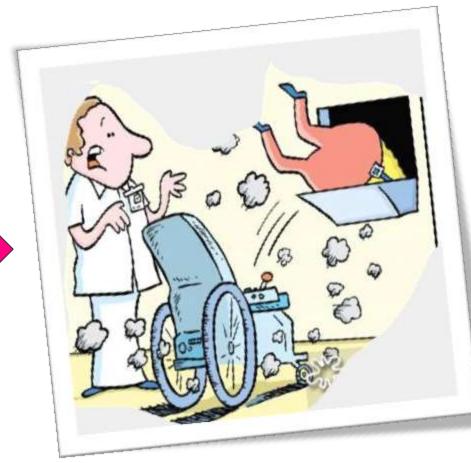




Hospital stay



#### Safe Discharge



Aim....

### To shorten the length of stay (LOS) of patients in acute orthopaedic and medical wards

without sacrifice the rehabilitation outcome of patients



## Multidisciplinary Day Ward(MDW)

- Venue: Physiotherapy Gym 8
- Ward setting: Doctors' consultation rooms
  - Nursing station
    - AH rehabilitation areas
    - Patient education
      - Support group activities
- Others: Transportation
- Lunch
- Operation hours : 5 days 8:45am to 5:00pm
  - (patients: till 2:30)
- Date of implementation : Oct 2009





## Patient Journey

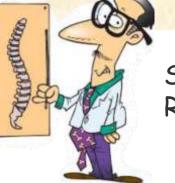








## Patient Groups



Spine, Hand, Joint Replacement















CVA, Fall



## One-stop Multidisciplinary







#### Wound Mx







#### Edema control



#### US scan for DVT



Scar Mx

## Support Group Activities







## Does MDW achieve the goals?

 Total Knee Replacement(TKR) patients journey before and after MDW implementation





## Review Study Design-1

- Study Target: TKR cases with rehab in PYNEH physio. OPD with or without MDW
- Period: from June(2009) to Feb(2010)
- Study Groups: Non-MDW vs. MDW



## Review Study Design-2

- Outcome indicator: Oxford knee score (old version 60-12, Scale 1-5)
- Others: 1. length of stay in hospital (LOS)
  2. total length of rehabilitation(LOR)

( counted from date of operation to discharge date from physio. OPD)





## RESULTS

• Means:

	Non-MDW	MDW
Oxford Knee Score	20.9	20.3
Length of Hosp. stay	15.62(vs	12.01( vs
(days)	HA 15.63)	HA 13.89)
Total Rehab period	148.2	<b>84.1</b>
(days)	(~4.5 months)	(~2.5 months)



## TKR-Rehab. Pathway

TKR cases In-patient rehabilitation (Early discharge LOS from 15.6 to 12.1 ds)

MDW immediate and intensive day rehabilitation for 2 weeks ( average 4 - 6 attendances) OPD Physio For continuity of rehabilitation 4 - 7 weeks rehabilitations (4 - 7 attendances)

Total Rehabilitation Period from 4.5 to 2.5 months No of attendances In OPD physio. From 11.2 to 5.2



