APTA Acute Care℠

# BRIDGE THE GAP 2026

# POSTER BOOKLET



May 1-3, 2026 | Chicago, IL

# Bridge the Gap Poster Presentations

Join us for the **2026 Bridge the Gap Poster Presentations**, an evening celebrating interdisciplinary research, creativity, and collaboration. Twenty-five posters will be on display on **Friday, May 1**, from **6:00–7:30 PM**, during a wine and cheese reception with the poster presenters.

Engage directly with presenters, explore innovative projects, and enjoy conversation in a relaxed, social setting. This event is free and **included with registration** and is open to registered attendees only.

We look forward to welcoming you for an evening of insight, dialogue, and discovery!

APTA Acute Care

# Poster Abstracts

## AI-driven Discharge Optimization on a Cardiac Surgery Step-down Unit |

Joshua Vogel, PT, DPT, MBA, Eileen Skaarer, MS, RN/ Director of Nursing

**Background & Purpose:** Patients recovering from open-heart surgery require multiple discharge-related activities involving interdisciplinary collaboration among nursing, providers, case management, and rehabilitation services. Inefficient coordination often results in delays, late discharge times, and workflow inefficiencies. Artificial Intelligence (AI) offers an opportunity to optimize patient flow and improve discharge timeliness. This project aimed to improve discharge planning compliance and adherence to scheduled discharge times by integrating AI-driven recommendations with structured interdisciplinary communication. The goal of this project was to have a 20% increase in discharge planning compliance through collaboration among providers, nursing, case management, and physical/occupational therapy, guided by AI-supported patient flow optimization.

**Methods:** Between February 1st and March 31st, 2025, a pilot initiative to improve discharge efficiency was implemented which established interdisciplinary standard work and an afternoon huddle process on the Cardiac Surgery Stepdown Unit. Each weekday representatives from nursing, advanced practice providers (APPs), case management, and PT/OT met virtually to identify patients anticipated for discharge the following day. Case management scheduled these patients into designated discharge time slots chosen by AI to optimize flow, while the therapy representative updated team priorities based on rehabilitation needs. Nursing and provider teams incorporated these plans into shift handoffs and care tasks to ensure communication, care coordination, and patient engagement for meeting discharge milestones.

**Results:** Baseline compliance in January 2025 was 30%, with 67% of patients discharged before their recommended time. By March 31st, planning compliance improved to 81%, and adherence to discharge times increased to 74%.

**Conclusions:** AI-supported discharge planning combined with structured interdisciplinary communication significantly improved discharge efficiency. This approach demonstrates the value of predictive analytics and workflow standardization in enhancing patient flow and reducing delays. Future work will focus on sustaining improvements through PDSA cycles and scaling the model to other units.

## The Art of Critical Mobility: Transforming 'DEF' Implementation and ICU Patient Outcomes | Emily L. Kavanaugh, PT, DPT, MBA (CCS)

**Background/Problem Statement:** Functional, skilled early mobility in ICU often perceived as requiring significant staff resources or capital equipment to implement and maintain.
ELK Methods were initially developed and iterated in small community, rural, and regional hospitals by author.

Results of CV ICU study (2017-2023):
Gait distance ELK method > ICU nursing > PT usual care
Time investment initial session: ELK Method > PT usual care > ICU nursing
(Graph of time spent and gait distance achieved)

Application to other ICUs using case study method:
(Visual diagram of Intervention Dosing Using Case Study of Critical Illness (ICU-AW) Acquired Weakness)

**Outcomes:** Provides a proven, reproducible process for ICU's of all sizes and resources that RECOVERS patients.
Trains a systematic process that provides "DEF" (of the ICU Liberation Bundle) mastery and consistency for advanced PT practice and ICU management.
Provide equitable access training that be incorporated into onboarding, residency, and advanced practice clinical training.

Value & Competitive Advantage:
LEVERAGES expert knowledge
TRANSFORMS patient outcomes
Provides SUSTAINABILITY
Provides COST-SAVINGS
without
cost of creating/recruiting/onboarding clinical educator
risk losing dedicated time usurped by other hospital projects
loss of implementation momentum due to staff turnover

## Bridging the Gap: Utilization of Outcome Measures in Acute Care PT for Discharge Planning | Laura Hull, PT, MPT, Acute Care/Med Surg Rehab Program Coordinator

**Background:** AM-PAC Mobility has emerged as the Gold Standard Outcome Measure for Acute Care Physical Therapists (PTs), offering a reliable way to assess mobility. Its scores increasingly shape discharge planning and insurance decisions. Patients scoring >17 are often denied access to the PT recommended discharge setting, highlighting the growing influence of standardized assessments on care and coverage.

**Description/Results:** A survey conducted in Spring 2025 among Acute Care/Med Surg Social Workers and Case Managers revealed that 81% of respondents reported pre-certification requests were denied more than half the time when patients had an AM-PAC mobility score ofâ€¯>17.â€¯ Following the survey, the use of Outcome Measures beyond the AM-PAC mobility was assessed across Acute Care/Med Surg Rehabilitation services. An audit of over 16,000 progress notes revealed that when all of the following conditions were met - PT discharge recommendations were present, a pre-certification was pending, the estimated discharge date was within two days, and the AM-PAC mobility score was >17 - alternative Outcome Measures were utilized in only 9% of cases. However, when these Outcome Measures were used, 81% of patients were discharged to the safest therapy-recommended location. Based on audit results, communication was initiated with clinical therapists, educating to promote consistent integration of Outcome Measures into both care delivery and documentation practices. This initiative was designed to strengthen our ability to advocate for higher AM-PAC scores and proactively reduce payer denials, ultimately supporting both patient outcomes and organizational performance.

**Discussion/Conclusion:** In Acute Care PT, the use of standardized Outcome Measures fosters a shared language to describe patient function and mobility during hospitalization. These tools provide objective data to assess the effectiveness of therapy interventions, support benchmarking across care settings, and enable tracking of patient progress over time. The strong correlation that when Outcome Measures beyond AM-PAC mobility were used and the patient was discharged to the safest therapy-recommended location highlights the significant potential impact of increasing Outcome Measure usage on patient safety and care quality. A recent survey of Acute Care and Med Surg physicians revealed that 90% believe using evidence-based fall risk data improves peer-to-peer communication, especially for patients with high AM-PAC scores needing pre-certification. This reinforces the importance of supporting therapy teams in consistently applying Outcome Measures and integrating these tools into workflows to strengthen discharge planning and enhance patient outcomes. Aligning practices with data-driven insights fosters collaboration and elevates care quality across the continuum.

## Clicking with Confidence: Using Simulation to Enhance Interprofessional Collaboration and Discharge Planning Among Doctor of Physical Therapy Students (DPT) for an Older Adult with Dementia Using AMPAC |

Cassandra Hutchison, Andrew Bartlett, Talin Bakalian

**Background:** Effective discharge planning for older adults with cognitive impairment requires coordinated interprofessional collaboration. The Activity Measure for Post-Acute Care (AMPAC) "6 Clicks" is a standardized tool used to assess functional mobility and guide discharge decisions. However, students in health professions have limited opportunities to apply this tool in clinical scenarios. Simulation-based interprofessional education (IPE) provides a safe and realistic environment for students to practice clinical reasoning, communication, and patient-centered decision-making.

