

Daily Sedation Holds on ICU

Dr Alison Evans

Locum Cardiothoracic Anaesthetic and Intensive Care Consultant

University Hospitals of North Midlands

Jane McMullen

ICU Senior Sister/CMCCN Local Service Improvement Lead

Liverpool Heart and Chest Hospital

Short presentation overview of:

- Sedation Hold Practice – Evidence and Guidelines
- Audit of Sedation Holds on ITU/POCCU at LHCH
- Introduction of Nurse Led Daily Sedation Hold Pathway
- Re-audit results post-implementation
- Future development

Daily Sedation Holds on ICU

ADVANCE

Sedation practice in the intensive care unit: a UK national survey

[Henrik Reschreiter](#),^{✉1} [Matt Maiden](#),¹ and [Atul Kapila](#)²

- 63.5% response – 7% of which were cardiac ITUs
 - 80% had a written sedation guideline
 - 88% use a sedation score – 66.4% is RASS
 - 78% implement a daily sedation hold
-
- Cite the evidence for reduced LOS and ventilation and complications
 - Cite that sedation holds are part of UK DOH “Ventilator Care Bundle”

[Crit Care](#). 2008; 12(6): R152.

Published online 2008 Dec 1. doi: [10.1186/cc7141](https://doi.org/10.1186/cc7141)

PMCID: PMC2646317

PMID: [19046459](https://pubmed.ncbi.nlm.nih.gov/19046459/)



Collaborative Regional Benchmarking Group

(North of England, North Yorkshire & Humber and West Yorkshire)

Daily Sedation Breaks

Daily sedation holds should be undertaken to ensure no accumulation of sedative/analgesic drugs. This is a complete cessation of sedation until the desired sedation score is reached. The length of a sedation hold can vary in individual patients depending on the level of sedation.

Daily breaks from continuous IV sedation reduce the duration of mechanical ventilation, ICU length of stay and requirement for neurological imaging with no increase in adverse events¹⁰.

Action: Daily sedation break unless contraindications are present

Daily sedation interruption versus no daily sedation interruption for critically ill adult patients requiring invasive mechanical ventilation

Monitoring Editor: [Lisa Burry](#), [Louise Rose](#), [Iain J McCullagh](#), [Dean A Fergusson](#),
[Niall D Ferguson](#), [Sangeeta Mehta](#), and Cochrane Emergency and Critical Care Group



- No clear evidence of sedation break effectiveness on LOS and ventilation days
- Reduced tracheostomy rate
- Cite US analysis of studies which did show decreased ventilation time
- Advise caution when interpreting their results and that more evidence is required

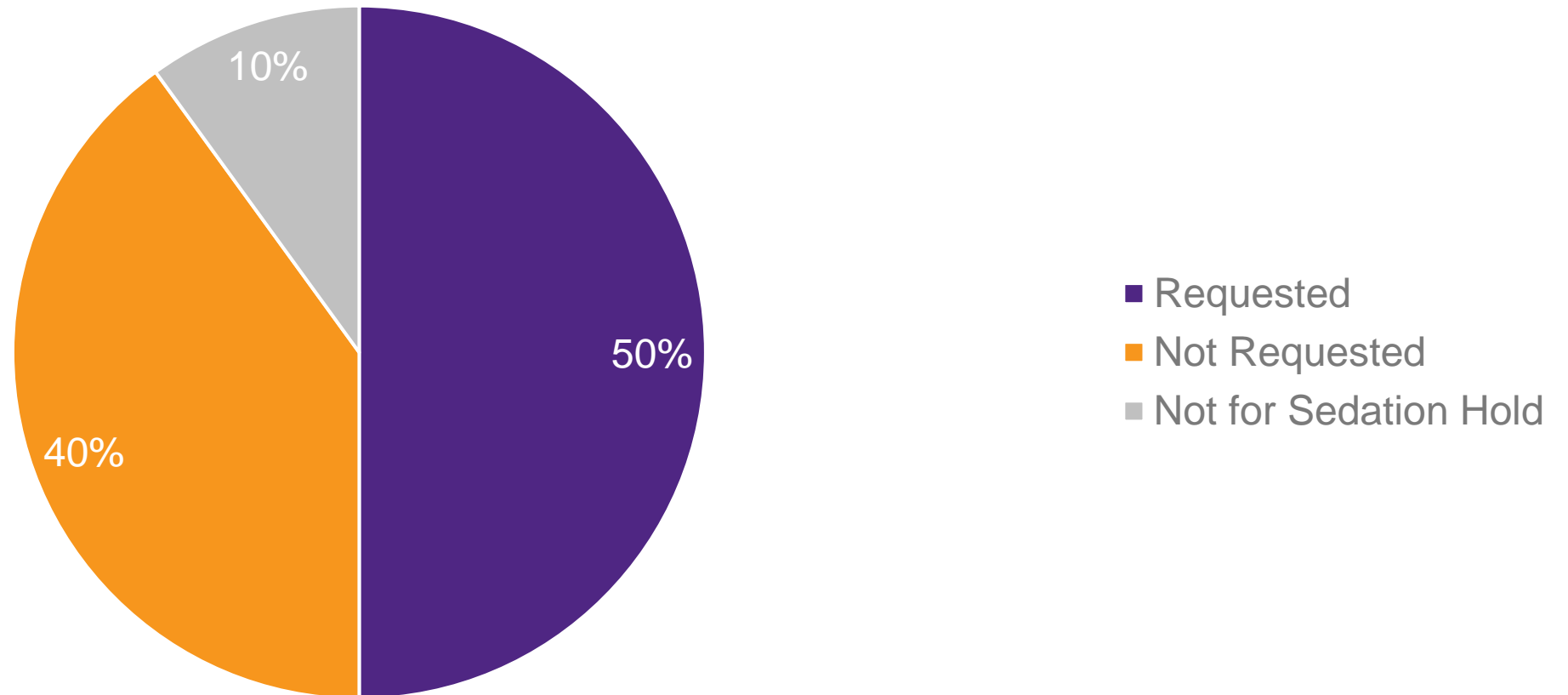
Audit Results



Initial Audit Data Collection

- Patients identified from ICNARC data for those intubated and ventilated on the ITU/POCCU in the month of December 2022
- Those not ventilated for >48hours excluded (147 excluded)
- Random number selection used to identify patient days to be included
- 53 patient days notes reviewed
- 23 patient days selected not sedated or not intubated on identified days so excluded
- 30 patient days data collected
- 336 patient days
- 189 patient days
- Aiming for 30 patient days

Sedation Break Requested on Daily Review



EPR Flowsheet Sedation Break Protocol Bundle

Date Range

From: 19-May-2023
Yesterday

To: 20-May-2023
Today

Filter

☐ Default to summary
☐ Show abnormal only
☐ Suppress blank rows and cols
☐ Show ml/Kg
☒ Show cancelled columns

☐ Retain selections for next patient

Flowsheet Selection

☒ Critical Care Area

☒ Flowsheet

- Vital Signs Measurements
- Blood Gas
- Critical Care Assessment an...**
- Critical Care Repositioning &...
- Food and Drink Record Chart
- Infection Prevention Daily Ch...
- Intake Output

Receiving Patient from Theatre Checklist

Shift Safety Checks - to be completed within 1 hr

Dependency

SOFA Score - to be completed on every shift

Haematological

Nutrition

Genitourinary

Pain

Gastrointestinal

Blood Transfusion

Hygiene/Activity

Sedation Break Protocol

Sedation Break Protocol
On every shift, please assess all sedated patients for a sedation break after 24 hou

Exclusion Criteria

Have any of the Exclusion Criteria been met?

