

## **Project Title**

Advanced Practice Physiotherapists in TTSH Emergency Department

## **Project Lead and Members**

Project members: Ms Ngo Xueting, Mr Loh Wei Bing, Dr See Keng Kew Terence, Dr Quek Yong Jing Daniel, Mr Christopher Ng Thong Lian, Adjunct Assistant Professor Ang Hou, Adjunct Associate Professor Lee Keng Thiam, Adjunct Associate Professor Sreedharan Sechachalam, Dr Tandon Ankit Anil, Mr Ringo Yee You Wah, Ms Sharika Udipi, Ms Ong Pei Gin, Ms Vanessa Ho Yi Ki

## **Organisation(s) Involved**

Tan Tock Seng Hospital

## **Healthcare Family Group(s) Involved in this Project**

Allied Health, Medicine

## **Applicable Specialty or Discipline**

Emergency Medicine, Hand & Reconstructive Microsurgery, Orthopaedic Surgery, Physiotherapy

## **Project Period**

Start date: 2018

Completed date: May 2022

## **Aims**

To address prolonged wait times and mitigate risks of chronic pain for MSK patients in TTSH ED, a revolutionary shift towards early physiotherapy intervention was undertaken.

## **Project Attachment**

See poster appended/ below

## **Background**

See poster appended/ below

## **Methods**

See poster appended/ below

## **Results**

See poster appended/ below

## **Lesson Learnt**

Engaging multiple stakeholders is crucial for the project's success, requiring continuous collaboration toward a shared goal. The unforeseen disruptions caused by Covid-19 necessitated flexibility and effective communication among collaborating departments. The project's achievements hinge on the support and collaboration of all stakeholder departments.

Looking ahead, the team plans to expand the scope of practice for APPs, enabling them to prescribe pain medications and issue medical certificates, as well as to extend the service into outpatient clinic settings. As the proposal for such an extended scope of practice for physiotherapists is a first in Singapore, some anticipated challenges include concerns about patients' safety, going through stringent review process before being granted Clinical Board's approval. These can be overcome via the ongoing engagements with stakeholders and aligning with guidelines from MOH to develop a framework that includes robust training and stringent governance to ensure safety in clinical care.

### **Additional Information**

National Healthcare Innovation & Productivity (NHIP) 2024 – Best Practice (Care Redesign category)

### **Conclusion**

See poster appended/ below

### **Project Category**

Care & Process Redesign

Access to Care, Turn Around Time and Waiting Time

### **Keywords**

Advance Practice Physiotherapy, Emergency Care

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# Advanced Practice Physiotherapists in TTSH Emergency Department

Physiotherapy Department, Department of Emergency Medicine, Department of Orthopaedic Surgery, Department of Hand and Reconstructive Microsurgery, Department of Diagnostic Radiology

## Problem and Background

Musculoskeletal (MSK) cases are often seen in Tan Tock Seng Hospital (TTSH)'s Emergency Department (ED), contributing to increased patient load and long waiting times, which may increase MSK patients' frustration and pain. In 2022, TTSH ED encountered 19,000 patients presenting with potential MSK issues, a number expected to rise due to an aging population. The current system mandates a doctor's assessment and referral for physiotherapy, resulting in multiple touchpoints, prolonged wait times and delayed access to physiotherapy care for MSK patients. This not only impacts patient well-being but also strains healthcare resources. Addressing this gap in MSK patient care is crucial, considering the high Burden of Disease and escalating healthcare needs in Singapore's aging population, ultimately benefiting both patients and the healthcare system.

## Solution Planning and Implementation

To address prolonged wait times and mitigate risks of chronic pain for MSK patients in TTSH ED, a revolutionary shift towards early physiotherapy intervention was undertaken. Collaborative efforts involving five TTSH stakeholder departments led to the development of the new ED Advanced Practice Physiotherapist (APP) care model (Diagram 1). The transformative approach aligns with international best practices which showed improvements in wait time, throughput time, and patient outcomes.