### **HKEC outstanding team 2010**

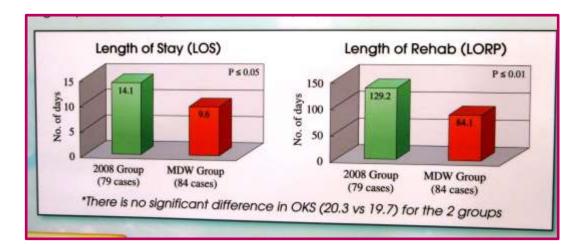




### International Society for Quality in Health Care (ISQua) Conference in Hong Kong 2011



ISQua 2011 HK







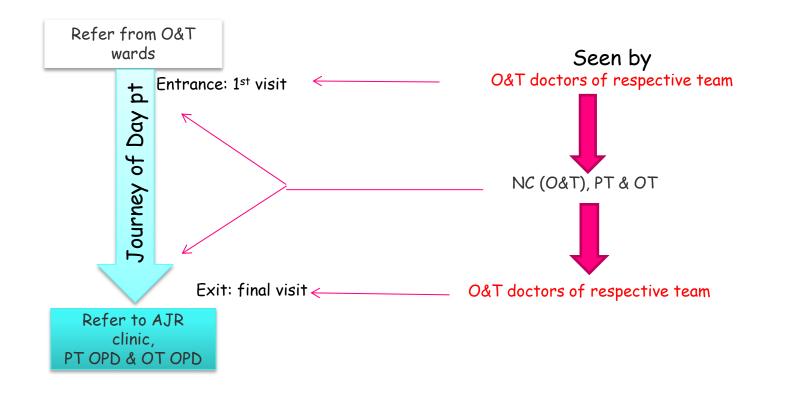
## Some highlights

- Early acute one-stop multidisciplinary rehab
- MDW within 3 days post discharge (previously around ~ 2/52 for 1 st OPD physio.)
- earlier gain in net AROM
- Early Multidisciplinary consultation : MSW, P & O, Diet.....
- Early detection of complications: wound infection, DVT
- Follow-up by the same team therapists in OPD
   Continuity of management/ better use of resources



## New initiative in 2014

 Advanced Collaborative Care Model for Total Knee Replacement (TKR) in Multi-disciplinary Day Ward (MDW)





### Discharge criteria

#### Nursing

- ✓ Afebrile
- ✓ Wound without S/S of infection
- ✓ Wound without gapping after clips off
- No increase of knee  $\checkmark$ swelling No increase of pain

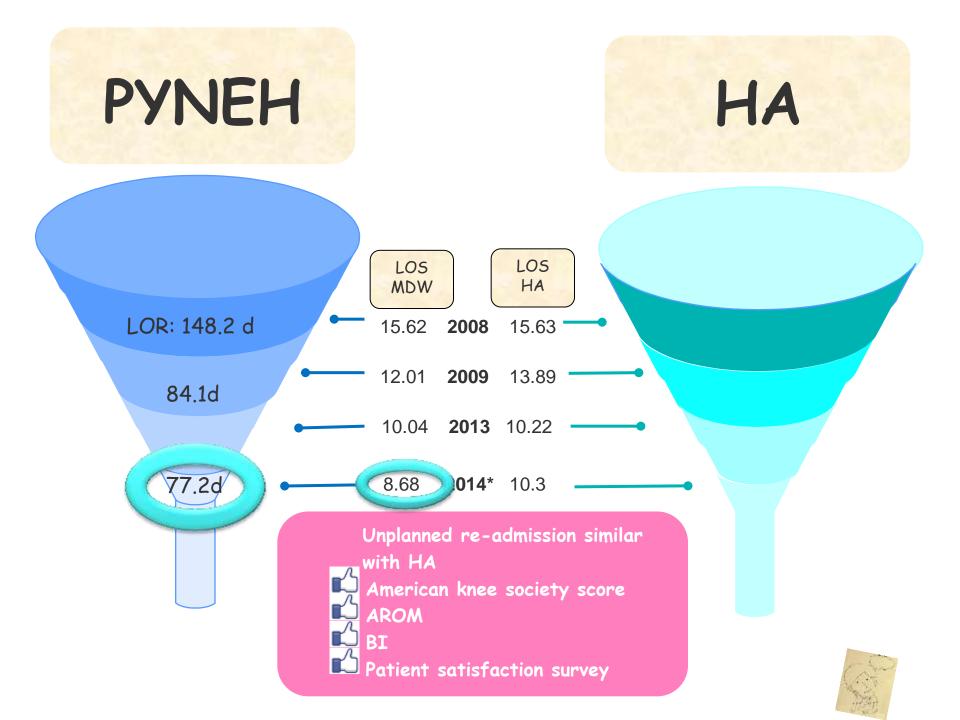
#### Physiotherapy

- $\checkmark$  ROM not less than 10-80
- ✓ Quadriceps strength not less than Gr3+
- $\checkmark$  Wean off frame, walk with stick / quadripod