If none of the exclusion criteria apply - First RASS Assessment (within 30 minutes)

'Comments (including further RASS scores and result of sedation break).

Sleep Bundle

Peripheral Vascular

Exclusion Criteria

Filter To:

☐ FiO2 > 0.6
☐ PEEP > 10cm
☐ APRV Ventilation Setting
☐ PIP > 30cm H2O
☐ Air Leak
☐ Pneumothorax
☐ CVA (Post-Admission)
☐ Raised ICP
☐ Seizures
☐ Post-Cardiac Arrest
☐ Active Agitation on Current Sedation
☐ Open Chest
☐ Thoracoabdominal Aneurysm with Spinal Drain
☐ On Noradrenaline Infusion more than 20m/h of Single Strength
☐ Enoximone, Adrenaline or Vasopressin Infusion
☐ Drug/Alcohol Withdrawal
☐ Neuromuscular Blocking Drug
☐ Prone Ventilation
☐ Difficult intubation (grade III or higher)

OK **Cancel**

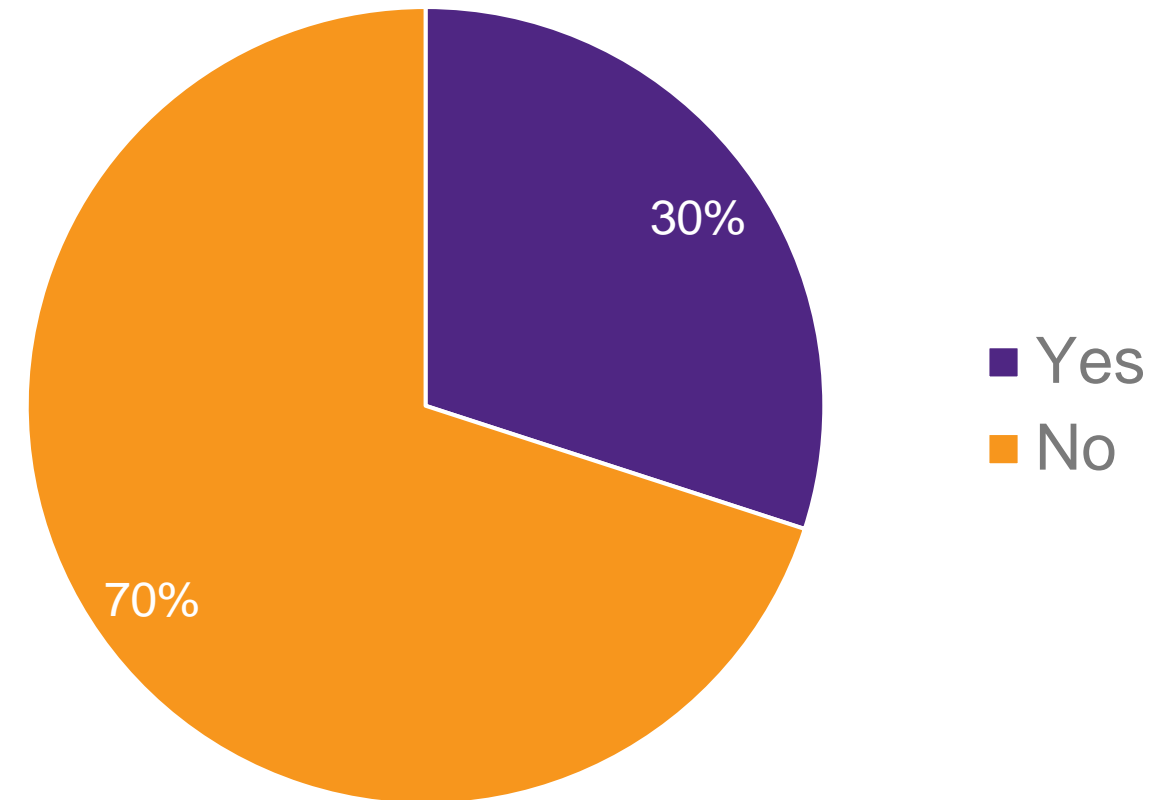
Assessed for Sedation Break Suitability on Flowsheet

Date Range
From: 19-May-2023
Yesterday
To: 20-May-2023
Today

Filter
☐ Default to summary
☐ Show abnormal only
☐ Suppress blank rows and cols
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Flowsheet Selection
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On every shift, please assess all sedated patients for a sedation break after 24 hours
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If none of the exclusion criteria apply - First RASS Assessment (within 30 minutes)
'Comments (including further RASS scores and result of sedation break).'
Sleep Bundle
Peripheral Vascular