**Purpose:** To evaluate the impact of an IPE simulation on students' confidence and understanding of interprofessional (IP) collaboration during discharge planning for an older adult with dementia using the "6 Clicks." It was hypothesized that participation in a structured observational simulation would enhance student confidence and IP role clarity in acute care discharge planning.

**Methods:** Participants included 27 DPT and 4 Bachelor of Science in Nursing (BSN) students in their final academic year. DPT participants completed pretest and posttest surveys before and after an IPE simulation. 2 validated instruments were used to measure confidence and clinical reasoning: the Acute Care Confidence Survey (ACCS) with additional questions specific to discharge planning and implementation of "6 clicks" tool and a Scripts Concordance Test (SCT) on discharge planning. Simulation included a pre-brief on dementia, interprofessional roles, and "6 Clicks," followed by a live remote Zoom simulation featuring a standardized patient with dementia with a family member present. Observers watched a nurse–patient encounter, a PT mobility assessment, and an IP discussion on discharge planning. Observers recorded "6 Clicks" findings and team behaviors using a structured observation guide. A PT and nursing faculty-led debrief encouraged reflection on communication and collaboration. Data were analyzed using independent-samples t-tests.

**Results:** Twenty-seven DPT students completed the pretest/posttest ACCS and 4 questions specific to discharge planning. Mean confidence increased from pretest ($M = 73.5$, $SD = 16.0$) to posttest ($M = 86.4$, $SD = 8.4$). Independent samples t-test indicated a significant improvement from pre- to post-simulation, $t(40.59) = -3.70$, $p = .0005$; mean difference (post – pre) = 12.6, 95% CI [0.54, 1.97). Participants completed a SCT, showing a mean percent correct was 60.1% ($SD = 15.7$; median = 58.3%) with modest internal consistency (Cronbach's $\alpha = .32$).

**Conclusions:** A structured IPE simulation significantly improved students' confidence in the acute care setting and perceived readiness for collaborative practice during discharge planning that incorporates "6-Clicks." Future studies should include additional professions, such as social workers.

# Delirium Care in Physical Therapy: An Initiative at Tampa General Hospital (TGH)

Yvonne Steffens, PT, DPT, Kelly Tucker PT, DPT

Delirium is marked by a disruption in attention and awareness, resulting in a sudden decline in cognitive function that is not associated with a preexisting or developing neurocognitive disorder. In acute care settings, delirium is often overlooked and misdiagnosed by therapists as dementia, behavioral problems, or neurological event, leading to delays in treatment, even though research shows that mobility is an effective intervention for managing delirium.
This poster highlights the rehabilitation department's role in implementing delirium care at TGH
An acute care physical therapy resident (ACR) project focused on delirium revealed that therapists often missed opportunities to intervene due to a lack of formal delirium assessments. The project addressed delirium assessment selection, delivered a delirium care lecture, and provided a handout for families.

The ICU Nursing Directed invited the ACR to join a hospital-wide delirium workgroup (HWDW), which allowed the therapy department to showcase its contributions to the treatment and prevention of delirium. Prior to this, involvement from therapists in delirium care was minimal, as the nurse-led delirium intervention primarily included physicians, pharmacists, and behavioral nursing staff. The therapy department agreed to implement a new assessment tool after the resident compared the #D-Confusion Assessment Method with the Intensive Care Delirium Screening Checklist (ICDSC), which was already in use by nursing.

The ICU Nursing Directed invited the ACR to join a hospital-wide delirium workgroup (HWDW), which allowed the therapy department to showcase its contributions to the treatment and prevention of delirium. Prior to this, involvement from therapists in delirium care was minimal, as the nurse-led delirium intervention primarily included physicians, pharmacists, and behavioral nursing staff.

The resident delivered a lecture on delirium, emphasizing the importance of assessing and treating patients with delirium, and provided a handout for families to engage them in preventive measures and interventions in the ICU. The therapy department recommended the use the Confusion Assessment Method with the Intensive Care Delirium Screening Checklist (ICDSC). Therapy leadership mandated delirium assessment and documentation.

A Therapy Delirium Workgroup (TDW) roll out the delirium program following the resident's lecture, with a focus on using the ICDSC.

The TDW conducted pre- and post-program surveys, asking therapists about their attitudes toward providing delirium care and their use of the ICDSC, with responses rated on a Likert scale.

The pre-project survey revealed that most therapists were not in favor of using the ICDSC tool and had not included it in their documentation. Most therapists reported educating patients and families about delirium but were less confident in the effectiveness.
The key to addressing delirium is to assess patient allowing early team intervention.

## Developing a Lung Transplant Physical Therapy Position and Program to Enhance Outcomes and Continuity of Care Across the Transplant Continuum

| Meghan Wollman PT, DPT, CCS

**Background:** Lung transplant programs benefit from multidisciplinary teams that include embedded physical therapists (PTs) to address patients' functional needs and optimize outcomes. Maintaining PT involvement across the pre- and post-transplant continuum can reduce care fragmentation, strengthen communication, and promote goal-driven, patient-centered care.

**Objective:** To establish a dedicated lung transplant PT position aimed at improving standardized assessments, candidate evaluation, continuity of care, and interdisciplinary collaboration throughout the transplant process.

**Methods:** A needs assessment examined patient care trajectories, PT roles in transplant candidacy evaluation, and use of standardized outcome measures. The lung transplant and rehabilitation teams collaborated to obtain institutional support for a full-time PT dedicated to the program. A structured pathway was developed to define PT involvement from pre-transplant evaluation through post-transplant recovery. Working with the multidisciplinary team, the PT integrated services into initial consultations, exercise and rehab programming during the waitlist period, and inpatient and outpatient recovery following transplantation.

**Results:** The PT was embedded within the transplant team to perform clinic evaluations, monitor waitlisted patients longitudinally, and provide inpatient therapy pre- and post-transplant. The PT also contributed to interdisciplinary decision-making in weekly Lung Selection Conferences. Patient engagement expanded from intermittent encounters to longitudinal care episodes lasting 1-12 months. Evidence-based outcome measures—including the UCSD Shortness of Breath Questionnaire, Short Physical Performance Battery, 6-Minute and 2-Minute Walk Tests, 10-Meter Gait Speed, and Five Times Sit-to-Stand—were standardized and administered during initial evaluation, follow-up visits, and throughout the waitlist period. Post-transplant assessments were repeated during inpatient recovery once patients were medically stable. Communication pathways were also developed with external PTs and pulmonary rehabilitation providers to ensure seamless transitions beyond the hospital setting. Implementation with a pilot patient cohort demonstrated improved continuity across pre-, peri-, and post-transplant phases.

**Discussion:** Establishing a dedicated lung transplant PT role addressed critical gaps in standardized assessment, candidate evaluation, and continuity of interdisciplinary care. Early findings indicate the model is feasible and enhances coordination throughout the transplant continuum. Ongoing data collection will evaluate long-term impacts on patient outcomes.

## Development of a Rehab Guideline to Standardize use of Compression Garments in Patients with Spinal Cord Injury

|Shawn Jacob PT, DPT; Katie Blazina PT, DPT, NCS; Andrisa Jefferson; Julie Murray OTR/L; Kara Schworm PT, DPT, CCS

**Background:** Acute spinal cord injury(SCI) disrupts sympathetic pathways, resulting in unopposed parasympathetic activity. This can lead to bradycardia, orthostatic hypotension, and venous thromboembolism(VTE). Compression garments- stockings, abdominal binders, and ace wraps—are commonly used to support venous return, prevent venous stasis, and reduce VTE risk. While their effectiveness is documented in subacute and chronic SCI cases, there is no standardized protocol for weaning compression garments in acute SCI. The absence of guidelines has led to significant variability in clinical practice.

