

# A comprehensive care bundle reduces harm in patients with Central Venous Access Devices: A QI project

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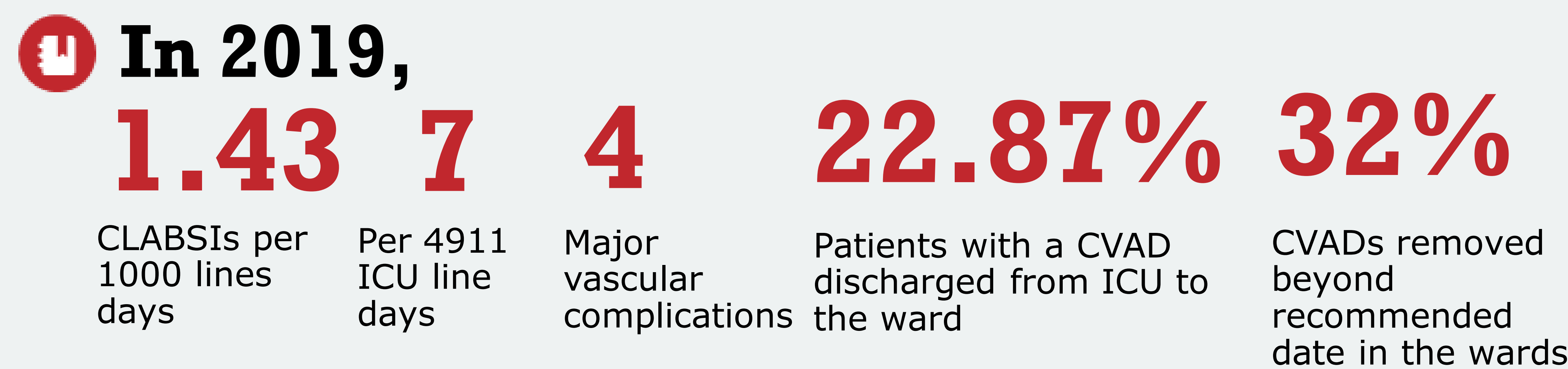
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## Background

- In 2019, Australia and New Zealand reported **0.53 CLABSIs** per 1000 lines days (111 per 209173 Line days)
- 0.1 to 1%** reported to have major vascular complications in literature
- Majority of CLABSIs were noted in patients with a CVAD inserted **outside** Canberra Hospital and patients **discharged with a CVAD** to the ward.

## Aims

- Reduce CLABSI rate to **zero** lines per 1000 lines days
- Reduce the major vascular complications to **zero**
- Decrease the patients discharged with a CVAD by **50 %** to the ward
- Achieve at least **80%** ICU JMOs accredited for CVC insertion

## Identified Risk factors

Lack of uniformity in training, education, standardised insertion packs, and equipment

