

# IMPROVING HIP FRACTURE CARE DELIVERY: A PATIENT-CENTERED OBSERVATIONAL ASSESSMENT AT DARTMOUTH HEALTH IN PREPARATION FOR CMS TEAM

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## INTRODUCTION

- CMS's **Transforming Episode Accountability Model (TEAM)** will bundle payments for hip fracture repair and all related care for 30 days post-op.<sup>1</sup>
- Hospitals will be responsible for both cost efficiency and clinical outcomes across the entire episode of care, shifting focus from volume to value-based performance.
- **Hip fracture (SHFFT) patients represent a high-risk, high-cost population with complex care needs and substantial post-acute spending.**
- These patients often experience avoidable delays in their care journey (e.g., time-to-OR, pain control, early mobilization, and discharge planning) which drives up cost and length of stay.

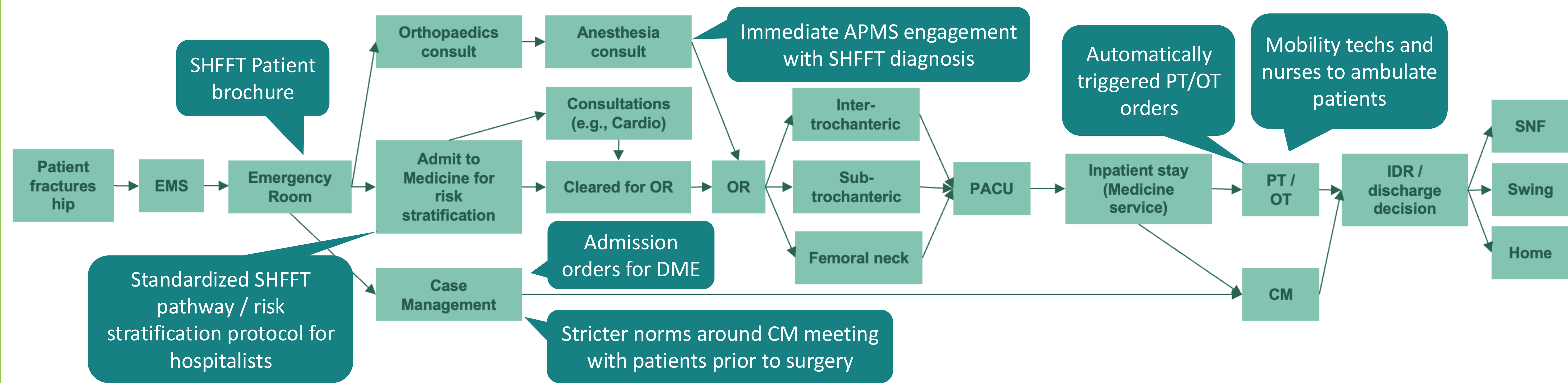
## AIMS

- Assess the current state of hip fracture care delivery at Dartmouth Health through direct patient shadowing and workflow observation.
- **Identify barriers and inefficiencies in coordination, communication, and clinical workflow across the hip fracture care continuum:** from ED presentation through post-acute discharge.
- Synthesize findings into actionable insights to inform future quality improvement efforts and system redesign in anticipation of CMS TEAM implementation.

## METHODS

- Design: Observational quality improvement project at Dartmouth Hitchcock Medical Center (June–August 2025).
- Patient shadowing and staff interview: Followed 14 SHFFT patients from ED presentation through discharge to document touchpoints, delays, and communication gaps. Engaged multidisciplinary staff (ED, Ortho, Hospital Medicine, Case Management, PT/OT, Nursing, Anesthesia) to identify pain points and improvement ideas.
- Workflow mapping: Charted current-state perioperative and discharge processes to visualize bottlenecks and handoffs.
- Analysis and validation: Thematically reviewed observations and feedback to identify recurrent inefficiencies and coordination gaps across the care continuum. Validated findings and proposed solutions with clinical teams and the Performance Network Operations (PNO) group.

## RESULTS



## OBSERVATIONS

**Time-to-OR delays** (often >24 hrs) are driven by inconsistent clearance practices, NPO violations, and limited OR prioritization for add-on cases.  
**Analgesia gaps are common** with inconsistent use of fascia iliaca blocks and catheters contributing to pain, delirium, and delayed mobilization.  
**Early mobility barriers** include limited PT/OT staffing, lack of automatic POD1 orders, and absence of routine ambulation outside therapy sessions.  
**Post-acute steering begins late and defaults to SNF placement.** Late CM engagement extends hospital LOS and prevents home placement optimization. Missed EDDs, expiring PT/OT evals, and late DME orders prolong LOS.  
**Patients and families frequently lacked awareness of care timelines,** surgical delays, and discharge options, reflecting gaps in communication and expectation-setting.

## OPPORTUNITIES

**Standardized Hip Fracture Pathway:** Develop a cross-disciplinary pathway (Ortho, Hospital Medicine, Anesthesia, ED, CM, PT/OT) defining standard risk stratification and checklist, and engagement of Acute Pain Medicine Service (APMS)  
**Integrated Discharge Planning:** Trigger case management involvement, expected discharge date (EDD), and durable medical equipment (DME) orders upon admission to reduce post-op bottlenecks.  
**Home Readiness Focus:** Define early criteria for home discharge vs SNF, with CM/PT/OT collaboration to reassess readiness during hospital stay.  
**Patient Communication Tools:** Provide patient/family education materials on timelines, pain management, and post-acute options.

## CONCLUSIONS

- Observations revealed recurring system-level gaps contributing to surgical delays, inconsistent pain control, limited early mobilization, and prolonged hospital stays.
- Key drivers include **variable clearance processes, inconsistent use of regional analgesia, delayed CM engagement, and reactive discharge planning.**
- **Standardized, interdisciplinary pathways linking Ortho, Hospital Medicine, Anesthesia, PT/OT, and CM may address these inefficiencies and care gaps** through earlier pain management, automatic mobility orders, and proactive discharge planning.
- Future work should validate these findings quantitatively and define clear process metrics to support pathway design under CMS TEAM.

## SOURCES

1: Centers for Medicare & Medicaid Services (CMS), Transforming Episode Accountability Model (TEAM) Final Rule, 2025.

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