goal for a restraint free critical care unit is far reaching and innovative, but it will force us to work in collaboration to implement lasting alternatives to restraints and create permanent changes in culture and practices.

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References:


Related Tools and Resources:
Guidelines for Management of Cognitive and Behaviorally Impaired Patient in the Critical Care Division
(Guidelines for Management of Restraints)

Patient Exhibits
Impairment in Cognition
- Confused, impulsive or combative and cannot follow commands
- Lack of awareness of potential harm to self
- Hallucinating, delusional, and/or delirious behavior

Behavioral Impairment
- Persistently trying to disconnect/dislodge medical equipment
- Moving/thrashing in a manner that interferes with care
- Disrupting a surgical wound site in a manner that could compromise healing
- Attempting to ambulate in a weakened condition
- Anxious

Are Symptoms Related To?
- Hypoxia
- Fever/sepsis
- Fluid/electrolyte imbalance
- Substance withdrawal
- Hypo/hyperglycemia
- Medical device malfunctioning
- Vent settings adequacy
- Drug to Drug interactions
  - Analgesics
  - Sedatives
  - Neuroleptics
  - Toxic drug levels

Environmental and Patient Specific Alternatives
- Diversionary tactics
  - Busy Blanket
  - Limit alarm noise
  - Change parameters
  - Schedule patient activities during awake time
  - Cluster care
  - Progressive mobility
  - PT/OT
  - Provide aides for hearing, vision, and ambulation if needed
  - Hearing aids, walker, glasses, pocket talker
  - Ask the patient “What can I do for you right now?”
  - Mitts

Is Patient at Risk for Death
- D/T sudden loss of airway or other therapies
- High risk patients include:
  - Difficult airways
  - Facial edema
  - Cervical spine injuries
  - Halos

Consider Restraints:
*Restrains should only be used when deemed a clinical necessity, and other alternative measures are unsuccessful*

Documentation should include:
- Cognition and Behavioral reasons for using restraints
- Reassessment of the need for restraints are ongoing using the same principles as used initially

Discontinued:
- Once criteria has been met

Standard of Care for the Cognitive and Behaviorally Impaired patient in the Critical Care Division
(Alternatives to Restraints) *Always consider MITTS prior to Restraints

Patient with Ventilator
- Reassess daily to extubate
- Secure ET holder
- Appropriate sedation and analgesia

Patient with NG/OG
- Anchor tube with proper taping technique

Patient with IV’s/TLC
- Anchor IV line securely
- Cover IV with gauze
- Secure IV line under gown
- Keep IV bag out of vision of patient
  - Pump behind bed

Patient with Urinary Catheter
- Discontinue catheter
- Bedside commode
- Properly secure and anchor catheter

Consult Physician

Yes

NO