

Overcoming the Barriers to Delivering Physical Therapy Rehabilitation in the Intensive Care Unit

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SCHOOL OF MEDICINE

Physical Therapy Program

UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS

Objectives



1. Identify the literature supporting that early physical therapy rehabilitation in the intensive care unit is safe and feasible
2. Identify the gap between established physical therapy practice in ICUs across the country and how often this is actually occurring
3. Discuss what barriers (clinical and cultural) exist that may prevent implementation of early PT rehab in the ICU
4. Examine strategies that could assist with overcoming these barriers in order to improve delivery of early PT rehab in the ICU

What are the benefits of early rehabilitation in the ICU?



- Reduction of hospital length of stay
- Reduction of hospital readmission
- Improved weaning from mechanical ventilation
- Prevention of complications from immobility (weakness, contracture, pressure ulcers)
- Improved functional outcomes

(Bailey 2007, Schweickert 2009, Burtin 2009, Morris 2011)

Is early rehabilitation in the ICU safe & feasible?



Respiratory Compromise (mechanical vent): Bailey 2007

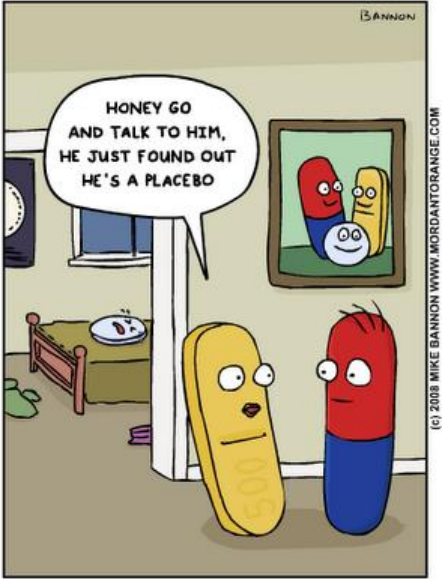
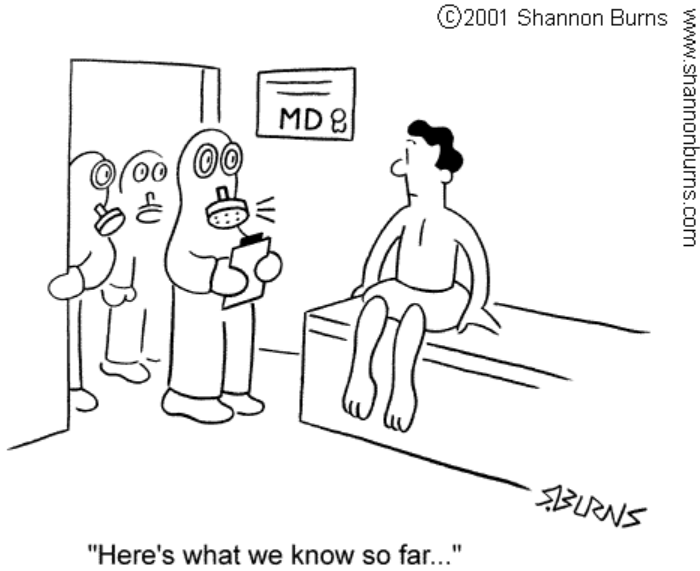
Neuro (SAH): Olkowski 2014, UCH pilot project 2016

Cardiac (femoral catheters): Perme 2013

Renal (CRRT): Talley 2013

Cardiopulmonary (ECMO): Abrams 2014

Safety and Feasibility of Critical Illness Rehabilitation



Safety



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Safety of physical therapy interventions in critically ill patients: A single-center prospective evaluation of 1110 intensive care unit admissions☆



Thiti Sricharoenchai, MD ^{a,b,c}, Ann M. Parker, MD ^{a,b}, Jennifer M. Zanni, PT, DScPT ^{d,e}, Archana Nelliott, BS ^{a,b}, Victor D. Dinglas, MPH ^{a,b}, Dale M. Needham, MD, PhD ^{a,b,d,*}

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Feasibility

ORIGINAL ARTICLE

Physical rehabilitation interventions for adult patients during critical illness: an overview of systematic reviews

Bronwen Connolly,^{1,2,3} Brenda O'Neill,⁴ Lisa Salisbury,^{5,6} Bronagh Blackwood,¹
on behalf of the Enhanced Recovery After Critical Illness Programme Group

Key messages

What is the key question?

- What physical rehabilitation interventions are effective for patients during critical illness and when are they best delivered?

What is the bottom line?

- Evidence confirming physical rehabilitation delivered in the early stages of critical illness in the intensive care unit (ICU) produce improvements in a range of outcomes is of moderate-to-high quality, but there is insufficient evidence of effects from interventions delivered post-ICU discharge.

Why read on?

- This overview comprehensively examines the existing evidence for effectiveness of physical rehabilitation in patients with critical illness and provides informed recommendations for future trial design and systematic review conduct.

SYSTEMATIC REVIEW



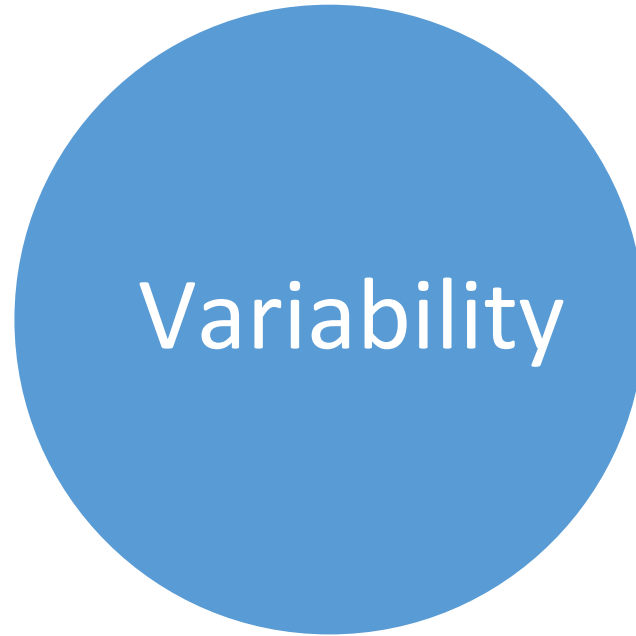
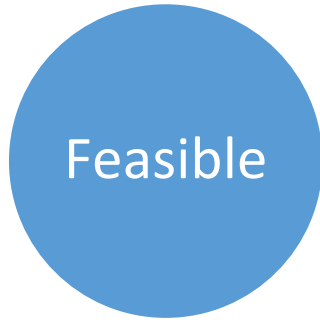
The effects of active mobilisation and rehabilitation in ICU on mortality and function: a systematic review

