

# National Quality Improvement Conference

## Integrated MSK Care – Rapid Assessment and Physiotherapy for Patients In Need (RAPID)

Dr. Donna Tan Mui Ling  
Mr Cheok Mingquan Gary  
Mr Chang Chuen Ern Joel  
(Joel\_CE\_CHANG@nhgp.com.sg)



### Problem Statement

In Singapore, Musculoskeletal (MSK) disorder is the top cause (24.3%) of healthy life lost to disability in 2019<sup>1</sup>.

Early and prompt physiotherapy has been effective<sup>2-3</sup> and prioritised in primary healthcare for its benefits for MSK disorders in the UK<sup>4-5</sup>.

However, currently in Singapore, there is:

- No standardised clinical protocol for providing prompt MSK and physiotherapy care.
- No data to show the effectiveness of prompt physiotherapy care that benefit patients.

### Potential Solutions

**S.T.A.T.** *Implemented in phases since October 2020*

#### Standardisation

Standardise care by developing clinical protocols:

- Clinical care
- Escalation and referral criteria
- Outcome measures

#### Train

Train our polyclinic physiotherapists and therapist assistants to accurately stratify and escalate with reference to protocols.

#### Attain Community Partnership

Collaborate with our community partners and create referral pathways for further holistic care for our patients.

#### Track

Compare RAPID and Non-RAPID pain, functional and anxiety and depression scores.

Continually review patients' response and process through PDSA cycles to better meet system and patient needs.

### Project Aim

1. To improve early access to physiotherapy care (within 0-2 weeks) to improve patient's:



1. Pain



2. Function



3. Anxiety and Depression

2. To develop a sustainable system to allow patients with MSK conditions early access to physiotherapy.

### Lessons Learnt

Early access to physiotherapy in primary care through RAPID has shown patient benefits in:

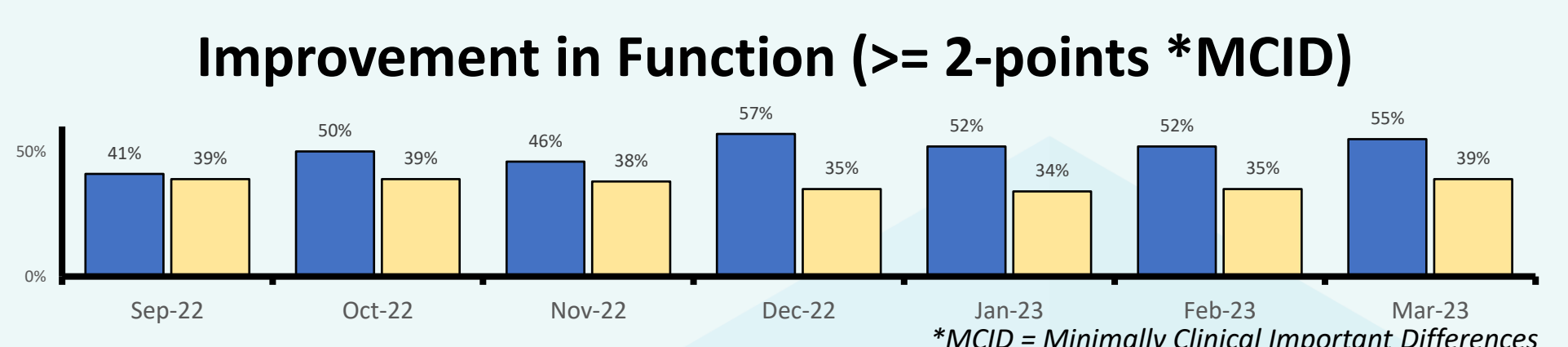
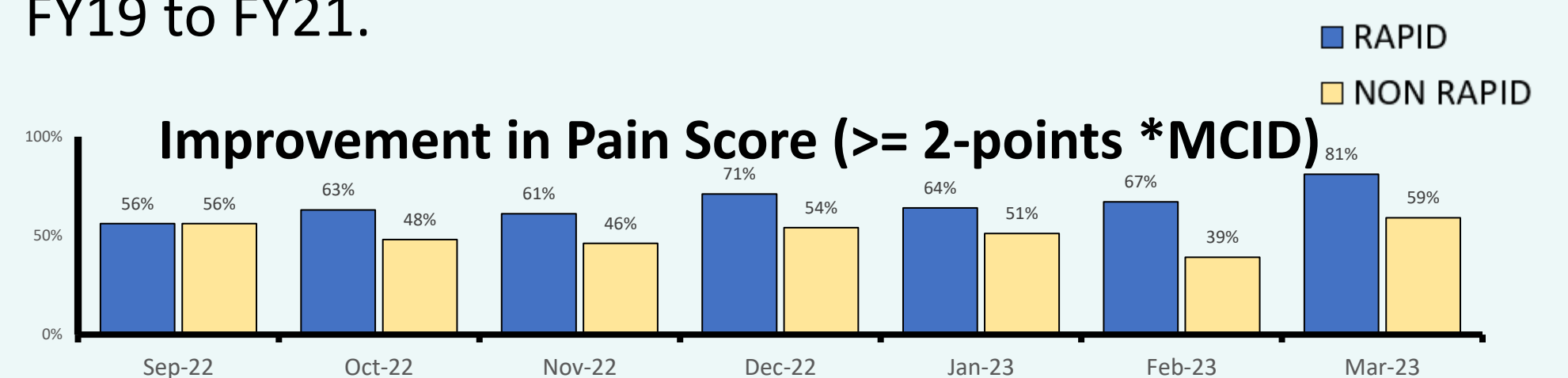
1. Reducing Pain
2. Improving Function
3. Improving moderate/severe anxiety & depression

