

HA Convention 2011

Service Priorities & Programmes 2 – Collaborative Care Models

**SPP2.3 Geriatric Hip Fracture  
Management Program  
in HKEC**

**Successful Clinical Outcome of  
Multidisciplinary Collaboration**

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# Introduction & Background

- Ageing is the trend over the world
- Ageing <-> Osteoporosis <-> Fragility Fracture
- Most severe type – Hip fracture
- High volume of geriatric hip fracture in HKEC : > 600 cases/ year
- Management flow is needed to align for this large group of patients

# Problems Encountered

- Irregular waiting time for surgery
- Multiple co-morbidities
- Non-standardized treatment flow
- Lack of communication
- Prolonged hospitalization of patients
- Repeated falls and fractures
- Lack of post discharge patient monitoring & education

# Multidiscipline Care Plan (MCP) for Geriatric Hip Fracture Patients

- Standardized care plan for geriatric hip fracture patients in HKEC
- Start from admission to post-discharge follow up
- Multidisciplinary Collaboration

# Aim & Objectives

- Improve clinical outcome on caring patients with geriatric hip fracture by...
  - Decrease waiting time for hip surgery
  - Decrease length of stay (LOS) of geriatric hip fracture patients
  - Minimize repeated fall & fracture rate
- BUT not jeopardize the clinical outcome