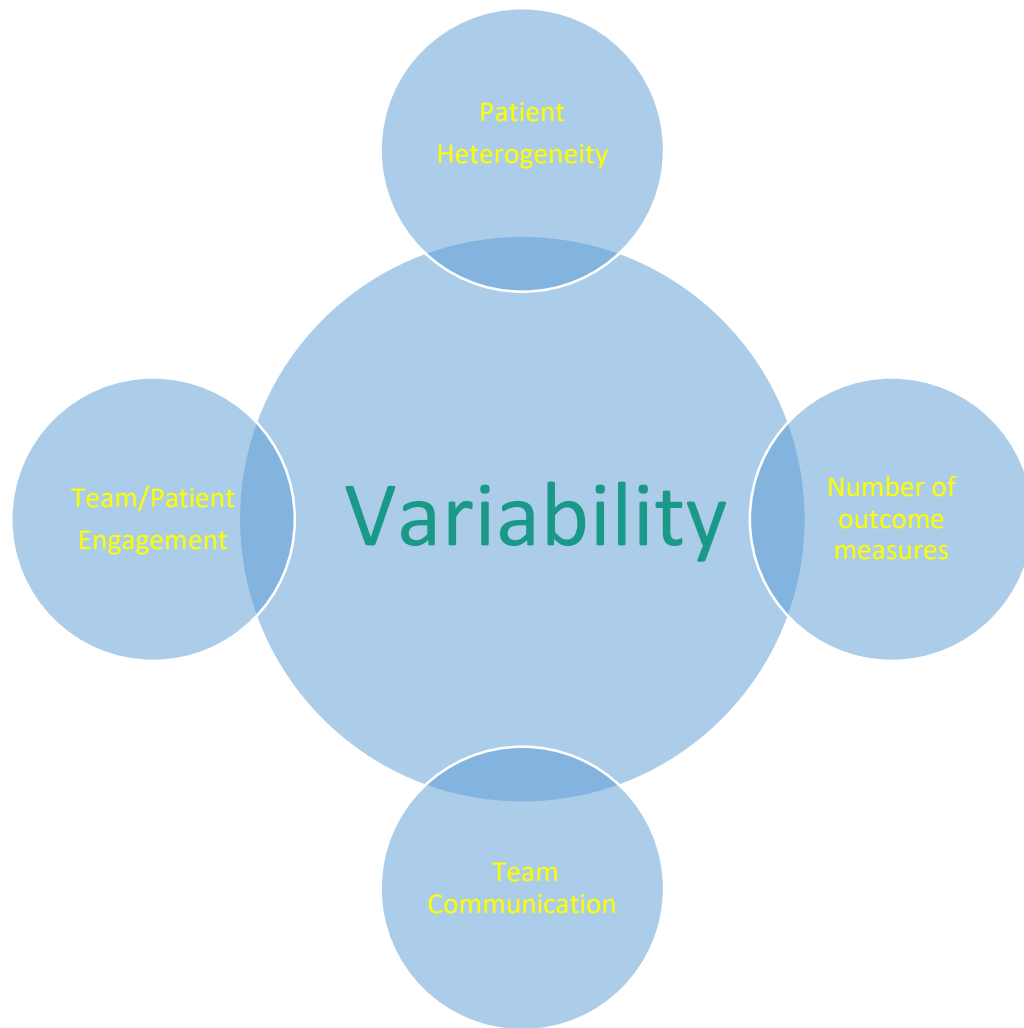
Claire J. Tipping^{1,2}, Meg Harrold^{4,5}, Anne Holland^{2,6}, Lorena Romero⁷, Travis Nisbet³ and Carol L. Hodgson^{1,2*}

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Abstract

Purpose: Early active mobilisation and rehabilitation in the intensive care unit (ICU) is being used to prevent the long-term functional consequences of critical illness. This review aimed to determine the effect of active mobilisation and rehabilitation in the ICU on mortality, function, mobility, muscle strength, quality of life, days alive and out of hospital to 180 days, ICU and hospital lengths of stay, duration of mechanical ventilation and discharge destination, linking outcomes with the World Health Organization International Classification of Function Framework.





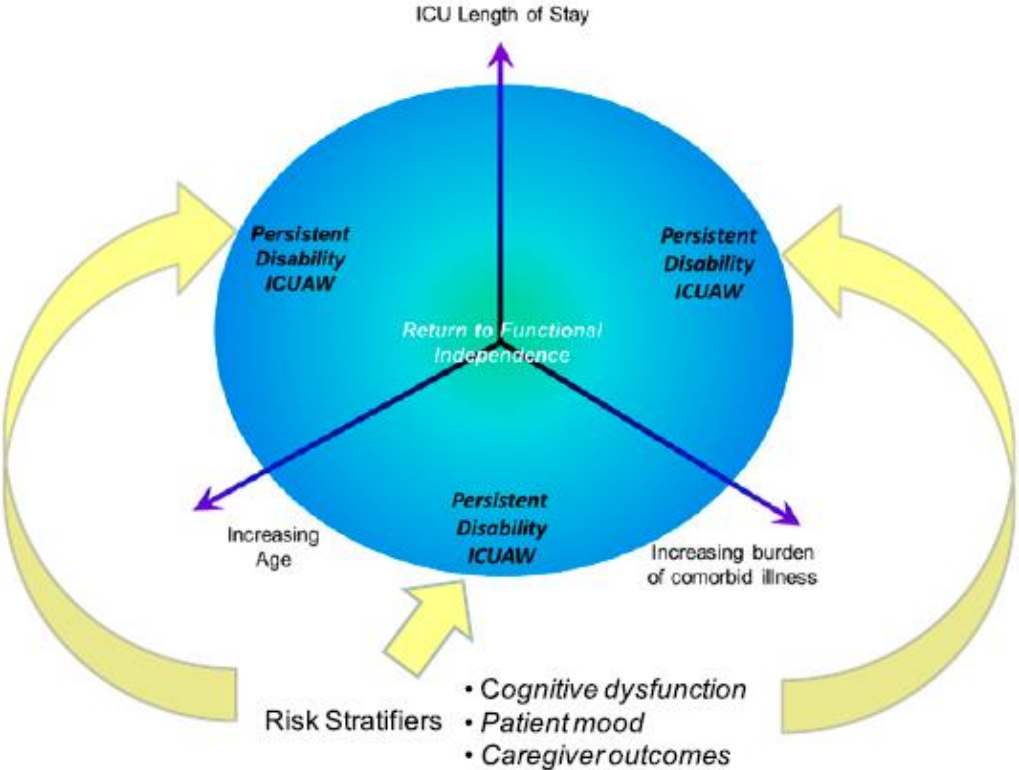


Figure 1. Major determinants and risk modifiers of clinical phenotypes

Exercise rehabilitation following intensive care unit discharge for recovery from critical illness: executive summary of a Cochrane Collaboration systematic review

Bronwen Connolly^{1,2,3*}, Lisa Salisbury⁴, Brenda O'Neill⁵, Louise Geneen⁶, Abdel Douiri^{3,7}, Michael P. W. Grocott^{8,9,10}, Nicholas Hart^{1,2,3}, Timothy S. Walsh¹¹ & Bronagh Blackwood¹²

Conclusions

There was insufficient evidence to determine an overall effect on functional exercise capacity or health-related quality of life of an exercise-based intervention initiated after ICU discharge for survivors of critical illness. The degree of heterogeneity across included studies precluded a meta-analysis of data, and individual study findings were inconsistent with regards a beneficial effect on functional exercise capacity. No effect on health-related quality of life was reported. The methodological rigour of included studies was variable with risk of bias present in several domains. Results

Outcome Selection



Parry et al. *Critical Care* (2015) 19:127
DOI 10.1186/s13054-015-0829-5



RESEARCH

Open Access

Functional outcomes in ICU – what should we be using? - an observational study

Selina M Parry^{1*}, Linda Denehy^{1,3}, Lisa J Beach², Sue Berney^{3,4}, Hannah C Williamson⁴ and Catherine L Granger^{1,2,3}

Conclusions

There is excellent criterion validity for other functional measures (FSS-ICU, IMS and SPPB) against the PFIT-s in the ICU setting. Higher PFIT-s scores on awakening were predictive of discharge directly home. All tests were responsive to change, however, the SPPB and IMS were limited by floor effects when used in the ICU. Based on the findings in this study the PFIT-s and FSS-ICU are promising functional measures and should be considered currently when measuring physical function in the ICU in clinical practice and research.

