Physical Therapists in the ICU
The Why, What, and How of Taking Rationale to Action
Insights and Lessons From Quality Improvement

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Description
A growing body of literature illustrates the safety, feasibility, and possible positive effects of physical therapy, mobility, and rehabilitation within the ICU during critical illness. But, research also indicates that hospital and unit culture as well as clinician attitudes are important issues affecting clinical practice patterns. Myths and perceptions regarding safety, feasibility, patient participation, rationale, and potential benefits remain present across disciplines. This session will review the published literature on common barriers, clinician beliefs, and successful programs. The theory and model of quality improvement (e.g., engage, educate, execute, evaluate) will be presented as a foundation for success. Recommendations for program components and design will be based upon hospital size, current practice patterns, and potentially available resources. A process for appropriate background assessment, planning, implementation, and evaluation of ICU physical therapy programs will be formulated.

Objectives
1. Describe identified barriers, clinician attitudes, and issues affecting physical therapy in the ICU
2. Describe the planning, components, implementation, and results of other ICU programs
3. Outline the basics of quality improvement
4. Apply a scalable quality improvement approach into action for PT in the ICU

Physical Therapists in the ICU: Rationale:

Physical Therapists in the ICU: Action:

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Background & Current Practice

Barriers

Barriers to physical therapy and mobilization of critically ill patients in the ICU are pervasive and present at the hospital, department, unit, and individual clinician level. Further, they may include current physician, nursing, and physical therapy practice patterns. In addition, the interaction and collaboration (or lack thereof) between administrators, clinicians, and various departments or units is an often overlooked barrier to PT’s in the ICU. At the bedside, the individual interactions and dynamic between various physical therapists, nurses, physicians, and respiratory therapists is sure to affect the potential therapy and mobility of each individual patient. While some researched and identified barriers (lack of need, lack of feasibility, “too sick”) are likely more perceived barriers than actual barriers, they must be acknowledged and subsequently addressed.

Lack or absence of:
- Leadership or “champions”
- Physician referrals
- Physical therapist presence in ICU
- “Unit based” physical therapist
- Physical therapy staff
- Equipment
- Time
- Knowledge (across disciplines)
- Physical therapist training
- RN directed mobility
- Communication & Collaboration

Perceived lack of:
- Benefit
- Need
- Safety
- Priority

Presence or perception of:
- Oversedation
- Pain & Discomfort
- Hemodynamic Instability
- Delirium
Issues Affecting PT in the ICU

In addition to identified and researched barriers, other issues affect the presence of physical therapists and delivery of physical therapy in the intensive care unit. These include the necessary training and knowledge physical therapists should possess, which is currently ill defined and not well characterized. Further, who should be seen, what should be done, for how long, and how often? The capacity of each individual hospital and acute in-patient physical therapy department to respond to and address such issues is obviously variable. Further, it is likely dependent on resources, staff knowledge and expertise, and leadership.

Surveys of physical therapists illustrate variability in training, consult criteria, and significant differences in treatment content based on the presence of medical equipment (tracheostomy vs. endotracheal tube for example). As above, barriers are pervasive.

Successful ICU Physical Therapy Programs

Describe the planning, components, implementation, and results of other ICU programs

Components of Successful Program
- Engages relevant stakeholders early and often
- Transdisciplinary planning & execution team
- Administrative support
- Significant pre-assessment and planning period
- Champions(s) across disciplines
- Systematic Planning, Implementation, and Assessment: Quality Improvement Approach
- Measures something! Data driven goals
- Unit based physical therapist
- Consult Guidelines
- Mobility Initiation Guidelines
- Involves transdisciplinary clinical training
- Addresses sedation
- 5-7 day a week PT staffing

Quality Improvement
- Clinical Goals: Increase patients receiving PT, increase number of visits, etc
- Observed Outcomes: Functional status, delirium sedation, length of stay, etc

Hitting the clinical goals IS one of the outcomes to measure
Quality Improvement Approach

Principles
- Plan<>Reflect<>Execute
- How to Improve
- Improving the Science of Continuous Quality Improvement Program and Evaluation

4 E's
- Engage
- Educate
- Execute
- Evaluate

Behavior and Process Change
- Plan
- Do
- Check
- Act
- Plan, Do, Study, Act (PDSA) “Rapid Cycle Improvement”

Intensive care unit quality improvement: a "how-to" guide for the interdisciplinary team

Initiating or improving an interdisciplinary critical care quality improvement program
1. Identify local motivation, support teamwork, and develop strong leadership
2. Prioritize potential projects and choose the first target
3. Operationalize the measures, build support for the project, and develop a business plan
4. Perform an environmental scan to better understand the problem, potential barriers, opportunities, and resources for the project
5. Create a data collection system that accurately measures baseline performance and future improvements
6. Create a data reporting system that allows clinicians and others to understand the problem
7. Introduce effective strategies to change clinician behavior

Evaluating and maintaining this program
1. Determine whether the target is changing with periodic data collection
2. Modify behavior change strategies to improve or sustain improvements
3. Focus on interdisciplinary collaboration
4. Develop and sustain support from the hospital leadership
Scalable Approach

What is the current state of YOUR hospital, rehab department, critical care, and the specific target ICU?

1. Current PT involvement?
2. Current mobility culture (or lack thereof)?
3. Number/frequency of current consults?
4. Timing of consults?
5. Consult guidelines?
6. PT triage guidelines?
7. PT’s in the ICU? Priority of ICU in PT department?
8. PT ICU training and competency?
9. What are the barriers to success?
10. Clinical and quality goals?
11. Clinical and quality metrics?
12. Possible outcomes to measures?

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Must know where you are to change where you are going.

Remember:
- Some factors vary clinician to clinician and unit to unit!
- Start small and build from where you are
- Scale approach, assessment, data collection, and scope to available time and resources
- Celebrate small successes
- Advocate or administrative involvement & support
- Construct a business model for costs, staffing needs, timeframes, clinical metrics, outcomes metrics, cost savings

Change is a process, not an event

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Data

- # of consults in ICU
- % of ICU
- # of patients seen
- Average frequency
- % who may benefit
- Surveys

Reasons

- Show demand
- Model need
- Current ability
- Lack of freq/intensity
- Staffing Predictions
- Provider Perceptions

Plan

Assess

Educate

Implement

Measure

Quality Improvement

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References

Background

Physical Therapy & Rehabilitation Programs

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Quality Improvement


General Resources