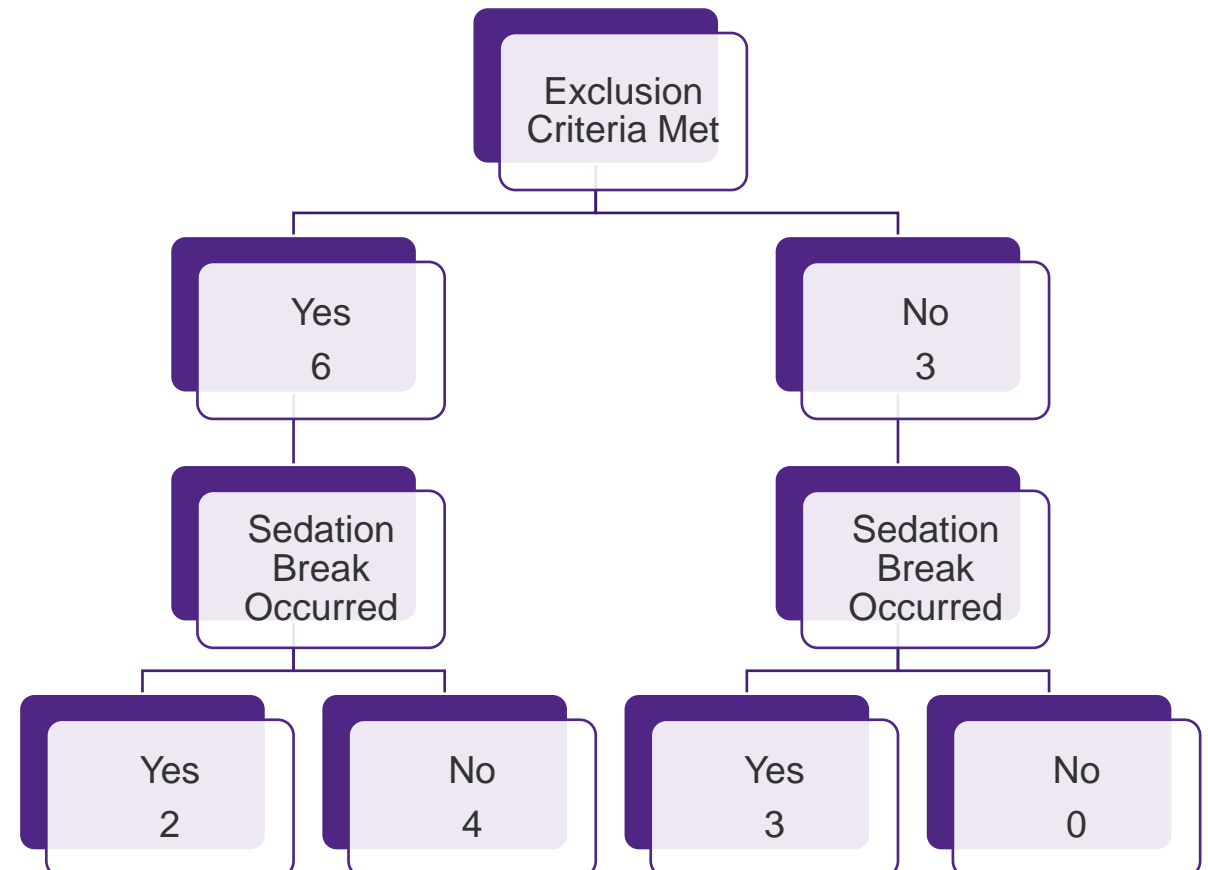
Exclusion Criteria to Sedation Break

Exclusion Criteria

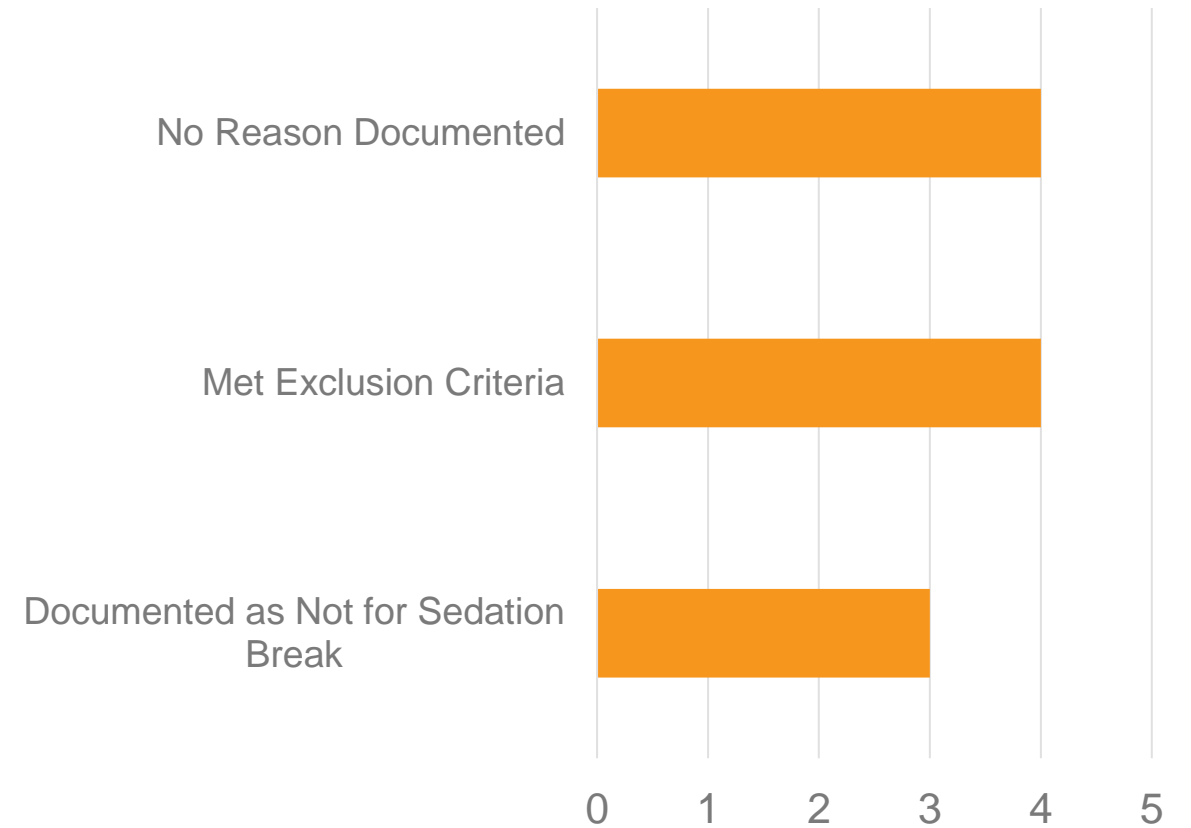
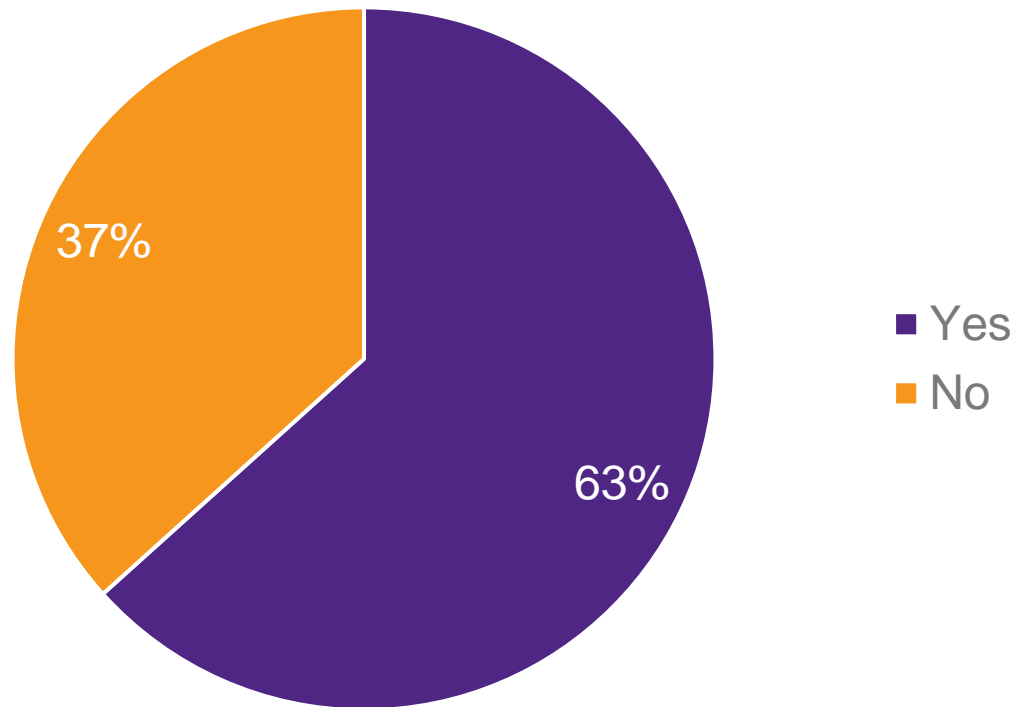
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- ☐ Enoximone, Adrenaline or Vasopressin Infusion
- ☐ Drug/Alcohol Withdrawal
- ☐ Neuromuscular Blocking Drug
- ☐ Prone Ventilation
- ☐ Difficult intubation (grade III or higher)