Key messages

- Impairment in physical function is a significant problem for survivors of critical illness.
- PFIT-s and FSS-ICU are promising functional measures and should be considered when measuring physical function in the ICU
- A core set of outcome measures, which map impairment, activity limitations and participation restrictions within the ICF framework need to be developed, which can be utilized across different time points of recovery.



Toward a Common Language for Measuring Patient Mobility in the Hospital: Reliability and Construct Validity of Interprofessional Mobility Measures

Erik H. Hoyer, Daniel L. Young, Lisa M. Klein, Julie Kreif, Kara Shumock, Stephanie Hiser, Michael Friedman, Annette Lavezza, Alan Jette, Kitty S. Chan, Dale M. Needham

Conclusions. The AM-PAC IMSF and JH-HLM had excellent interrater reliability and test-retest reliability for both physical therapists and nurses. The evaluation of convergent validity suggested that AM-PAC IMSF and JH-HLM measured constructs of patient mobility and physical functioning.

Perceived Barriers to Mobility in a Medical ICU: The Patient Mobilization Attitudes & Beliefs Survey for the ICU

In conclusion, a survey administered to a multiprofessional group of MICU staff demonstrated relatively low perceived barriers to patient mobility across clinical roles. Within the first decade of work experience, greater experience was associated with lower perceived barriers to patient mobility. As part of a structured QI project, the PMABS-ICU may be a valuable tool to assist in identifying specific perceived barriers for consideration when designing mobility interventions for the ICU setting.

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1-6

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RESEARCH

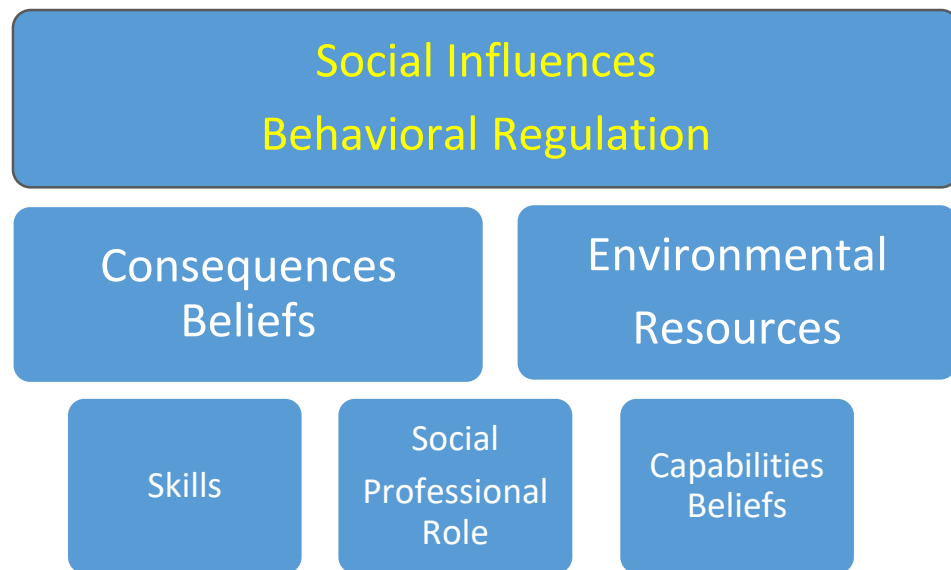
Open Access



CrossMark

Barriers and facilitators to early rehabilitation in mechanically ventilated patients—a theory-driven interview study

Shannon L. Goddard^{1,2*} , Fabiana Lorencatto³, Ellen Koo¹, Louise Rose^{1,4,5}, Eddy Fan^{2,6}, Michelle E. Kho⁷, Dale M. Needham⁸, Gordon D. Rubenfeld^{1,2}, Jill J. Francis^{2,3} and Brian H. Cuthbertson^{1,2}



A team approach to the introduction of safe early mobilisation in an adult critical care unit

Sanjiv Chohan, Sara Ash, Lorraine Senior

ICU Daily Dangle

(If in doubt, discuss with medical staff)

All patients should attempt to dangle when:

Responsive to verbal stimulation and obeying commands
(They do not need to be delirium negative)

PEEP is < 8 and FiO₂ is < 50% **and** cardiovascularly stable

Pressor/Inotrope infusions have not increased in the last 2 hours
They are not receiving active volume resuscitation
Arrhythmias are controlled and there is no active myocardial ischaemia
Assessment by physio

Early, goal-directed mobilisation in the surgical intensive care unit: a randomised controlled trial



*Stefan J Schaller, Matthew Anstey, Manfred Blobner, Thomas Edrich, Stephanie D Grabitz, Ilse Gradwohl-Matis, Markus Heim, Timothy Houle, Tobias Kurth, Nicola Latronico, Jarone Lee, Matthew J Meyer, Thomas Peponis, Daniel Talmor, George C Velmahos, Karen Waak, J Matthias Walz, Ross Zafonte, Matthias Eikermann, for the International Early SOMS-guided Mobilization Research Initiative**

Summary

Background Immobilisation predicts adverse outcomes in patients in the surgical intensive care unit (SICU). Attempts to mobilise critically ill patients early after surgery are frequently restricted, but we tested whether early mobilisation leads to improved mobility, decreased SICU length of stay, and increased functional independence of patients at hospital discharge.

