

# National Quality Improvement Conference

## Physiotherapy-Led Spine Triage And Rehabilitation (STAR) Clinic: An Initiative To Improve Wait Times

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### Problem Statement

The Sengkang Orthopaedic Spine department is facing a growing challenge of increasing referrals and prolonged waiting times. Referrals from polyclinics have a **median wait time of 61 days**, with **34.5% of patients waiting for more than 60 days** before they can secure an appointment to see an Orthopaedic Spine Physician. Long waiting times have been associated with higher defaulting rates, resulting in wasted clinic slots and delaying the flow of care. Moreover, delays in diagnosing patients with 'red flag' presentations, who require urgent care, increase the likelihood of an unfavourable recovery prognosis.

### Project Aim

To reduce percentage of patients with waiting time to appointment (WTA) more than 60 days from **34.5% to less than 10%**.

### Potential Solutions

#### ☆ Physiotherapist Preparation Course

- 3-month course consisting of:
  - Shadowing Clinic Sessions
  - 2 MRI Interpretation Workshops
  - 3 Case-Based Discussion Workshops
  - Log-Book Completion - Consisting of common and red-flag spine conditions
  - Case Concordance Book – Minimum of 10 cases where physiotherapist and spine consultant had the same diagnosis and management plan

#### ☆ Rerouting of Spine Referrals

- Polyclinic spine referrals were re-routed from Medical Officer Clinics into STAR Clinic staffed with qualified physiotherapists
- Patients notified of their selection and voluntarily recruited

#### ☆ Virtual Screening Process

- Strict clinical exclusion criteria for "red-flag features" applied prior to in-person STAR clinic review

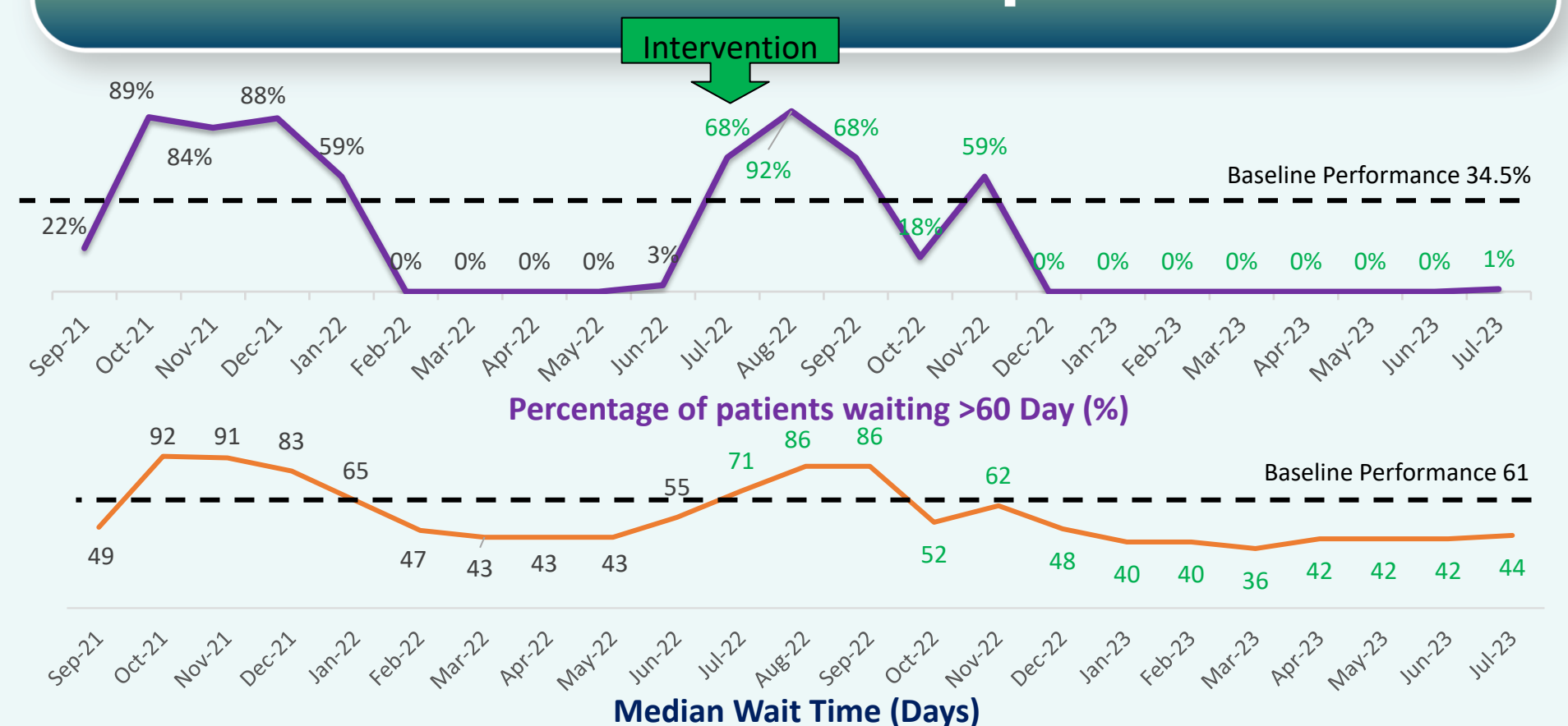
#### ☆ STAR Clinic Review

- 15 Minute History Taking and Clinical Examination
- 15 Minute Physiotherapy Session

