

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 Injuries (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

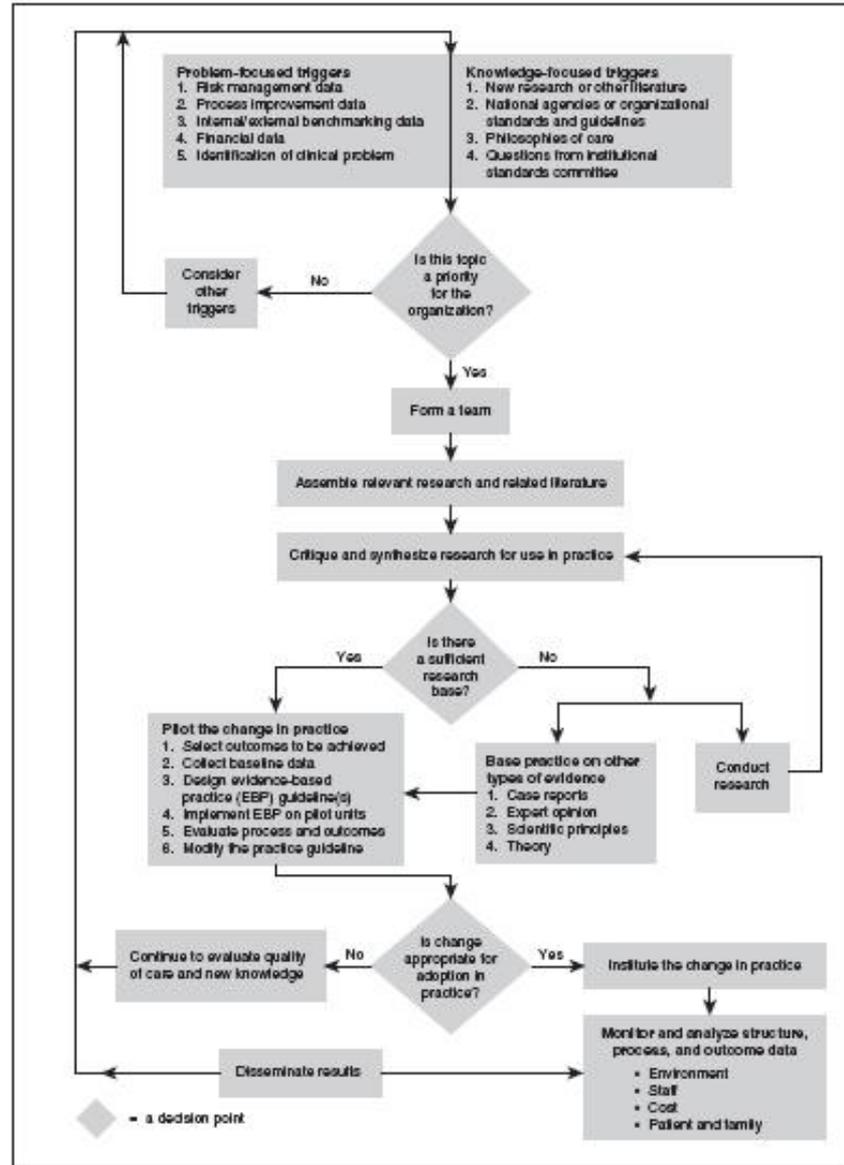
Leadership Commitment

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.