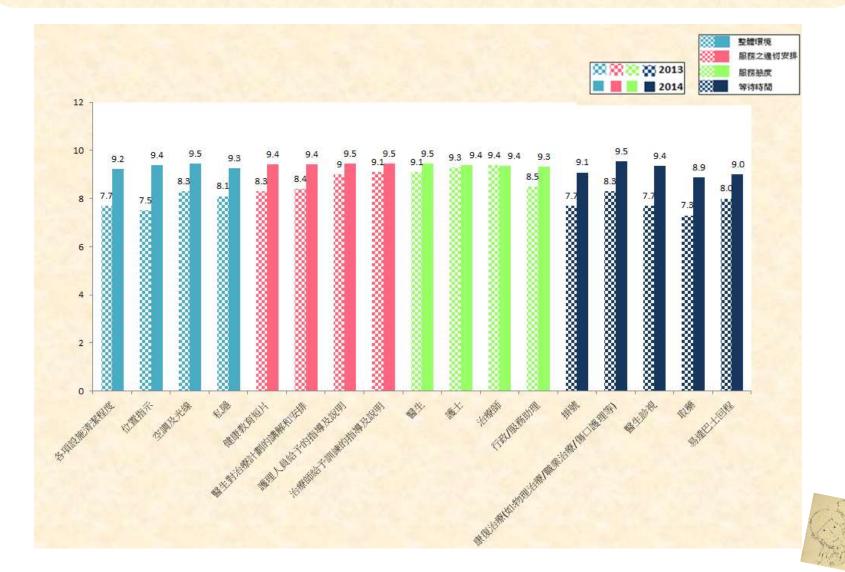
#### Occupational therapy

- ✓ Independent in transfer
- ✓ Independent in
- ✓ Sufficient assistive device are available
- ✓ for ADL performance✓ Home environment is safe





### Collaborative Care Model for TKR Patient Satisfaction Survey 2013 & 2014





 If we can decrease LOS and LOR, can we decrease the admission rate????



### Emergency Orthopaedic Day Service (EODS)

0





## New Model of Care

Stop Service

One-

Multi-Disciplinary Approach

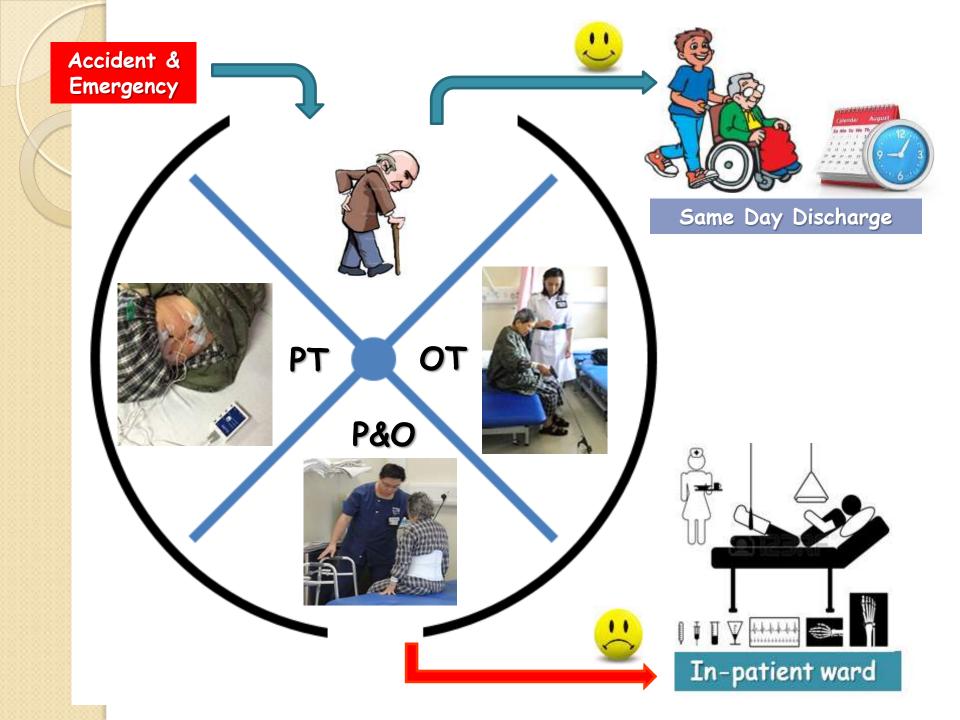
Integrated Care

Early and Safe Discharge **CON** 

•Prevent admission

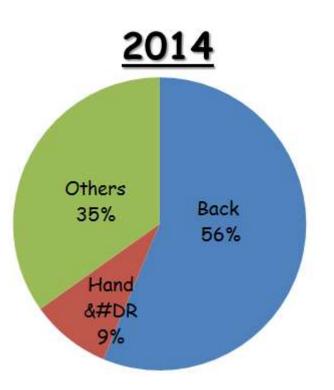


## Quick In Quick Out



## Target groups for EODS

- Criteria:
  - Predictable progress
  - High level of self-care and cognitive functions
- Case types (n=766):
  - Back
  - Hand & #DR
  - Others
    - LL injury
    - shoulder/elbow injury