OK Cancel




Evidence a Sedation Break Occurred



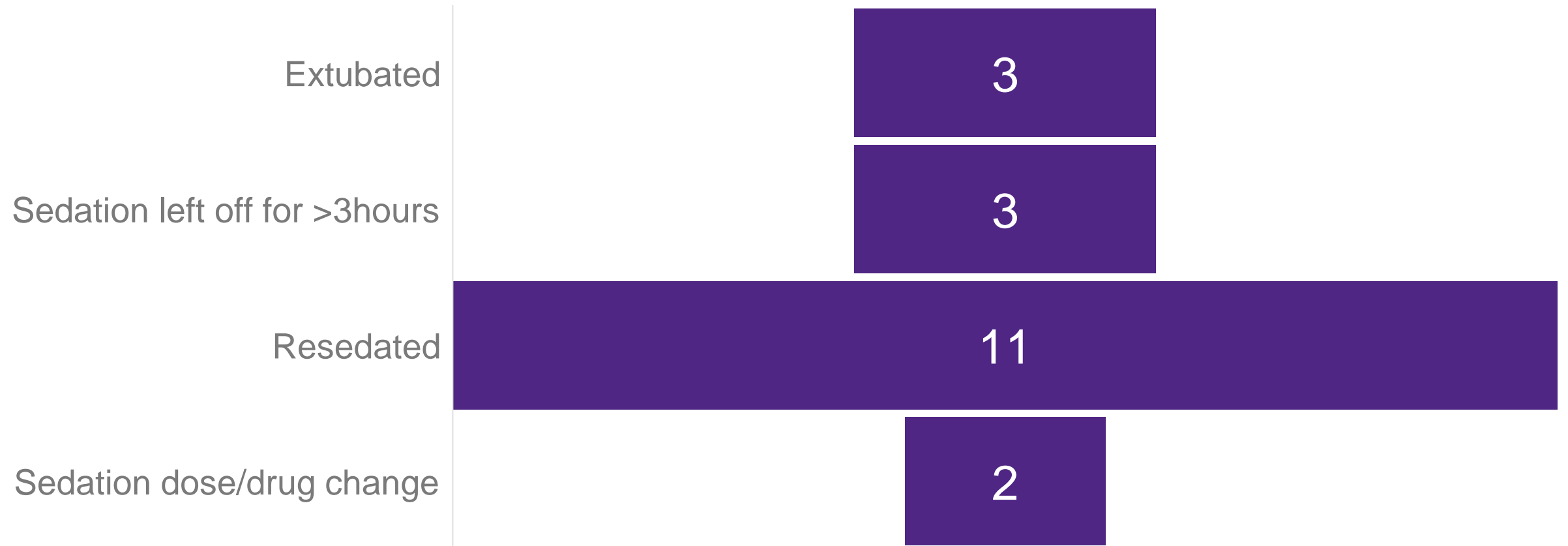
Other indices documented during sedation break

- 1 – Ability to follow commands not documented
- 9 – Documented as following commands
- 9 – Documented as not following commands

Other indices documented

- 
- 5 – RASS documented
 - 0 – formal examinations of neurology/mental state/cranial nerves /abdomen
 - 1 – tooth ache/neck swelling discovered prompting CT and MFU review
 - 6 - length of sedation hold in nursing/medical entry

Outcome of Sedation Hold



Proposed Changes

Introduce Daily Nurse Lead Sedation Breaks

- Aiming to build sedation breaks into the daily routine on ITU/POCCU
- Would not rely on Daily Review request for sedation break
- Set time in day - ?after morning handover ?after washing ?after morning break
- Need definite exclusion criteria from nurse lead sedation break - those which need Medical approval



Redefined the Sedation Hold Exclusion Criteria

Exclusion Criteria

Filter To:

- ☐ FiO2 > 0.6
- ☐ PEEP > 10cm
- ☐ APRV Ventilation Setting
- ☐ PIP > 30cm H2O
- ☐ Air Leak
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- ☐ Neuromuscular Blocking Drug
- ☐ Prone Ventilation
- ☐ Difficult intubation (grade III or higher)

OK Cancel



Absolute contra-indication to sedation hold:

Muscle relaxant infusion/bolus
Targeted temperature management
Prone ventilation
Status epilepticus
Raised intracranial pressure

Ask Intensivist about suitability for sedation hold:

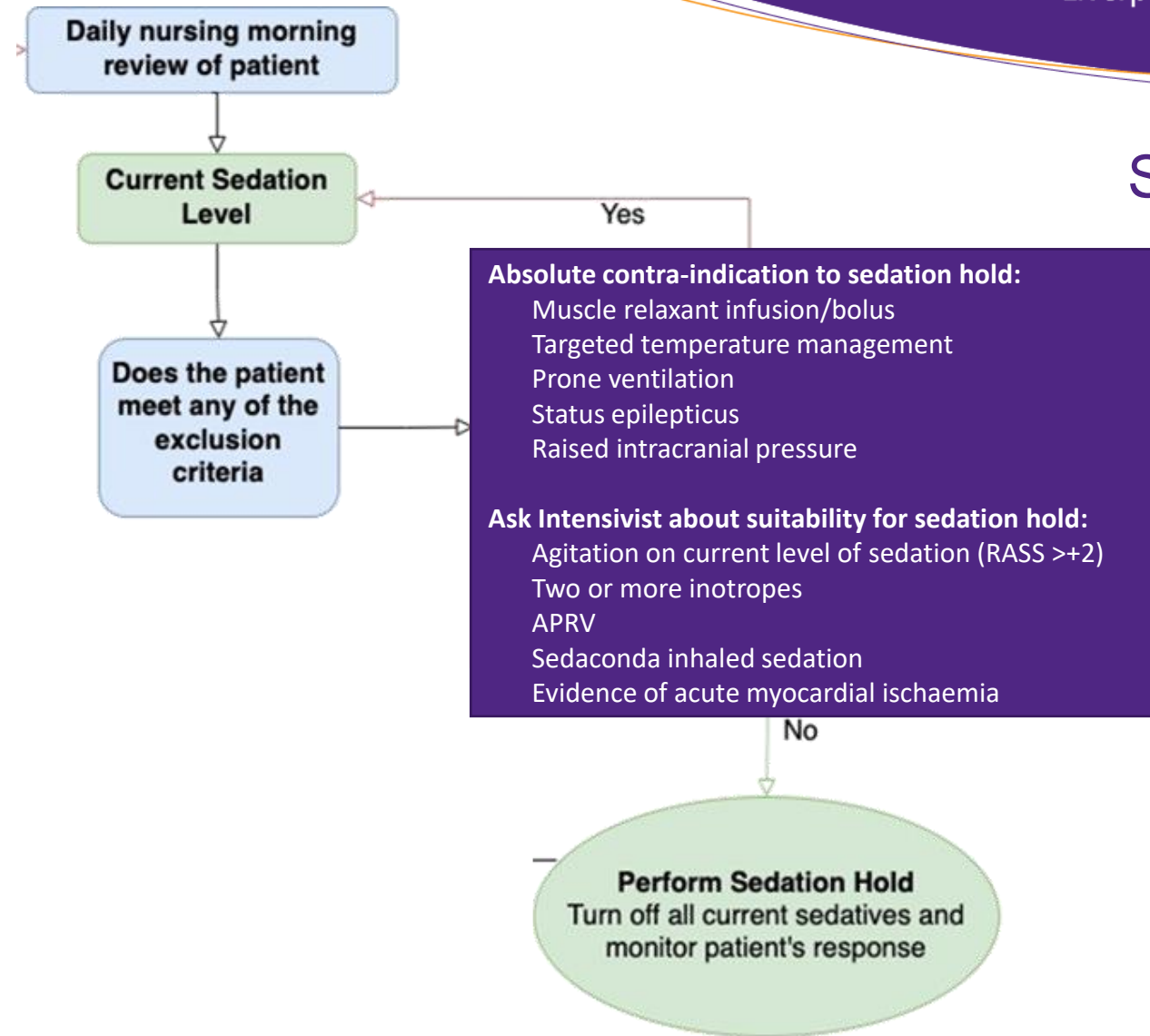
Agitation on current level of sedation (RASS >+2)
Two or more inotropes
APRV
Sedaconda inhaled sedation
Evidence of acute myocardial ischaemia

