



# TREAT YOU BETTER: PHLEBITIS REDUCTION PROJECT

CORONARY INTENSIVE CARE UNIT (CICU), HEART HOSPITAL

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## AIM

The aim is to reduce the occurrence of phlebitis from peripherally-inserted intravenous cannula in the Coronary Care Intensive Unit (CICU) within the 5% standard set by the Infusion Nurses Society (INS) by July 2017.

## INTERVENTIONS

The Phlebitis task force investigated evidence-based care interventions that could be adapted to the clinical settings. Multidisciplinary approaches were used to identify the common causes of phlebitis, to determine high risk patients for IV complications, and to implement interventions for these patients. These interventions include:

- Identifying drugs that are irritants and commonly causing IV complications such as Amiodarone and Inotropes.
- Utilization of the Visual Infusion Phlebitis (VIP) Scale.
- Focusing on early detection, reporting of intravenous complication, and proper selecting of vascular access device and site.
- Monthly compliance monitoring and presenting of progress in phlebitis reduction to the multidisciplinary team.
- Introduction of phlebitis safety calendar to track daily progress. Infection control and surveillance. Adherence to handwashing and change of administration set based on policy.
- Use of Personal Protective Equipment (PPE) and proper intravenous materials such as needless connectors, filters, and flow control devices.
- For Amiodarone and Inotropes, first preference is Gauge 18 cannula in antecubital vein and larger median vein. If not possible, the physician should be informed for alternatives like central line access.
- Anchoring of the cannula should be done properly. All cannula sites should be secured in a way that it cannot be moved. If possible, use of gauze bandage is recommended.
- Flushing of the line with 10 ml of Normal Saline whenever it gets disconnected or discontinued.
- Avoid measuring blood pressure in the affected arm.