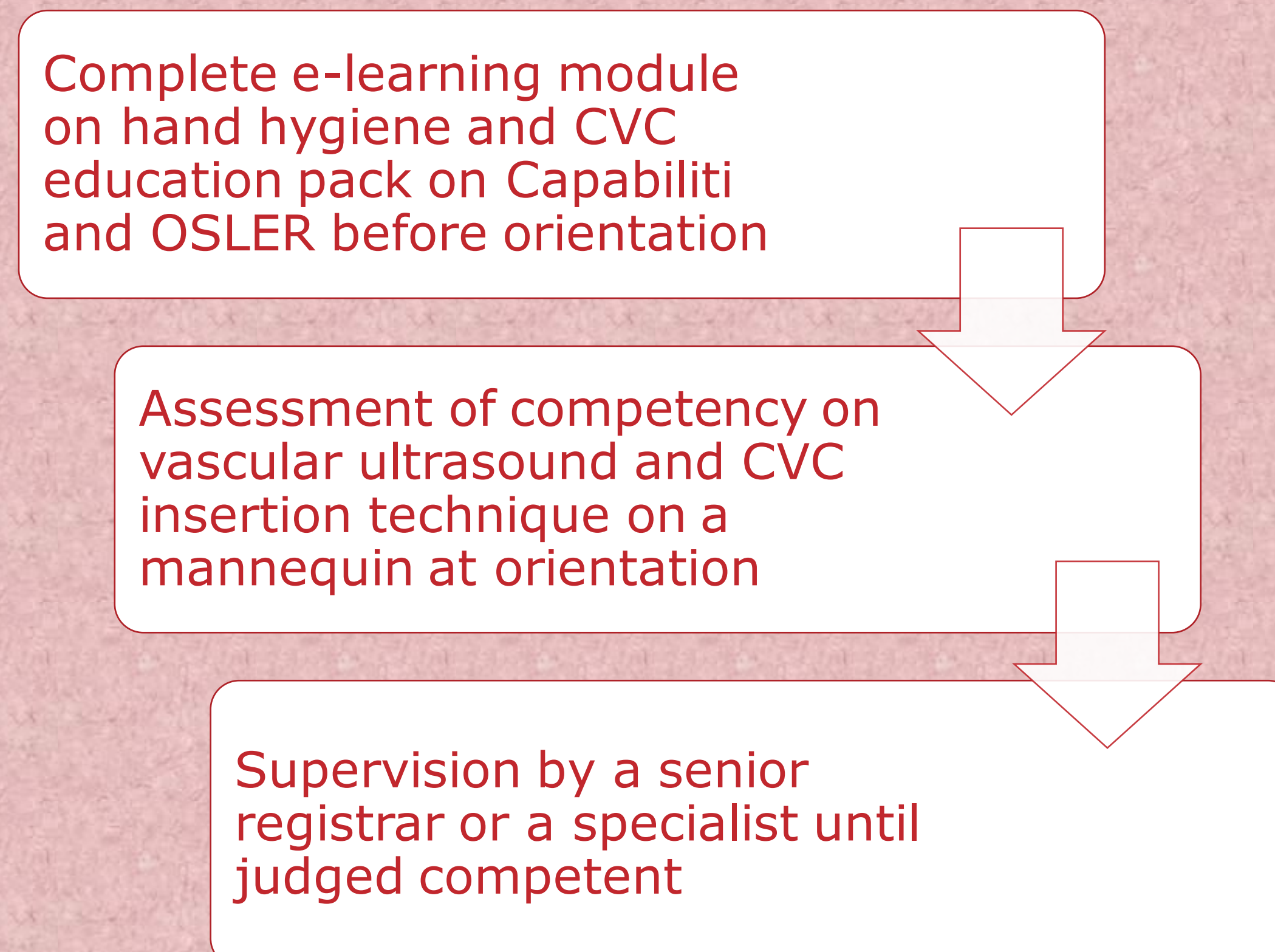