**Aim:** To evaluate current trends in compression garment weaning among physical and occupational therapists treating SCI patients, identify usage and mobility initiation patterns, and develop a standardized weaning guideline for patients with acute SCI.

**Methods:** Medical charts of patients with acute SCI undergoing therapy were reviewed. Key data collected included injury level/severity, length of hospital stay, therapy frequency, compression garment usage, timing of mobility initiation, and garment weaning. A literature review was conducted to identify best practices. SCI specialists at the VA and Spaulding Rehab were interviewed to gain insight into regional practices.

I**nterventions:** Clinician consensus was used to develop a compression garment weaning guideline, which was introduced during an all-staff in-service session that included education on the garments' efficacy and rationale for standardization. It was then implemented in the Boston Medical Center (BMC) inpatient rehabilitation department for acute SCI patients. Ongoing data collection was initiated to monitor changes in clinical practices and outcomes related to garment use and mobility.

**Results:** 13 patients with acute SCI were included (data collection from 4/28/24-5/12/25). Key findings: 9 patients were mobilized out of bed; 4 were not. 3 of 13 patients never used compression garments. 75% of patients with complete injuries used compression garments on evaluation, compared to 44% of those with incomplete injuries. 80% of those who used garments began wearing them during their first session of upright mobility. 4 of 13 patients (31%) began weaning garments during therapy—3 with incomplete and 1 with complete injuries. Therapy sessions when weaning began varied widely, with no consistent order of garment removal.

**Conclusions:** There is currently no standardized approach to using or weaning compression garments in acute SCI, resulting in practice variability. A department-wide weaning guideline has been created and implemented at BMC to address this gap. Continued data tracking will assess the guideline's impact on patient outcomes, such as earlier mobility and successful garment weaning. Clinical judgment remains essential in the absence of universal protocols, but the guideline aims to provide a more consistent framework. Future refinement is expected as more data become available.

# Dynamic Physical Therapy Plan of Care During Hospitalization that Included ECMO, Acute Inflammatory Demyelinating Polyneuropathy, and Lung Transplant

| Jenna Gondelman PT, DPT, PCS

**Background:** Pulmonary hypertension (PH) affects 1% of the population and is defined as increased pulmonary artery pressure. Symptoms include shortness of breath, chest pain, and hemoptysis. Treatments include vasodilators, activity modification, use of supplemental oxygen, and in severe cases, lung transplant. Acute care physical therapy (PT) intervention for patients undergoing lung transplant involves maximizing pre-operative strength and function within safe hemodynamic parameters and post operative support to regain independence. This poster will describe the PT plan of care throughout a complex hospitalization that included development of acute inflammatory demyelinating polyneuropathy (AIDP).

**Description:** The patient is a 14 year old female with PH admitted to Boston Children's Hospital for medical management and lung transplant evaluation. She presented to PT with generalized weakness and decreased endurance, walking 870' on a 6 Minute Walk Test with 3L O2 via nasal cannula. PT focused on maximizing strength and activity tolerance through therapeutic exercise and functional mobility. Hospitalization was complicated by disease progression requiring ECMO. She was able to ambulate once before bleeding at her cannulation site limited mobility. The patient then reported sensory changes and weakness in her feet. PT activities shifted to desensitization, safe mobilization out of bed, and frequent reassessment. Symptoms progressed in an ascending pattern and she was diagnosed with AIDP. Soon after, she underwent lung transplant via median sternotomy. Post operatively, PT focused on bed mobility, transfer training, and lower extremity strengthening. Standing and gait activities were limited by profound lower extremity weakness and sternal precautions. The patient was cleared for bodyweight supported gait training 1 week after chest closure and for upper extremity weightbearing after 2 weeks. PT advanced to standing and gait activities in parallel bars and a rolling walker. Off the shelf solid AFOs were used until custom braces were fabricated.

**Results/Outcomes:** The patient was discharged to inpatient rehabilitation 6 weeks after transplant. By discharge, proximal lower extremity strength had improved but distal movement and sensation remained absent. She could walk short distances with a rolling walker and bilateral solid AFOs. At 6 month follow up, she continued with distal lower extremity weakness and hypoalgesia bilaterally but ambulated 800' on a 6 minute walk test using AFOs, without supplementary oxygen or walker. She continues with outpatient PT.

**Discussion/Conclusion:** PT plans of care in the inpatient setting must remain dynamic. This case illustrates the importance of frequent re-evaluation based on patient tolerance, medical treatment, and changing status. Focusing on the person as a whole rather than individual systems, allows treatment strategies to be adaptable and creative to achieve impairment level and functional goals.

## Elevating Acute Care Practice Through Early Mobilization and High-Frequency Physical Therapy After Hip Fracture Repair | Honeylou Lim, PT

**Background and Purpose:** Hip fractures in older adults are a critical public health concern, often resulting in significant loss of mobility, independence, and increased mortality. The Academy of Orthopedic Physical Therapy of the American Physical Therapy Association developed Clinical Practice Guidelines (CPGs) to promote evidence-based interventions that enhance recovery outcomes. These guidelines advocate for Grade A interventions such as early assisted transfers and ambulation, and Grade B interventions like high-frequency physical therapy in the early postoperative phase. This special interest report explores the impact of two innovative care initiatives—Day 0 early mobilization and twice-daily physical therapy sessions—on functional improvement, discharge destination, and hospital length of stay (LOS) following hip fracture repair.

**Description:** In this retrospective chart review, physical therapist collected data on initial evaluation timing, Activity Measure for Post-Acute Care Mobility (AMPAC) 6-clicks scores at first and last PT visits, discharge destination, and LOS. The study included 59 out of 67 admitted patients who underwent proximal femur fracture surgery from January to March 2025. Eight patients were excluded due to stress fractures, age under 65, and incomplete AMPAC data. Patients were stratified into two groups by discharge destination: Discharged Home and Discharged to another institution. Descriptive analysis was performed on the raw data.

**Results:** Of the 59 patients included, 45% were discharged home and 55% to another institution. Both groups had recorded AMPAC Mobility scores at the first and last physical therapy visits. The mean improvement in AMPAC score was 4.96 points for patients discharged home compared to 1.21 points for those discharged to another institution. Average LOS was 3.42 days for discharged home group and 4.85 days for discharged to another institution group. Additionally, 24 patients (41%) received their initial physical therapy evaluation on the day of surgery (Day 0), predominantly among those discharged to another institution.

**Conclusion:** This initiative demonstrates how integrating CPGs into acute care workflows can elevate practice standards. While Day 0 mobilization alone may not directly influence LOS or discharge outcomes, the combination with increased PT frequency shows promising trends—shorter LOS and higher discharge-to-home rates—compared to national benchmarks (LOS: 4–8 days; home discharge: 5–19%). These raw findings highlight the value of implementing innovative, guideline-driven physical therapy strategies after hip fracture repair to accelerate functional recovery and improve resource efficiency. Future research should investigate barriers to broader implementation and explore patient-specific factors influencing outcomes.

