Project Title

Hip Fracture ICP – Going Beyond Acute Care to Community Care Through Telephonic Follow-Up

Project Lead and Members

Project lead: Adj A/Prof Fareed Kagda

Project members: Adj Asst Prof Kelvin Koh, Fione Gun, Wong Tze Chin, Zhu Huixing, Heng Zi Ying, Dr Lydia Au

Organisation(s) Involved

Ng Teng Fong General Hospital and Jurong Community Hospital

Healthcare Family Group(s) Involved in this Project

Medical, Operations

Aims

We aim to achieve care beyond the walls of the hospital to the post discharge care in the community, to follow up on a patient's current conditions, functional status, rehab visit status and compliance to osteoporosis treatment.

Background

See poster appended/ below

Methods

See poster appended/ below

Results

See poster appended/ below

Lessons Learnt

Extension of care beyond the walls of the hospital to the post discharge care in the community enhanced patient outcomes and improved patient awareness about a potential risk of second osteoporotic hip fracture. Reaching out to patients on post operative at 6 & 12 months provided valuable information to further strengthen care. Strong leadership and support from the multidisciplinary team are essential to the continued functioning of hip fracture pathway.

Conclusion

See poster appended/ below

Project Category

Care Continuum

Intermediate And Long Term Care & Community Care (Right-Siting)

Keywords

Hip Fracture, ICP, Acute Care, Community Care, Telephonic follow ups, Osteoporosis

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HIP FRACTURE ICP – GOING BEYOND ACUTE CARE TO COMMUNITY CARE THROUGH TELEPHONIC FOLLOW-UP

CLINICIAN LEAD: ADJ A/PROF FAREED KAGDA, ADJ ASST PROF KELVIN KOH, FIONE GUN, WONG TZE CHIN, ZHU HUIXING, HENG ZI YING, DR LYDIA AU

- ❑ SAFETY
- ❑ QUALITY
- ❑ PATIENT EXPERIENCE

Define Problem, Set Aim

Problem/Opportunity for Improvement

Hip fracture incidence increases exponentially with age. While achieving excellent patient and clinical outcomes through the robust Hip Fracture Integrated Clinical Pathway (ICP) with a multidisciplinary team approach, the team is also seeing an opportunity to develop a structured post operative care through Telephonic Follow-up.

Aim

We aim to achieve care beyond the walls of the hospital to the post discharge care in the community, to follow up on a patient's current conditions, functional status, rehab visit status and compliance to osteoporosis treatment.

Establish Measures

Methodology

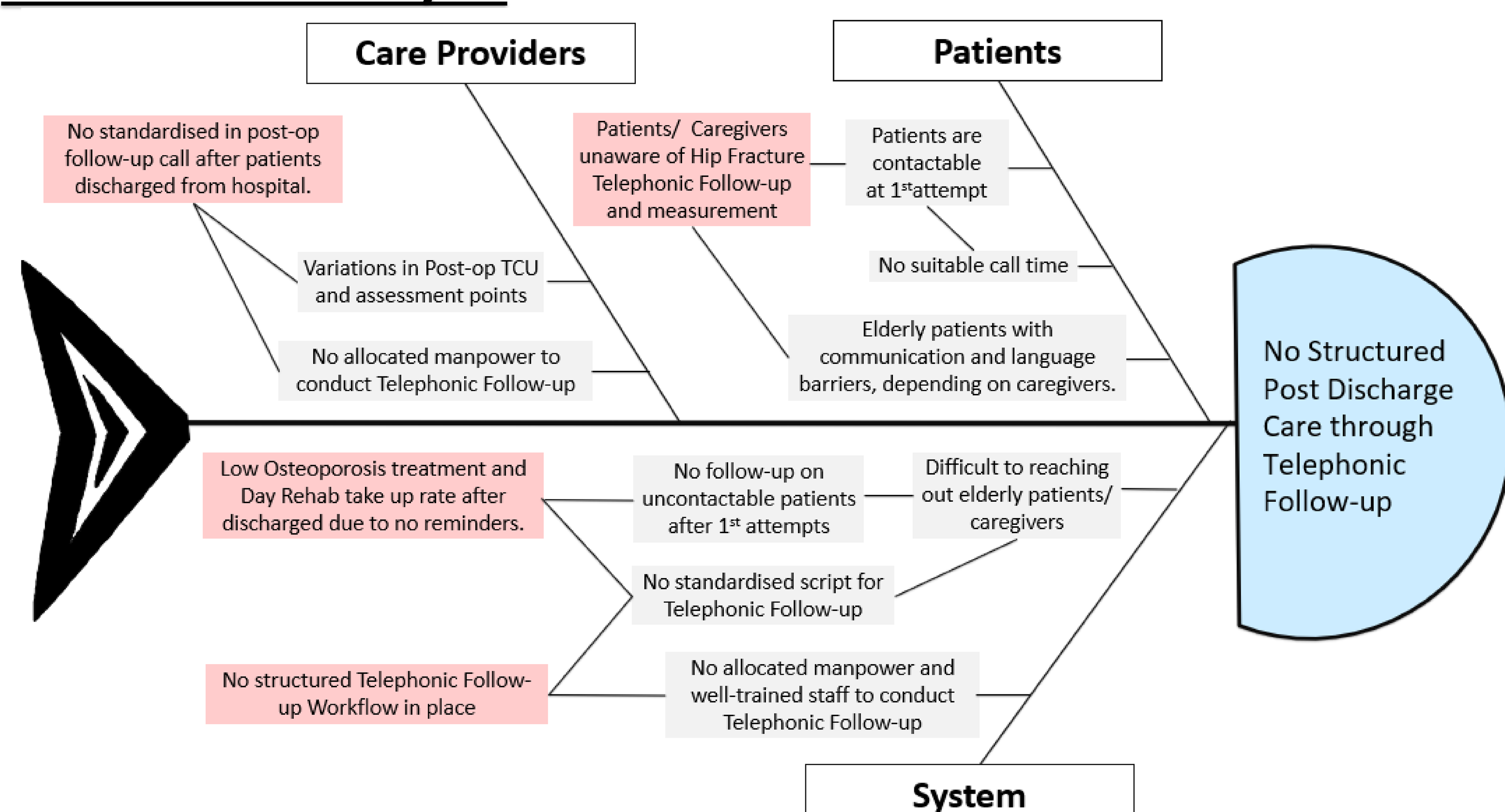
Hip Fracture Care Coordinators conduct post operative care through telephonic follow-up at 6 & 12 months.

