

VALUE-BASED HEALTHCARE CONFERENCE 2024

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Improving Pre-operative assessment workflow for Anterior Cervical Discectomy and Fusion (ACDF) patients at Pre-Admission Centre (PAC)

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Background

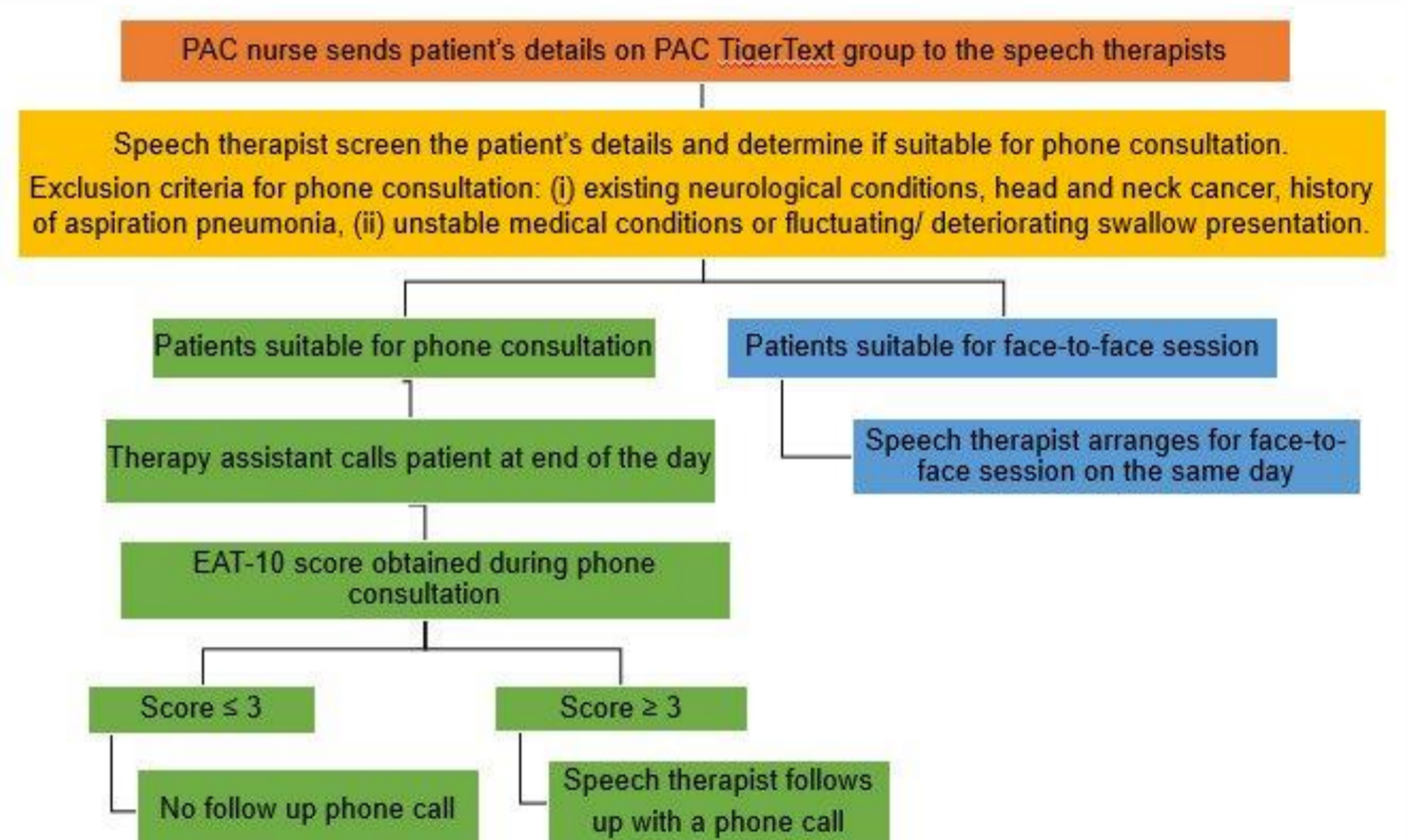
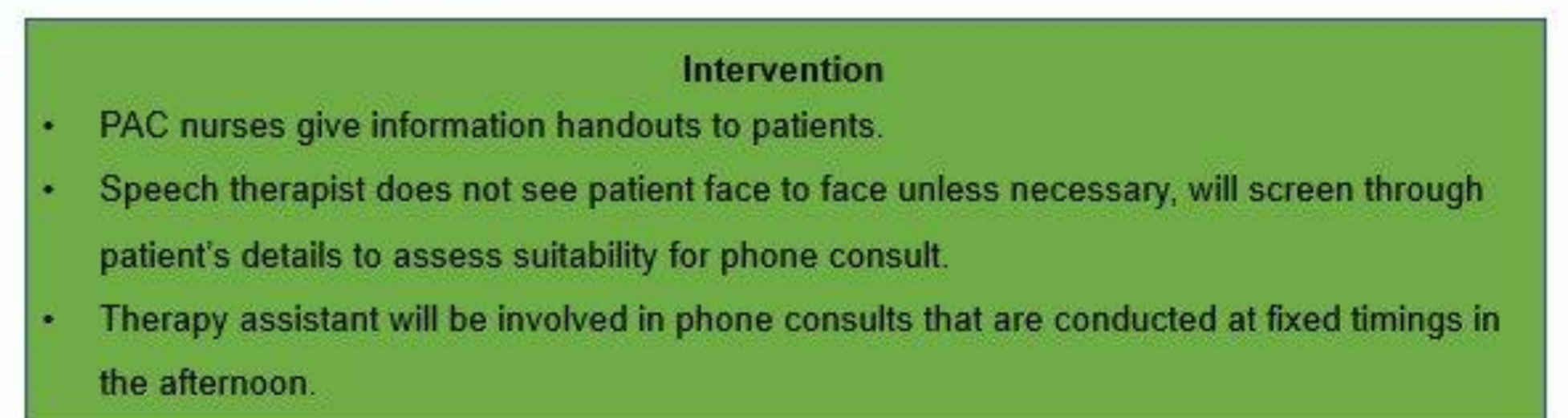