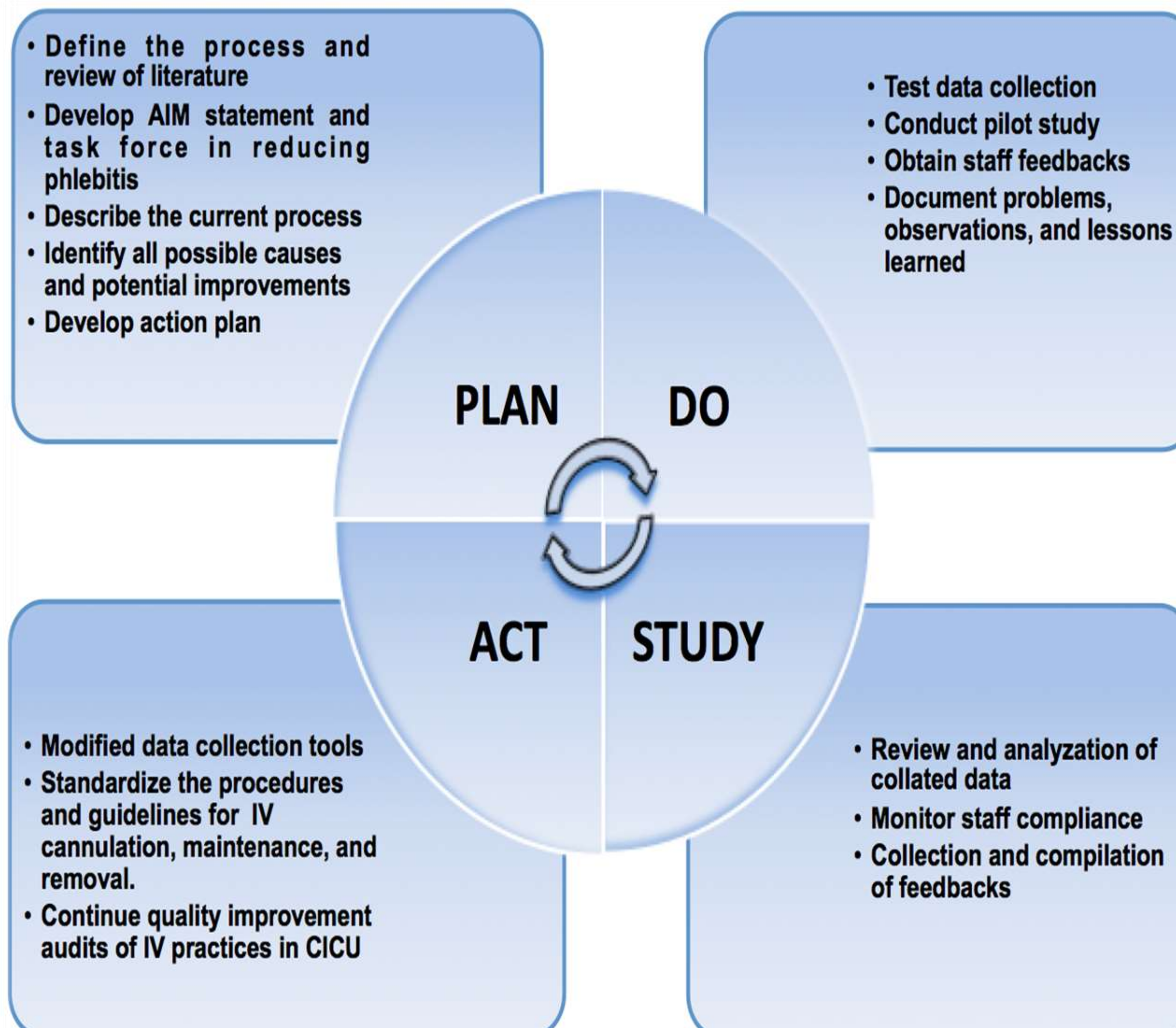


## CHANGE METHODOLOGY

The purposes of the project are to improve patient outcome and to optimize healthcare, especially in patients receiving different types of intravenous therapy that are prone to phlebitis.

Outcome indicators of Intravenous (IV) cannula dwell time as measured in hours and complication rates were measured in the study.

Strategies were tried through the Plan-Do-Study-Act (PDSA) cycle.



## CONCLUSION

The occurrence of phlebitis from peripherally-inserted intravenous cannula in the CICU of Heart Hospital for July 2016 is significantly above the 5% standard set by the INS.

After the implementation of the evidence-based practices, adhering to continuous monitoring and education, the phlebitis rate significantly decreased below the targeted rate.

## NEXT STEPS

- To achieve and sustain the 5% standard set by the INS by the end of first quarter of 2017.
- To continue monitoring compliance with the modified tools.
- To achieve a zero-rate phlebitis by the end of the second quarter of 2017.

## MESSAGE FOR READERS

- Phlebitis not only causes patient discomfort, it increases length of hospital stays and delays discharge, Hence, increases hospital costs.
- For Amiodarone infusions, the use of dedicated line, in-line filters should be implemented.
- Mandatory skin assessment of every 4 hours or as needed before infusion of any irritant drugs.
- Removal of cannula with the first sign of phlebitis. Notify a nurse regarding any pain, redness, and other changes.

## TEAM

- Dr. Ashfaq Patel, Director, CICU
- Dr. Poonam Gupta, QM
- Ms. Fatima Rustom, Pharmacy
- Mr. Prince Mathew, SN, CICU
- Ms. Deepthy Ulahannan, SN, CICU
- Ms. Nidhu Zachariah, SN, CICU

## ACKNOWLEDGMENT

- Prof. William McKenna, CEO, HH
- Mr. Paul Mavin, Executive Director, HH
- Mr. Ian McDonald, AEDON
- Ms. Fadia Ali, AED, Quality

