

Reduce Incidence of Rejected Blood Specimen

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Problem Statement

- There were high incidences of rejected blood specimens raised by the laboratory department. The average number of cases reported was **22** for Q1 2021. The top three reasons were haemolysis, clotting, and insufficient specimen collection
- Patient safety may be compromised if there are further delays in obtaining these laboratory results, as treatment decisions hinge on their timely availability

Project Aim

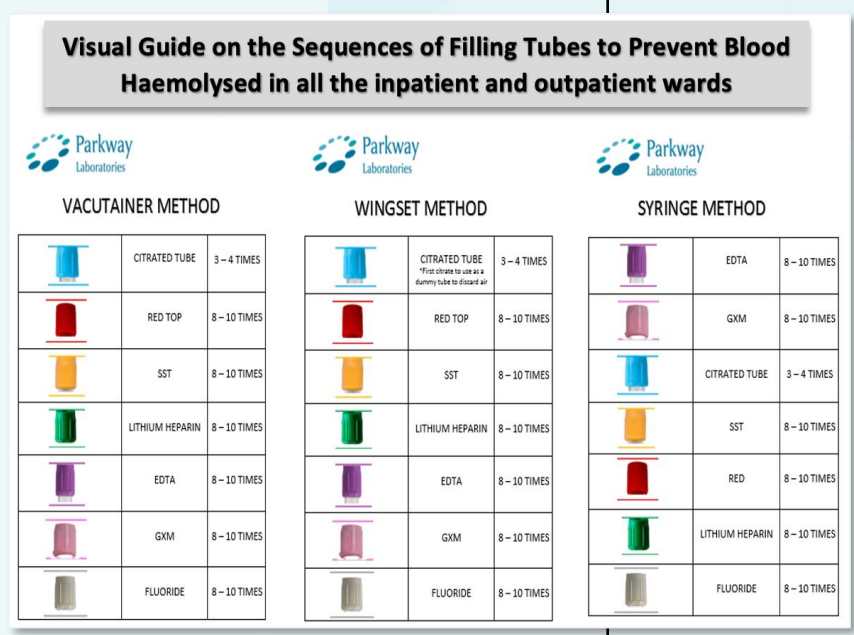
To achieve **ZERO** Blood Rejection across All Inpatient and Outpatient Department by September 2022



Lessons Learnt

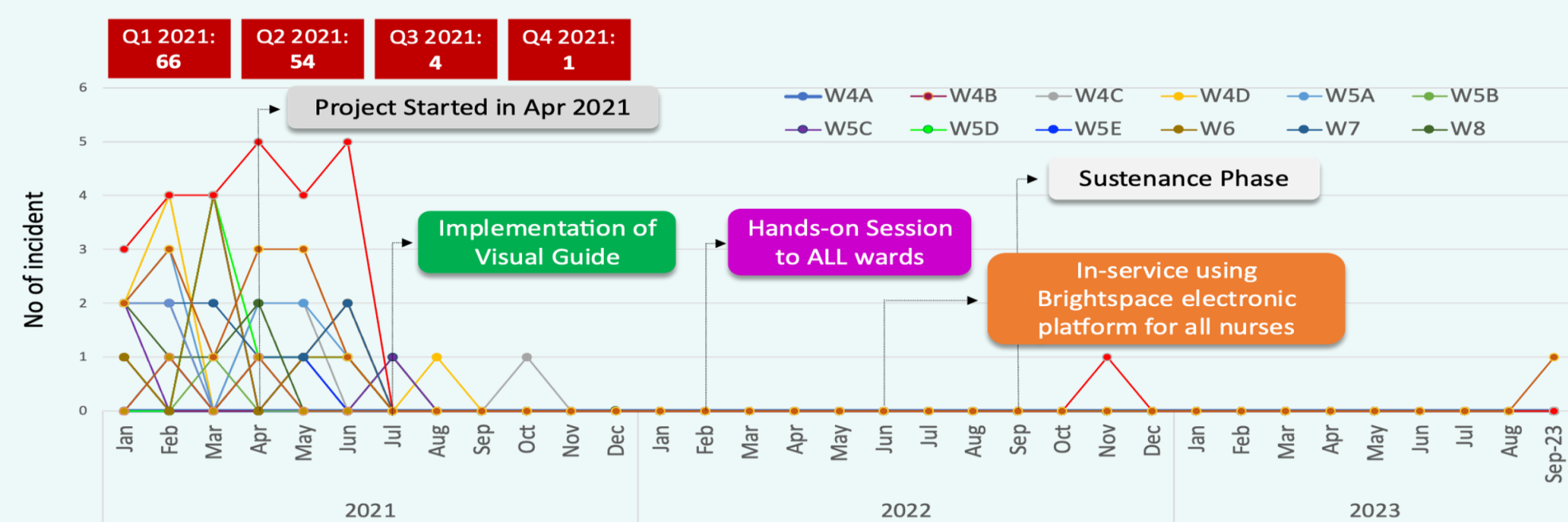
- Change management was challenging as it involved a change of mindset. Understanding and knowledge impact the standard of performance
- If we were to start over, the team would like to involve the Nurse Educators from the beginning because they will be able to provide valuable guidance in the planning and implementation of the training programme
- Systematic education for all newly joined nurses is vital to ensuring the sustenance of good outcomes

Potential Solutions

SOLUTIONS	DESCRIPTIONS
Visual Guide 	Educate the nurses on correct methods of <ul style="list-style-type: none"> • inversion of blood tubes and correct sequences of filling/drawing of blood
Hands-on session conducted by Principal Phlebotomist	<ul style="list-style-type: none"> • Educate the nurses that the tourniquet should be applied less than 1 minute • Demonstrate the technique on palpating or milking before venepuncture and to avoid over-tapping • Knowledge sharing on using 22 G (Black) or 23 G (Blue) to withdraw blood and 21 G (Green) to transfer blood into specimen bottle
In-Service training	<ul style="list-style-type: none"> • Using Brightspace electronic learning platform to educate all nurses

Outcomes & Impacts

Number of Rejected Blood Specimens 2021 to 2023 (Jan to Sep)



There was a significant reduction post-implementation. There was one case each in Nov 22 and Sep 23. When the team did a deep dive, the identified root cause was that both staff were new and had not yet attended the systematic training. This has been rectified as both staff have since been trained.

Benefits		
Patients	Nurses	Organisation
<ul style="list-style-type: none"> ❖ Received timely treatment ❖ Satisfied with nurses' blood taking competency 	<ul style="list-style-type: none"> ❖ Increased confidence ❖ Increased job satisfaction 	<ul style="list-style-type: none"> ❖ Cost effective ❖ Maintains good reputation