Introduce Daily Nurse Lead Sedation Breaks

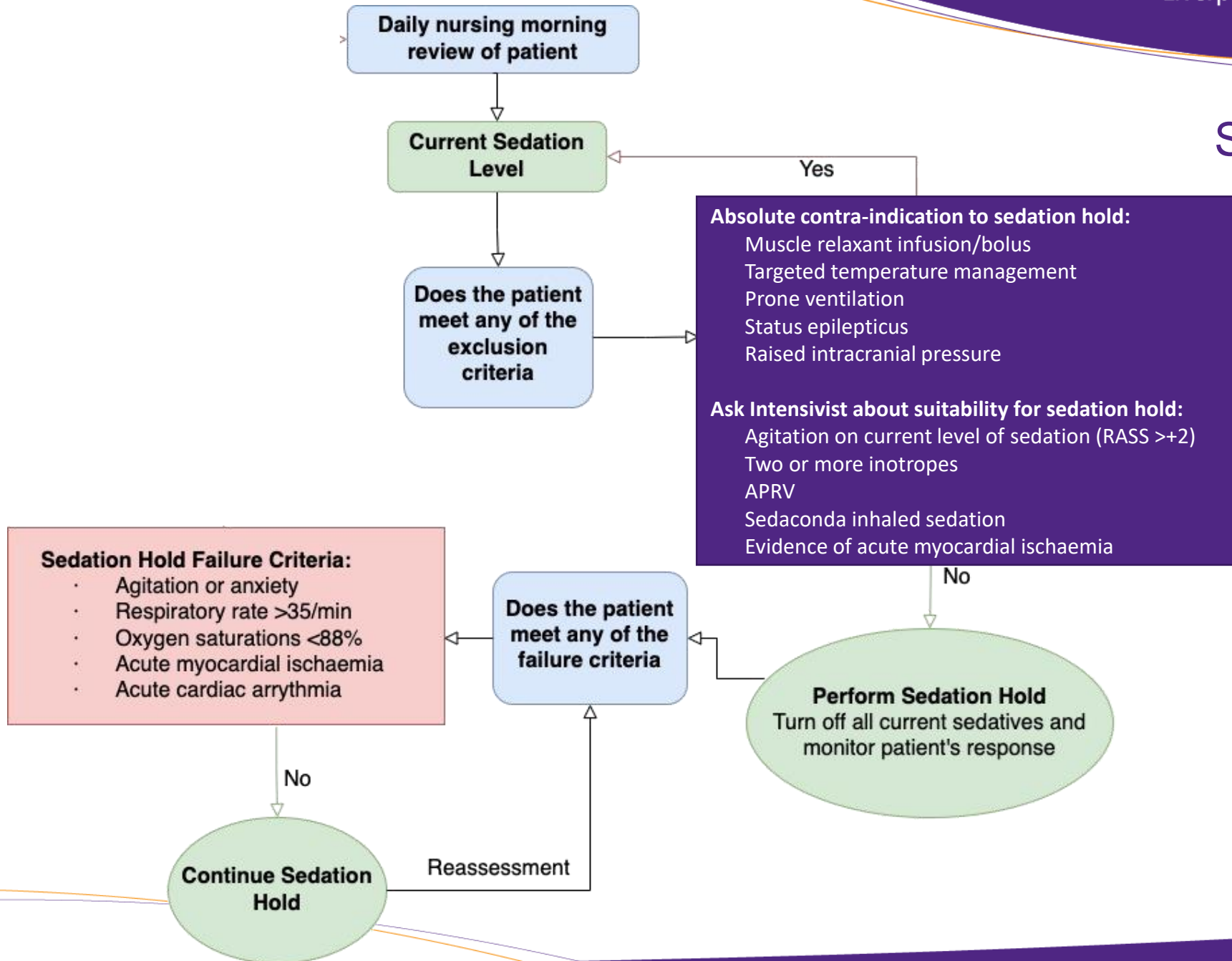
- Aiming to build sedation breaks into the daily routine on ITU/POCCU
- Would not rely on Daily Review request for sedation break
- Set time in day - ?after morning handover ?after washing ?after morning break
- Need definite exclusion criteria from nurse lead sedation break - those which need Medical approval
- Increase compliance with documentation on Flowsheet
- Standard resedation protocol with reduced initial resedation dose