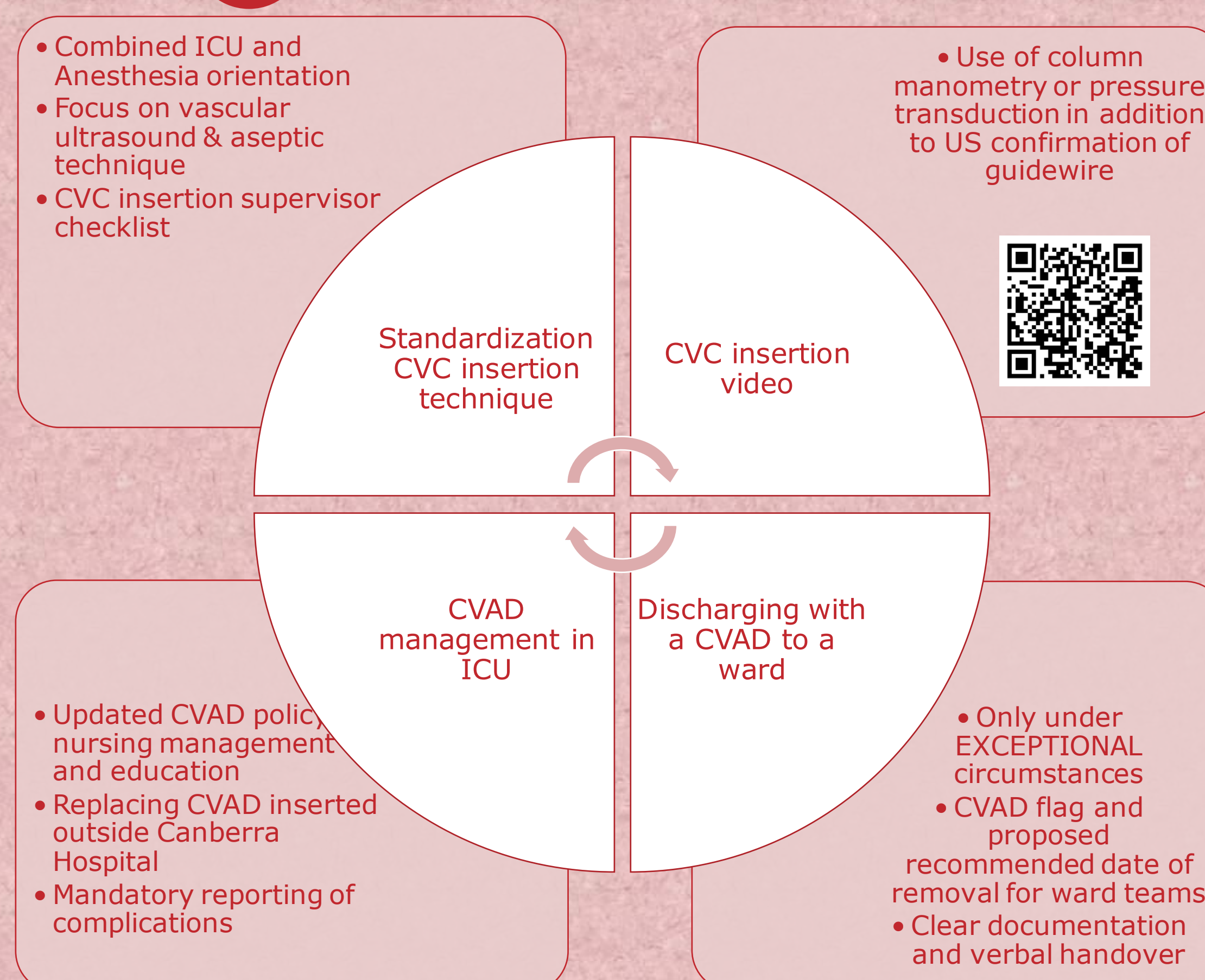