Better optimisation of primary healthcare resources requires continuous engagement with community service providers.

Polyclinics can successfully manage patients with moderate/complex MSK needs without need to go to hospital, while simple MSK conditions can be managed in the community.

### Outcomes & Impacts

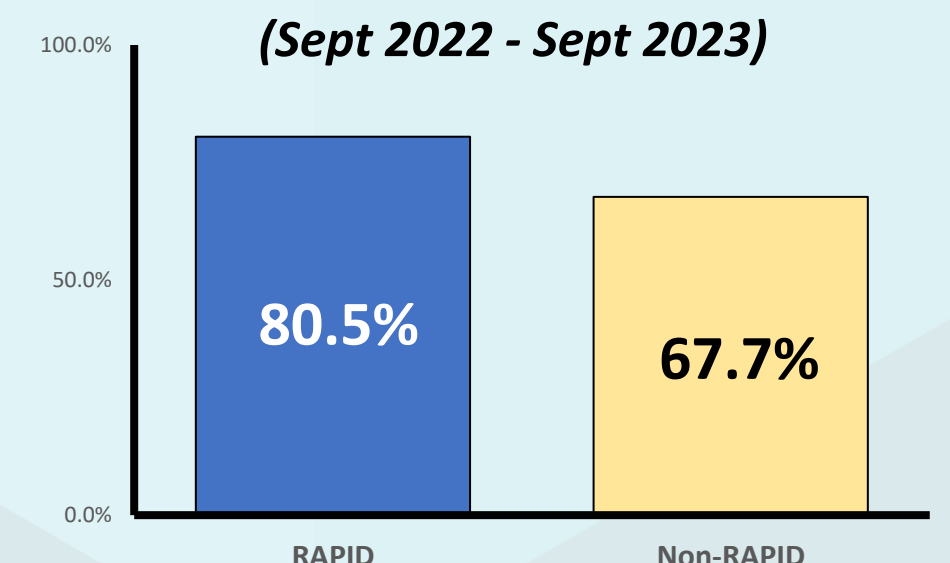
RAPID is now available in 6 NHG Polyclinics, from the initial 2. We also see an increased uptake of RAPID patients from FY19 to FY21.



Compared with Non-RAPID (n=1153), RAPID patients (n=507) have:

- Statistically significant improvement ( $p < 0.05$ ) in pain & function scores.
- Improved moderate anxiety/depression scores.

**EQ5D: Improvement in Anxiety and Depression<sup>#</sup>**  
(Sept 2022 - Sept 2023)



<sup>#</sup>Analysing those with at least moderate severity anxiety and depression or worse; n=46, 78 (RAPID vs Non-RAPID).

References  
1. Global Burden of Disease Collaborative Network. Global Burden of Disease Study 2019 (GBD 2019). Seattle, United States: Institute for Health Metrics and Evaluation (IHME), 2020  
2. Fritz, E. Lane et al. Physical Therapy Referral from primary care for acute back pain with sciatica: a randomized controlled trial. Epub 2020 Oct 16  
3. Timing of Physical Therapy Initiation for non-surgical management of musculoskeletal disorders and effects on patient outcomes: A systematic review. Ojha HA, Wyrsta NI, Davenport TE, et al. Journal of Orthopaedic & Sports Physical Therapy Feb 2016  
4. Effects of waiting for outpatient physiotherapy services in persons with musculoskeletal disorders: a systematic review. Simon Dislaurova, b, Disability And Rehabilitation https://doi.org/10.1080/09638288.2019  
5. Reducing wait time from referral to first visit for community outpatient services may contribute to better health outcomes: a systematic review. Annie K. Lewis, et al. BMC Health Services Research (2018) 18:869