Lancet 2016; 388: 1377–88

See [Editorial](#) page 1349

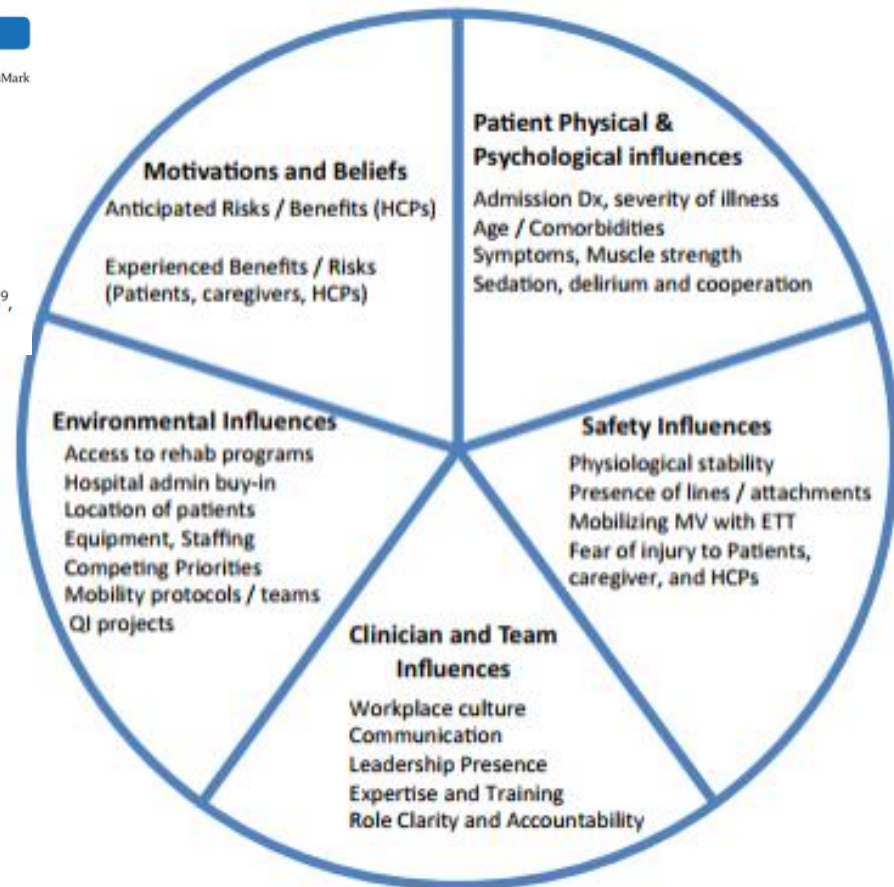
See [Comment](#) page 1351



Factors influencing physical activity and rehabilitation in survivors of critical illness: a systematic review of quantitative and qualitative studies

Selina M. Parry^{1*}, Laura D. Knight², Bronwen Connolly^{3,4,5}, Claire Baldwin⁶, Zudin Puthuchear^{4,7}, Peter Morris⁹, Jessica Mortimore^{3,5}, Nicholas Hart^{3,5,8}, Linda Denehy¹ and Catherine L. Granger^{1,2,10}

Intensive Care Med (2017) 43:531–542
DOI 10.1007/s00134-017-4685-4



Case 1: Jane Smith

- 39 year old female admitted to the neuro ICU with a subarachnoid hemorrhage
- BMI: 51
- Home medications: lisinopril, levothyroxine
- Hunt and Hess Scale: Grade 3
- Fisher: 3
- Angiogram reveals aneurysm- s/p coiling POD 1
- Mechanical Ventilator: CPAP via tracheostomy, 40% FiO₂
- Lines and Tubes: radial arterial line, external ventricular drain, foley catheter, peripheral IV, EKG
- Social: no family present, no insurance information



**What barriers might make early rehabilitation
for Jane Smith difficult?**

Text AMYRICH735 to 37607 to reply

Case 2: Charles Macklemore



- 67 yo male; PMH of rheumatoid arthritis and obesity
- Presented to the ED with SOB; found to be hypoxic with progressively worsening hypotension that was unresponsive to fluids
- Admitted to the medical ICU for septic shock and ARDS; started on neuromuscular blockade and placed in prone position
- Initial ventilator settings: FiO₂ of 100% and a PEEP of 14
 - After 36 hours, O₂ requirements decreasing
 - Now on an FiO₂ of 70%, PEEP of 14 and supinated without paralytics, remains on two vasopressors

What barriers might make early rehabilitation for Charles Macklemore difficult?

Text AMYRICH735 to 37607 to join

Clinical Barriers vs Cultural Barriers



5 themes:

Patient physical and psychological influences

Safety influences

Culture and team influences

Motivation and beliefs about physical activity (from pts and HCPs)

Environmental influences

Parry, S., Knight L, Connolly B, Baldwin C. et. al. Factors Influencing physical activity and rehabilitation in survivors of critical illness: a systematic review of quantitative and qualitative studies. *Intensive Care Med* (2017) 43:531-542

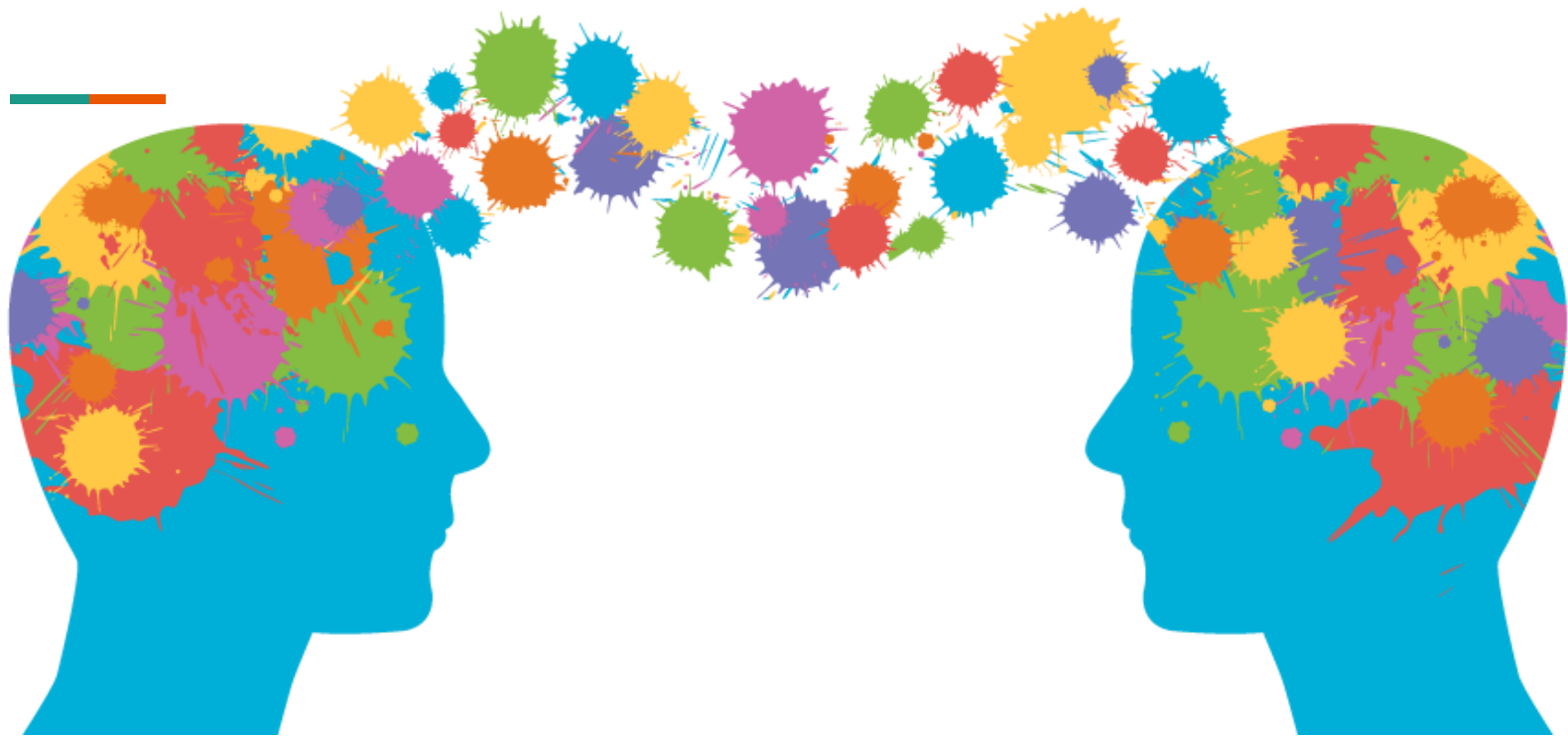
Clinical Barriers Preventing Early Rehabilitation