#### ☆ Clinical Plans Determined

#### ☆ Case Discussion with Spine Consultant Surgeon

### Outcomes & Impacts

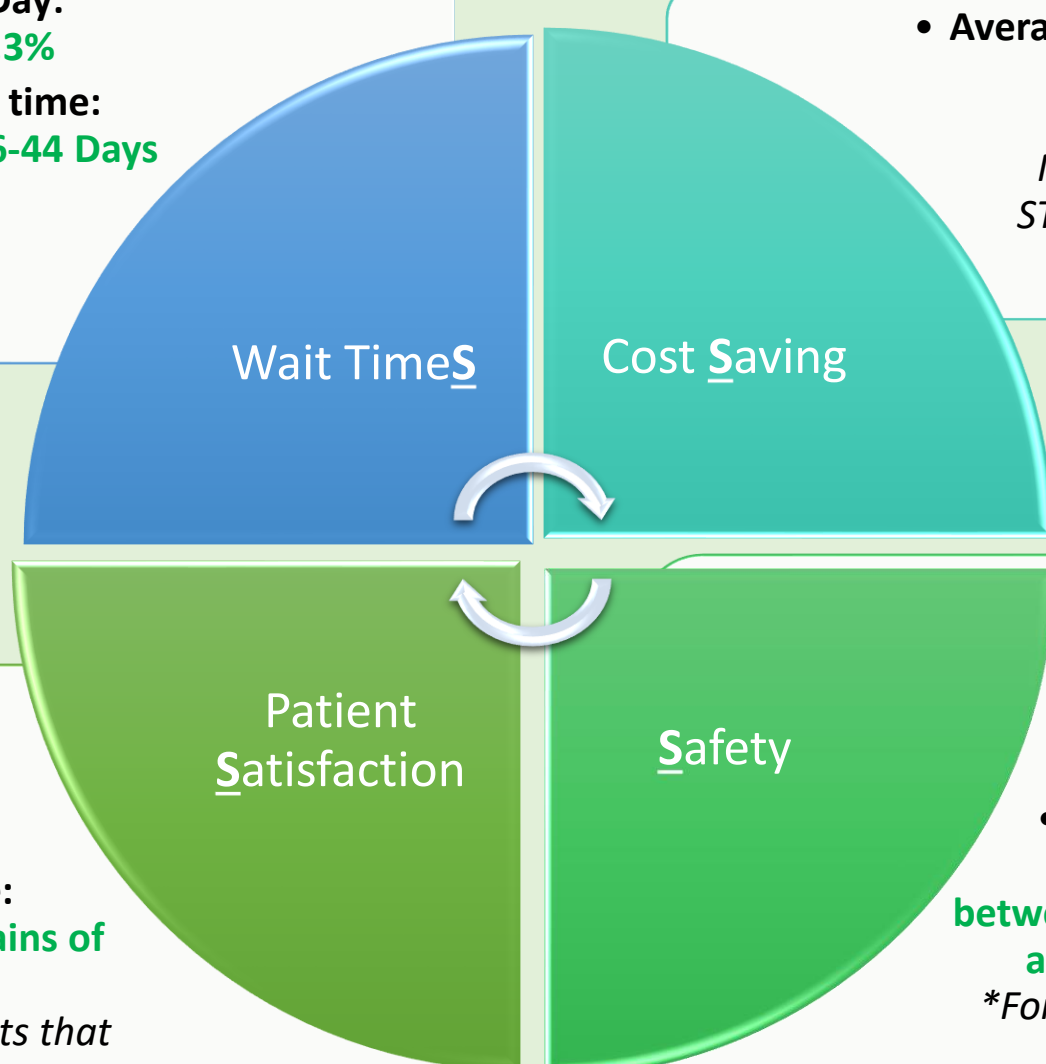


\*Starting in February 2022, the department initiated a major effort to reduce existing wait times by allocating additional clinics and manpower resources. This resulted in a period of improved wait times before the STAR program was implemented. These resources were subsequently removed once STAR was in place.

Our experience with our pilot study of a physiotherapist-led Spine Triage And Rehabilitation Clinic (STAR) has been overwhelmingly positive with **significantly reduced waiting times and high-cost savings, without any compromise on patient safety and satisfaction.**

For the future we are looking to expand on this service by not only driving further recruitment of spine referrals from polyclinics but to expand into other areas of Orthopaedics as well.

- Percentage of patients waiting >60 Day: 34.5% → 0-1.3%
- Median Wait time: 61 Days → 36-44 Days



- Average Cost Saving per patient: 415SGD (69%)  
MO Clinic - 602SGD  
STAR Clinic - 187SGD

- Patient Satisfaction Rate: 100% in all domains of questionnaire  
\*In the 87 patients that responded to the survey

- Concordance Rate: 99.5% agreement between physiotherapist and spine consultant  
\*For both diagnosis and treatment plan