

The roles & challenges of Allied Health Consultant in HK

**Consultant physiotherapist in musculoskeletal:
Experience sharing
from Prince of Wales Hospital**

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15 May 2013 HA Convention



Outline

- I. Background
- II. Role extension / enhancement
- III. Service impact
- IV. Challenges encounter
- V. Way forward

Consultant
Physiotherapist

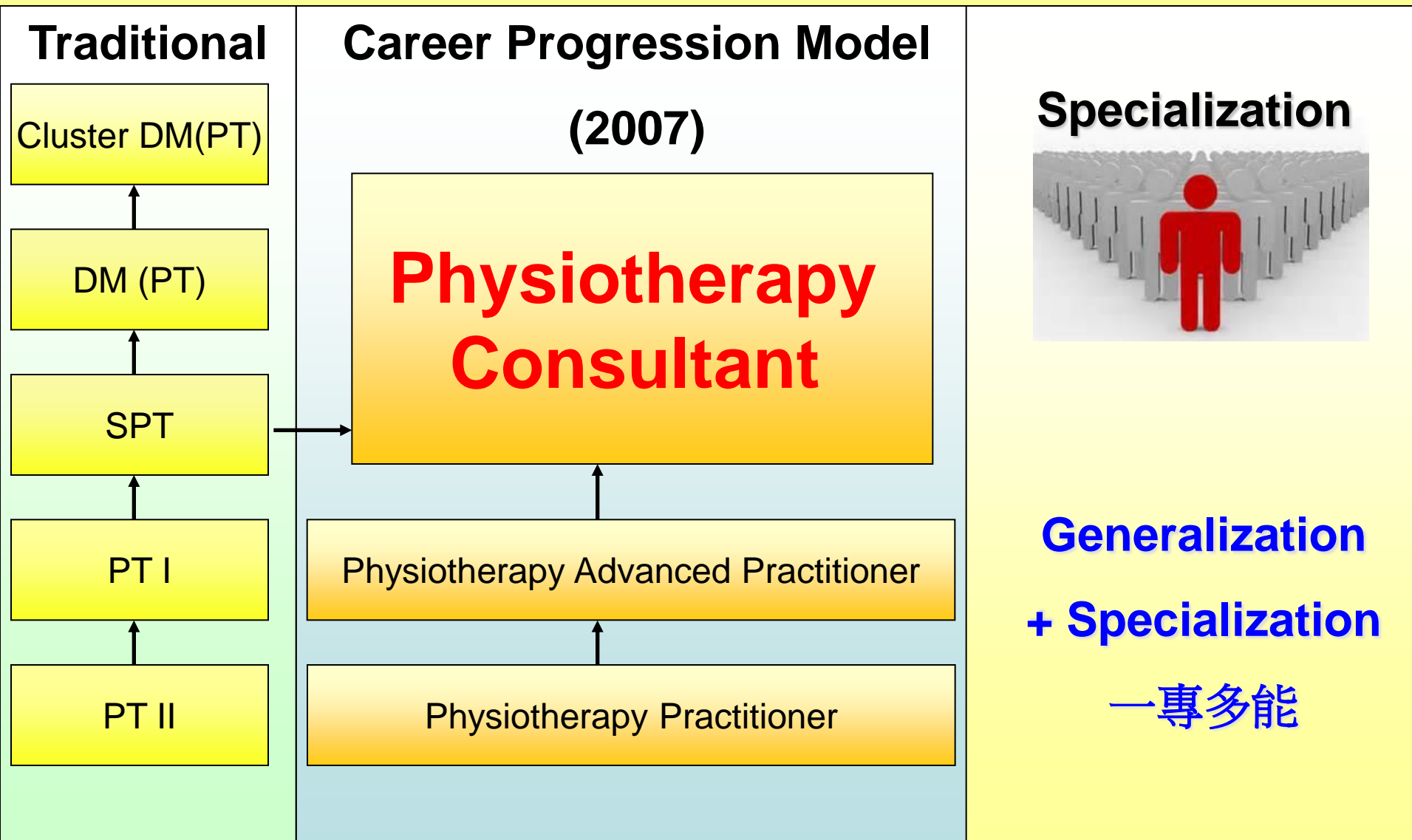


I. Background



I. Background

1. Career Progression Model + Specialization



I. Background

2. NTEC SPT → CPT



Aims: working towards strategic vision

- Added value senior physiotherapist
- Competence in musculoskeletal (MSK) specialization
- Provide clinical leadership, bring strategic directions, innovations & influence through clinical, research & education



II. Role extension / enhancement



II. Role extension / enhancement

1. Expert practice

e.g. Spinal Pain Triage Clinic (SPTC)



Spinal referrals from AE/GP/GOPD/others for O&T consultation

1st screened by PT through Questionnaire + referral

Others

2nd screen by PT through Physical exam + Interview
• +/- Physiotherapy intervention if necessary

P1

P2

R / FM

O&T doctor checks

O&T Clinic

FM

IOD < 3mth



II. Role extension / enhancement

2. Consultancy roles & handling complex condition

Professional leadership
develop the overall
musculoskeletal services

In-Patient (Musculoskeletal)

Out-Patient
(Musculoskeletal)

In-Patient + Out-Patient
(Musculoskeletal)