**STAFF
SHORTAGE**

Staffing



Training

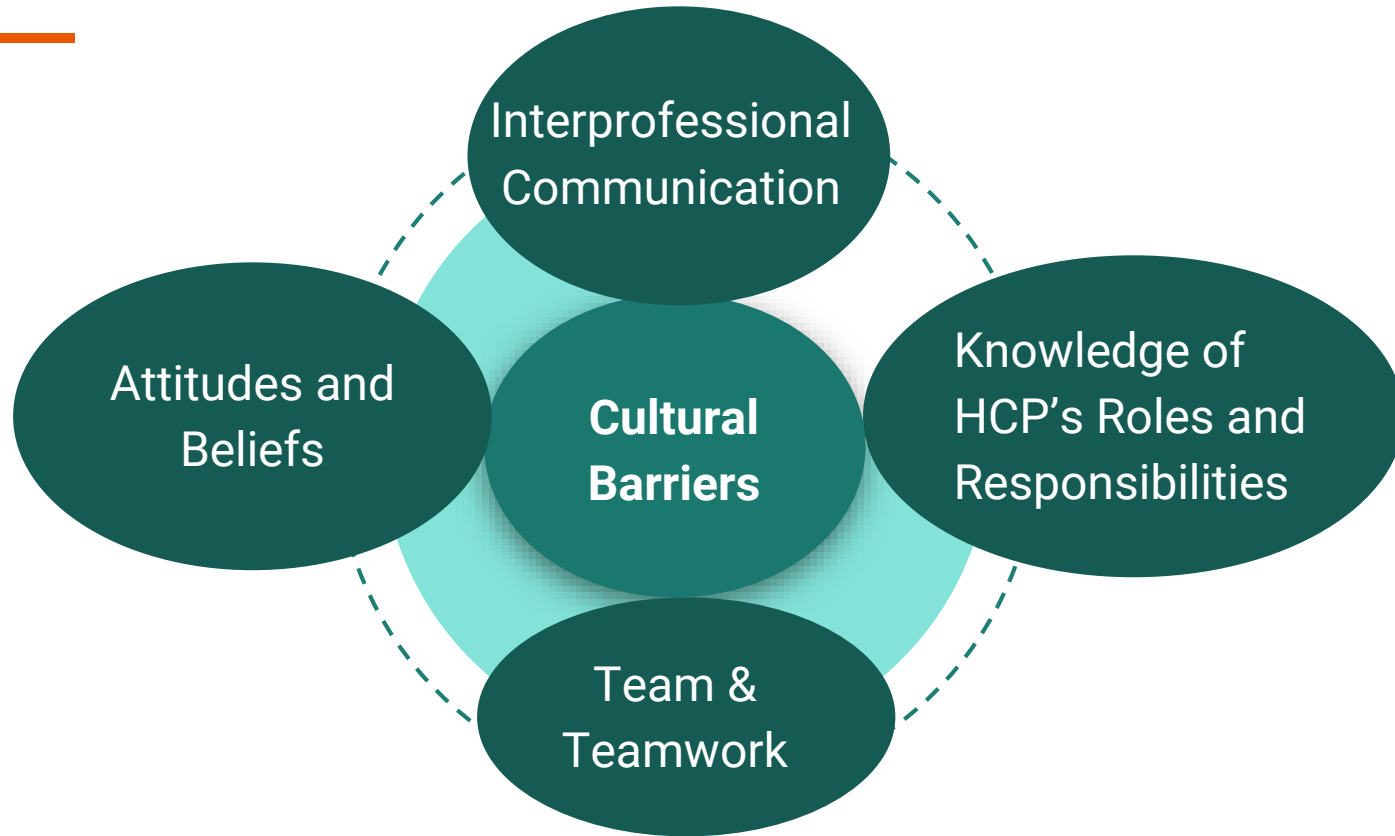


Safety considerations



Patient factors

Cultural Barriers to Providing Early Rehabilitation



Right Patient Right Time in the ICU

The timing of patient care can be a barrier

- Chart review takes time and opportunities are missed in an ICU
- In an ICU without a good culture of mobility, RNs and MDs will NOT seek out the PT to collaborate
- The onus is therefore on the PT to sort through 24+ patients and convince the other providers that physical therapy should be involved
- Poor knowledge of others' roles and responsibilities leads to a lack of perceived importance of early rehabilitation which can impact consultation

BREAK 10:00-10:30

When you return, the speakers will suggest key strategies to overcome both clinical and cultural barriers to early rehabilitation in the ICU



Key STRATEGIES for Overcoming Clinical Barriers



- Educate physical therapists working in the ICU
 - Implementation of ICU training programs
 - Safety considerations- when to start, when to stop, what to monitor
 - Equipment and management during mobility
- Establish a triage system to determine which patients should be seen first
 - Staffing shortages cannot be resolved without leadership guidance
 - Innovation with triaging and communication can assist with high patient loads

Therapist Readiness Survey

- Completed prior to enrollment into ICU training program.
- Adapted from the Casey-Fink Readiness for Practice Survey

11. Confidence Level Related to Essential Physical and Occupational Therapist Skills Needed to Practice in an ICU				
	STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE
Identification				
I feel confident in identifying and naming the purpose of ICU equipment related to <i>standard monitoring</i> EKG, pulse oximeter, blood pressure cuff, portable monitor				
I feel confident in identifying and naming the purpose of ICU equipment related to <i>Hemodynamic Monitoring</i> Arterial line, Central Venous Pressure, Pulmonary Artery Swan Ganz Catheter				
I feel confident in identifying and naming the purpose of ICU equipment commonly used in the <i>Neurological Intensive Care Unit</i> External Ventricular Drain, Subarachnoid Bolt, Lumbar Drain				
I feel confident in identifying and naming the purpose of ICU equipment commonly used in the <i>Cardiothoracic Intensive Care Unit</i> Intra-aortic Balloon Pump, Ventricular Assist Devices, CCOT/OT/BS , ECMO, external cardiac pacemaker				
I feel confident in identifying and naming the purpose of ICU equipment related to <i>oxygen delivery devices</i> Nasal cannula, High-flow nasal cannula, ox/ot/bs , simple mask, face tent, Heated high flow, Non-rebreather, HME, BiPAP				
I feel confident in identifying and naming the purpose of ICU equipment related to the <i>mechanical ventilator</i> PEEP, FIO2, APV/cmv , SIMV, CPAP/ spont , tidal volume				
I feel confident searching and finding evidence-based literature to guide my patient evaluation, examination, intervention and plan				

	STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE
Application				
I feel confident in management of ICU equipment related to <i>standard monitoring</i> during patient mobility and interpreting patient response accordingly EKG, pulse oximeter, blood pressure cuff, portable monitor				
I feel confident in management ICU equipment related to <i>Hemodynamic Monitoring</i> during patient mobility and interpreting patient response accordingly Arterial line, Central Venous Pressure, Pulmonary Artery Swan Ganz Catheter				
I feel confident in management of ICU equipment commonly used in the <i>Neurological Intensive Care Unit</i> during patient mobility and interpreting patient response accordingly External Ventricular Drain, Subarachnoid Bolt, Lumbar Drain				
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I feel confident in management of ICU equipment related to the <i>mechanical ventilator</i> during patient mobility and interpreting patient response accordingly PEEP, FIO2, APV/cmv , SIMV, CPAP/ spont , tidal volume				

Training for the PT in the ICU

Where to start?

