Progressive Mobility (PM): Evidence Based Program Improves Outcomes in Critically Ill Patients

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Background

The team’s overarching goal is to prevent complications of reduced mobility in critically ill patients. Our goals included:

• LOS in ICU: Reduce LOS by 5%
• Mean Days on Ventilator: Reduce mean days by 10%
• Ventilator Associated Events: Reduce by 25%
• Hospital Acquired Pressure Injures (Stage II or Greater)- target of zero occurrences
• Falls with Injury (utilizing National Database of Nursing Quality Indicators Injury definitions including Minor Injuries) - target is zero occurrences
• Staff Injuries related to Patient Handling - target is zero occurrences
Leadership Commitment

The Senior Leadership Team (SLT) supported this initiative since its inception.

• Nursing staff attended a national critical care conference and learned about several best practices including PM.
• Presented a proposal to SLT to initiate a PM program and received approval.
• SLT supported the initiative and related purchases such as specialty walkers and ceiling mounted patient lifts.
• PM Program has been able to demonstrate cost savings and improved outcomes.
Methodology

• Utilized the IOWA Model for implementation of evidence based practice

• Developed an A3 work plan utilizing DMAIC methodology (Define, Measure, Analyze, Improve, Control)

• Monitored key outcome metrics
Evidence-Based Care

- Research supports using the ABCDE Bundle (Balas et al, 2012), where disciplines collaborate to reduce sedation, immobility and delirium.
- The bundle is a 6-step process:
  - **Awakening** ventilated patients
  - **Breathing** trials
  - **Coordinated** efforts between nurses and respiratory therapists to decrease sedation/analgesics while attempting spontaneous breathing trials,
  - **Delirium** assessment including prevention and treatment, and finally
  - **Early** mobilization and ambulation.
Evidence-Based Care

Early mobilization is a key component of the ABCDEF Bundle and reduces complications of ICU stays, such as

- ventilator associated events)
- length of days on the ventilator
- length of stay in the ICU.
The Plan

- Chose a PM protocol with 5 phases, which progressively increases activity (Vollman, 2010; Bassett et al, 2012)
- **Collaboration:** Created a multidisciplinary task force
- Developed a pilot and implementation plan
- Reviewed and purchased equipment and piloted this program on our unit.
- Implemented pilot in the Torresdale ICU - March, 2016
- Rolled out Program to other campuses
Results
ICU Length of Stay compared pre and post Progressive Mobility Program Implementation

= initially **0.56 day decrease** (estimated $500,000 savings per month)

= now **0.84 day decrease** (estimated $750,000 savings per month)
Mean Ventilator Days compared pre and post Progressive Mobility Program Implementation = 1.14 day decrease

$$$ - estimated $117,000 per month
# of Ventilator Associated Events compared 5 months pre and post Progressive Mobility Program Implementation

= was 70% reduction

= now over 80% reduction
# of Unit Acquired Pressure Injuries in prevalence study compared pre and post Progressive Mobility Program Implementation

= **NO INJURIES**
Since Implementation

- Nurse Driven Protocol
  - Created Nurse Driven Order Set
  - Created documentation in electronic medical record

- Replication
  - Implemented in other ICUs in our organization

- Monitoring Outcomes
  - Continue monitoring Torresdale/Bucks/Frankford outcomes
  - No pressure injuries, fall injuries, ventilator associated pneumonias
Sustainability

• Multidisciplinary team continues to meets to review data, identify opportunities and create plans to address

• Skills labs - include mobility in scenarios and in annual competencies

• Team developing mobility program for acute care areas to complement this initiative and maintain optimal mobility throughout the patient’s hospitalization
References