Consultancy Role in new advance
technique / equipment locally &
across cluster

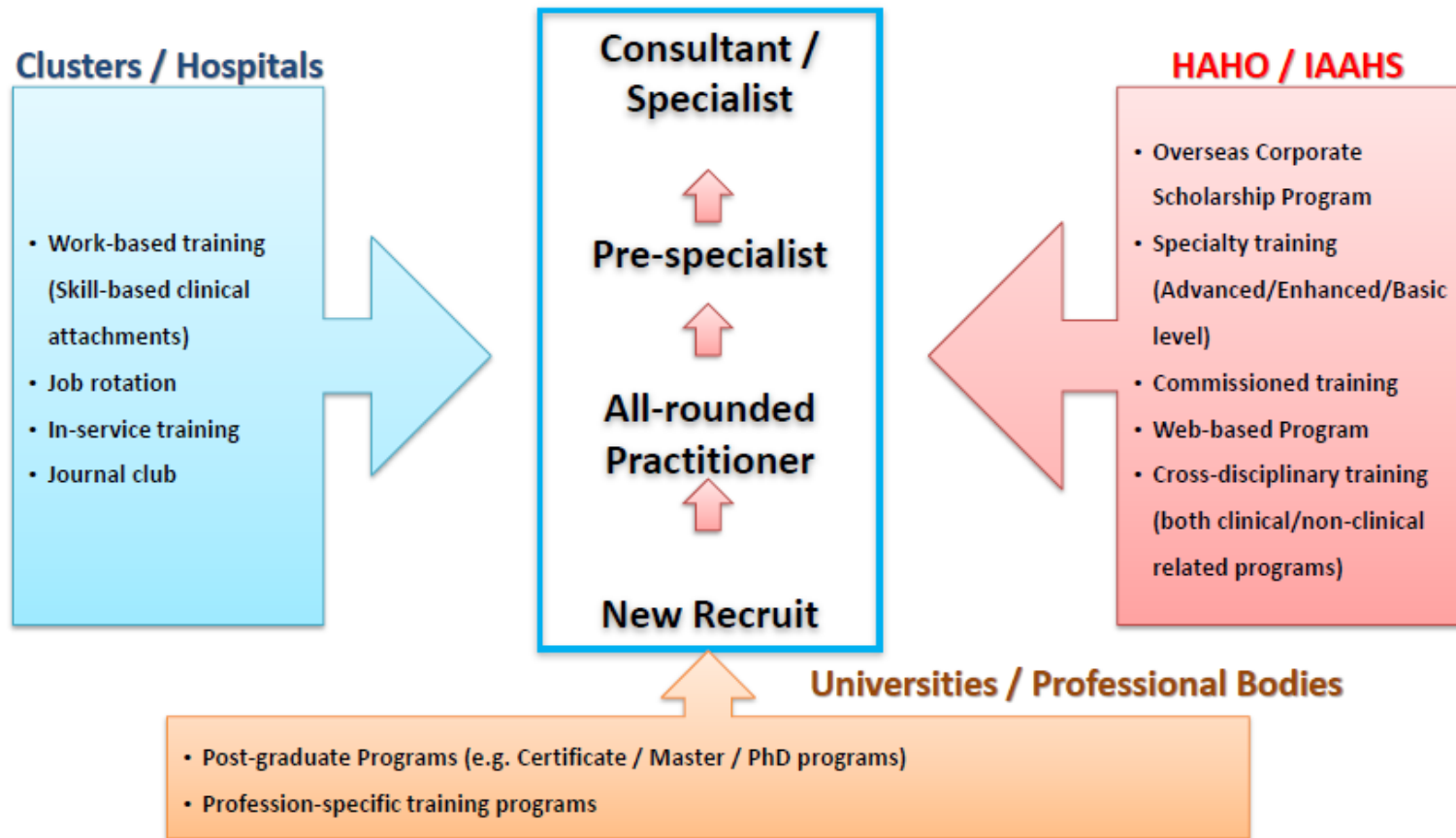
- CPT with clinical session & consultancy roles to assess, triage and treat complex musculoskeletal conditions
- Develop protocol & guidelines
- Mentorship for PTI / PTII
- In service training.....



II. Role extension / enhancement

3. Professional coaching & training coordination in MSK specialty

Staff Development -- Tri-parties Training Support



One Staff One Training Plan



II. Role extension / enhancement

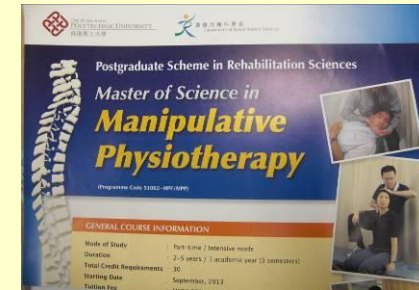
4. Distinct expert role delineation in education

Specialization role (musculoskeletal) local & international clinical visit & training

Perform clinical teaching **undergraduate** PT student **Musculoskeletal** module



Coordinate **musculoskeletal** related **MSc** course eg. MSc in Manipulative Physiotherapy (Evening clinic-Practical)



Organize **skill transfer from** Australia expert: Lynn approach for managing **musculoskeletal** condition eg low back pain (Joint course with CUHK)



Skill transfer to Mainland China (orthopaedic doctor, Rehab doctor, therapist in the field of **musculoskeletal**) (Quarterly program in PWH)