Hodgson C, Stiller K, Needham D, et. al.

Expert consensus and recommendations on safety criteria for active mobilization of mechanically ventilated critically ill patients. *Critical Care*. 2014; 18: 658

Red light, yellow light, green light....

a		IN-BED EXERCISES	OUT-OF-BED EXERCISES
CARDIOVASCULAR CONSIDERATIONS			
Blood pressure			
Intravenous antihypertensive therapy for hypertensive emergency ^a		Red	Red
MAP ^b :			
Below target range and causing symptoms		Yellow	Red
Below target range despite support (vasoactive and/or mechanical)		Yellow	Red
Greater than lower limit of target range while receiving no support or low level support		Green	Green
Greater than lower limit of target range while receiving moderate level support		Yellow	Yellow
Greater than lower limit of target range on high level support		Yellow	Red
Known or suspected severe pulmonary hypertension		Yellow	Yellow
Cardiac arrhythmias			
Bradycardia:			
Requiring pharmacological treatment (e.g., isoprenaline) or awaiting emergency pacemaker insertion		Red	Red
Not requiring pharmacological treatment and not awaiting emergency pacemaker insertion		Yellow	Yellow
Transvenous or epicardial pacemaker:			
Dependent rhythm		Yellow	Red
Stable underlying rhythm		Green	Green
b			
Any stable tachyarrhythmia:			
Ventricular rate >150 bpm		Yellow	Red
Ventricular rate 120 to 150 bpm		Yellow	Yellow
Any tachyarrhythmia with ventricular rate < 120 bpm		Green	Green
Devices			
Femoral IABP ^c		Green	Red
ECMO:			
Femoral ^d or subclavian (not single bicaval dual lumen cannulae)		Green	Red
Single bicaval dual lumen cannulae inserted into a central vein		Green	Yellow
Ventricular assist device:		Green	Green
Pulmonary artery catheter or other continuous cardiac output monitoring device:		Green	Yellow
Other cardiovascular considerations			
Shock of any cause with lactate >4mmol/L		Yellow	Yellow
Known or suspected acute DVT/PE		Yellow	Yellow
Known or suspected severe aortic stenosis		Green	Yellow
Cardiac ischemia (defined as ongoing chest pain and/or dynamic EKG changes)		Yellow	Red

Figure 3 Cardiovascular safety considerations.

Training for the PT in the ICU

Table 1. Safety Criteria for Start/Stop Rehab/Mobilization (in Bed or out of Bed)

Safety Criteria	Starting a Rehab/Mobilization Session	Stopping a Rehab/Mobilization Session
System	<u>Start</u> when all of the following are present:	<u>Stop</u> when any of the following are present:
Cardiovascular	<ul style="list-style-type: none"> Heart rate 60-130 beats/min, Systolic BP 90-180 mm Hg, or MAP 60-100 mm Hg 	<ul style="list-style-type: none"> Heart rate decreases < 60 or increases > 130 beats/min Systolic BP decreases < 90 or increases > 180 mm Hg MAP decreases < 60 or increases > 100 mm Hg
Respiratory	<p>“... not be a substitute for clinical judgment”</p> <p>“All thresholds should be interpreted or modified, as needed, in the context of individual patients’ clinical symptoms, expected values, recent trends, and any clinician-prescribed goals or targets.”</p>	
Neurologic		
Other		
	<p>The following should be absent:</p> <ul style="list-style-type: none"> New or symptomatic arrhythmia Chest pain with concern for ischemia Unstable spinal injury or lesion Unstable fracture Active or uncontrolled GI bleeding <p>Mobility may be performed with</p> <ul style="list-style-type: none"> Femoral ventricular assist device, except sheath, in which hip mobilization is generally avoided Continuous renal replacement therapy Vasoactive medication infusion 	<p>If following develop and are clinically relevant:</p> <ul style="list-style-type: none"> New or symptomatic arrhythmia Chest pain with concern for ischemia Ventilator asynchrony Fall Bleeding Medical device removal or malfunction Distress reported by patient or clinician

PT ICU Competency – Mentoring Program Checklist

Mentee _____ Date _____

A. Required Reading

- ☐ a. "Supplemental Oxygen Utilization during Physical Therapy Interventions"
- ☐ b. "Mobilizing Patients in the Intensive Care Unit: Improving Neuromuscular Weakness and Physical Function"
- ☐ c. "Expert consensus and recommendations on safety criteria for active mobilization of mechanically ventilated critically ill adults"
- ☐ d. "An Official American Thoracic Society Clinical Practice Guideline: The Diagnosis of Intensive Care Unit-Acquired Weakness in Adults"
- ☐ e. "Long-Term Neurocognitive Functional after Critical Illness"
- ☐ e. "Long-Term Complications after Critical Care"

B. Clinical Participation & Education (up to 40 hours in each ICU)

- ☐ a. STICU
- ☐ b. CICU
- ☐ c. CTICU
- ☐ d. MICU
- ☐ e. NICU

C. Resources (rehab share drive)

- ☐ "ICU: Lines, tubes, and monitoring equipment"
- ☐ ICU specific policies/guidelines applicable to rehabilitation therapists

D. Skills Checklist

- ☐ a. STICU
- ☐ b. CICU
- ☐ c. CTICU
- ☐ d. MICU
- ☐ e. NICU

E. Competency Check-Off

*must have successful completion before progressing to the next ICU

- | | | | |
|----------|--------------------------------------|---|--|
| a. STICU | <input type="checkbox"/> Verbal Exam | <input type="checkbox"/> Practical Exam | <input type="checkbox"/> Feedback form |
| b. CICU | <input type="checkbox"/> Verbal Exam | <input type="checkbox"/> Practical Exam | <input type="checkbox"/> Feedback form |
| c. CTICU | <input type="checkbox"/> Verbal Exam | <input type="checkbox"/> Practical Exam | <input type="checkbox"/> Feedback form |
| d. MICU | <input type="checkbox"/> Verbal Exam | <input type="checkbox"/> Practical Exam | <input type="checkbox"/> Feedback form |
| e. NICU | <input type="checkbox"/> Verbal Exam | <input type="checkbox"/> Practical Exam | <input type="checkbox"/> Feedback form |

Mentor Advisor Sign off _____ Date Completed _____

Program Highlights:

- Required readings to begin PRIOR to hands on training
- 1 week MINIMUM to train to each ICU
 - Can be adapted to staffing or dept needs
- Trainees perform a session of trainors choosing as well as complete a pre-determined case study oral exam



UCHealth

PT CTICU Competency Check-Off

Verbal Exam:

Jane is a 71F admitted for surgical excision of an atrial myxoma. Post-operatively she developed septic shock, including anuric AKI, in which she required re-intubation and initiation of multiple vasoactive agents. Jane underwent to OR for tracheostomy placement last week and has transitioned to trach collar; additionally she has been placed on CVVH with RI access. She has an arterial line in her R femoral artery.