## Enhancing Safety with Mobility and Transfers in Acute Care: Outcomes and Feedback from Utilization of a Variable Position Siderail Bed Frame |

Megan Hermann, PT, DPT, CSPHA; Neil Craney BSN, RN; Kristen Thurman DPT, PT, CWS

**Background:** Safe patient handling and mobility are essential in physical therapy. Improper transfer techniques place patients and therapists at risk for injury, particularly during hospital bed transfers. Transferring patients continues to be a leading cause of musculoskeletal injuries among healthcare workers, with thousands sustaining back injuries each year.[1] A 2024 rehabilitation-therapist survey (n=1,041) listed low back pain as the most common complaint, confirming low-back injury is a leading problem in rehabilitation clinicians.[2] Patients are also at significant risk during hospital bed transfers. A large portion of inpatient falls occur during transfers- such as getting in or out of bed– and often lead to injury.3 These incidents can delay mobility progress and prolong hospitalization. Identifying and implementing bed frame features that promote early mobility, protect rehabilitation clinicians from injury, and enhance overall patient outcomes is essential to promote safe and efficient transfers. Due to the increased risk of injury with existing hospital bed frames, the need for new innovative bed frame features to assist both patients and caregivers with transfers was identified.

**Methods:** A new bed frame with variable position siderails - increasing unobstructed ingress/egress space and allowing for multiple handholds with transfers- was trialed in three U.S. hospitals for 1042 patient days across multiple units. Feedback was collected on ease of use, safety, and impact on mobility and transfers.

**Results:** Zero bed-related, patient falls, or clinician injuries were reported during the trial. Ninety-five bedside clinicians were surveyed during the trial. Most clinicians (89%) reported it was intuitive and easy to use. Regarding increasing safety with transfers, the majority (85%) agreed the multiple siderail positions allowed for individualized patient hand placement during ingress/egress. They (93%) also reported the low bed with variable position siderails decreased patient fall risk, and (84%) said it increased unobstructed access to patients- improving body mechanics with positioning and transfers.

**Discussion:** Traditional hospital bed frames have siderails that often impede with safe patient transfers resulting in a high incidence of musculoskeletal injuries among healthcare workers and patient falls. A new bed frame siderail– allowing for variable positions- has shown promise in decreasing patient falls and caregiver injuries. Physical therapists who frequently perform patient mobility and transfer training may benefit from the improved ergonomics and safety features of this design. With caregivers and patients utilizing equipment that is readily available, having these safety features built into the bed frame has shown to have a positive impact on safety- zero patient falls or clinician injuries occurred. With the positive outcomes of this trial, larger scale studies are warranted to further understand the greater impact.

## An Exacerbation of Lymphedema Following Infection and Revision of a Total Knee Arthroplasty - A Case Report

| Maya Betz-Otero, PT, DPT, CLWT, Dr. Archana Vatwani, PT, DPT, EdD, MBA

**Background and Purpose:** Total knee replacements are a common surgery, with a 4.2% incidence rate in the general populationÂ[1]. The purpose of this case presentation is to highlight the unique clinical management and rehabilitation journey of a 75 year-old female with chronic venous insufficiency (CVI), obesity, and a history of bilateral total knee arthroplasty (TKA), whose right lower extremity edema was complicated by recurrent infections of the right knee prosthesis requiring a revision. This case was chosen secondary to edema impacting many patients who undergo a TKA, and the need to manage edema to improve the timeline of treatment and outcomes of patients with and without a history of chronic swelling.

**Case Description:** The patient is a 75 y/o female who presented for right lower extremity swelling which was exacerbated following a revision of her right total knee arthroplasty due to an infection on 2/6/2023 after initial surgery on 6/7/2021. Her management including significant education regarding lymphedema management, including the importance of compression therapy daily and home management components including elevation, exercise, and a pneumatic compression pump, as well as manual therapy, therapeutic exercise, and therapeutic activity.

**Outcomes:** The patient was seen for 14 visits over a course of 8 weeks for edema reduction, and then 6 visits over a course of 8 weeks to further promote bilateral lower extremity strength and her ability to perform ADLs with HEP provision and expansion. Her edema reduced by a total of 471.92 mL, resulting in a 10.01% limb difference. Her right knee range of motion improved from 117 degrees of flexion to 123 degrees of flexion and from lacking 5 degrees of extension to 2 degrees of hyperextension, now equal to her left knee. She was assisted in obtaining thigh high lower extremity over the counter garments and given education in garment ordering, donning techniques, and donning aids, and a pneumatic compression pump was ordered for her in order to enable her to better manage her symptoms independently. Her strength significantly improved (grossly 4/5 or greater throughout bilateral lower extremities) and she was better able to negotiate stairs, could transfer independently without the use of her upper extremities, and she could perform a floor to stand transfer safely with the use of a stable surface.

**Discussion:** This case highlights the importance of edema management following a TKA, as well as the compounding effect that an infection can have on a patient with CVI. It also demonstrates that patients who have complications such as an infection may not receive an appropriate course of physical therapy following their surgery, resulting in significant impact on activities of daily living. This case was limited by the patient's inability to present to the clinic for the frequency of complete decongestive therapy of 4-5 times per week, slowing progress.

## Expediting Functional Readiness Assessments for Hospital Discharge: Early Morning Sunrise Physical Therapy for Patients After Hip and Knee Total Joint Arthroplasty | Megan Teele, PT

**Background:** Timely initiation of Physical Therapy (PT) following hip and knee total joint arthroplasty (TJA) is essential for ensuring functional readiness for discharge.
Delayed timing of functional readiness assessments (FRA) can lead to delayed discharges.

We hypothesized that early-morning FRA may:
Decrease time to discharge (d/c)
Increase bed capacity
Reduce patient wait times

Methods:
Population: Elective hip and knee TJA patients with plans to d/c post-op day (POD)1
Design: Retrospective and prospective observational analysis
Retrospective cohort: 36 patients
Prospective cohort: 36 patients

**Interventions:**
Starting March 1, 2025, one PT staffed at 7:30 AM (Tue–Fri)
Completed ~2–3 FRAs for TJA patients before 9:00 AM
Communicated results of FRA in real-time with orthopedics team

Prospective/Retrospective Data Collected:
FRA time
Hospital d/c time
Interval time between FRA and d/c

Patient exclusions: Traumatic TJA, other traumatic orthopedic surgeries, shoulder TJA, POD 0 discharge

**Outcomes:** Implementing the earlier FRA decreases the time of discharge. On average, patients left the hospital 2 hours earlier. The time between FRA and discharge remained relatively unchanged.

## Facilitating Safe Discharge and Improving Functional Outcomes: The Value of Inpatient Physical Therapy | Aileen Eviota, DPT, NCS

**Background:** Inpatient physical therapists (PT) play a vital role in improving functional mobility, promoting safe discharge, and supporting throughput for hospitalized patients. Despite this critical role, PT contributions are often underrepresented in organizational quality and utilization reporting. Moreover, the combined impact on clinical effectiveness and operational efficiency is often not fully demonstrated. This project evaluated the impact of PT on functional outcomes using the Activity Measure for Post-Acute Care (AM-PAC), while also examining therapy duration and therapy discharge recommendations relative to hospital discharge to provide metrics on physical therapy effectiveness and operational efficiency.