II. Role extension / enhancement

5a. Enhance evidence based MSK service

e.g. Exercise related: Pre work fitness exercise – idea

Base on Traditional Chinese exercise

Five Animal Frolics 五禽戲 (Hua Tuo 華佗)



Ba Duan Jin 八段錦



Yijin xisui jing 易筋洗髓經



Tai Chi 太極



II. Role extension / enhancement

5b. Enhance evidence based MSK service

e.g. Exercise related: Pre work fitness exercise – innovate 10 styles

+ Physiotherapy integration of East & West Evolve Pre work 10 fitness exercise - OSH



鍛鍊時如有不適, 請向物理治療師查詢, 以調節運動方法

物理治療-健體十式



II. Role extension / enhancement

5c. Enhance evidence based MSK service

e.g. Exercise related: Pre work fitness exercise OSH – vision & mission

Existing
Physiotherapist
in PWH

Ongoing

Physiotherapy Department

All Clusters in HK

Other Departments in PWH

Research Outcome:

- SF 12
- Sit to reach test
- Single leg balance test
- Peak flow rate

All Departments in PWH

Clinical: Patient
Preventive: Healthy people

NTEC Cluster

Evidence: OSH- IOD rate

II. Role extension / enhancement

6a. Leading evidence based practice- patient training program
e.g. Exercise related: Stretching workshop - Evidence base research

Stretching exercise is beneficial



Office Workers

Marangoni AH (2010)



Chronic LBP

França FR et al. (2012)



Shoulder pain

Camargo PR et al.
(2009)



Neck pain

Cunha AC et al. (2008)



Heel pain

DiGiovanni BF et al.(2003)



Knee pain

Duncan AR
(2011)



II. Role extension / enhancement

6b. Leading evidence based practice-patient training program

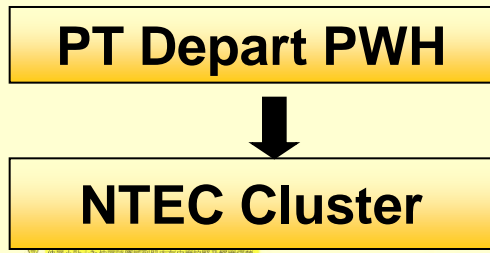
e.g. Exercise related stretching workshop - Background

Background:

- Chronic spinal referral
 - ~ 20% of OPD referral
 - ~ 20% of chronic spinal problem had multiple joints pain

Stretching workshop

- Brief theory of stretching
- Multiple body stretch
- **筋柔百病消**



伸展小點上每項伸展運動約做二十秒，做三組

伸展小點上每項伸展運動約做二十秒，做三組

伸展運動

伸展運動以伸展頸背及手腕作備

新界東醫院聯網
物理治療部
(2012年9月)

威爾斯親王醫院 物理治療部

伸展運動工作坊

對象

- 不限年齡和性別
- 頸腰背或是手腳勞損而出現之慢性痛症
- 長時間過着靜止姿勢工作或生活的人
- 受傷後出現關節僵緊之後遺症



伸展運動的好處

- 增加肢體的活動度
- 增加協調性
- 動作更靈活
- 改善血液循環
- 放鬆你的身體和心情



怎樣參與?