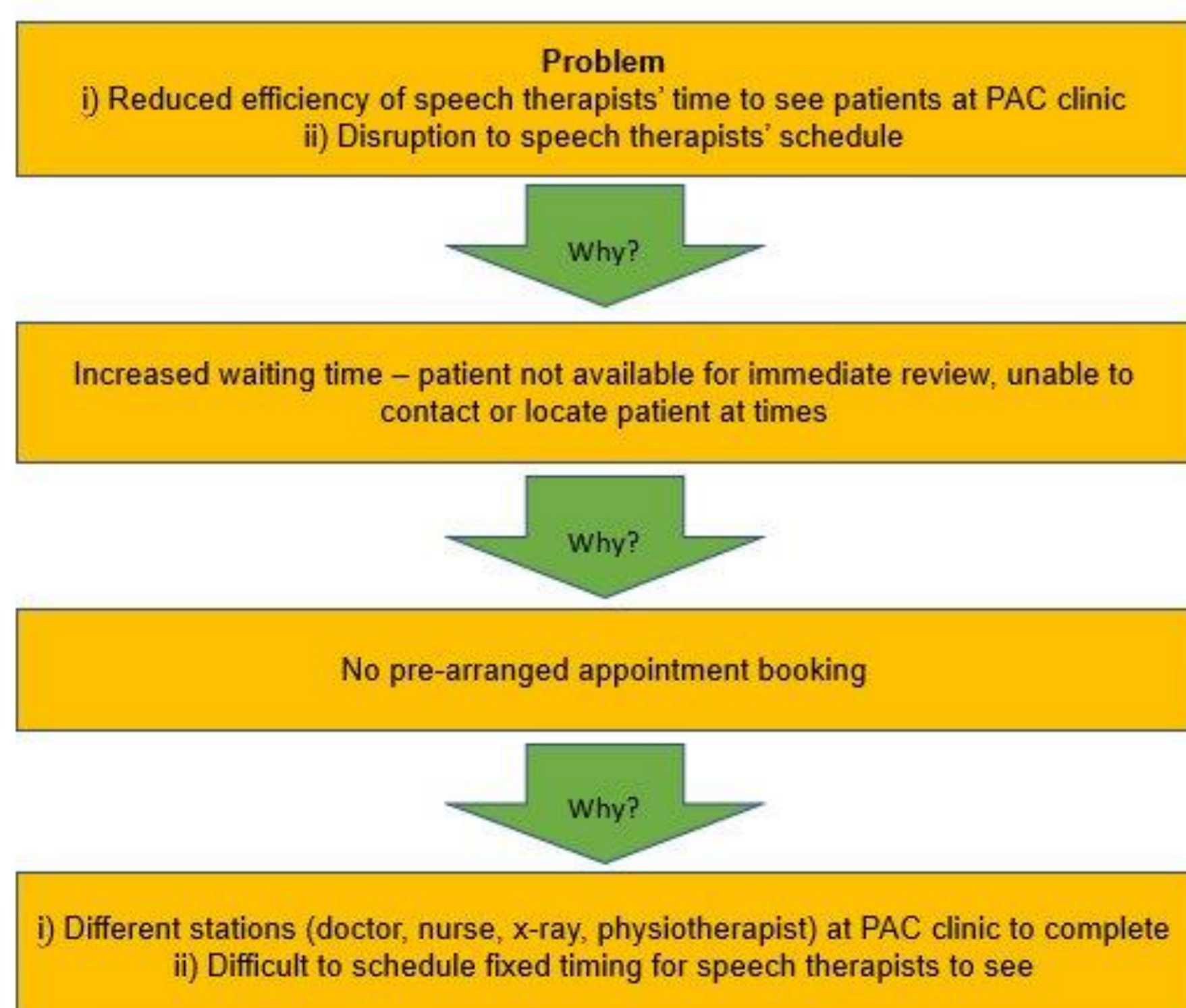
Potential complications of anterior cervical discectomy and fusion (ACDF) surgery include temporary voice and swallowing difficulties, with dysphagia incidence estimated at 3.3% to 87.5% based on existing literature. In Singapore General Hospital (SGH), the dysphagia incidence is 42%. Educating patients about the incidence and risk factors for these complications is essential to pre-operative management. The ACDF clinical pathway at SGH includes swallowing assessment and info-counselling by Speech Therapists (STs) pre and post-surgery. However, there was no pre-arranged appointment booking at the pre-admission centre (PAC), which resulted in increased waiting time for patients. Referrals for ST sessions could also come any time, disrupting ST's daily schedule.