**Methods:** A retrospective chart review was conducted on 90 patients who received inpatient PT services between July 2024 and March 2025. Patients included were those evaluated by PT with a therapy discharge recommendation to home. Total joint and spine surgery cases were excluded due to predefined clinical pathways. Data collected included AM-PAC scores at PT evaluation and final treatment session, PT length of stay (LOS) defined as days from evaluation to final PT session, time from final PT session to hospital discharge, and alignment between PT discharge recommendations and actual discharge destination. Rehabilitation diagnoses were grouped into three categories: elective surgery, non-elective surgery, and acute-on-chronic medical conditions.

**Results:** Referrals to PT were generally initiated one day after admission, with PT evaluation typically occurring within one day of referral. PT demonstrated clinically meaningful AM-PAC improvement in patients within both elective and non-elective surgical groups. Patients with acute-on-chronic medical conditions demonstrated functional improvement near the minimal clinically important difference (MCID) threshold. Across all cohorts, average AM-PAC improvement was 5.48 points over an average of 3.22 consecutive days of PT treatment. Mean hospital LOS for the cohort was 8.62 days, reflecting a substantial time gap between PT functional readiness and hospital discharge. PT discharge recommendations demonstrated 100% accuracy compared to actual discharge destination.

**Conclusion:** Significant functional progress facilitated by PT commonly precedes hospital discharge, demonstrating PT's role in preparing patients for timely and safe transitions home. Additionally, the high accuracy of PT discharge recommendations highlights the discipline's critical contribution to interdisciplinary discharge planning and decision-making. Early initiation of PT and consistent integration of objective, data-driven functional assessments may support patient safety and return to home, improve hospital throughput, and reduce excess length of stay. These findings reinforce the value of PT in optimizing recovery, ensuring safe discharge, and supporting operational efficiency in acute care settings.

## From Hospital to Home: Improving Caregiver Readiness After Hip/Femur Fracture Repair | Nancy Ferreira, PT, DPT; Zabrina Charapp PT, DPT

**Background:** In 2020, the national average for discharge to home after hip/femur fracture repair was 15.61% (Medicare S-DRG). At Langone Orthopedic Hospital, this rate increased to 36.25% between January 2021 and February 2022. Acute care physical therapists identified caregiver support as a critical factor for successful home discharge, while delayed caregiver training posed a barrier. Interventions addressing caregivers' needs—such as providing educational materials and hands-on training—were associated with improved patient mobility, enhanced performance of daily activities, and reduced caregiver distress, anxiety, and depression.

**Description:** Patient's s/p hip fracture surgery were issued a notebook during their initial physical therapy session. The primary caregiver was identified via patient report and chart review within the first 3 days of admission. An appointment for caregiver training was established within days 0-5 of care. The caregiver was trained in functional mobility by therapy. The outcome measure, Preparedness for Caregiving Scale (PCS), was utilized pre and post training to establish caregiver confidence. Once the patient achieved the medical and functional goals, discharge proceeded per medical team. The notebook consists of collaborative education from the interdisciplinary team. If no caregiver was identified, the patient received the educational content and progressed functional mobility as tolerated.

**Results/Outcomes:** A total of 266 charts for patients who underwent hip or femur fracture repair were audited between May 2024 and June 2025. Of these, 76% received the hip fracture notebook, and 74% had initial caregiver training PCS scores administered, while 48% had post-training PCS scores recorded. Additionally, 78% of patients with an identified caregiver received caregiver training. Regarding discharge outcomes, 58% of post-hip fracture patients went home overall, with an increase to 73% in the last quarter (April–June). The average total length of stay (LOS) was 4.3 days, with patients discharged home averaging 3.5 days and those discharged to subacute rehabilitation (SAR) averaging 6.6 days.

**Discussion/Conclusion:** Distributing an educational rehabilitation notebook can increase home discharges after hip/femur fracture by promoting patient engagement and improving communication among patients, caregivers, and the care team. Early identification and involvement of caregivers in therapy sessions for hands-on training enhances their confidence and ability to provide care at home. Following implementation of the notebook, home discharge rates improved from 36% to 58%. Empowering caregivers with timely education and essential medical information from the interdisciplinary team reduces barriers to home discharge and supports better patient outcomes.

## Implementation of Interdisciplinary Weekly Skin Rounds on the Medical Care Transition Unit (MCTU) | Shawn Byrnes, PT, DPT

**Purpose:** Pressure injuries are largely preventable, yet remain prevalent across all healthcare settings, affecting patients of all ages and medical conditions.1 Interdisciplinary skin rounds offer a structured framework for delivering improvements in daily patient care practices for pressure injury management, increased documentation compliance, enhanced staff knowledge and competencies in the early identification, intervention, and prevention of pressure injuries 2. This special interest group report outlines the role of physical therapy within an interdisciplinary skin assessment team on a medicine unit.

**Description:** Interdisciplinary skin rounds are conducted weekly and include Nursing, Physical Therapy (PT), and Occupational Therapy (OT). Skin assessments were performed for patients with a Braden score of 15 or below, indicating increased risk for skin breakdown (Huang, et. al, 2021). During rounds, a PT participated in the evaluation of existing wounds, identification of early signs of skin breakdown, and assessment of areas at risk. Based on their findings, the PT developed individualized care recommendations, including customized positioning strategies, mobility plans, wheelchair use guidelines, and/or offloading devices to support wound prevention and promote healing. These recommendations were developed in collaboration with OT. A centralized tracking spreadsheet was utilized to document weekly Braden scores, therapy recommendations, and wound healing progress. This facilitated consistent monitoring and helped ensure continuity and quality of care across disciplines.

**Summary:** PT plays a critical and proactive role within the interdisciplinary team during skin rounds. PTs contribute by identifying mobility-related risk factors, facilitating early intervention, and implementing strategies that promote wound healing and prevent the development of pressure injuries. From January to March 2024, the Medical Care Transition Unit reported zero hospital-acquired pressure injuries, a direct result of coordinated care and collaborative decision-making among the interdisciplinary team. Future initiatives may focus on tracking compliance with clinical recommendations and leveraging historical data to evaluate the effectiveness of skin rounds in reducing pressure injury incidence.

**Importance:** Skin breakdown and pressure injuries remain a significant concern for patients with prolonged hospitalizations. Patients in our Medical Care Transition Unit typically experience longer lengths of stay due to a variety of complex factors. This extended hospitalization, combined with the disruption of their normal daily routines, heightens the importance of continuous monitoring to prevent hospital-acquired injuries. Physical Therapists, in collaboration with interdisciplinary team members, can play a critical role in addressing this issue by implementing targeted prevention and management strategies.

## Integrating Acute Care Physical Therapists into the Interdisciplinary Management of Urinary Incontinence in Hospitalized Older Adults

|Marielle (Ellie) Dineen-Carey, PT, DPT, CSRS

Urinary incontinence (UI) is a significant problem among adults over 65, affecting both physical and emotional health as well as diminishing quality of life. It is estimated that 30-40% of community-dwelling older adults and up to 72% of those hospitalized or in long-term care facilities experience UI. Although often dismissed as a normal part of aging, UI is not inherently linked to age, and does not have to remain an accepted part of daily life for older adults. A multitude of interventions for UI exist, and have demonstrated meaningful improvement or resolution of symptoms for multiple types of UI.

Transient, also known as hospital-acquired, new-onset, or nonsocomial UI, occurs in approximately 13-17% of hospitalized adults over 65. This risk is further increased among patients with dementia, cognitive impairments, or those who have used indwelling urinary catheters or have utilized continence aids such as diapers or pads during their hospitalization. Notably, UI while inpatient is associated with a 3.4-fold increase in mortality within 12 months following hospitalization.