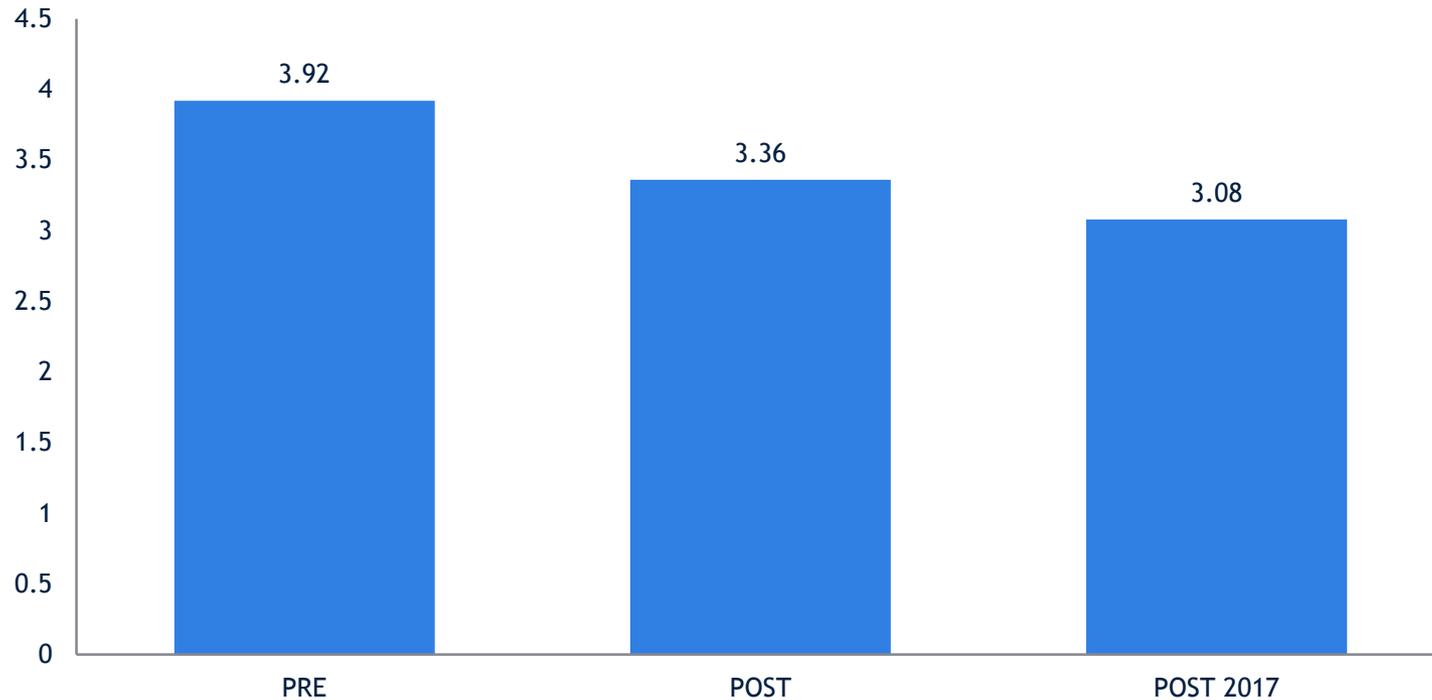
The Plan

- 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 LOS Pre/Post PMP

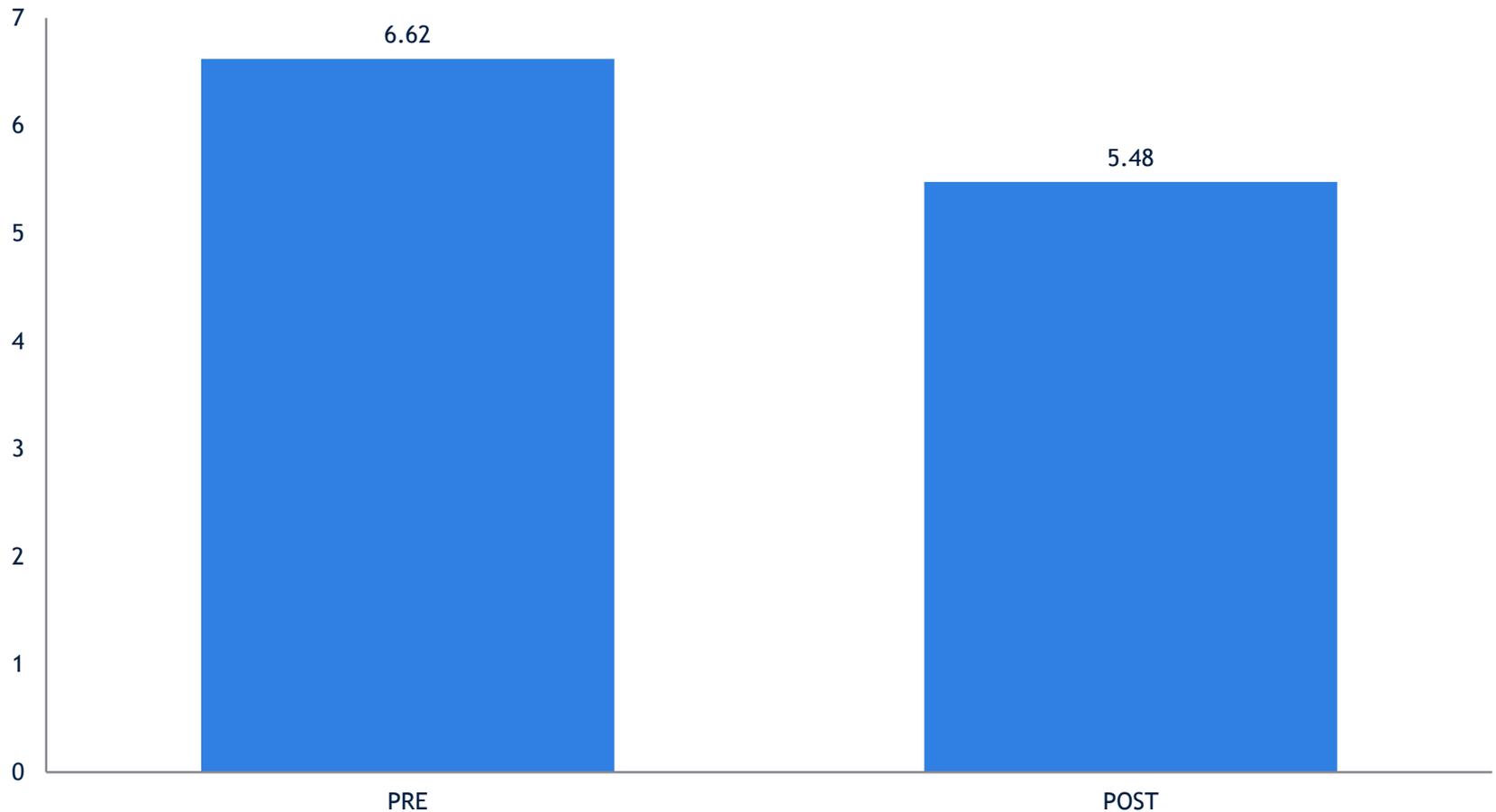


ICU Length of Stay compared pre and post