有興趣學習一套全身伸展運動的病人，可向主診物理治療師查詢

注意事項

- 物理治療師會為病人甄選及排除禁忌症。
- 病人上課時需要穿鬆身的運動衣服。



頻率

- 初期每星期2至3天
- 目標每星期5至7天

強度

將要被伸展的肌肉和筋腱緩慢拉長直至感到被拉扯的感覺

時間

- 每組動作維持15-30秒
- 重複3-5次



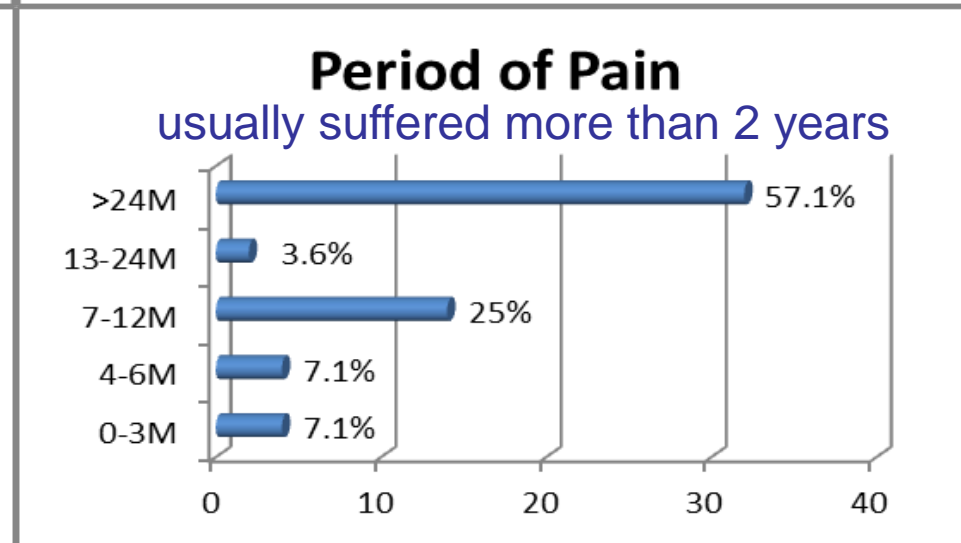
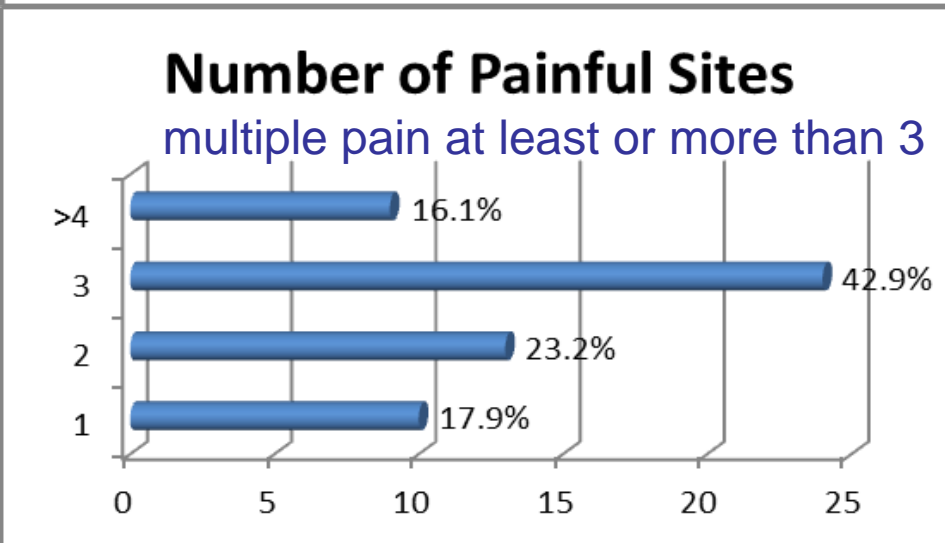
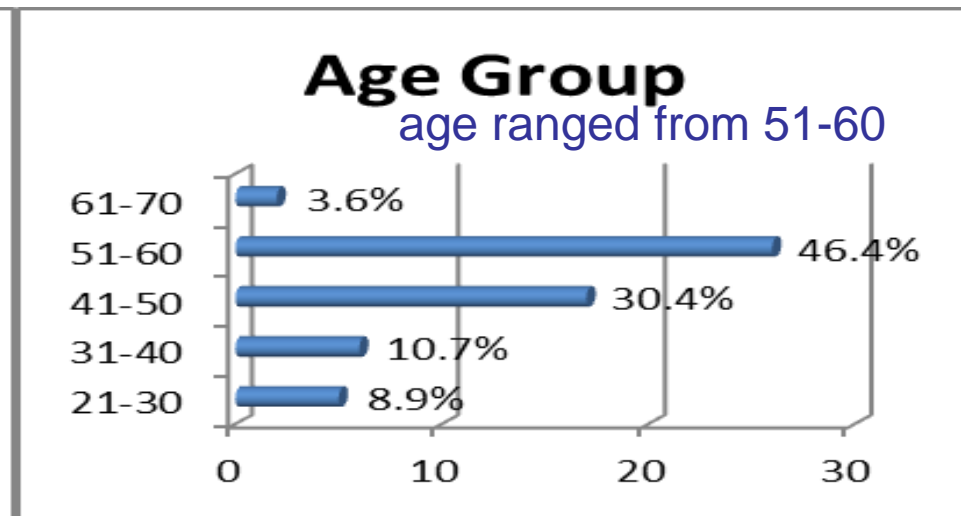
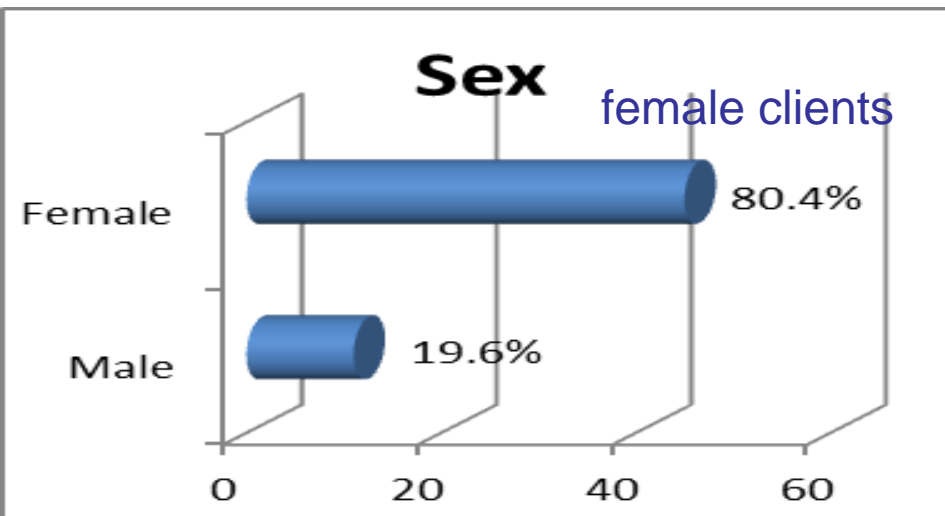
新界東醫院聯網 | NTEC



