

# National Quality Improvement Conference

## Peripheral but Essential: How to sustain a reduction in PIVC\*-related phlebitis

\*peripheral intravenous cannula

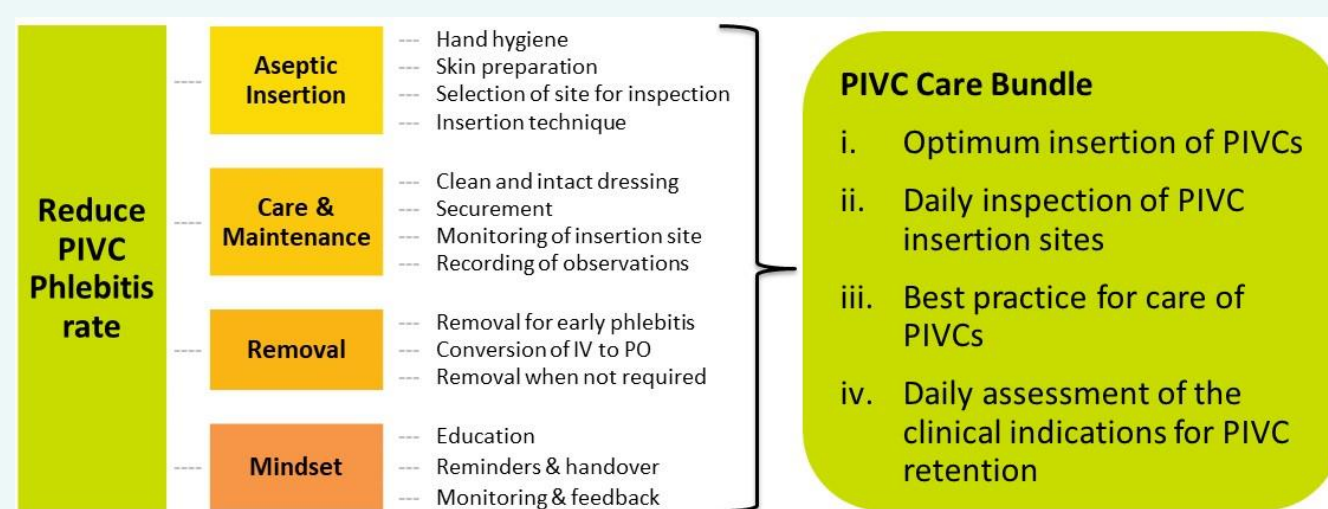
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### Problem Statement

Peripheral intravenous cannulas (PIVC) are the most common intravascular device used on patients. PIVC-related phlebitis is a relatively common complication resulting in pain, erythema and/or swelling. Serious complications such as thrombophlebitis, local abscess formation and bacteremia increase morbidity, duration of hospitalisation and treatment costs. Our introduction of the PIVC care bundle at two pilot wards led to an initial reduction in phlebitis rates from 7.1% and 7.8% respectively to 4.8% and 1.3%



### Potential Solutions

The teams utilised a multi-pronged approach involving both monitoring to ensure results are sustained along with interventions to encourage cultural change.

An overview of the strategies utilised is as follows:

### Interventions

#### Monitor

- ASK TAKE 5 Prospective monitoring**  
Joint monitoring with ward champions and infection control
- Immediate feedback**  
Quick feedback given after each monitoring session
- Data sharing in pantry**  
Outcome and process measures shared on pantry noticeboard
- IV/PO Acceptance of IV/PO**  
Monitor acceptance rate of IV/PO & discontinuation of infusions

#### Culture Change

- Role models & PIVC heroes**  
Joint monitoring with ward champions and infection control
- Patient Stories**  
Sharing stories about PIVC events and/or complications from patient's perspective
- Direct feedback**  
Enable quick correction of practices to improve care
- Ice-cream sessions**  
Act as reward and recognition for ward nurses  
Allows champions to understand challenges on the ground