Progressive Mobility Program Implementation

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

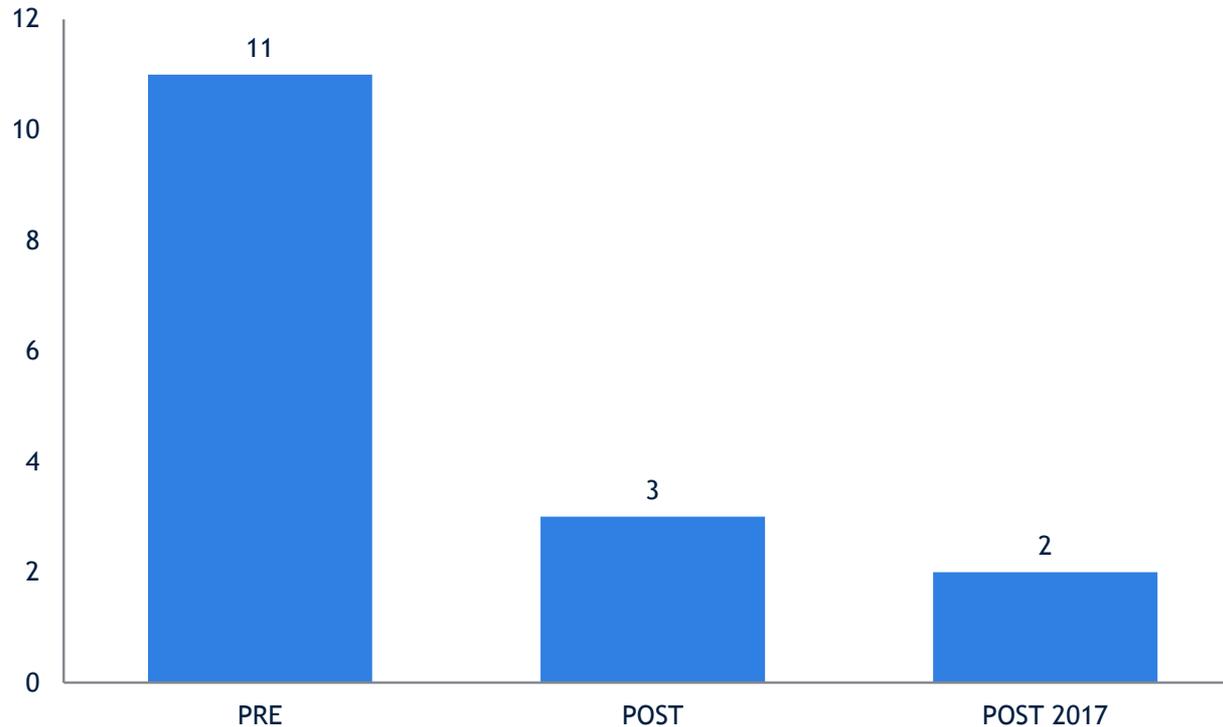
= now ***0.84 day decrease*** (estimated \$750,000 savings per month)