II. Role extension / enhancement

6c. Leading evidence based practice- patient training program

e.g. Exercise related : Stretching workshop – Pilot sample



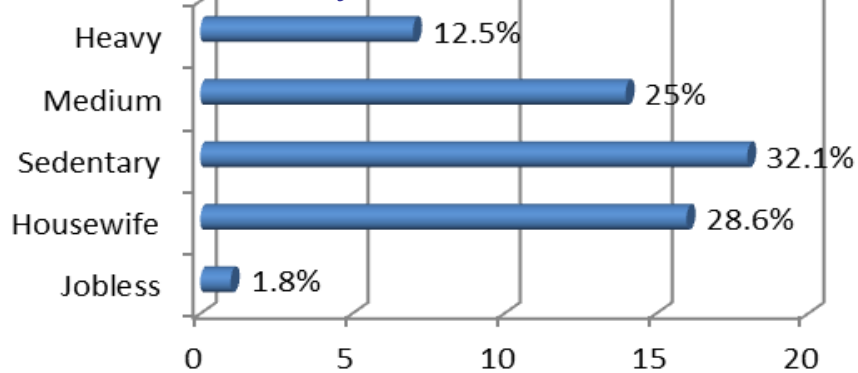
II. Role extension / enhancement

6d. Leading evidence based practice- patient training program

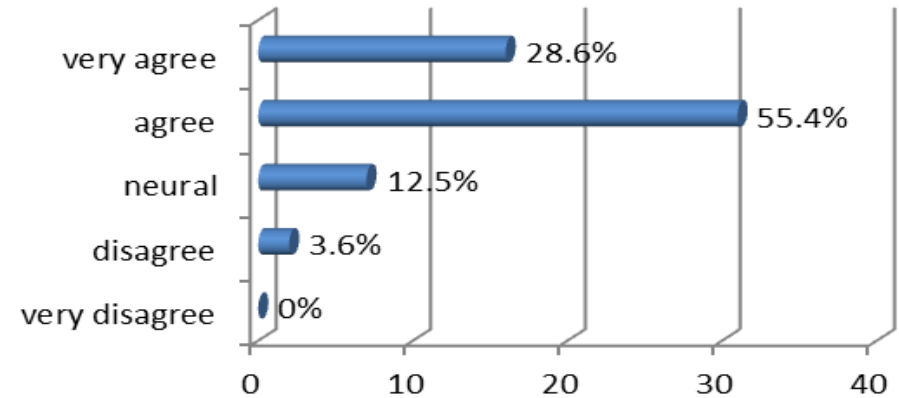
e.g. Exercise related: Stretching workshop – Pilot results

Occupational Types

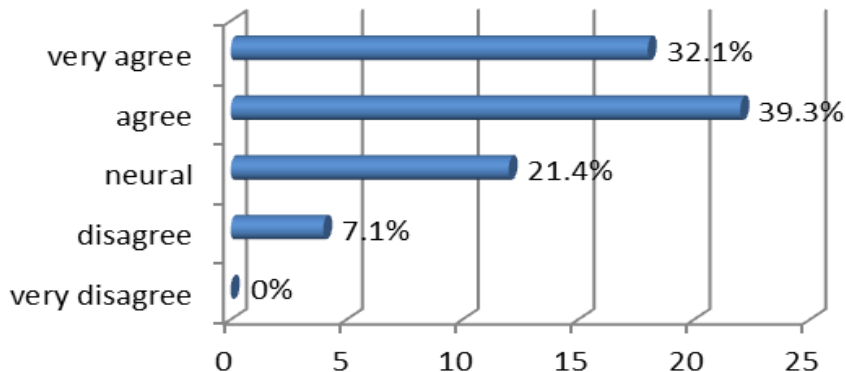
sedentary workers or housewives



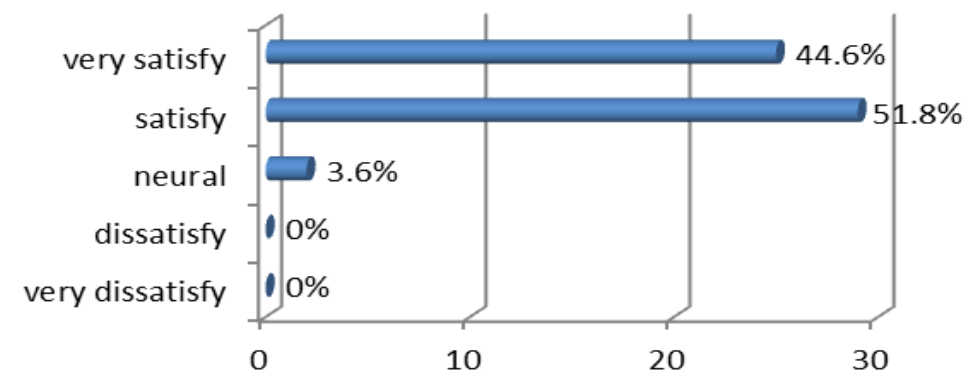
Q1 Reduce Pain



Q2 Improve Functions



Q3 Level of Satisfaction



III. Service impact



III. Service impact

1. Enhance research/ clinical collaboration & development

Consultancy roles & promote research/ increase clinical collaboration opportunity with varies clinical specialties