### Project Aim

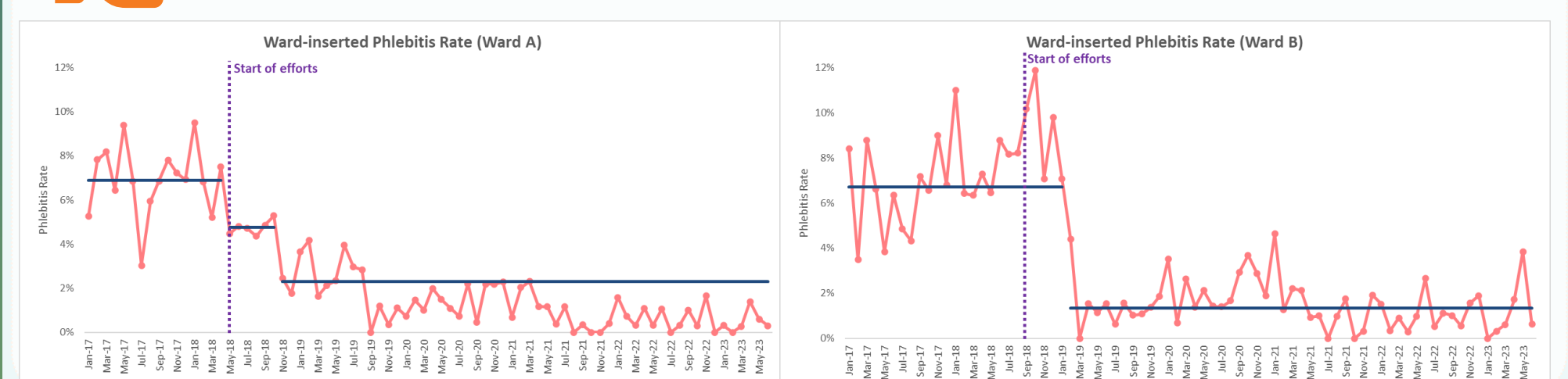
Our aim was to sustain the post-intervention PIVC-related phlebitis rates at our two pilot wards.

Outcome	Phlebitis Rate	Extracted from System (SCM)	Monthly
Process	Dressing clean and dry Presence of phlebitis Accurate documentation on SCM	Take 5 Audit (5 observations each by Ward and ICN)	Monthly
	Unnecessary PIVs	Removal Audit (5 observations each by Ward and ICN)	Quarterly
	Reduce unnecessary IV medications	Monitoring of intervention acceptance	Monthly

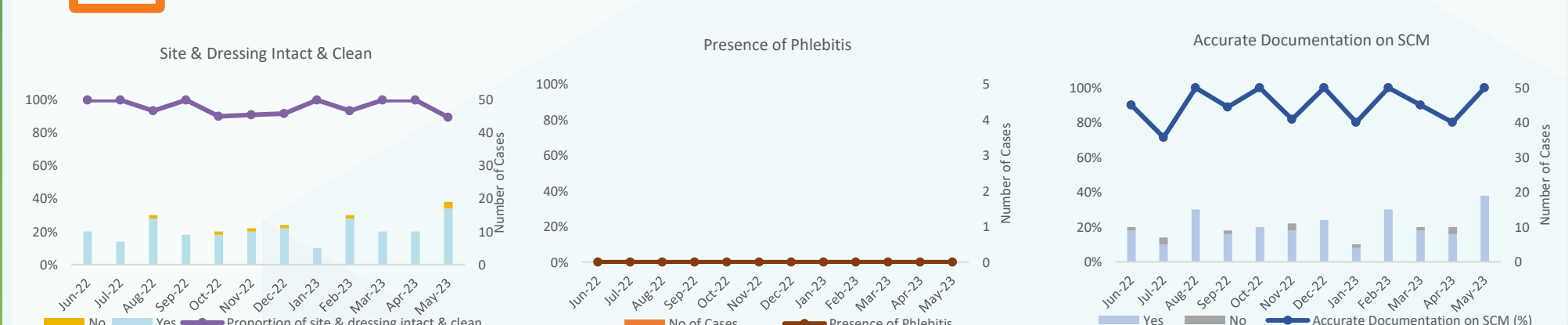
### Outcomes & Impacts

The measures below demonstrate that we were able to successfully sustain the improvement in phlebitis rates.

#### Sustained reduction in phlebitis rates



#### Monitoring of process measures



**80%** acceptance of pharmacist interventions  
(but small number of total of interventions per month)

number of unnecessarily retained PIVCs  
(but minimal decrease in total PIV days)

### Lessons Learnt

#### Importance of obtaining buy-in and support

- Department sharing / huddle to raise awareness of performance
- Proactive engagement by nurse clinicians / managers to ward staff to emphasise need to maintain processes to ensure low phlebitis rates

#### Acknowledge the impact created

- Provide reward and recognition e.g. giving 'small snacks' during huddles (e.g.; finger food, ice cream)

