

Dr Alex Parker, Dr Simran Khanna, Dr Mavis Cheng and Dr Martin Smith

University Hospitals of Leicester NHS Trust

Contact: alex.parker@doctors.org.uk

## Background

- Sedatives for critically ill patients are commonplace in the Intensive Care Unit (ICU). Appropriate use of sedation can reduce agitation, discomfort, and metabolic demands of the patient<sup>1,2</sup>.
- Continuous sedation infusions prolong days spent invasively ventilated, increase the risk of delirium and lead to an increased mortality<sup>3</sup>.
- Guidelines published by the Faculty for Intensive Care state daily sedation holds should be considered for all appropriate patients and sedation should be minimised<sup>4</sup>.
- University Hospitals of Leicester (UHL)'s sedation hold guideline is available from Figure 1.



Figure 1: QR Code for UHL Sedation Guideline.

## Method

- The sampled data was collected between December 2022 and May 2023.
- Data was collected by reviewing bedside nursing charts of 68 eligible patients in the Leicester Royal Infirmary ICU.
- Data was collected on whether a sedation hold had taken place. The quality of the documentation was graded against the criteria in Table 1.

Table 1: Criteria for sedation hold documentation.

Not Documented	Sedation hold not documented or tick boxes left blank.
Very Poor	Vague subjective descriptors used or sedation hold box ticked with no additional comments.
Poor	Some subjective comments and description, no objective markers.
Acceptable	Clear subjective comments/description with clear rationale for termination of sedation hold and reasoning for/not for extubation.
Good	As 'Acceptable' but with additional objective markers and clear picture of neurological status.

## Results

Table 2: Results for whether sedation holds took place or not.

Yes	36.8%
Unsure	7.4%
No	55.9%

Table 3: How well sedation holds were documented.

Not Documented	25.0%
Very Poor	66.2%
Poor	5.9%
Acceptable	2.9%
Good	0.0%

- Only 36.8% (25/68) of the sample had a sedation hold.
- For 5 patients, they were recorded as 'unsure', as some had their sedative infusion stopped but received boluses every hour.
- Of those that did not have a sedation hold, the majority of patients (57.9% (22/38)) had a Richmond Agitation-Sedation Scale (RASS) score of -4.
- From these 68 patients, 25% (17/68) did not have any information about their sedation hold recorded in the medical notes.
- 66.2% of entries were graded as 'Very Poor'.
- Only 2 entries were deemed acceptable and none were graded as 'Good'.

## Discussion

- A qualitative survey found most doctors in the department were not aware of the sedation hold guideline and were not confident when to/not to perform a sedation hold.
- Documentation was often poor due to staff being pre-occupied treating the patient; feedback suggests the current paperwork is confusing as sedation appears under the analgesia heading.
- There has been a large turnover of staff since COVID-19 with more senior nurses leaving, therefore more junior colleagues have not had the necessary teaching.
- Patients were often deeply sedated during COVID-19 and so there has been a gradual fall out of practice.
- Staff felt they should wait for a consultant ward round before altering sedative medications.

## Conclusion and Further Work

- There is room for improvement in both performing sedation holds and documenting them.
- Teaching sessions for nurses and doctors are being completed.
- A new sedation hold sticker (Figure 3) has been introduced.
- Posters advertising the sticker (Figure 2) have been produced and put in the unit.
- Aim to re-audit in 2-3 months after education programme and sticker roll out.
- Aim to achieve 80% of daily sedation holds and 80% of documentation meeting acceptable/good criteria.



Figure 2: QR Code for Education Poster.

**Sedation Hold Appropriate?**

Yes

No: Head Injury  Active Seizures  Proned/Paralysed  FiO2>0.7   
CVS Instability  <24 Hours Post-OOHCA  Treatment Withdrawn

**Assessment**  
Appropriate / Follows commands? Yes / No

**Outcome**  
Continue sedation hold  Resedate

Figure 3: Sedation Hold Sticker.