Target Patient Criteria	
Inclusion criteria	• Age 60 and above • Solitary hip fracture (Neck of femur, intertrochanteric, Subtrochanteric fracture)
Exclusion criteria	• Pathological fractures secondary to metastases • Multiple trauma

Right Care Right First Time Every Time	CY2021	CY2022
Patients were prescribed with antibiotics prophylaxis pre-op	100%	100%
Patients were given appropriate thromboprophylaxis (Calf pump of Anticoagulant)	100%	100%
Patients were given osteoporosis assessment	100%	100%
Patients were operated within 48 hours (upon certified fit for surgery)	100%	99%
Proportion of patients transferred from NTFGH to JCH	88%	86%
≥10 points of Modified Barthel Index (MBI) Improvement (discharged from JCH)	76%	77%

Analyse Problem

Root Cause Analysis



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Test & Implement Changes

Cycle	Plan	Do	Study	Act
1.	External manpower funding	Leveraging on OICP Programme (funded by JurongHealth Fund)	Development of OICP Programme	Programme update to JHF Board on quarterly basis
2.	Team engagement and strategy planning	Established structured Hip Fracture Telephonic Follow-up using NGEMR Flowsheets.	Data collection and performance management.	Refine report and continue effort in Telephonic Follow-up.
3.	Workflow & development	Implementation of Telephonic Follow-up (Post-op 6 &12 months)	Improvement in performance and decease in variance	Regular tracking and monitoring of performance.

NGEMR Hip Fracture Telephonic Follow-up Flowsheets

Comparison of Results (6-Month Post-Op vs 12-Month Post-op)

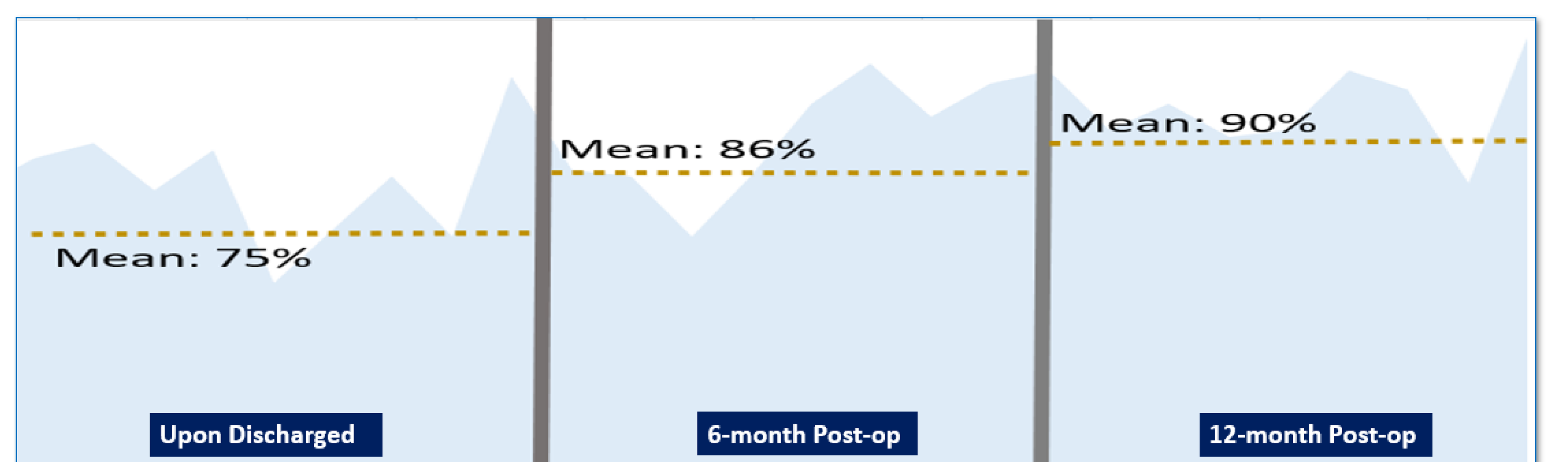
A total of 645 patients underwent hip fracture surgery were contacted by Care Coordinators through Telephonic follow-up.

