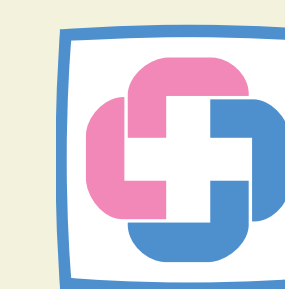




Singapore Healthcare
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DVT Prophylaxis – A Multidisciplinary Approach



KK Women's and
Children's Hospital
SingHealth

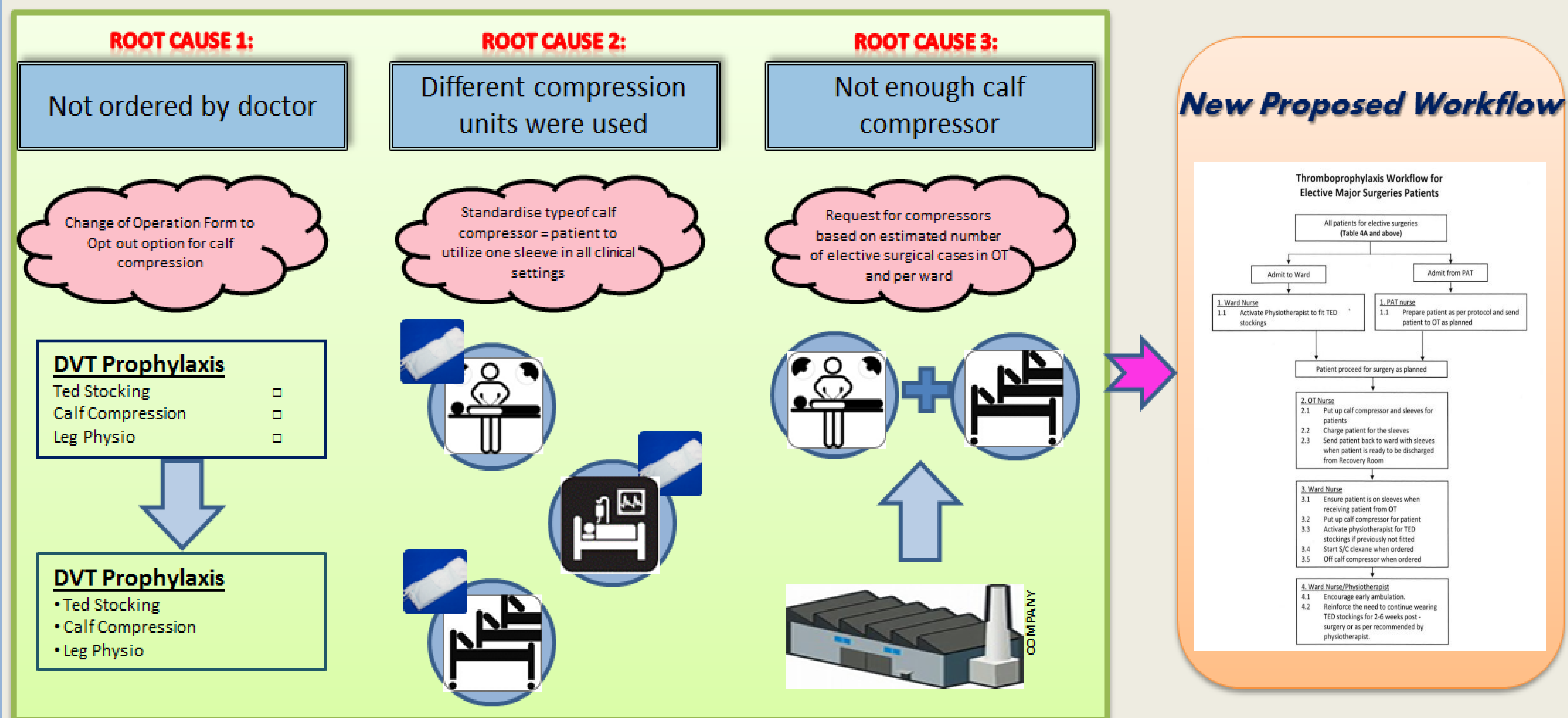
Ding Na, KK Women's and Children's Hospital
Teo Chor Cher, KK Women's and Children's Hospital
Tan Thiam Chye, KK Women's and Children's Hospital

Aim

Venous thromboembolism (VTE), which includes deep vein thrombosis (DVT) and pulmonary embolism PE), is common in patients after major surgeries due to the prolonged bed rest post-operatively and it can be fatal. Fortunately, VTE is highly preventable with implementation of appropriate DVT prophylaxis. In KKH, the DVT prophylaxis guideline for surgical patients includes three interventions: TED stockings, calf compressor and subcutaneous clexane. Despite these guidelines being in place for the last 10 years, a retrospective study conducted in May 2014 on surgical patients including obstetrics and gynaecology discipline, found a low compliance rate to the DVT prophylaxis guideline, especially in the use of calf compressors.