Aim

To reduce time spent by STs in assessing ACDF patients from 30 minutes to 15 minutes, over a period of 4 months.

Methods

We utilized the 5 WHY diagram to identify root causes of reduced efficiency and develop a new workflow. Upon patient's arrival, PAC nurses distribute educational handouts and the Eating Assessment Tool 10 (EAT-10) questionnaire. Using predetermined criteria, patients are risk-stratified into phone vs face-to-face groups. For phone consultation patients, therapy assistants (TAs) conduct screening using the EAT-10 questionnaire and remind them to read the education handout. For identified higher risk patients, ST would provide face-to-face evaluation.



Results

We successfully reduced the average time spent by STs and TAs from 30 minutes to 15 minutes per patient (Fig 1). This has resulted in cost savings from the ST clinical resource perspective, as TAs can complete screening remotely for low-risk patients. Additionally, STs could allocate more time to urgent cases in inpatient wards and the overall waiting time for patients have also reduced.

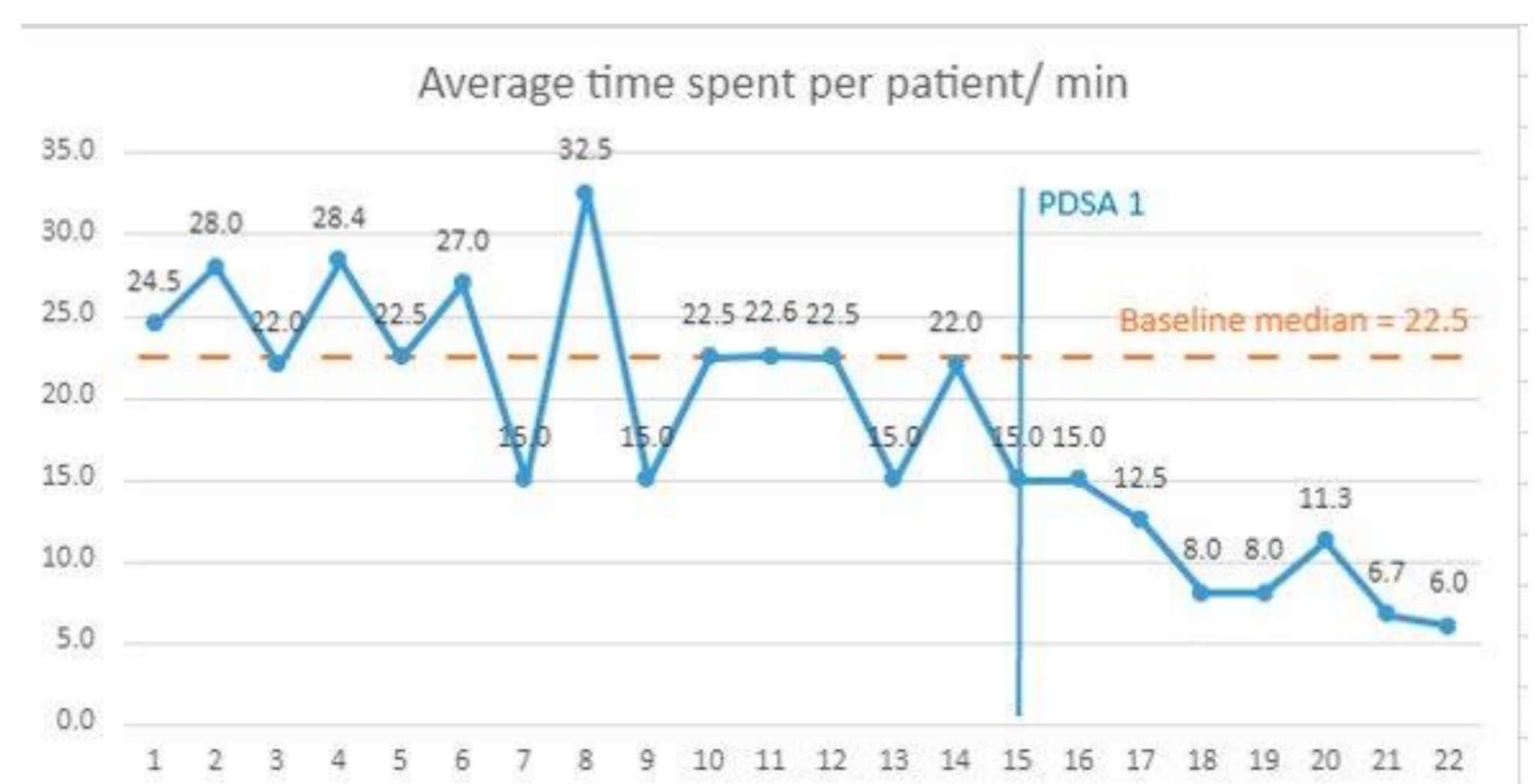


Fig 1. Average time spent per patient/min from Jan to Jul 2023. PDSA 1 started on 25 Jul 2023

Conclusion

Overall, the initiative effectively addressed the mission statement, improved patient care and optimized resources. The department plans to continue using the new workflow beyond the project's completion, ensuring sustained benefits for both patients and STs.