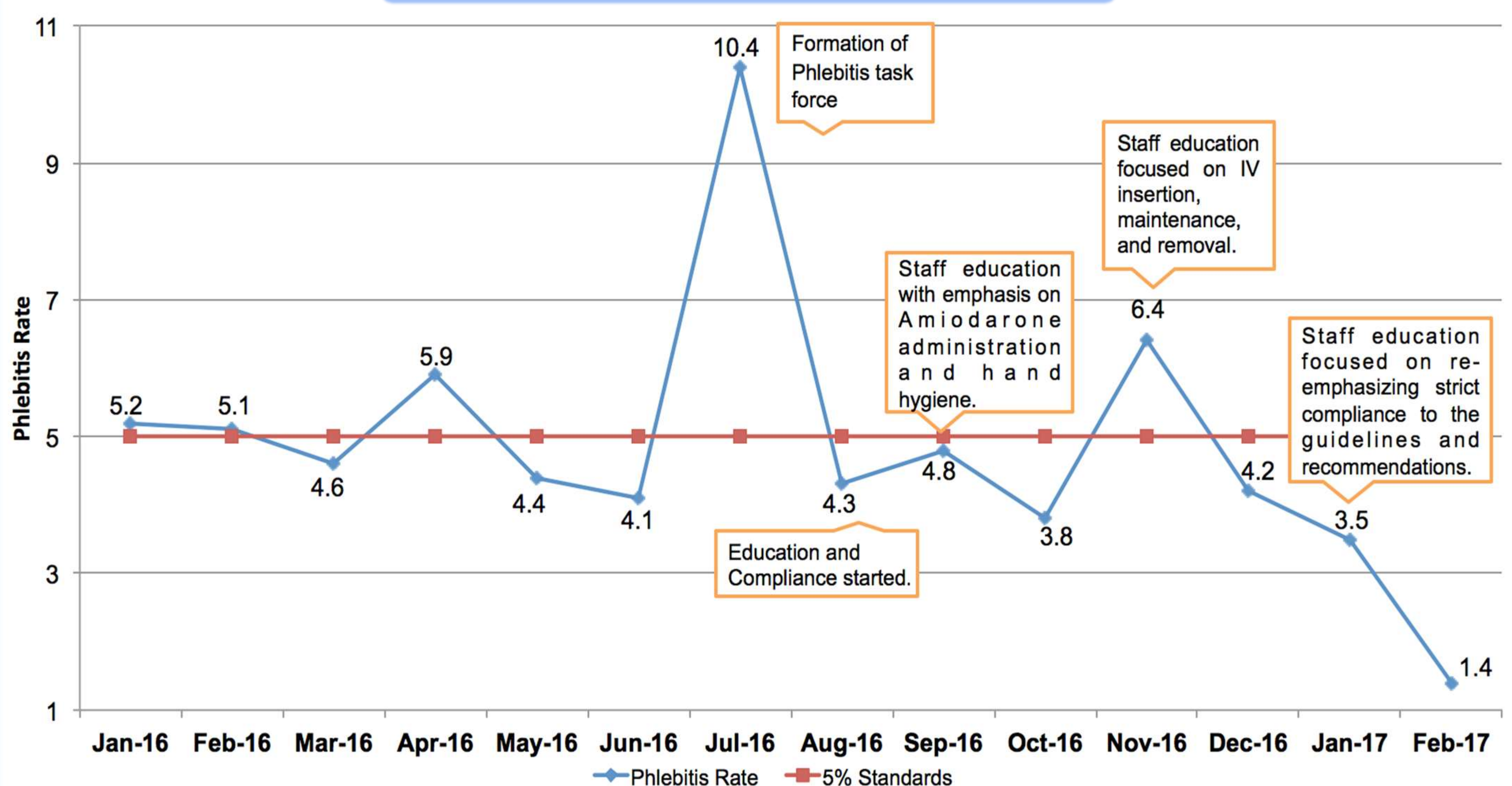
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## CONTACT DETAILS

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## RESULTS



Incidence of Phlebitis in CICU, January 2016 – February 2017

In Collaboration with