- 1) What are your concerns/questions regarding initiating treatment with this patient?
- 2) What are your concerns/questions regarding mobilizing a patient on CVVH? When is further discussion with the MD warranted?
- 3) Would you see a patient on multiple vasoactive agents? Why or why not?
- 4) How would you monitor physiologic response to activity in this patient?
- 5) What would your treatment goals be for today?

☐ Meets Expectations

☐ Needs Improvement

Scoring: Mentee scores "NI" if gives incorrect response without clinically sound reasoning OR if mentee requires 3 or more cues throughout entire exam from mentor to develop clinically relevant response. Mentors, please use "Notes" section to document cues and areas of difficulty.

Notes:



Staffing

Management of a High Patient Census

- The reality is we likely won't get more staffing. So what do we do?
 - Triage
 - Education: mobility vs therapy
 - Support staff and nursing colleagues

Triaging

Triage System for Acute Care Therapy Services

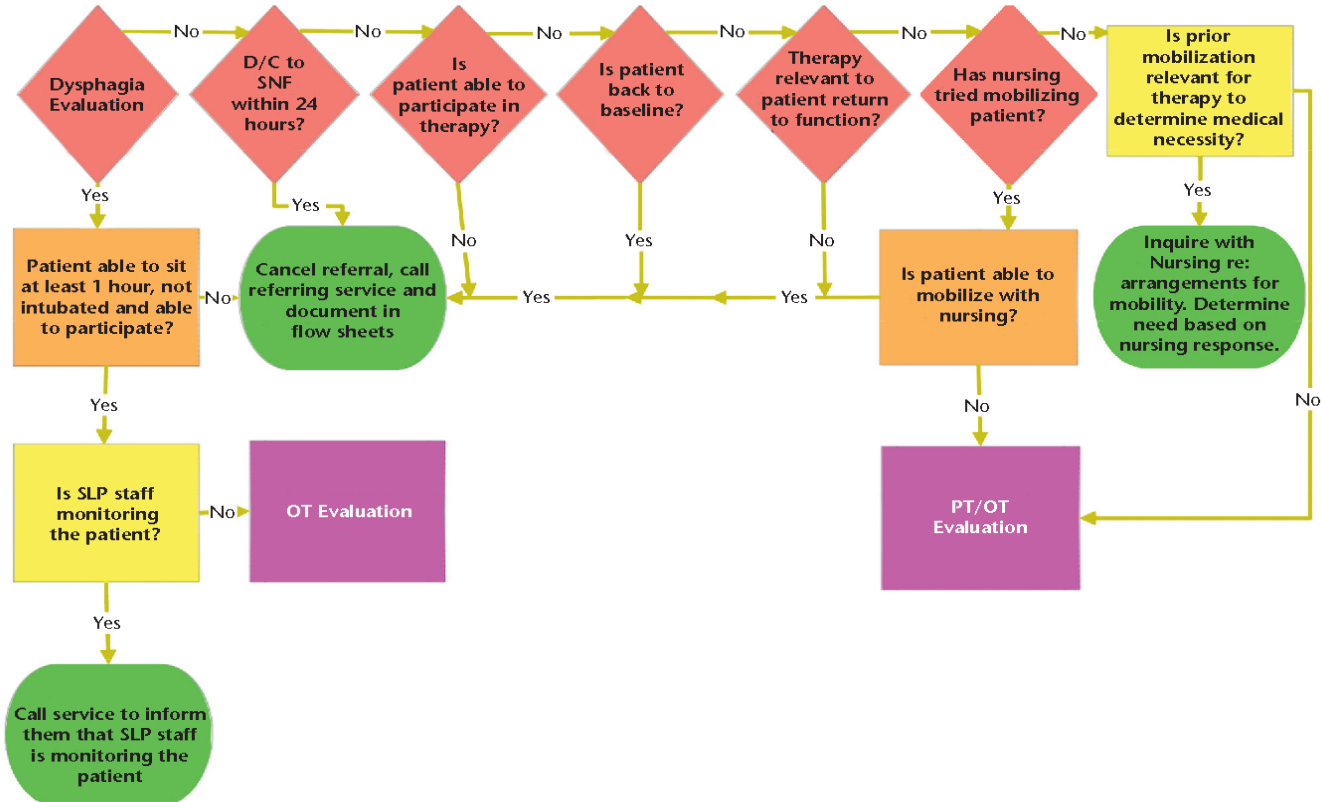


Figure 1

Mobility does **NOT** always equal Therapy

Therapy is **NOT** just Mobility

Mobility is a **COMPONENT** of Therapy

Mobility is **NECESSARY** outside of Therapy

Difference between **THERAPEUTIC** and **THERAPY**



Additional strategies to overcome clinical barriers

- Mobility Techs, Rehabilitation Techs
- AM-PAC
- Clinical Snapshot





AM-PAC

AM-PAC “6-Clicks” Inpatient Daily Activity and Basic Mobility Short Forms

Appendix 1.

“6-Clicks” Inpatient Basic Mobility Short Form^a

Please check the box that reflects your (the patient’s) best answer to each question.	Unable	A Lot	A Little	None
How much difficulty does the patient currently have . . .				
1. Turning over in bed (including adjusting bedclothes, sheets, and blankets)?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
2. Sitting down on and standing up from a chair with arms (eg, wheelchair, bedside commode)?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
3. Moving from lying on back to sitting on the side of the bed?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
How much help from another person does the patient currently need . . .				
4. Moving to and from a bed to a chair (including a wheelchair)?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
5. To walk in hospital room?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
6. Climbing 3–5 steps with a railing?	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

Clinicians may find the following helpful in selecting responses:

1. Total/Unable=Total/Dependent Assist
2. A Lot=Maximum/Moderate Assist
3. A Little=Minimum/Contact Guard Assist/Supervision
4. None=Modified Independence/Independent

Clinical Snapshot



Kehoe, Kelly, PT
Physical Therapist
Rehabilitation/Physical Medicine

Progress Notes
Signed

Date of Service: 9/27/2019 10:11 AM

Physical Therapy Treatment Note

Clinical Snapshot

Discharge Recommendation: Facility based rehab (can tolerate 1-2 hours of therapy/day)

Recommended Discharge DME: To be determined, At next level of care

Movement Precautions: Fall risk, CVVH, MV (50%/8), and VV ECMO (RIJ)

Activity and Mobility Recommendations: Patient requires 2 person maximum assistance with repositioning. Please assist patient with positioning into chair mode , AROM to all extremities and PROM to all extremities using one-person assist.

ASSESSMENT

Emphasis of this session focused on facilitating positioning edge of bed to progress upright tolerance, improve aro command following. Patient initially presents w/ RASS of 0, localizing to voice, and following 0% of commands in U

KEY STRATEGIES for Overcoming Cultural Barriers



- **Facilitate** interprofessional communication
- **Change** healthcare professional attitudes and beliefs about PT and early rehab in the ICU
- **Create an environment of trust**, knowledge sharing and respect for the interprofessional team
- **Educate** other healthcare providers about PT Roles and Responsibilities and **learn** about others' roles in the ICU
- **Practice team and teamwork** by working together interprofessionally to care for the patient

IPEC Core Competencies: Strategies for optimizing interprofessional care of the patient



Communication: Is there an environment of *trust* where *open and honest communication* can occur?

Values and Ethics: Do other healthcare professionals **VALUE** early rehabilitation? Do they understand why it is important, what it is? Do they know how, why and when to consult physical therapy?