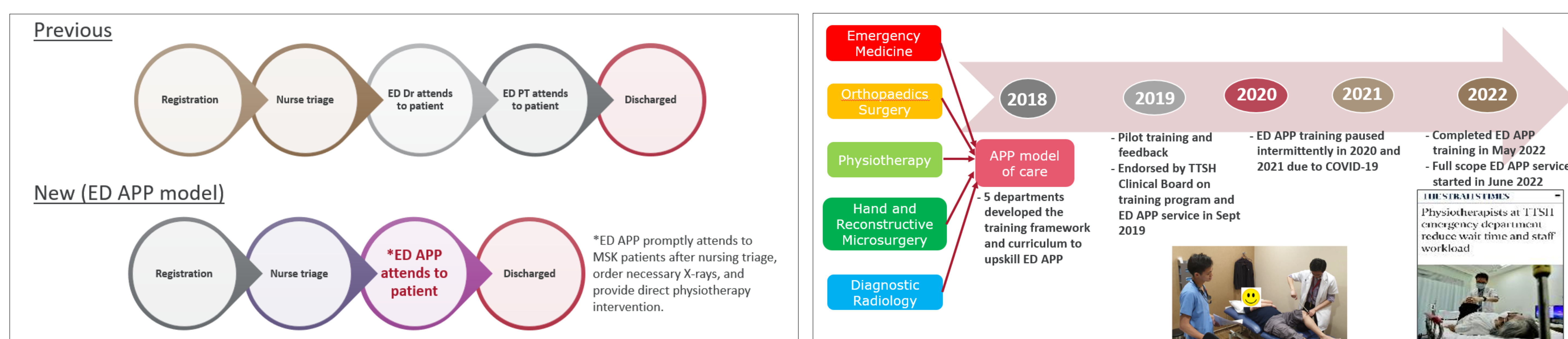
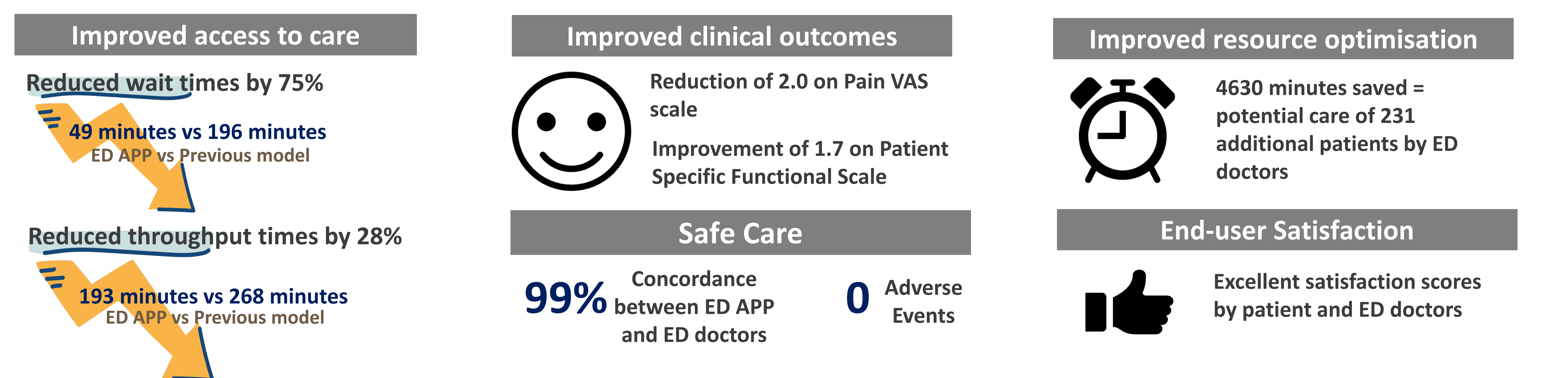


Diagram 1: Previous vs New model of care for MSK patients in ED

Diagram 2: Project implementation timeline

To enhance the skills of physiotherapists in the new care model, a comprehensive upskilling program was created and piloted. The training program and service model were successfully approved by the TTSH Clinical Board in September 2019. Training of the ED APPs were provided by doctors from the stakeholder departments and was completed in May 2022 due to the disruptions from the Covid-19 pandemic, with full-scale implementation of the ED APP service commencing in June 2022 (Diagram 2). Since service inception till December 2023, 463 patients have benefited from swift access to the care by ED APPs, marking a significant leap forward in MSK patient care in TTSH ED.

## Outcomes and Impact



## Extent of Spread and Scale

The ED APP service began in TTSH ED in June 2022, with three fully trained ED APPs and ongoing training for two more, set to complete in May 2024. There are plans to extend the X-ray ordering privileging of the ED APPs to outpatient clinic setting for upskilled physiotherapists to order X-rays in another pre-SOC model of care with the aim to reduce unnecessary referrals to TTSH Orthopaedic Specialist Outpatient Clinic. The team has been invited by the Ministry of Health (MOH) to be part of a workgroup currently looking into developing a national framework for extended scope practice for physiotherapists. TTSH's ED APP service has also attracted interest from other healthcare institutions seeking to implement similar services in their Emergency Departments.

## Acknowledgements

**Team members:** Ms Ngo Xueting, Mr Loh Wei Bing, Dr See Keng Kew Terence, Dr Quek Yong Jing Daniel, Mr Christopher Ng Thong Lian, Adjunct Assistant Professor Ang Hou, Adjunct Associate Professor Lee Keng Thiam, Adjunct Associate Professor Sreedharan Sechachalam, Dr Tandon Ankit Anil, Mr Ringo Yee Yiu Wah, Ms Sharika Udipi, Ms Ong Pei Gin, Ms Vanessa Ho Yi Ki

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