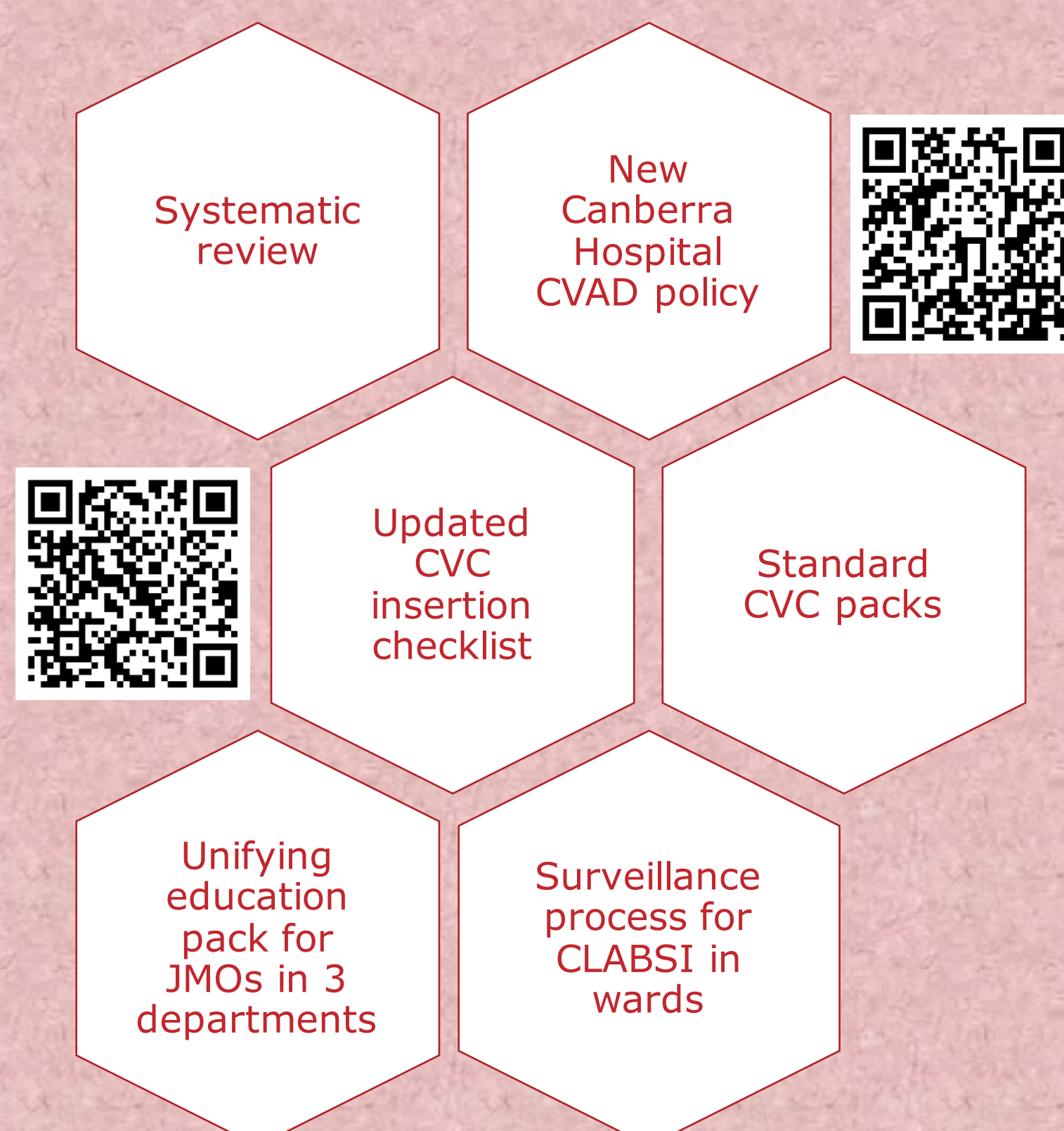
## Interventions