Urology

Research collaboration
**Obesity
(Exercise)**



Medical

Research collaboration
**Heart failure
(BaDuanJin 八段錦)**



THE HONG KONG
POLYTECHNIC UNIVERSITY
香港理工大學

Orthopaedic

Research collaboration
**Neck Pain
(Ergomotor)**



.....etc
Clinical collaboration



III Service impact

2. Lead quality & safety projects

e.g. Risk stratification for exercise (ACSM) - Protocol/ guidelines

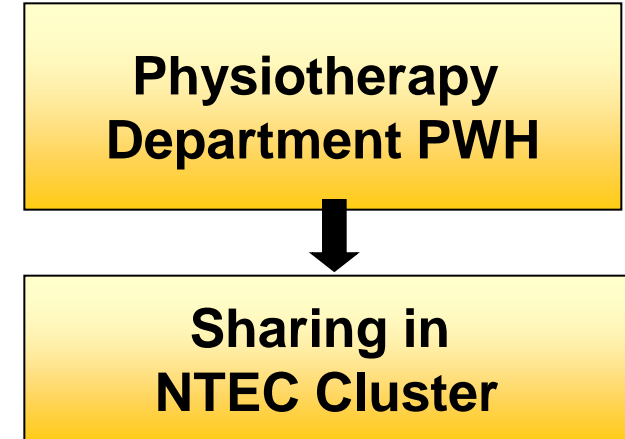
Preparedness for safety

Risk Stratification for exercise:

Low / Medium / High

Criteria	1 M<45, F<55	3 M ≥ 45, F ≥ 55	5 Known CVS pulmonary or metabolic diseases (c)
	2 Risk Factors ≤ 1 (a)	4 Risk Factors ≥ 2 (a)	6 Major S/S ≥ 1 (b)
	1 AND 2	3 OR 4	5 OR 6
Class	<input type="checkbox"/> Class I	<input type="checkbox"/> Class II	<input type="checkbox"/> Class III
Recommendations	Mod-High Ex intensity ↓ No need for supervision/Ex test in mod to high intensity ex ↓ Recommend Mod to high ex intensity 61-85% HRR or RPE < 17	Mod Ex intensity ↓ No need for supervision/Ex test in mod intensity ex Ex test or supervision for high intensity ex ↓ Recommend Mod ex intensity 40-60% HRR or RPE < 14	Low Ex intensity ↓ Need for Ex test or supervision in mod to high intensity ex ↓ Recommend Low ex intensity <40%HRR or RPE < 12

$$\text{Target HR (THR):} (\text{HR}_{\text{max}} - \text{HR}_{\text{rest}}) \times \text{_____\%} + \text{HR}_{\text{rest}} = \text{_____\}$$