# Selection of Cases

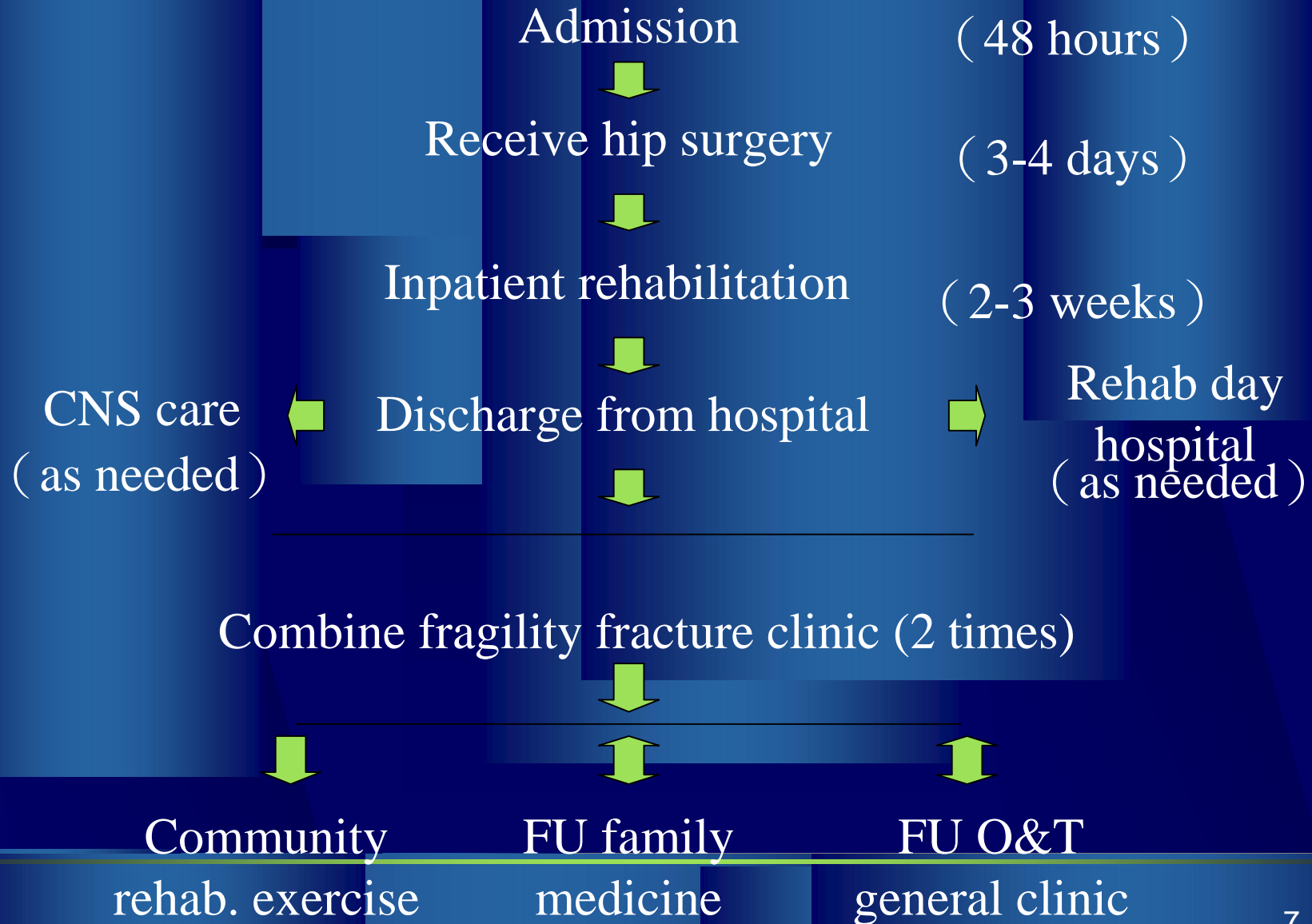
## Inclusion Criteria

- Acute traumatic close hip fracture
- Age  $\geq 65$
- Receive hip surgery

## Exclusion Criteria

- Transfer back from rehab. hospital
- Transfer out to other specialty/ hospital
- Non-admission diagnosed hip fracture
- Death
- DAMA

# Flow of Management



# Stakeholders & Responsibilities

	Doctor	Nurse	PT	OT	MSW	Chaplaincy	Clin. Psy.	Dietitian	Patient	Relative	NGO
Anaes./ Med. Consult	■								■		
Pre-op workup	■								■		
Drug/ Nursing Rx	■	■							■		
Functional/ Wound/ Vital signs Ax	■	■	■	■					■		
Mobility/ ADL training & Ax			■	■					■		
Diet Arrangement		■						■	■	■	
Pre/Post-op education & Psycho. Support	■	■			■	■	■		■	■	
D/C Planning	■	■	■	■	■				■	■	
Follow up	■	■							■	■	
Community ex. prog.									■	■	■