An interdisciplinary approach is essential for identifying and addressing the causes of transient UI. While pelvic physical therapy (PT) in isolation and in conjunction with functional training and activities of daily living (ADL) training, have demonstrated effectiveness across multiple types of UI, the specific role of acute care Physical Therapists (PTs) has remained underexplored. Physical Therapists are uniquely positioned to identify patients at risk for, or currently experiencing transient or chronic UI, and can effect change by incorporating targeted strategies such as behavioral therapy, habit retraining, pelvic floor muscle training (PFMT), and individualized functional strengthening into the plan of care. Research has shown that patients treated for UI by physical therapists—both in the community and in acute care settings—demonstrate 73-94% improvement in symptom frequency and severity.

In this poster I will summarize existing literature, examine best practice, and provide recommendations for those particularly working in acute care settings to treat underlying causes of UI, and improve symptom management to enhance functional recovery and quality of life.

## Interdisciplinary Evaluation of Normal Pressure Hydrocephalus: A Clinical Case Series on Functional Outcomes and Shunt Candidacy

|Heather Case, PT, DPT

**Background:** Normal Pressure Hydrocephalus (NPH) is a potentially reversible neurological condition characterized by a triad of symptoms: gait disturbance, urinary incontinence, and cognitive decline. Accurate diagnosis and timely intervention are critical, as ventriculoperitoneal (VP) shunting can significantly improve patient outcomes. Physical therapists (PTs) play a pivotal role in assessing functional changes pre- and post-CSF drainage to support clinical decision-making regarding shunt placement. Most lumbar puncture trials are performed in the inpatient setting and typically require a three-night admission. We are piloting an outpatient approach in which the patient receives a physical therapy session both before and after the lumbar puncture on the same day from an acute care PT billed as outpatient.

**Methods:** This case series includes 15 patients evaluated in a hospital-based outpatient setting. Due to the location of interventional radiology within the hospital, assessments were conducted by acute care PTs. Each patient underwent standardized physical therapy evaluations before and after a diagnostic spinal tap, including the Mini-Cog, Short Blessed Test, Berg Balance Scale, Timed Up and Go (TUG), 5x Sit-to-Stand, and 10-Meter Walk Test (10MWT). PT findings were reviewed in conjunction with neurology assessments to determine shunt candidacy.

**Results:** All 15 patients demonstrated measurable improvements in at least one domain following CSF drainage. Enhancements were observed in cognitive function, gait speed, balance, and overall mobility. In every case, physical therapy and medical evaluations were concordant regarding the recommendation for VP shunt placement. Patient and caregiver reports during follow-up further supported observed clinical improvements.

**Conclusion:** This series underscores the efficacy of interdisciplinary collaboration in the evaluation and management of NPH. The consistent agreement between PT and MD assessments highlights the reliability of functional testing in guiding treatment decisions. Utilizing acute care PTs for outpatient evaluations proved both practical and effective. These findings support the integration of standardized PT assessments into routine NPH diagnostic protocols and suggest further investigation into long-term post-shunt outcomes.

## Navigating Mobility Fluctuations in Cryptococcal Meningitis with Cauda Equina Nerve Root Involvement: A Case Study

| Xin Kai PT, DPT ; Galen Schram PT, DPT

**Background:** A 73-year-old male patient presented to the hospital with weakness and acute-on-chronic headache. MRI findings revealed leptomeningeal disease and communicating hydrocephalus. CSF studies confirmed cryptococcal meningitis. Further imaging on hospital day 30 suggested cauda nerve root involvement not present during initial workup. At baseline patient is an independent community ambulator (no assistive device). Initial PT evaluation revealed an AMP-AC score of 19/24 with unimpaired sitting tolerance. MMT revealed 3/5 left quadricep strength. Standing tolerance was 5 minutes using a RW, and maximal ambulation of 25 ft x2 rep with contact guard assistance and RW. Upon re-assessment at hospital day 12 the patient began exhibiting fluctuating left lower extremity strength and orthostatic hypotension requiring medical management.

**Method/description:** During the patient's 47 day hospitalization, initially placed on frequency of 1-2 sessions per week (30-40 minutes each). However, due to subsequent fluctuating mobility level as assessed at each session via AMP-AC, muscle strength testing, sitting/standing tolerance, ambulation distance and assist level, his frequency was increased to 3-4 weekly sessions for a total of 17 sessions. 3 sessions were held due to nausea/fatigue. Interventions emphasized response-dependent mobility progression and included sitting/standing endurance, strengthening, neuromuscular reeducation, and gait training (with Arjo walker, a RW, and unilateral upper extremity support).

**Result:** The patient's functional mobility fluctuated throughout his course due to multifactorial neurological and cardiogenic sources. His lowest functional point occurred during session 14 (AMP-AC score 11/24, left quad strength 0/5, standing tolerance of 30 seconds with moderate assistance from two therapists and unable to ambulate). During the final 3 sessions he demonstrated improved blood pressure stability and increased left lower extremity strength, reaching 3–/5 on manual muscle testing. This strength was maintained consistently between sessions, reflecting stabilization of the previously fluctuating neurological presentation. At the time of discharge the patient scored a 12/24 on the AMP-AC. He maintained standing for at least six minutes with moderate assistance and supported sitting for 20 minutes. He ambulated a maximum of 12 feet utilizing a unilateral handrail and with moderate assistance from two therapists.

**Discussion/Conclusion:** This case highlights the importance of interdisciplinary collaboration in the acute setting to optimize patient care. Therapists and medicine team consulted neurology for additional imaging, which revealed new cauda equina nerve root enhancement. Coordination of midodrine administration and an abdominal binder was important for productive rehab sessions. This case illustrates that not all patients show consistent improvement; therapy plans must be modified according to response-dependent mobility progress

## Optimizing Emergency Department Consults for Fall-Related Presentations: A Quality Improvement Initiative

| Rachel Herbeck, PT, DPT; Lindsey Wolson, PT, DPT; Homer Walag, PT, DPT

**Background:** Early involvement of physical therapists (PTs) during the Emergency Department (ED) index visits for older adults with falls can significantly reduce 30-day return rates. At Clements University Hospital ED, PT consultations for fall-related complaints are inconsistent, with no standardized tracking system—contributing to frequent repeat visits for similar complaints.

**Methods/Description:** Utilizing the DMADV framework, our team worked together to identify key problems to address along with our success criteria. We then reached out to our data analysis team to help create a structured tracking system (Power BI) to gather baseline data and look for any patterns emerging over 6 months (Jan 1, 2025 – Jun 30, 2025). Data points included: Patient age, chief complaint, date of initial presentation, whether they received a PT consult, and 30-day and 90-day representation rates.

We then analyzed this data to determine the patients at highest risk for re-presentation and structured our intervention of an automated alert to ED providers for implementation.

**Results/Outcomes:** 1,312 visits occurred for fall-related complaints between January 1st and June 30th, 2025. Out of these, 85 were subsequent visits for similar complaints. Utilizing a pareto chart, we found that 67% of these visits were patients between the ages of 61-91 years old. Within this age group, if the patient received a PT consult upon their index visit, they were 27.2% less likely to re-present within 30 days for a similar complaint. If we were to reduce the number of ED re-presentations by 25%, this is an estimated $54,000 saved per year (based on the average ED visit costing $1300). This estimate does not account for the additional benefits of reducing visits, such as increasing room availability and freeing provider time to care for other acutely ill patients.