Multidisciplinary team from ICU, anaesthetics and emergency medicine at the Canberra Hospital

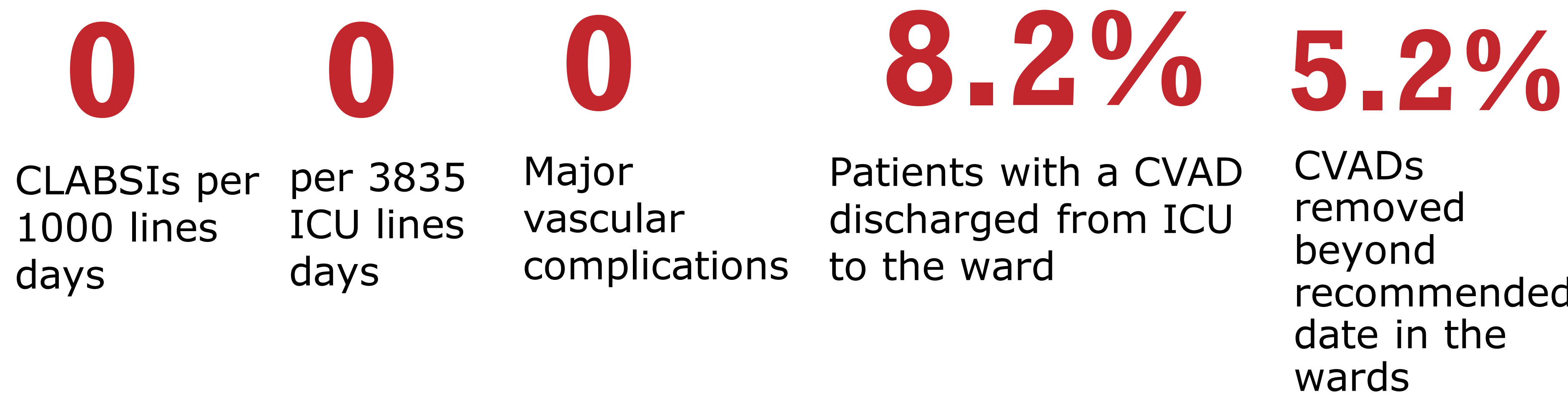
## Policy and checklists

## Staff education

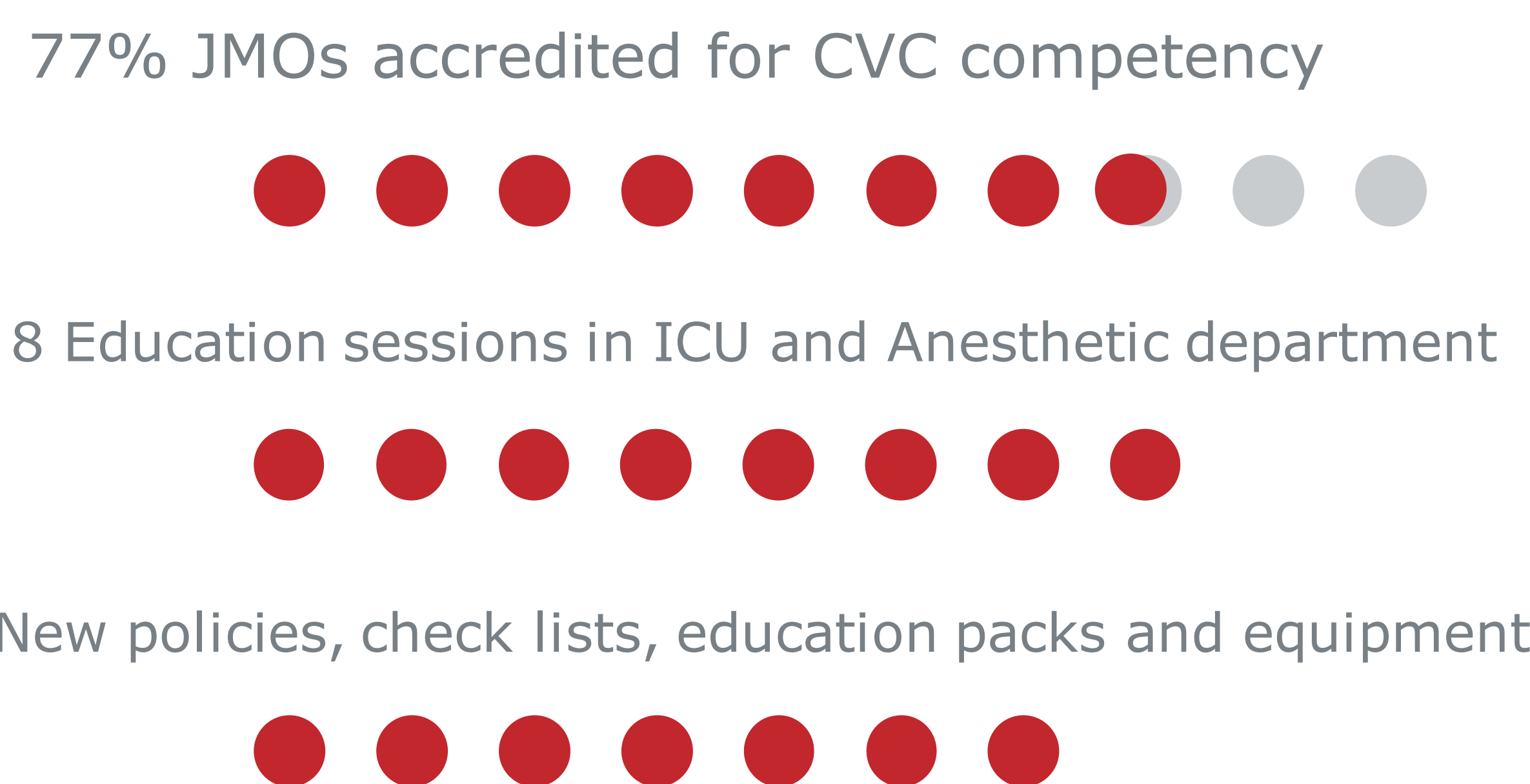
## Staff accreditation



## In 2020,



## Results and outcomes



## Sustainability

- Mandatory training and accreditation process for critical care JMOs and nurses
- Prospective surveillance of CVADs in ICU and wards
- Business case for CVAD nurse for the wards
- CVAD flag on patients records on upcoming DHR

## Key messages

- 0 CLABSI achievable and sustainable
- Major vascular injuries are preventable
- Important to identify the weakness and address it
- Multidisciplinary approach and ongoing staff engagement is a key