Benchmark

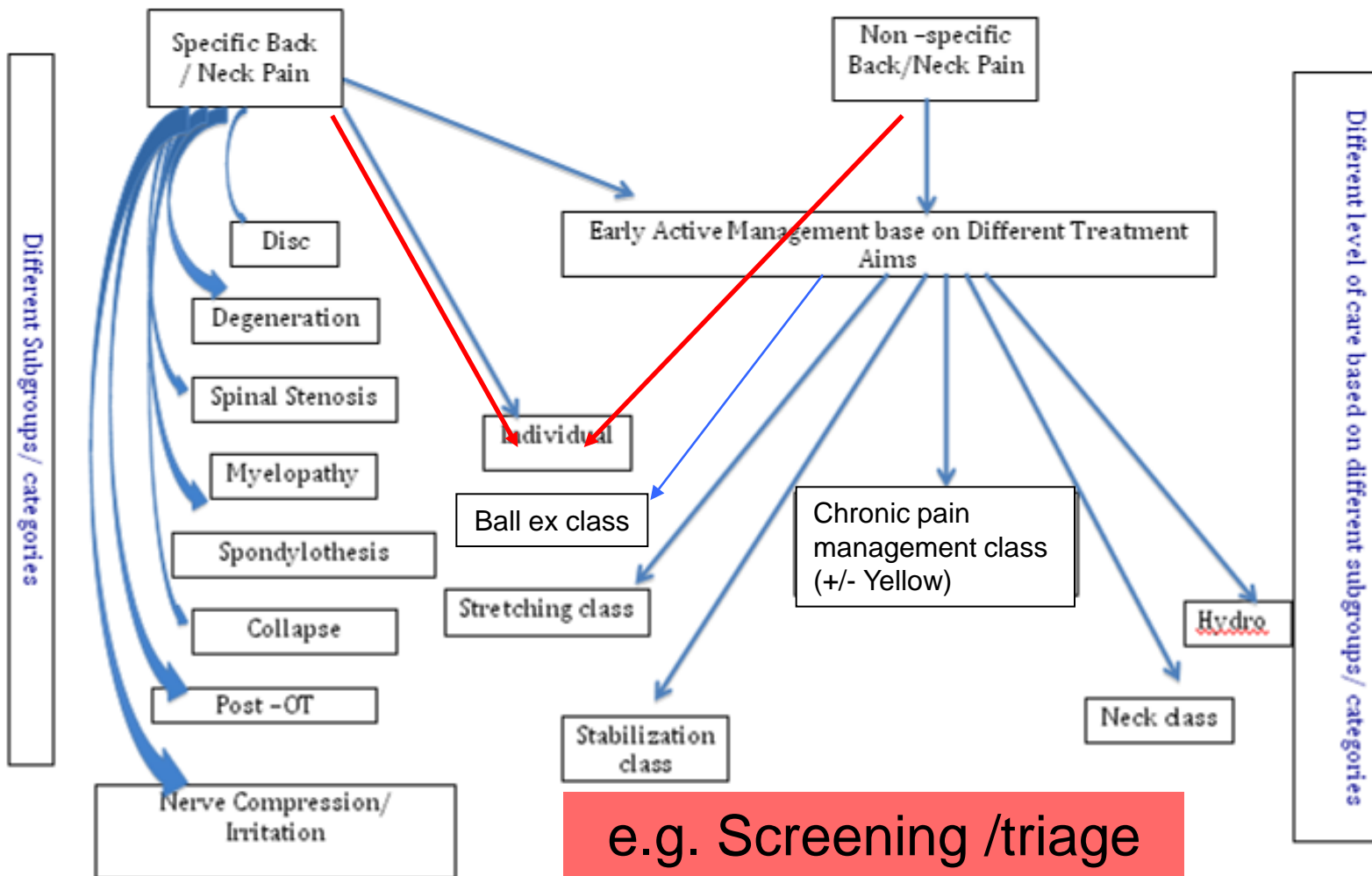


III Service impact

3. Lead service remodeling reforms

e.g. Care pathway

Flow Chart on Chronic Spinal Subgroups / Categories and Care pathway



e.g. Screening /triage
By Back screening tool



III Service impact

4a. Lean management

Establish lean management system



Input
Customer Value as
a Strategy



Reduction of waste



III Service impact

4b. Lean management

e.g. Project (A3 form)

Department::	Physiotherapy Department, PWH	Title:	Shorten average telephone confirmation time per patient
Leader /Team:	Angelina Yeung, Pamela Wong, Eddy Siu	Project date:	Jan 2013 to Mar 2013

Background

- New case default rate for case mix of 'R' ~ 31% which cause wastage of resource
- It was found that telephone confirmation of the appointment could decrease the default rate to ~ 10%
- In the process of telephone confirmation, it was found that time spent per patient:

Process	Time require	% of patient	Different pathway
	1.20 min	60%	smooth case only need to dial 1x
	6.75 min	10%	Patient request to change appointment
	3.00 min	5%	Need to dial 2x
	4.50 min	15%	Need to dial 2x + clarification of phone no. by OPAS + further dialing 1 x
	4.13 min	10%	Need to dial 2x but eventually still could not contact the patient

- In average it take 4.17 min (process time) to complete each phone confirmation
- There are ~ 25 call per day, 6000 case per year and it takes 417 hour for 1 year

Current Situation

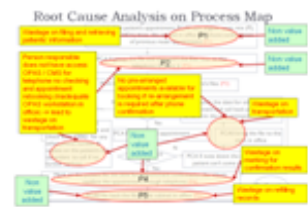
Current situation
*In average, it takes 4.17 min to complete each phone confirmation



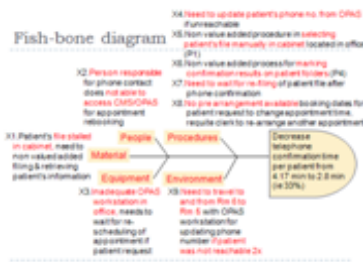
Goal

- By Mid March, 2013, shorten average telephone confirmation time per patient from 4.17 to 2.8 min (save 137 hour per year)

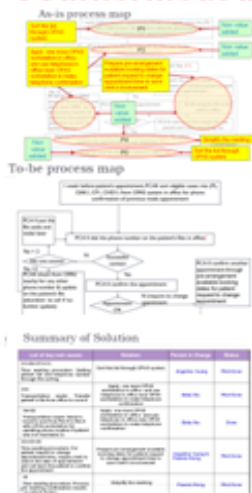
Root cause analysis



Fish-bone diagram



Countermeasures



Solutions (Photos, diagram....)

Prepare pre arrangement available booking dates for patient request to change appointment time to save clerk's involvement

Sort the list through OPAS system

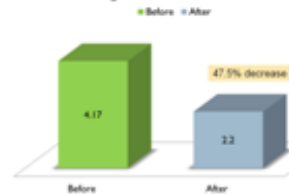
Simplify the marking by a 'tick' or OK on the list

Apply one more OPAS workstation in office and use telephone in office near OPAS workstation to make telephone confirmation

Effect confirmation

Pilot Run Result

Processing Time for Phone Confirmation



- Assuming phone confirmation 25 per day
- Time saved for each phone confirmation 4.17 to 2.2 min
- 1.97 min per case (47.2%)
- 49.25 min per day
- Assuming 20 days phone confirmation per month
- 11,820 min per year
- 197 hours per year

Follow up action

Item	Plan	Do	Check	Act	Review
Apply one more OPAS workstation in office and use telephone in office near OPAS workstation to make telephone confirmation	Jan	Mar	Mar	Mar	Apr
Sort the list through OPAS system	Jan	Mar	Mar	Mar	Apr
Prepare pre arrangement available booking dates for patient request to change appointment time to save clerk's involvement	Jan	Mar	Mar	Mar	Apr
Simplify the marking by a 'tick' or OK on the list	Jan	Mar	Mar	Mar	Apr



III Service impact

4c. Lean management

- Ongoing project to enhance MSK specialty service

Department::	Physiotherapy Department, PWH	Title:	Shorten average telephone confirmation time per patient
Leader /Team:	A		

Ongoing project to reduce wastage

- No Show for MSK
- Duplicated MSK assessment forms
- Searching MSK filing records
- MSK Discharge summary