Based on the pre-intervention data and literature, we plan to implement an automated alert to ED providers prompting a PT consultation for patients aged 61-91 years old that present with a fall-related completed – our goal is to decrease re-presentation rates by 25% over a 6 month time period.

**Conclusions/Discussion:** Presuming our goal is achieved, we will implement a permanent Best Practice Alert (BPA) for ED providers, prompting them to consult PT for this specific patient population. We will continue collaborating with our data analyst team to develop an ED Dashboard in Tableau, providing a quick reference for how PT's presence in the ED impacts patient throughput and 30-day representation rates. Finally, we will assess potential correlations between a PT consult at the index visit and both admission rates and length of stay.

## Physical Function and Quality of Life of Individuals Undergoing Left Ventricular Assistive Device Implantation Surgery – A Feasibility Study |

Suh-Jen Lin, PT, PhD; Catherine Connors, PT, DPT

**Background:** Approximately 3,000 people with advanced heart failure (HF) undergo Left ventricular assistive device (LVAD) implantation every year. Pre-implantation frailty is associated with suboptimal post-implantation outcomes. Due to the high frailty rate of individuals undergoing LVAD, focused PT interventions may be warranted. Currently there is no literature on the optimal PT for individuals hospitalized for LVAD implantation. Understanding the physical function of these individuals is an initial step to addressing a gap in literature.
Purpose of the study: To explore the feasibility of assessing physical function and quality of life in individuals undergoing LVAD implantation.

**Methods:** The IRB approval was obtained. Participants were recruited from an academic medical center after chart screening. Inclusion criteria of participants were adults admitted for LVAD implantation, English speaking, diagnosis of HF. Outcomes included 6-minute walk distance (6MWD) and the Kansas City Cardiomyopathy Questionnaire-12 (KCCQ-12) with the score ranging from 0 to 100 (excellent), a health-related quality of life measure. These were assessed at 3 points (PT initial evaluation, 2 days before LVAD surgery, and 2 weeks post-op). Participants received usual acute care PT consisting of active range of motion exercises, transfer training, and ambulation. Descriptive statistics were conducted.

**Results:** A total of 15 charts were screened, and 13 individuals were eligible for the study. Eleven individuals were enrolled (mean age: 59 yrs (SD=12), 8 males). Nine patients were removed from the study due to: worsening medical status (4), delirium (1), psychosocial factors (2), discharge to home (2), and heart transplantation (1). One participant completed the study (60-year-old male). His 6MWD data were: 240 m, 216 m, and 220 m. His KCCQ-12 scores were: 19, 17, and 16, indicating poor physical function and social limitation. Data collection is ongoing.

**Discussion:** The results of 6MWD in one participant pre- and post-LVAD implantation were close to those reported in the literature. The hospitalization and post-operative incisional pain may explain the lower sense of social function assessed on the KCCQ-12 survey. Factors limiting subject retention in the acute care setting include the disease process of advanced HF along with psychosocial factors. Challenges faced when conducting a study in the hospital include medical procedures, pre-op testing, and competing therapies' time. Overall, it seems feasible to incorporate these evidence-based outcomes for LVAD candidates in the acute care setting. However, a high dropout rate in this population needs to be considered for future studies. In addition, seeking funding support to enhance patient recruitment is needed.

## Physical Therapy Management of a Patient Post Commando Procedure: A Case Study | Salina Winslow, PT, DPT

**Background:** Typically, valvular heart dysfunction is successfully managed with well-established valve replacement procedures. However, complex complications affecting the valves and surrounding structures may require extensive resection and reconstruction. This is accomplished via the Commando Procedure, which has mortality rates and extended recovery time. Early mobilization in the ICU after cardiac surgery has positive impacts on various outcomes like decreased hospitalization time and improved function. This case examines whether the benefits of early mobilization apply to a patient in cardiac ICU after Commando procedure.

**Description:** This case study discusses a 35-year-old male with past medical history significant for Streptococcus gordinii endocarditis and recent mechanical aortic and mitral valve replacements. A month later, he was transferred from an outside hospital for acute heart failure with perivalvular aortic and mitral regurgitation. Initial PT exam was limited to bed level strength assessment, given his decreased activity tolerance and emesis. Due to the severity of his heart function, he underwent urgent Commando procedure which involved redo tissue aortic and mitral valve replacement. Re-evaluation post-operatively was delayed a week due to tenuous medical status and the need for VA ECMO because of increased cardiopulmonary support secondary to poor oxygenation. The patient's recovery was further complicated by necrotic left toe pain on account of high vasopressor requirements and tachycardia leading to pacemaker placement. In support of continued medical management, PT treatment focused on strength, pulmonary hygiene, bed mobility, transfers, ambulation, and stair negotiation. PT interventions progressed based on the patient's hemodynamic stability. The patient was discharged home with assistance from family after fifty-seven days.

**Outcomes:** The patient's AMPAC scores fluctuated across therapy intervention, gradually improving from 6 to 20, which is statistically significant. Initially, he tolerated standing for 30-seconds with two-assist but by discharge, was ambulating 250' and negotiating stairs with stand-by assist. He experienced no falls during hospitalization, demonstrating progressive mobility was not harmful. Desaturations occurred in the context of exertion, but improved with oxygen titration, rest breaks, and instruction on efficient breathing mechanics. PT saw the patient 19 times, and 4 sessions were deferred due to hemodynamic instability or patient refusal.

**Discussion:** Research shows patients benefit from early mobilization in the ICU. The Commando Procedure, often employed after valve surgery complications, may lead to extended ICU stays and associated disability. In conclusion, this case study demonstrates early mobilization in the ICU after Commando procedure is well tolerated, not harmful to the patient, and successfully improved the patient's functional mobility to allow for safe return home.

## The Rapid Functional Recovery of a Geriatric Patient Following Prolonged Intubation and ECMO Cannulation | Richard Ellsworth, PT, DPT, GCS

**Background and Purpose:** Geriatric patients experience prolonged and reduced recovery compared to their younger counterparts following an ICU admission. It is noted that older ICU patients experience a higher incidence of frailty, disability, and multimorbidity. This case study is meant to highlight the rapid recovery of a geriatric patient's muscle strength and functional mobility following a prolonged ICU stay with bilateral femoral Extracorporeal Membrane Oxygenation (ECMO) decannulation and intubation.

**Case Description:** 69 year old male transferred from an outside hospital, orally intubated on VA ECMO with refractory ventricular arrhythmias. Patient has comorbid conditions including a history of cardiac arrest s/p dual chamber ICD placement, malignant thymoma, and HLD. Admitted to the CCU where the early course included vent weaning and ECMO decannulation. PT and OT consults initiated on day 6 of CCU stay, interventions provided targeting bed mobility, transfers, and chest PT. Upon transfer out of the CCU, the patient was receiving 4L O2 via nasal cannula and noted to have developing pneumonias in the right middle and lower lobes. The patient presented with an AMPAC raw score of 11 and a Johns Hopkins Highest Level of Mobility score (JH-HLM) of 5. Muscle strength measured via manual muscle tests of 4-/5 grossly, with focal weakness of 3/5 about the right hip flexors. Range of motion was not formally assessed, but it was noted that active range of motion was grossly diminished. The patient required moderate assistance to transfer to standing. The patient was highly motivated and eager to perform interventions both independently and during therapy. Sessions focused on progression of functional mobility, dynamic balance, and endurance. The patient was provided a tailored exercise program to strengthen key muscle groups outside of therapy. Patient adherence to their exercise program was strong and they were able to teach-back the details of the program and effectively demonstrate appropriate form during treatment sessions.

