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Reducing MARSI incidence among post angioplasty patients in the Vascular Surgery Team

Problem Statement

Medical Adhesive Related Skin Injury (MARSI) is commonly observed on patient undergone angioplasty (femoral approach) in the Vascular Surgery Team.

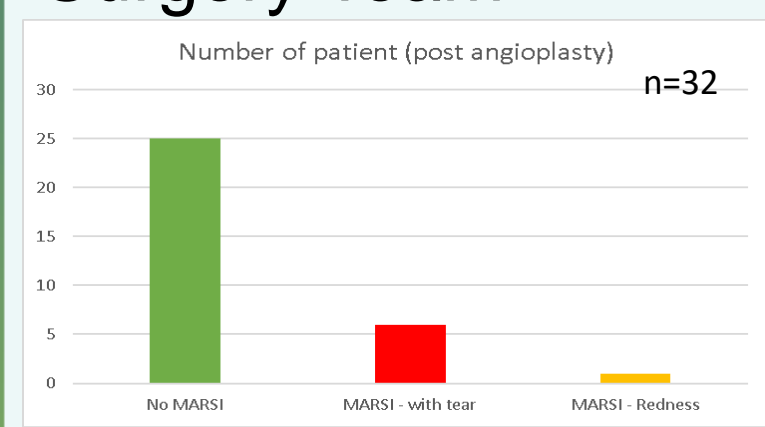
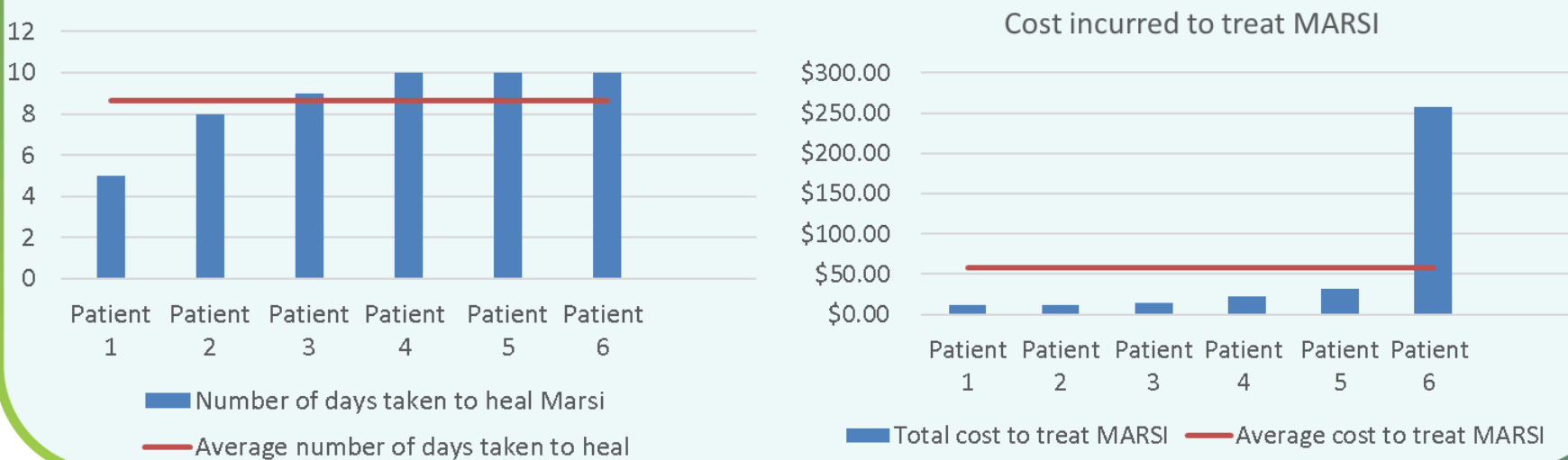
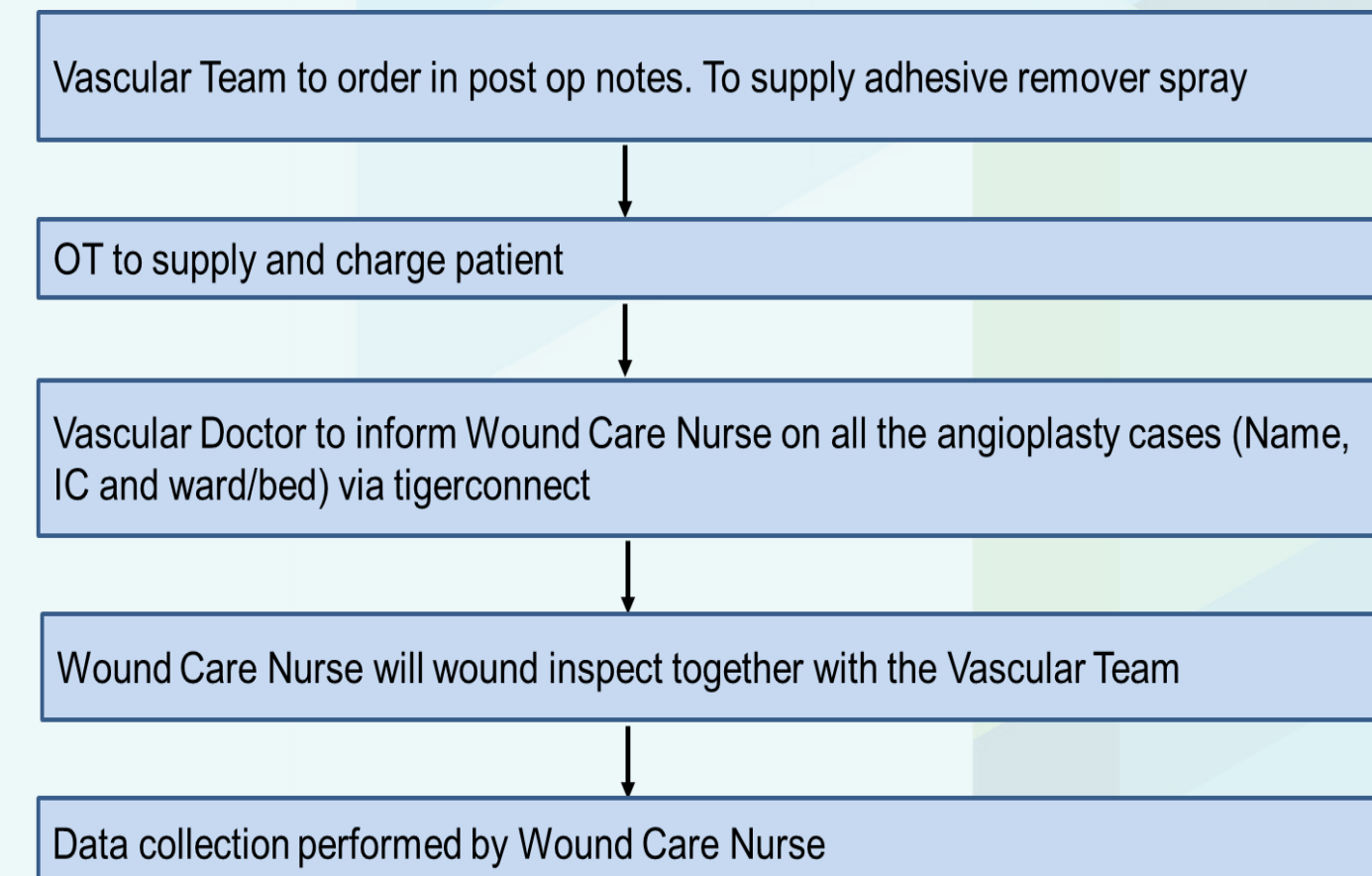