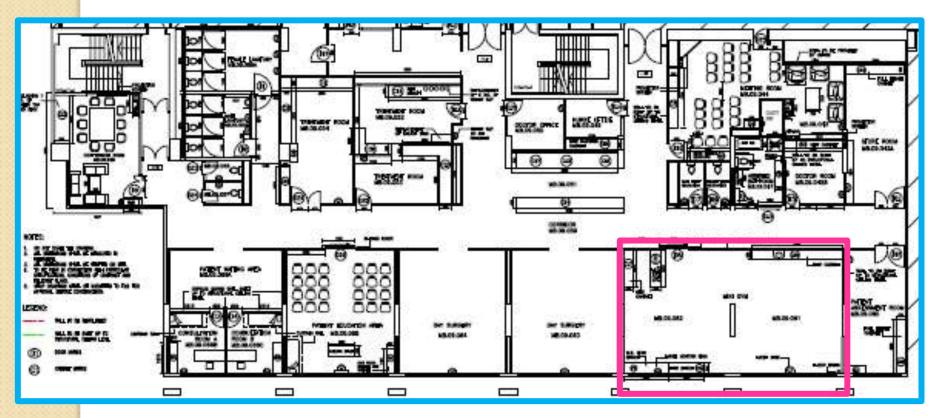




## Emergency Orthopaedic Day Service

Integrated Rehabilitation Centre

• Mini gym



## Challenge - Boundary



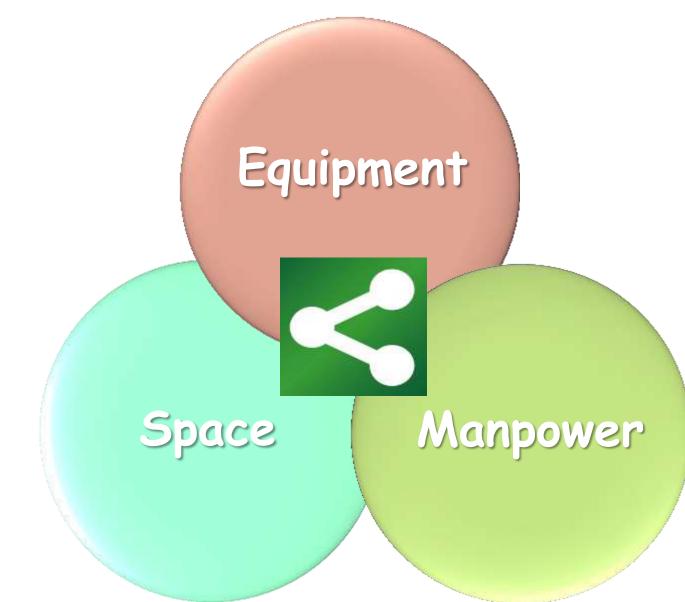
"Is THIS the line you're telling me not to cross?"

### Seamless AH service





## Share of resources





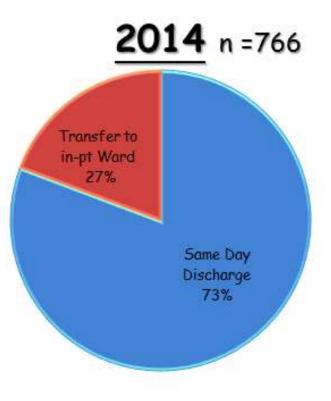




## Cost-effectiveness

 73% of patients can achieve Same/One Day Discharge from EODS







## Wait within a day



Doctor
 Nurse
 Physiotherapy
 Occupational therapy
 Prosthesis & Orthotic





## Ultimate goal

Prevent admission

> Optimize bed utilization

Reduce waiting







# Thank you