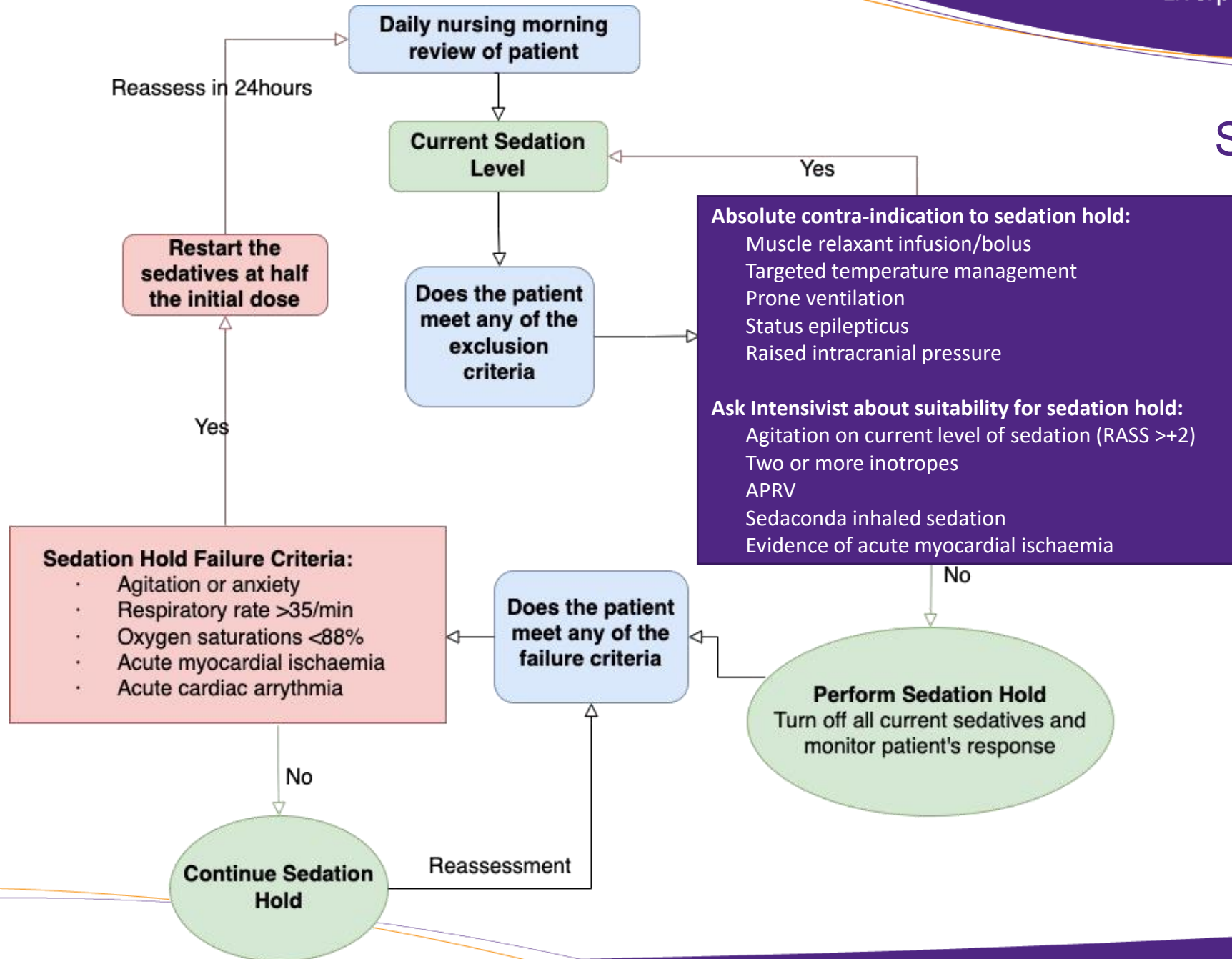
Sedation Hold Pathway



Sedation Hold Pathway



Sedation Hold Pathway



Steps to Implementation

- Finalise protocol/exclusion criteria
- Review/Discussion of protocol at Intensivist Meeting
- Redesign the Sedation Hold part of the flowsheet
- Nursing Education – working with Jane McMullen/Educator
 - Sedation Hold Quiz
 - Sedation Hold Protocol Aide-memoire
- Sedation Hold Champions within the ICU nursing staff
- Roll out of nurse lead sedation holds across the unit

Daily nursing morning review

Reassessment

Exclusion Criteria

Filter To

- ☐ FiO2 >
- ☐ PEEP >
- ☐ APRV
- ☐ P
- ☐ A
- ☐ P
- ☐ C
- ☐ R
- ☐ S
- ☐ P
- ☐ A
- ☐ O
- ☐ T
- ☐ O
- ☐ E
- ☐ D
- ☐ N
- ☐ P
- ☐ D

Sedation Hold

- Agitation
- Respiratory
- Oxygen
- Acute
- Acute

Continue Sedation Hold

It takes the Nurses to lead the way!

<https://for>

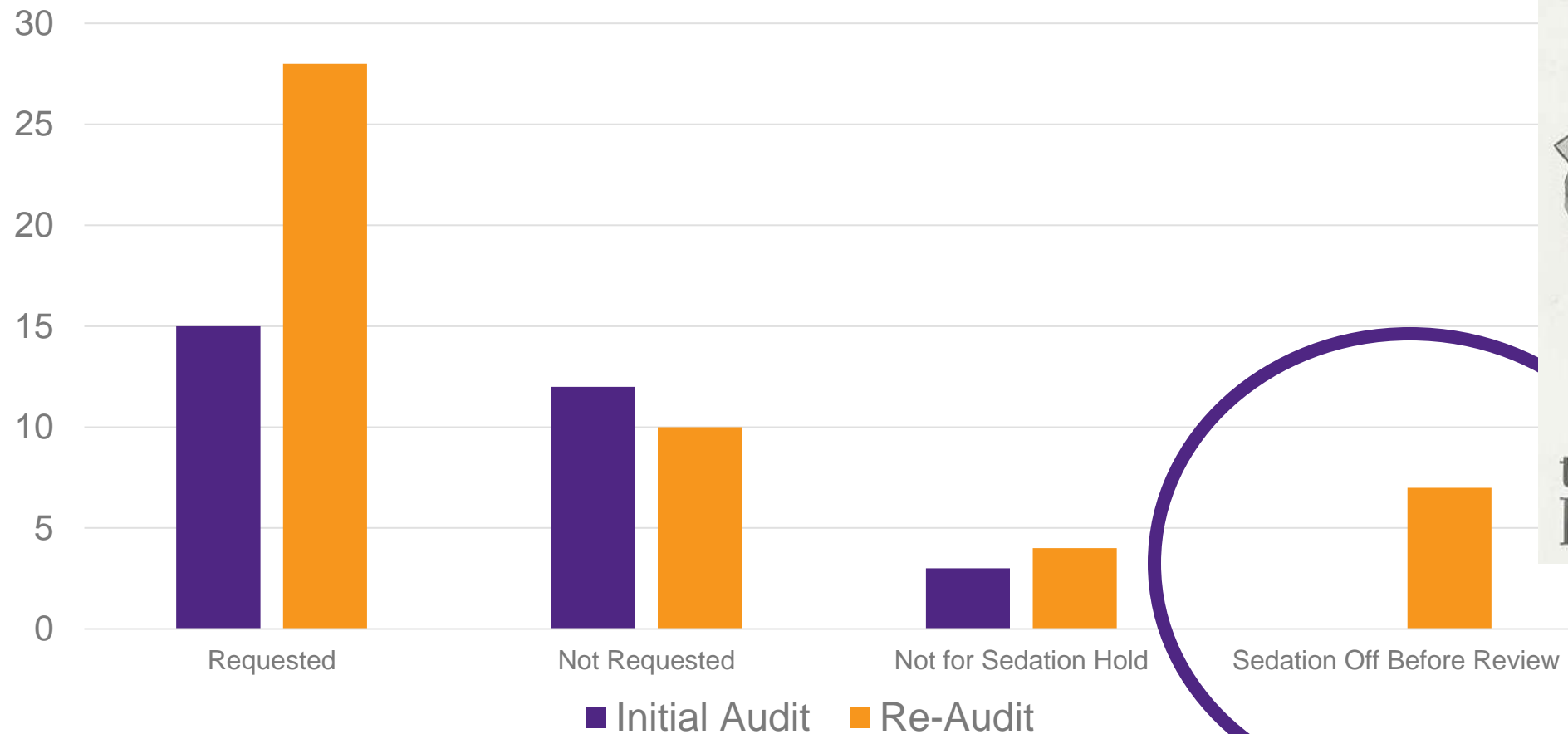
Those that fill it out will have the option to be entered into an **Easter raffle** which will be drawn over the Easter Weekend!