Figure 2. Example of a MARSI



Potential Solutions

Workflow was created to supply the adhesive remover spray post-operatively to enhance its accessibility.



(Image of the adhesive remover spray supply to ward)

Figure 4. Workflow of the groin compression pressure bandage

Train-the-trainer was conducted and step-by-step guide was created for future education.

Sequence	Instruction
Step 1	Always start removing the Elastoplast from the punctured site
Step 2	Hold the adhesive remover spray around 5-10cm away from the Elastoplast
Step 3	Spray evenly onto the Elastoplast and focus more on the groin and abdomen folds
Step 4	Gently remove the Elastoplast while supporting the skin



(Image of the Train the Trainer to Dr Harsha)

Figure 5. Guide for removal of the groin pressure compression bandage

Project Aim

Reduce the incidence of MARSI secondary to inappropriate technique of removal of groin compression pressure bandages in post-angioplasty patients between Jun and Dec 2021.

Lessons Learnt

Ishikawa diagram demonstrated the main challenges. Lack of resources and education were identified as the top two main challenges faced.

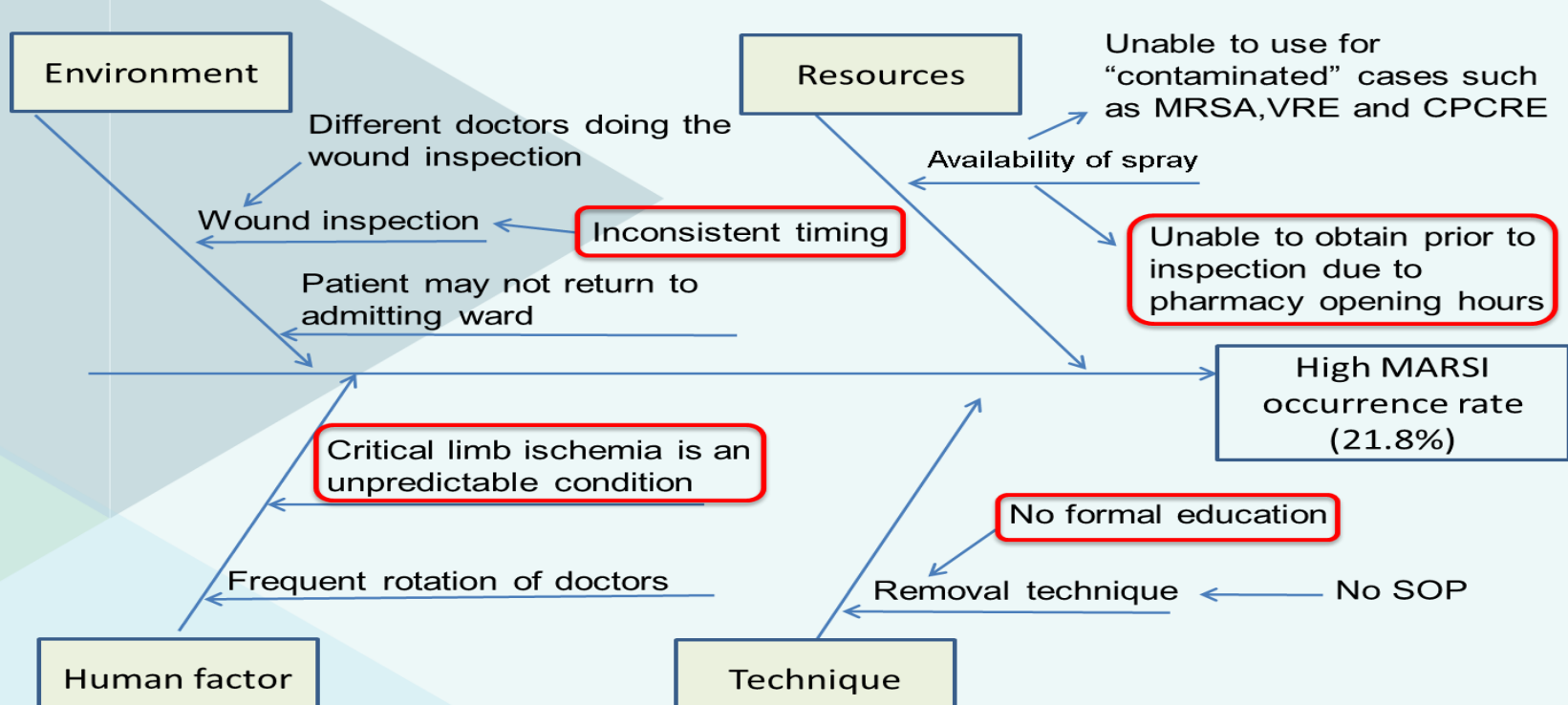


Figure 3. Ishikawa diagram for the cause of MARSI

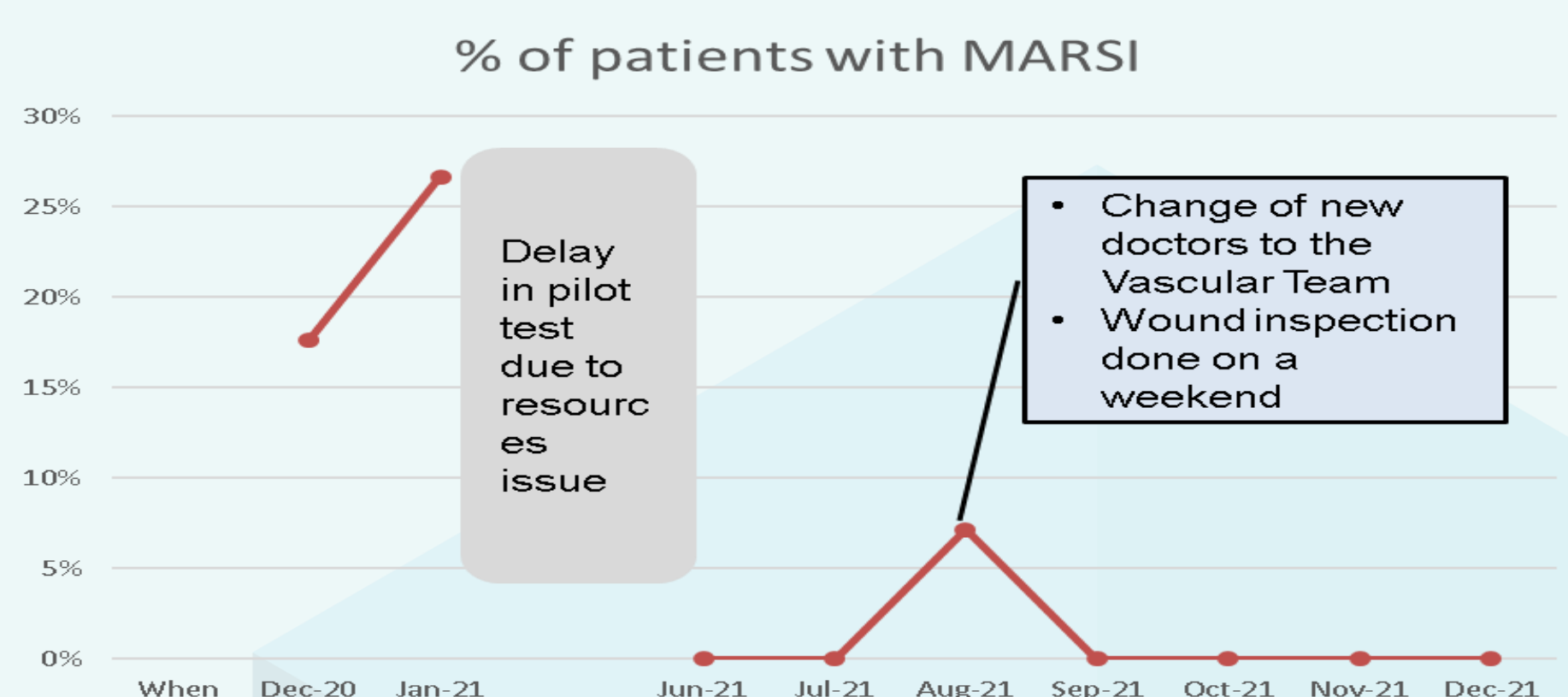
Data was shared with the Vascular Surgery Team and Operating Theatre nurses and a QI team was formed to look into strategies to reduce MARSI.

Outcomes & Impacts

The Team has achieved 0.01% MARSI (n= 93) incidence rate between Jun 2021 to Dec 2021.

1 MARSI was observed after removal of the compression bandage by newly rotated Doctor to the Vascular Team who have not been .

MARSI occurrence remains at 0% thereafter which indicated nil operational challenge.



The Team is looking into replacing the Train the Trainer on the proper technique of groin compression pressure removal by creating a video to educate the newly rotated doctors in the Vascular Team