Background

- New case default rate for resource
- It was found that telephone default rate to ~ 10%
- In the process of telephone

Process Time require	% of patient
1.20 min	60%
6.75 min	10%
3.00 min	5%
4.50 min	15%
4.13 min	10%

- In average it take 4.17 min
- There are ~ 25 call per day

Current Situation

As-is process map

Goal

- By Mid March
- time per patient

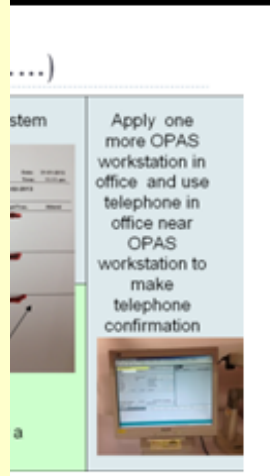
Root cause anal



Follow up action

• 197 hours per year

Item	Qty	Material	Value	Unit	Remark
...



25 per day
confirmation 4.17 to
...2%)
one confirmation



IV. Challenges encounter



VII. Challenges encounter

1. Acceptance, resources, succession

Organizational &
professional
acceptance



Support &
resources
allocation



Succession
plan to develop
consultant role

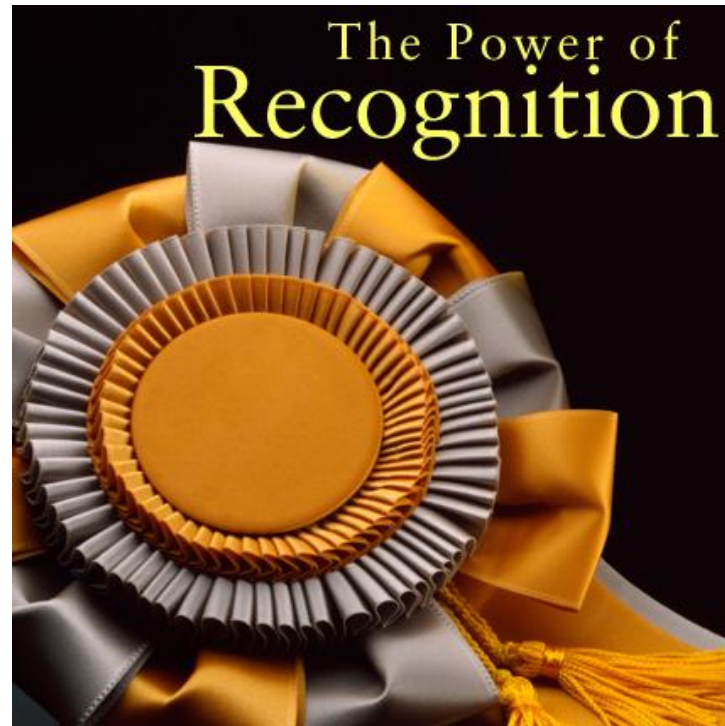


V. Way forward



V. Way forward

1. Formal recognition of specialization



Consultant Physiotherapist
Musculoskeletal



V. Way forward

2. Actualization of career progression model

Provide career advancement opportunities

Physiotherapy
Consultant

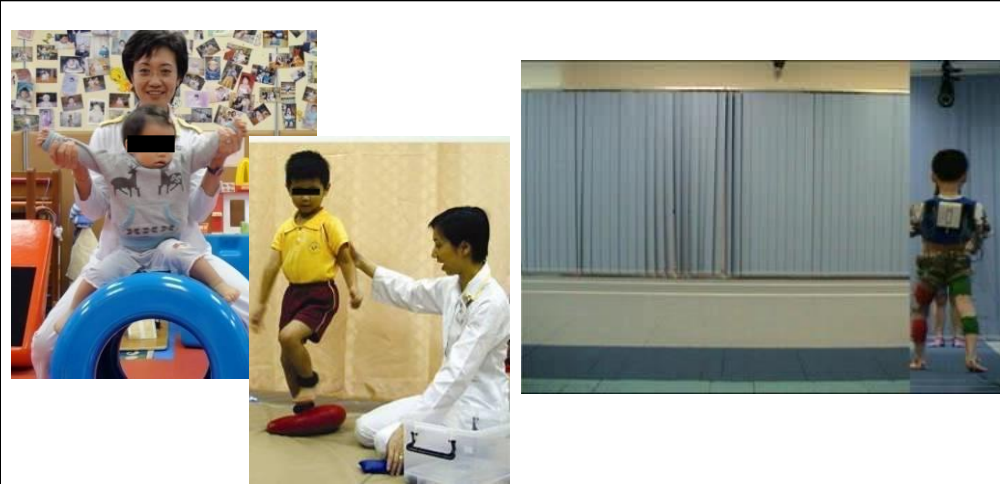
Physiotherapy
Advanced
Practitioner

Physiotherapy
Practitioner



V. Way forward

3. Progression of CPT to other clinical specialties



CPT in Paediatric



CPT in Neurology



CPT in Cardiopulmonary

CPT in

**OSH/Work
rehabilitation**

**Woman's
health**

Geriatric

**Integrative
medicine**



Summary

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- II. Role extension / enhancement
- III. Service impact
- IV. Challenges encounter
- V. Way forward

Consultant
Physiotherapist

**The roles & challenges of
Allied Health Consultant in HK**



Thank you



Reference

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