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BIDMC: Beth Israel Deaconess Medical Cen

Introduction

- Hip Fractures are often emergencies in the elderly and threaten independence and quality of life.
- Hospitalizations for hip fracture should address both acute complications (e.g., delirium) and chronic underlying conditions related to this event (e.g., osteoporosis, falls, underlying neurocognitive impairment, and lack of appropriate support and caregiving.
- A Co-Management Model between Orthopedic Trauma and Geriatric Medicine has been implemented at selection institutions worldwide and proven to improve the following outcomes: time to surgery, the incident and severity of post-operative delirium, other post-operative complications, length of stay and readmission rates.
- Collaboration and coordination from admission to discharge between Orthopedics, Geriatrics and Nursing IDT teams as well as, PT/OT, SW, Case Management and Pharmacy teams ensures improvement in the quality of care and outcomes in this vulnerable population.
- population.

The Team

Orthopedic Trauma	Geriatric Medicine	Nursing & Allied Health
Edward K. Rodriguez, MD, PhD: Chief of Ortho Trauma Surgery, BIDMC & GIFTS Champion	Karen Chahal, MD: Director, BIDMC GIFTS Program Advanced Fellow in Geriatric Medicine	Kelley Parziale, Kerri Cellucci & Naomi Stone, RNs: Nursing Leadership, BIDMC/CC6
Jack Wixted, MD: Ortho Trauma Surgeon, BIDMC	Lewis Lipstiz, MD: Chief of Gerontology, BIDMC & GIFTS Champion	Deborah Adducci & Brian McDonnell: OT/PT Leadership, BIDMC
Paul Appleton, MD: Ortho Trauma Surgeon, BIDMC	Sarah Berry, MD: Geriatrician, BIDMC/HSL & Principle Investigator QI Research	Christina Wang, LCSW: Social Work, BIDMC/CC6
HMS Orthopedic Surgery Interns & Residents & PAs	Daniele Olveczky, MD; Suzanne Salamon, MD; Jeremy Whyman, MD: Geriatricians, BIDMC	Maryellen Cronin & Case Management Teams, BIDMC Pharmacy Leadership, BIDMC

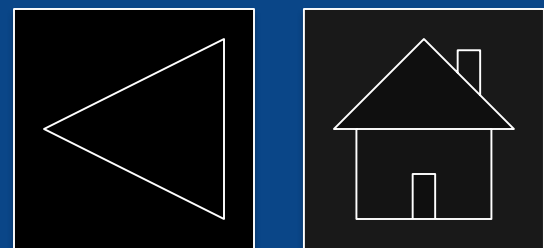
Aims & Goals

- Implement a Pilot Program for Co-Management with Orthopedic Trauma & Geriatric Medicine at BIDMC for patients aged 65 and older with Traumatic Hip Fracture or Femur Fracture
- Identify Key Interdisciplinary Stakeholders to create a welcoming and collaborative environment to improve communication, define challenges, improve care & workflow, develop new innovations
- Describe characteristics of patients enrolled in pilot program
- Track outcomes via QI Research comparing similar cohorts before Implementation of Co-Management and after Implementation of Co-Management
- Provide Geriatrics expertise for fracture patients at Harvard Hospitals with GIFTS program – already in place at BWH & MGH

The Interventions

- Preclinical Planning (6 weeks):
  - Design and implement infrastructure to sustain clinical work (i.e. Consult Order, Census tracking, Pager, Order Sets, Standardized Geriatric Assessment)
  - Automate frailty assessment into clinical care using the Frailty Index (score 0.0-1.0, greater numbers indicate greater frailty)
  - Geriatrician to observe/shadow existing orthopedic work flows
  - Identify, meet with key Interdisciplinary Stakeholders (Nursing, PT/OT, SW, CM)
  - Determine outcomes to measure
  - Submit QI proposal to IRB for waiver
- Pilot Launch (August 16<sup>th</sup>, 2021):
  - Conduct a Comprehensive Geriatric Assessment for patients with hip/femur fracture
  - Work directly with Orthopedic Intern to optimize patient care & discharge
  - Coordinate care with Nursing, CM, SW and PT/OT Teams and help with disposition
  - Track patient census and outcomes as part of QI work





# GIFTS: Geriatric Inpatient Fracture Trauma Service

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## Case Example

- 78 year old community-dwelling female with history of **recurrent falls, mild cognitive impairment, HTN, anxiety and IDDM** admitted to BIDMC following unwitnessed fall, found to have Left Femoral Neck Fracture admitted for definitive surgical management.
- Patient initially CAM (-) and scored 1/5 on Mini-Cog screen. Patient lives alone at home and manages her own medications including insulin, anti-hypertensives and PRN Ativan for anxiety. She does not recall the circumstances for her falls and endorses falling often.
- Post-operatively patient develops delirium thought to be multifactorial re: possible Benzodiazepine withdrawal, pain, anesthesia and hospitalization. Patient also found to be retaining urine. Antihypertensives held to monitor for post-operative hypotension.
- Discussions with Family & CM: disposition to STR and transition to Senior Housing

### GERIATRIC MEDICINE INTERVENTIONS:

1. Mini-Cog screen suggests advanced Neurocognitive Impairment . This impacts overall clinical picture and treatment plan including disposition.
2. Patient managing meds at home– concern medication/insulin error could contribute to falls
3. Identify and de-prescribed high risk medications: HCTZ for HTN, Ativan for Anxiety
4. Patient suffers post-operative delirium managed with interdisciplinary non-pharmacologic methods without the use of physical or chemical restraints
5. Disposition planning on Admission Day 1 ensures smooth transition to STR on POD 3
6. Family discussions regarding patient living at home alone = plans for added formal supports and transition to Senior Housing

## Areas of Greatest Impact

- Deprescribe high risk medications associated with falls and injury
- Consistent medication reconciliation
- Prompt disposition planning and case management support
- Delirium prevention, diagnosis, and management
- Communication, planning with family members/proxies
- Engage deeply in Goals of Care and Advanced Care Planning discussions with patients & health care proxies

## Next Steps

- Curriculum development for Nursing Staff and Orthopedic Residents introducing key Geriatric Medicine content
- Participation in BIDMC Trauma Council Committee to tackle health system issues
- Analysis of QI Research outcomes: 12 weeks prior to beginning PILOT, weeks 1-12 weeks after PILOT launch
- Present a Business Plan to support full-time funding of GIFTS Service to BIDMC Administration

*For more information, contact:*

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