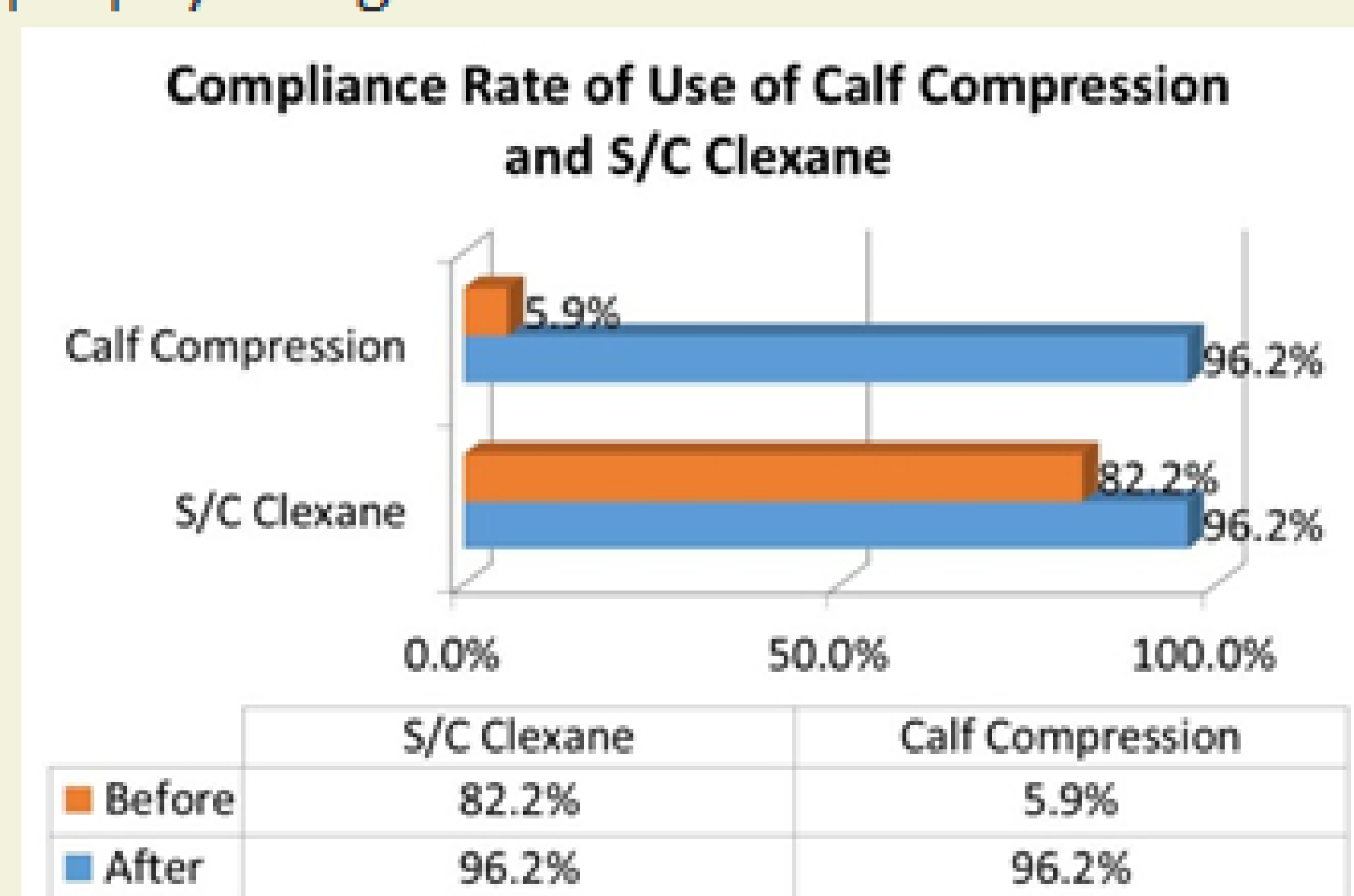
Methodology

A multidisciplinary team formed a taskforce with the aim to improve the compliance rate of DVT prophylaxis guideline to 95%. Three root causes were identified and the team proposed solutions to improve compliance. The taskforce also proposed a workflow to empower nurses, the use of similar calf compressors in all settings, as well as changes to documentation and instructions for implementation to improve the compliance rate of DVT prophylaxis guidelines.



Results

New workflow of "Thromboprophylaxis Workflow for Elective Major Surgeries Patients" was implemented in all adult wards and OT to enhance compliance. Calf compression units in wards and OT have been standardised to the same type. A post implementation audit showed great improvement in compliance to the DVT prophylaxis guideline.



An increase of
90.3%
in compliance rate of
use of calf compression

Conclusion

Compliance to DVT prophylaxis guidelines improved significantly after the implementation of all proposed solutions. A seamless flow for surgical patients is observed for receiving DVT prophylaxis measures from pre-operatively to post-operatively. With these improvements, it is hopefully that unfortunate instances of venous thromboembolism can be prevented for patients post major surgeries.