- Patient cohort (6-month Post-op): 343 (July 2021 to Sep 2022)
- Patient cohort (12-month Post-op): 302 (Jan 2021 to Mar 2022)

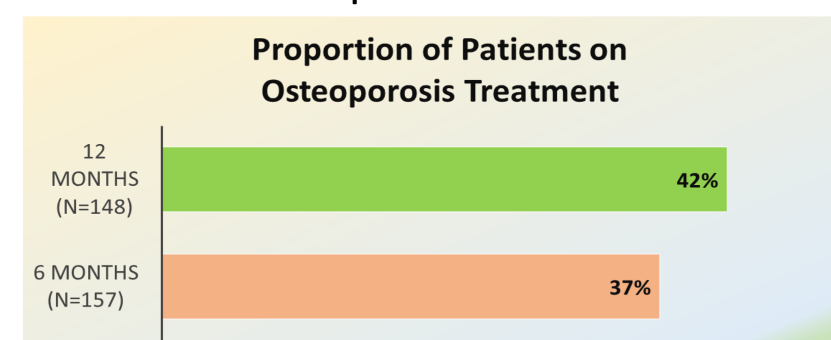
Telephonic Follow-up Questionnaire	6M Post-op	12M Post-op
Is patient contactable?	**98% (343)**	**97% (302)**
Any wound issues?	0%	0%
Any carer stresses?	3%	5%
Is patient on osteoporosis treatment?	35%	48%
Is patient on Day Care/ Day Rehab?	45%	45%
Did patient fall after discharged?	8%	16%
Did patient readmit to an acute hospital (all cause) after discharged?	24%	34%
Did patient achieve ≥10 points of MBI Improvement	88%	87%
Is patient staying at home	87%	87%
Is Home modification done?	98%	98%

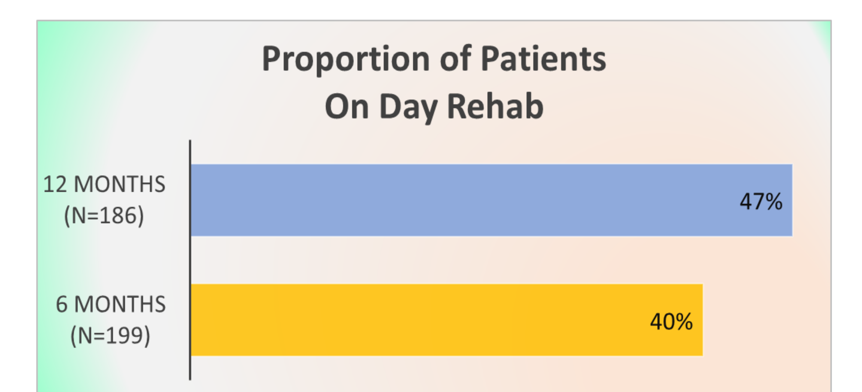
Comparison of Results (Patient Cohort: July 2021 to March 2022) (6-Month Post-Op vs 12-Month Post-op)

90% achieved improvement in their Activities of Daily Living at 12-month Post-op, as measured by MBI score (≥10 points of improvement from baseline), as compared to 86% at 6-month Post-op and 75% upon discharged from NTFGH/ JCH.



There was **5% increased in Osteoporosis Treatment Uptake Rate** in 12-month Post-op, as compared to 6-month Post-op.





There was **7% improvement in Day Rehab Uptake Rate** in 12-month Post-op, as compared to 6-month Post-op.

Spread Changes, Learning Points

- Extension of care beyond the walls of the hospital to the post discharge care in the community enhanced patient outcomes and improved patient awareness about a potential risk of second osteoporotic hip fracture.
- Reaching out to patients on post-operative at 6 & 12 months provided valuable information to further strengthen care.
- Strong leadership and support from the multidisciplinary team are essential to the continued functioning of hip fracture pathway.