Re-Audit Results

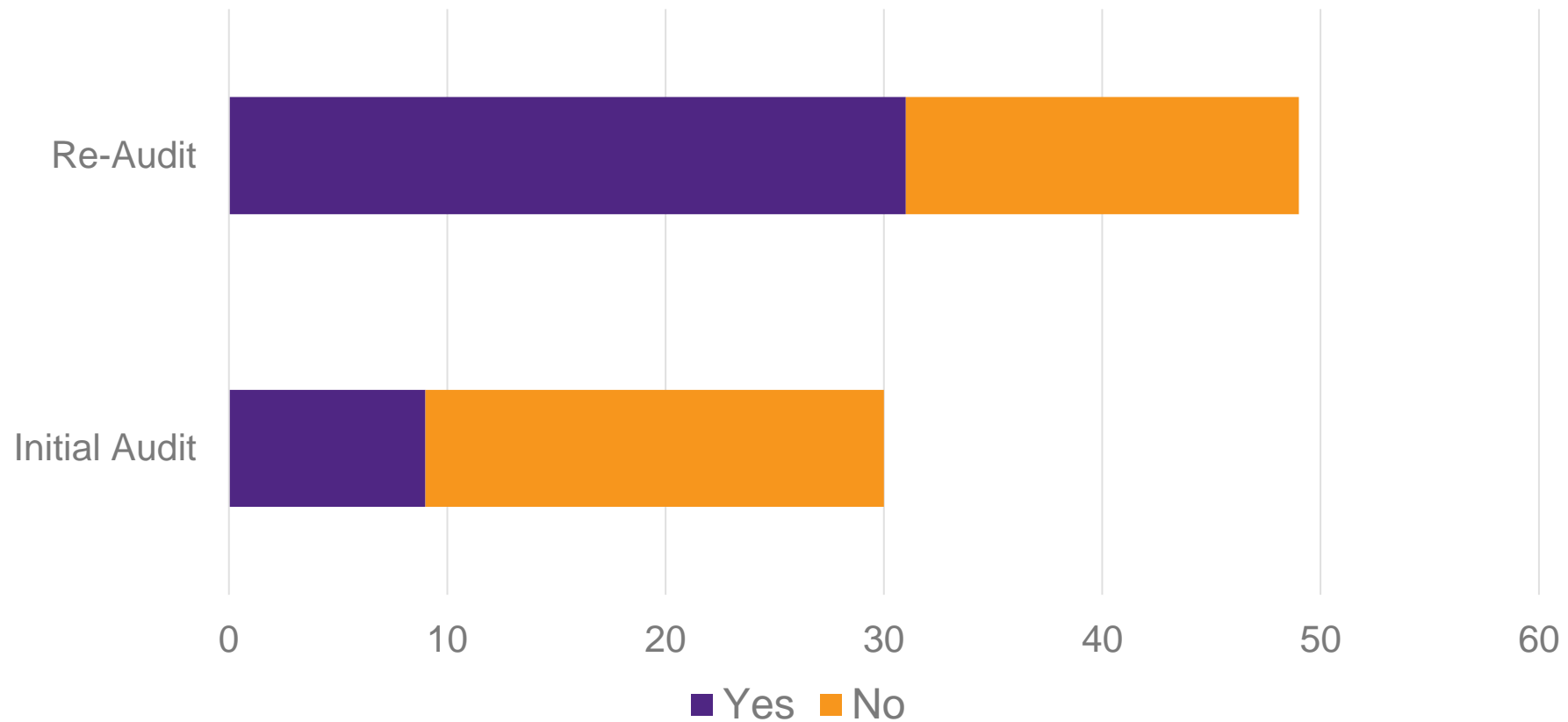
Re-Audit Data Collection

- **Prospective audit**
- Those not ventilated for >48hours excluded
- Used to track progress with implementation and make tweaks to education etc
- 52 patient days notes reviewed
- 3 patient days flowsheets inaccessible so excluded
- 49 patient days data collected

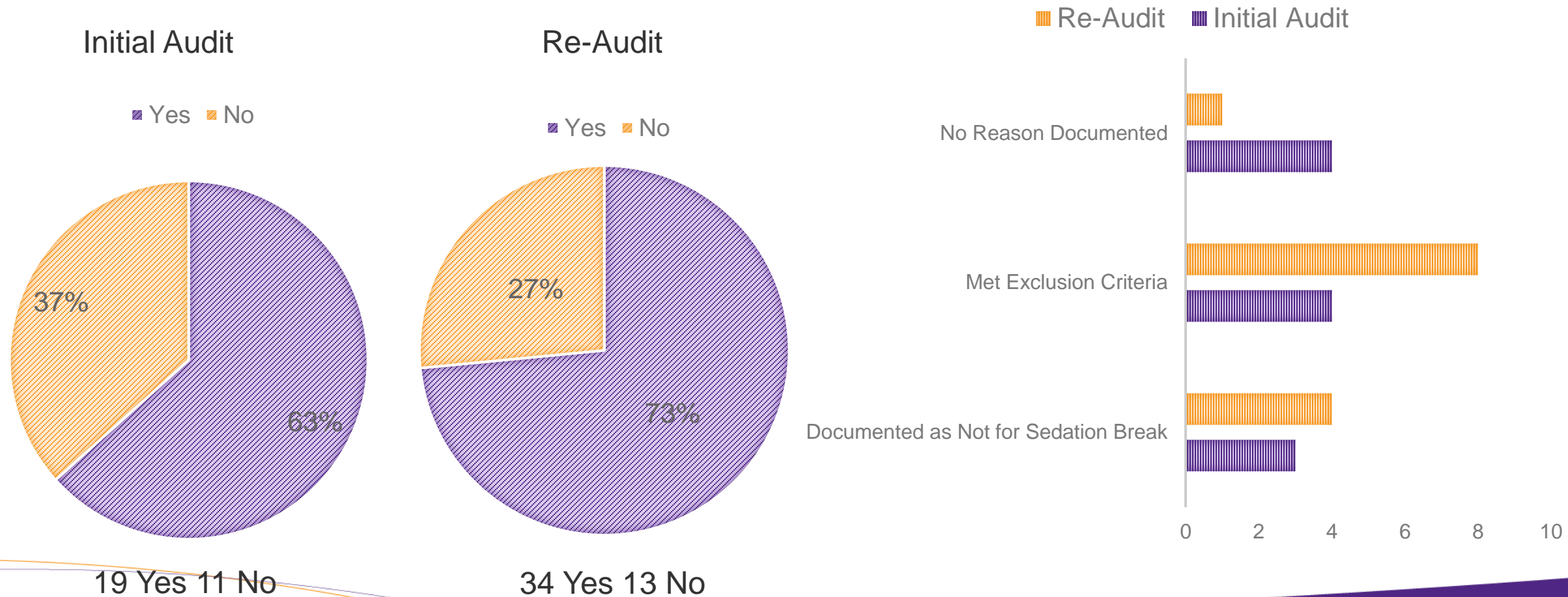
Sedation Break Requested on Daily Review