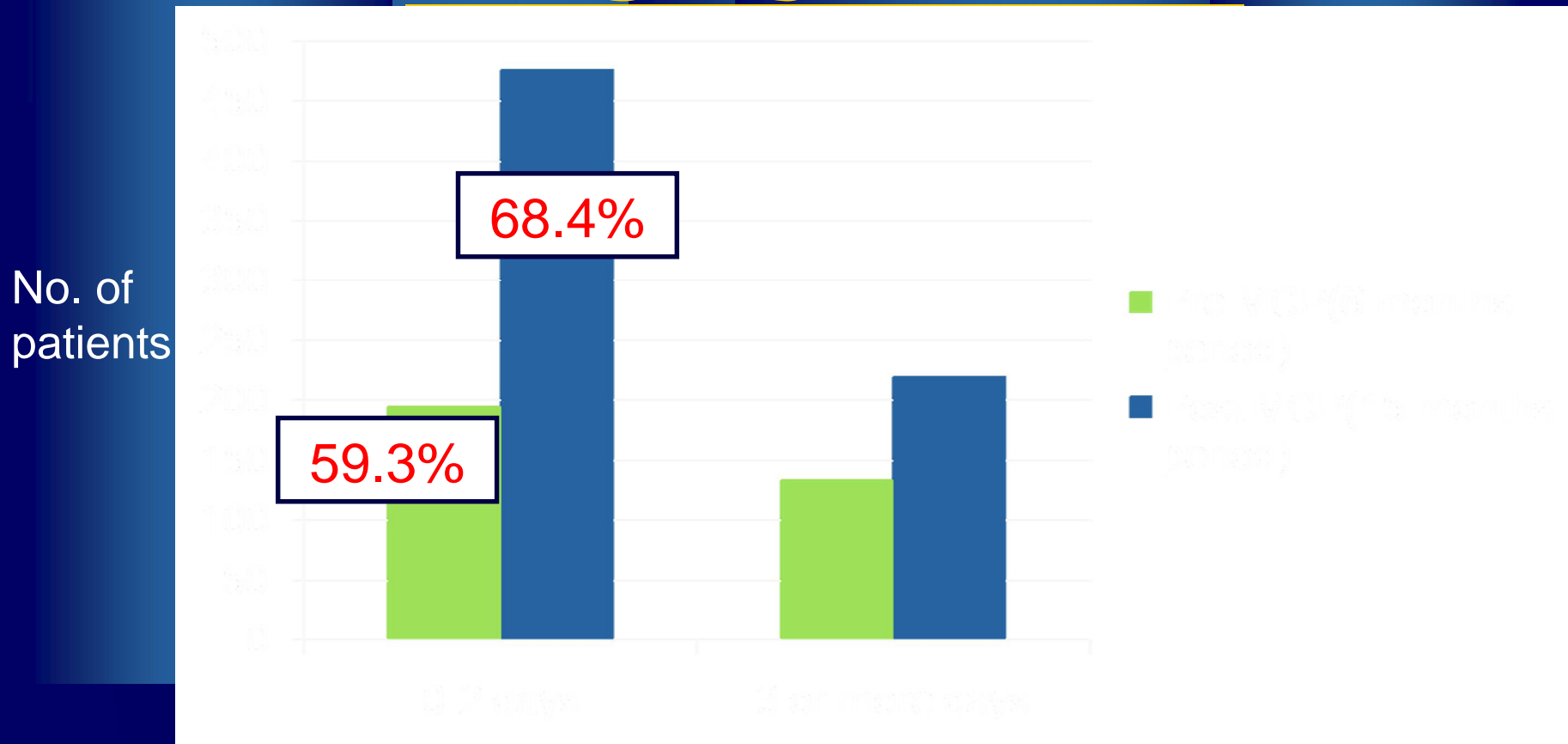


# Results

- Period: July 2009 – Sept 2010 (15 months)
- Cases meet inclusion criteria: 696
- Half-way excluded from the program:  
108 (15.6%)
- Cases completed program: 588 (84.4%)