Team and Teamwork: Is there time and opportunity to collaborate across healthcare professions? I.e. respiratory therapist, nurse and PT all collaborate to enable early rehabilitation

Roles and Responsibilities: Does the PT understand their own and other's scope of practice? Do other healthcare professionals know what role the PT plays in the ICU?



“It is easy to consider early mobilisation in the intensive care unit solely as an exercise intervention. However, it has become increasingly clear that such a simplification is wrong. Instead, early mobilisation in the ICU is a complex intervention demanding interdisciplinary coordination and communication.”

Culture Change & Communication with the Inpatient Team

Start with Consult to Physical Therapy

- Support & Educate at individual level in the moment (short term)
- Sustain momentum and culture (long term)

Physical Therapist



What my friends think I do.



What MDs think I do.



What Medicare thinks I do.



What my patients think I do



What I think I do.



What I really do.

Misperceptions



Opportunity

- 1) Validate & acknowledge concerns
- 2) Identify (and remove) barriers
- 3) Build relationships
- 4) Educate others
- 5) Illustrate expertise

Establishing Support in the Short Term

Eliminate
Misconceptions



Achieve Buy In



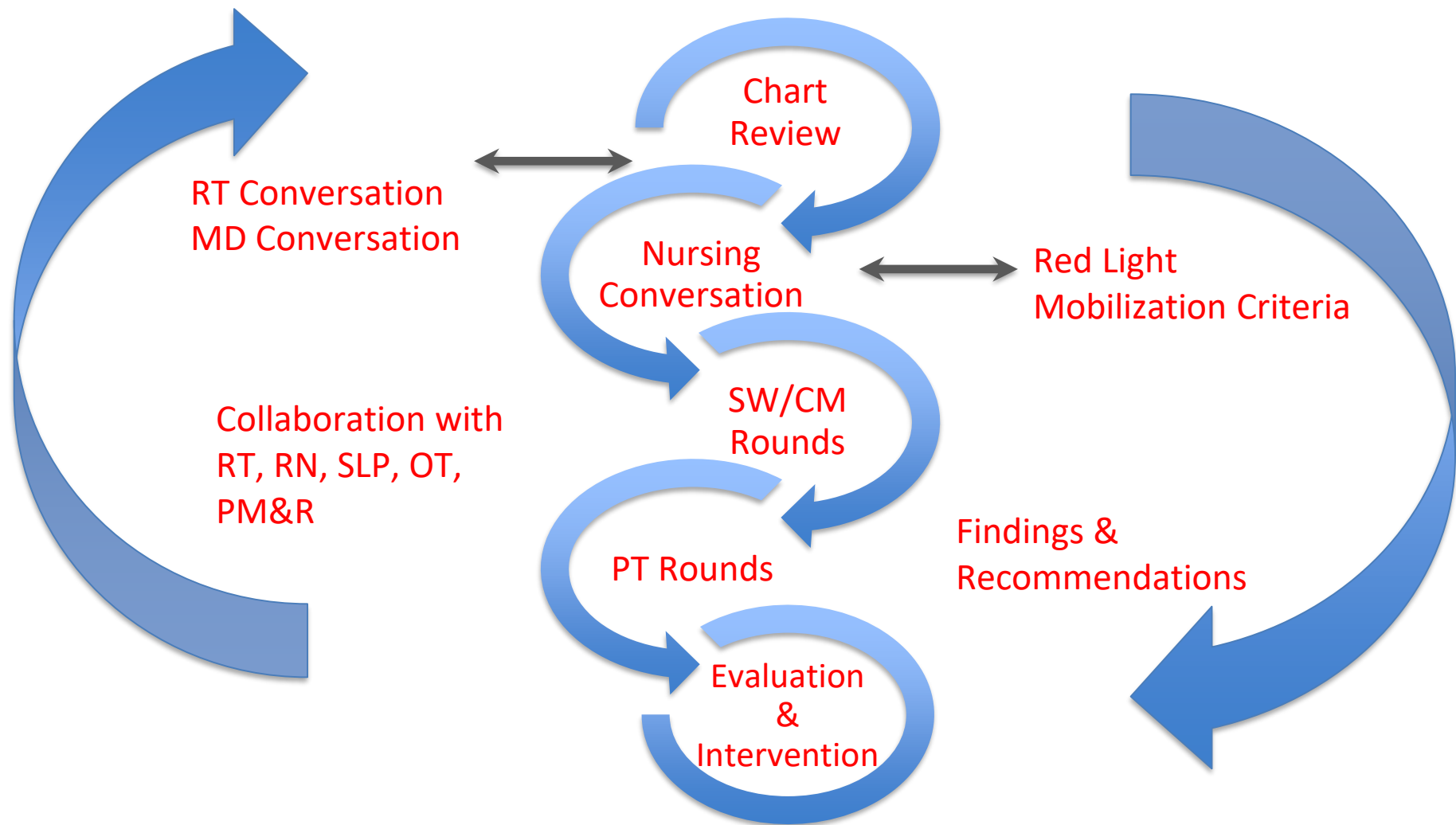
Collaborate

Nursing Conversation

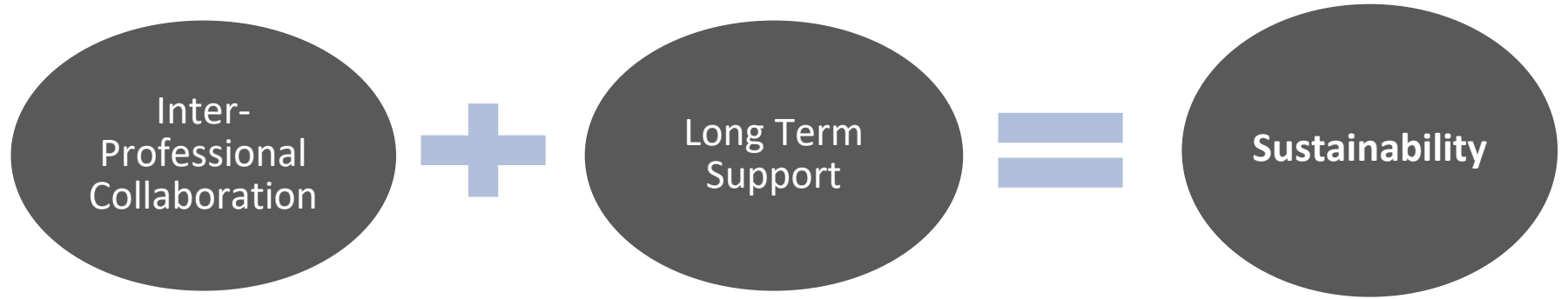
- Events of last 24 hours, what are the trends?
- Updates from MD daily rounds
- Logistical Plan
- Sedation Vacation
- Nursing Concerns
- Orders Clean Up (bedrest?)
- Nursing Assessment: RASS, cognition, stability with nursing care, sleep, symptoms

Respiratory Conversation

- Events of last 24 hours, what are the trends?
- Secretions
- Spont breathing trial?
 - Success? Failure? Why?
- RT concerns
- Vent settings and discussion on ideal respiratory support during therapy



Sustainability



Key Take Home Points~ what are your next steps?

What strategies will you take back to your ICU to address the clinical and cultural barriers to providing early rehabilitation for patients in the Intensive Care unit?

Questions?



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