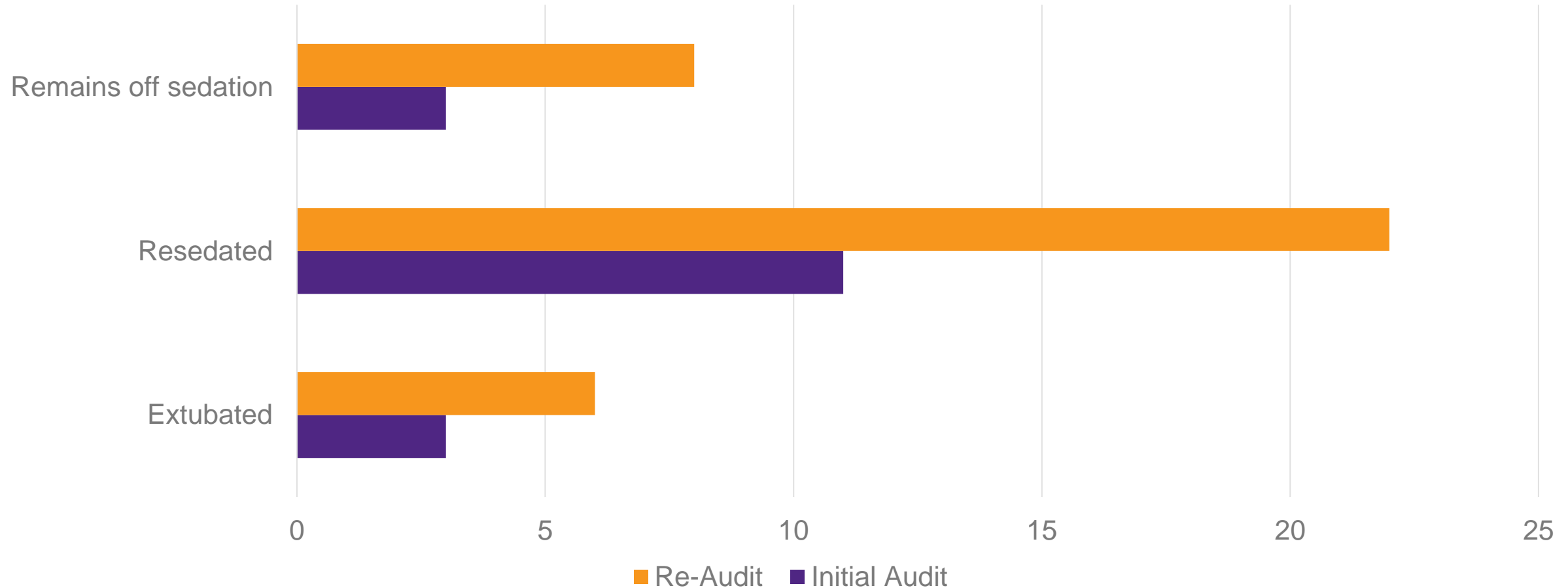
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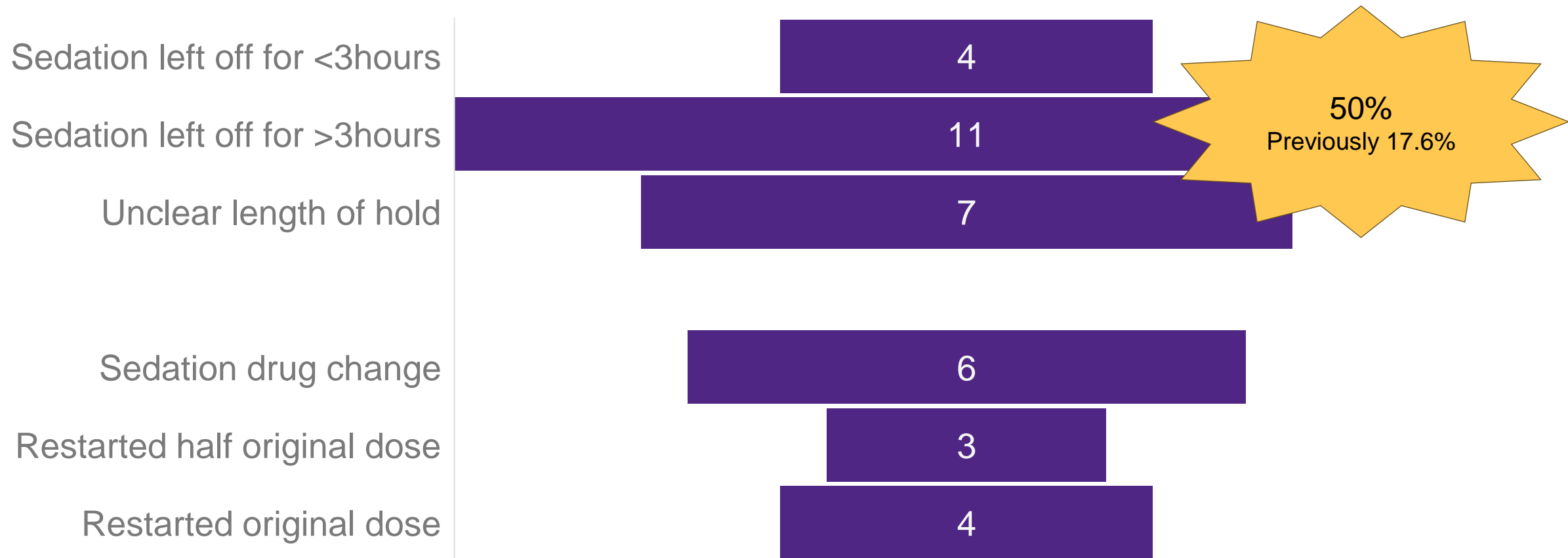
Evidence a Sedation Break Occurred



Outcome of Sedation Hold



Outcome of Sedation Hold in Re-Audit of Those Resedated



Future Developments

ADVANCE

Where next?

Continue to build on nurses experience and comfort with sedation holds

Continue to encourage **nurse led** timing of sedation holds

Aim to have it as a normal part of a sedated patient's day on our unit

Continue to regularly audit our use of sedation holds

Improve the compliance with restarting at half original sedation dose

Improve nurse use of the flowsheet to document outcomes of sedation hold

A close-up photograph of a bouquet of flowers. The bouquet features several large, light pink roses, clusters of small purple lavender flowers, and sprigs of bright yellow baby's breath. A white rectangular card is tucked into the center of the bouquet. The background is a soft, out-of-focus green, suggesting foliage.

Thank
you!

Thanks for listening

Any Questions

alisonmevans9@gmail.com