



Tan Tock Seng
HOSPITAL
National Healthcare Group

Advanced Practice Physiotherapists in TTSH Emergency Department

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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.

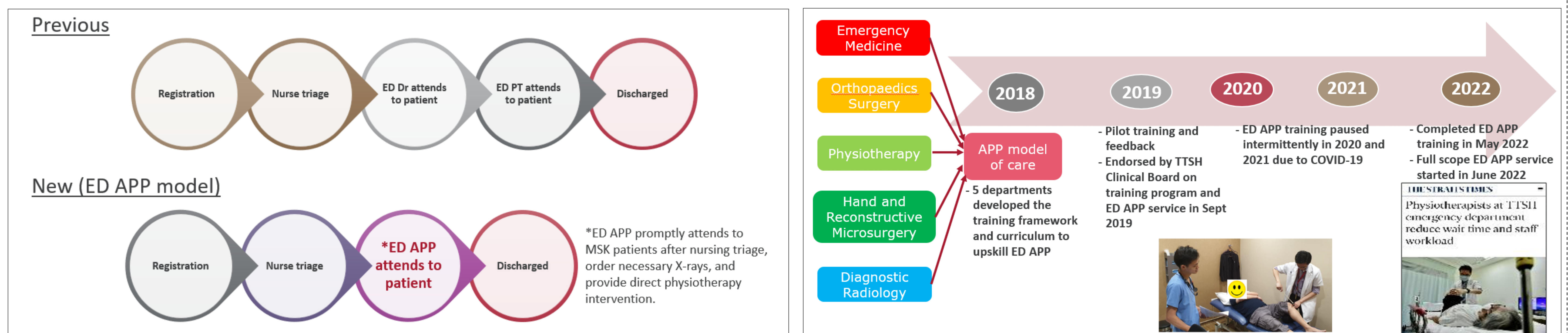
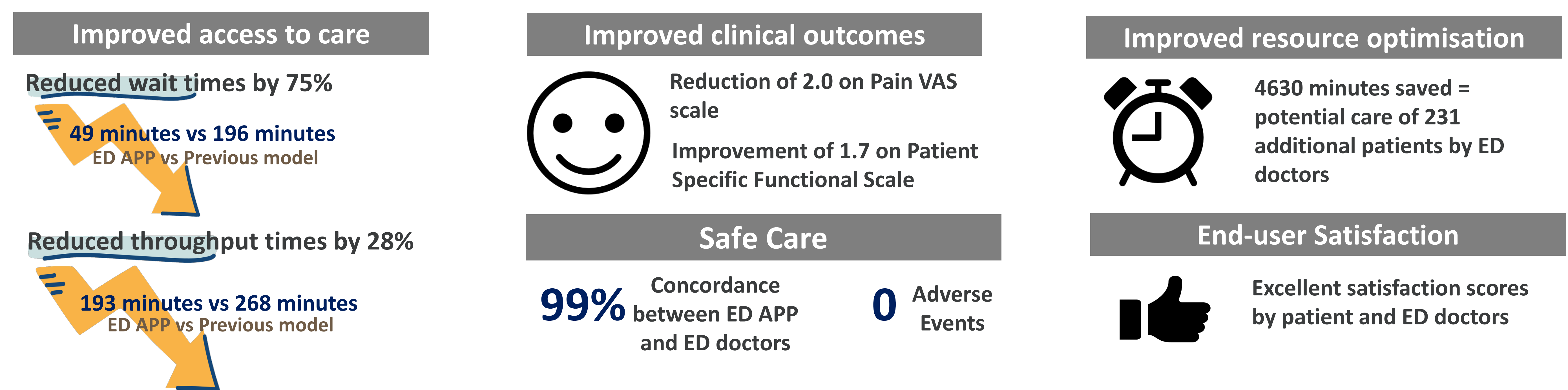


Diagram 1: Previous vs New model of care for MSK patients in ED

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.

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