**Outcomes:** Following a 12 day stay on the cardiology floor and 11 PT treatment sessions, the patient achieved an AMPAC raw score of 23 and a JH-HLM of 8. Muscle strength measured via MMT's of 5/5 about the right lower extremity. Ambulating cumulative distances greater than 1000' with a rollator and greater than 150' without the use of an assistive device. Patient acquired a COVID-19 infection while admitted, which prolonged his length of stay by 3 days, and was ultimately discharged to rehab due to social factors.

**Discussion:** Often, geriatric patients in an acute care setting are under-prescribed exercise and minimally involved in their own physical therapy plan of care. This case study, while limited, demonstrates that with appropriate dosing and intrinsic motivation, a geriatric patient that demonstrates significant impairments and functional limitations is able to regain substantial strength and mobility in a short window.

## Rehab Clinical Educators in the Acute Care Setting: A Professional Framework | Kathleen Yahya, PT, DPT; Noelle Sublett, PT, MPT

**Background Information:** Current literature describes nursing professional development (NPD) practitioners, a nursing role that provides a variety of job support to clinical nurses. The American Nursing Association has a specific certification for NPD practitioners. The NPD practice model recognizes seven roles and six main responsibilities. No other health profession has a professional development model that outlines its roles and responsibilities as clearly as the NPD model. As the NPD practitioner role evolves, other clinical disciplines have recognized the benefits of this role, and in some hospitals in the United States, similar, informally identified professional development roles exist for rehab professionals. There is no published data on this group of professionals. In this practice analysis, researchers seek to understand the currently defined skills that a Rehab Clinical Educator (RCE) needs to have when working and leading in an acute care rehabilitation setting, what variability exists in role definitions, and what tasks current educators spend the most time completing. With this information, we propose a professional development framework specific to Rehab Clinical Educators.

**Methods/description:** The RCE survey was created using information collected from the RCE APTA Listserv to create categories of job duties and tasks. The survey sections addressed work demographics, current roles, current tasks, current skills, and the perceived importance of these skills. Participants were recruited from the researchers' professional networks and APTA Listservs. Qualitative thematic analysis was completed on free text responses.

**Results/outcome:** This practice analysis identified 39 complete surveys, of which 87% were physical therapists. Demographic data indicated that most participants identified as female (88%). The average time in the RCE role is 7.2 years. RCEs typically work an average of 36 hours per week, with the time spent in educator-specific tasks being highly variable (0-40 hours/week).

Nineteen tasks were reviewed by respondents, and they were asked to assess if they completed the tasks in the normal course of their job and how important they felt those tasks were. Ten skills were reviewed and ranked for importance in this job role.

Respondents identified the most common tasks were related to department-specific activities with the top three tasks being "staff competencies: staff-wide education: create, structure, disseminate" (97%), "develop, implement, track" (95%), and "onboarding: orientation for new hires" (90%). Educators classified the most important tasks as "staff-wide education" (83%), "staff competencies" (73.3%), and onboarding (73.1%).

Thematic analysis revealed six common themes of the most important duties of Rehab Clinical Educators to be: (1) onboarding & orientation, (2) competency creation & validation, (3) communication & dissemination, (4) professional & clinical education, (5) mentorship.

## Specialty Wheelchair Acquisition in the Acute Care Setting | Laura Wichman, PT, DPT; Allison Grunst, PT, DPT; Annalise Lyon, PT, DPT

Since 2005, Minnesota has experienced a 33% decline in nursing home beds, including an 8% decrease between 2020 and 2024 largely due to the COVID-19 pandemic. As a result, more patients are discharging directly home, creating an increased need for specialty wheelchair acquisition within the acute care setting.

At our 1,265-bed hospital, we identified a significant gap in this service and developed a wheelchair team to address the changing discharge practice. This team implemented an Epic secure chat and patient tracking list to monitor complex patients with evolving discharge needs and destinations. We also strengthened PT/OT collaboration with PM&R physicians to expedite the necessary documentation before hospital discharge. When PM&R was not involved, the team worked closely with non-PM&R physicians to support the in-hospital wheelchair acquisition process.

Through these efforts, we increased the number of patients able to discharge directly home with appropriate equipment instead of transferring to a facility. In addition, the team improved access to outpatient specialty seating appointments for patients who did not require a wheelchair immediately upon discharge.

Since its launch in 2025, the wheelchair team has been involved with 28 patients, 14 of whom discharged directly home with the necessary equipment in place. This initiative has also fostered a culture shift among general acute care therapists, leading to increased wheelchair acquisition for both general and amputee populations, ultimately improving patients' ability to return home safely.

## Utilization of a Novel Algorithm to Assist with Acute Inpatient Rehab Discharge Recommendations | Kyle Strickland, PT, DPG, GCS

**Purpose:** Discharge planning is a complex task involving input from multiple medical providers and taking into consideration factors including but not limited to physical function, social supports, medical co-morbidities, patient preference, psychosocial factors, insurance barriers, etc. Physical therapists play a key role in discharge planning to optimize patient safety post-hospitalization which can reduce re-admission risk and potential overall healthcare cost. Due to the high degree of variability in each unique patient case and universally implemented tools available for physical therapists outside of the AM-PAC, uniformity in discharge recommendations is poor (Widenhoefer 2024). Our goal of this algorithm is to implement greater objectivity to discharge recommendations, specifically patients discharging to acute inpatient rehab (AIR) as they tend to have prolonged hospital stays and highly complex rehab needs.

**Description:** The AIR algorithm was created through both a formal focus group and brainstorming sessions with acute care physical therapists. We discussed the variety of factors that therapists take into consideration when recommending a patient discharge to AIR. Physiatrists with a focus on case management review of AIR placement were also consulted to assist with optimizing components of the algorithm (medical barriers to AIR placement). As a result of these discussions, we were able to create a specific algorithm that assessed appropriateness and highlighted the necessity for AIR. To optimize ease of use and documentation, the clinical questions included information required in baseline documentation (AM-PAC score, prior level of function, social supports in home setting) and had simple option selection (yes, no, unknown).

**Summary of Use:** The use of this pilot algorithm demonstrated a trend between the amount of "yes" columns selected and discharge to AIR. 80% of patients recommended to AIR with algorithm score >/=6 were discharged to AIR. Analysis of the AIR algorithm during a pilot trial within a general medicine service line demonstrated 78% compliance with utilization. Additionally, a survey was given to those therapists using the tool during the trial period and 75% of physical therapists reported they would implement the algorithm long term.

**Importance to members**: As acute care physical therapists, we provide the most up to date information regarding a patient's functional deficits and the level of rehabilitation they may need. While recommending a discharge plan is a large part of our role in acute care, literature shows a low level of agreement between physical therapists' discharge recommendations. Inconsistencies need to be addressed to maintain our credibility as PTs, create a more fluid discharge plan, and above all else, optimize patient functional recovery and quality of life. Utilization of this pilot algorithm can serve as a form of clinical decision support to better inform discharge recommendations.