# Results

## Waiting Time for Surgery $\leq$ 48 hr



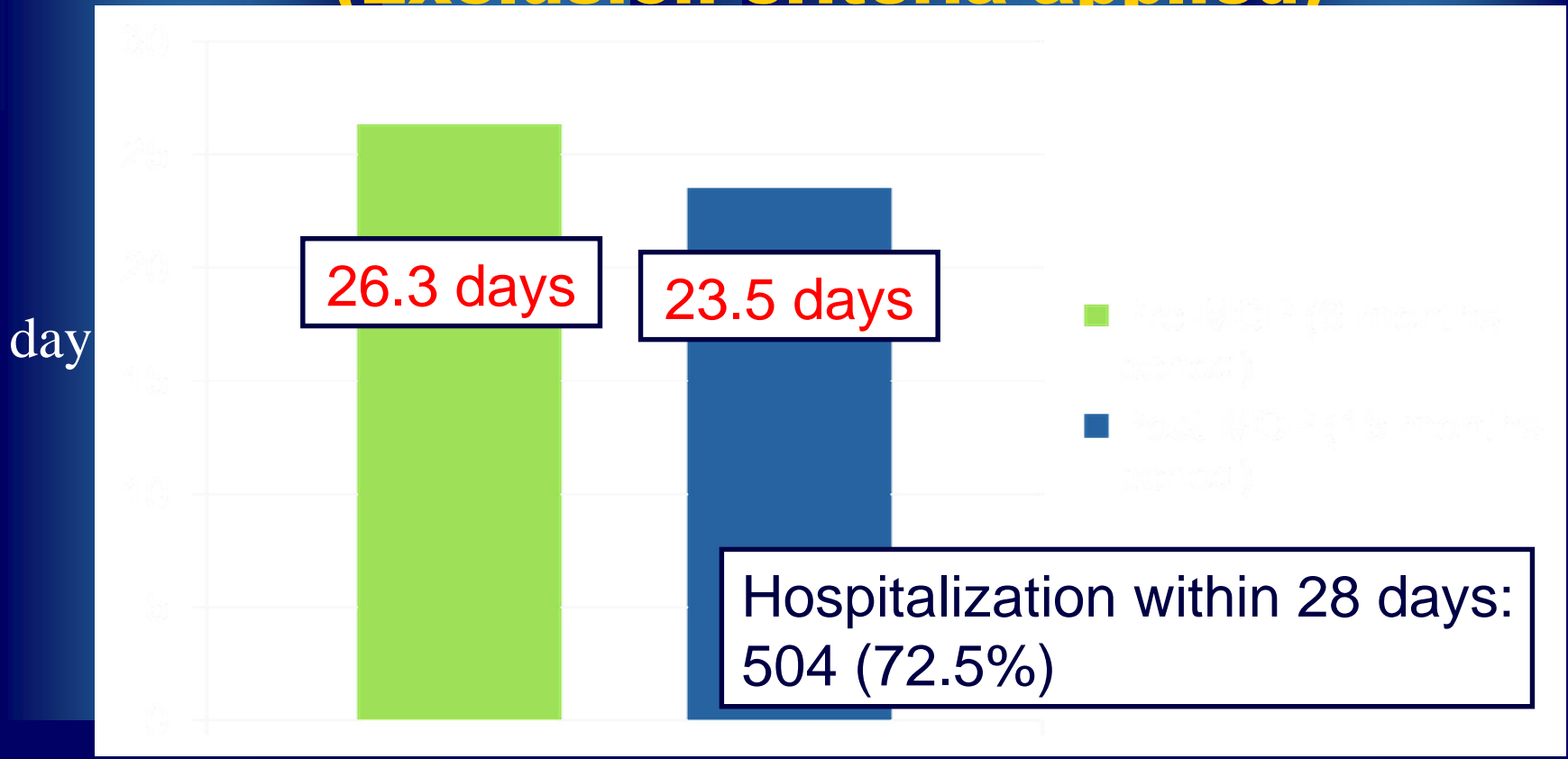
# Results – Prolonged waiting time for surgery

- Unsettled medical problems
- For those needed pre-op medical/ anaes. consultation, request sent within 24 hours: 100%

# Results

## Average LOS

(Exclusion criteria applied)



# Results – prolonged hospital stay

- Main reasons prolong hospital stay
  - Unsettled co-morbidities
  - Caring/ placement problems

# Results

## Functional Status

- Pre-MCP and Post-MCP functional score on discharge

	Pre-MCP	Post-MCP
Elderly Mobility Scale (EMS)	Moderate dependent	Moderate dependent
Modified Barthel Index (MBI)	Dependent to moderate dependent	Dependent to moderate dependent

# Results

## Drug Prescriptions

Medications	No. of patients (%)
Anti-osteoporotic medication	300 (43.1%)
Calcium	404 (58%)
Multivitamin/ Vit. D	333(47.8%)

# Results – combine fragility clinic

- 383 patients interviewed by case manager in combine fragility clinic
- Among this group, repeated fall rate within 6 months: 18(2.6%)
- Repeated hip fracture: 0%



# Keys to Success

- Doctor as the program champion
- Multidisciplinary involvement
- Proactive communication platform
- Designated case manager
- Adequate program promotion
- User friendly data record system
- Post D/C case monitoring

# Why the program valuable?

- Early manage co-morbidities
- Timely surgical intervention
- Early commencement of rehab. prog.
- Shorten LOS
- Align treatment & care plan
- Patient / carer empowerment
- Reduce repeated fall & fractures
- Lessen clinical burden

# Conclusion

- Caring patients  $\neq$  single disciplinary task
- Standardized pathway + multidiscipline collaboration + designated case manager = effective way to improve quality of care

# Conclusion

- MCP already an example to show the effect of multidisciplinary collaboration, it is worth to adopt this management approach, and develop another pathway to another diagnostic group of patients to improve the clinical outcomes

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