Mean Ventilator Days Pre/Post PMP



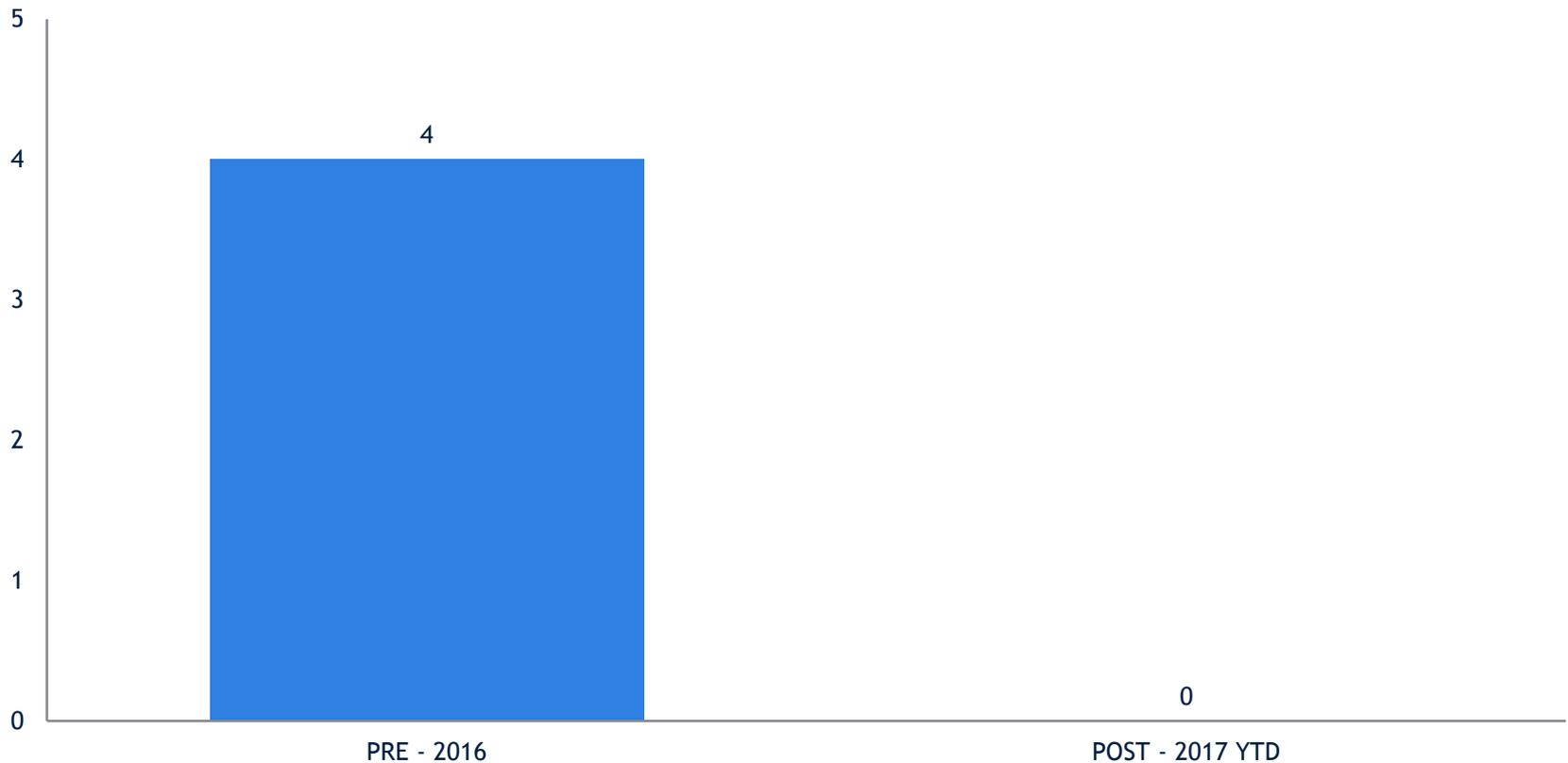
Mean Ventilator Days compared pre and post Progressive Mobility Program Implementation = **1.14 day decrease**
\$\$\$ - estimated \$117,000 per month

VAEs Pre/Post PMP Implementation



of Ventilator Associated Events compared 5 months pre and post Progressive Mobility Program Implementation
= was **70% reduction**
= now over **80% reduction**

UAPI Pre/Post PMP



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 meet 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

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