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Procedural Sedation in the Emergency Department

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Background:

Procedural sedation is commonly used in Emergency Departments (EDs) such that the delivery of safe sedation is a key component of the skill set of an Emergency Physician.

The aim of procedural sedation is to relieve patients' anxiety towards and facilitate their cooperation for a potentially painful procedure. This provides obvious benefit to the patient but is not without risk and if not done to set standards can cause adverse outcomes in relation to morbidity and, rarely, mortality. For this reason, the Royal College of Emergency Medicine (RCEM) composed guidelines for the safe practice of adult sedation in the ED. It was against these standards a previous audit was completed. This demonstrated that NSECH ED was not meeting the expected standards.

A local protocol was developed and implemented with a pro-forma to be used during sedation. The aim of this audit cycle was to assess whether or not NSECH ED is (A) is meeting the standards set out by RCEM in "Safe Sedation of Adults in the Emergency Department" and (B) has improved compliance with the introduction of a local protocol and pro-forma compared with the previous cycle.

Table 1. American Society of Anaesthesiologists degrees of sedation

	Minimal sedation	Moderate sedation	Deep sedation	General anaesthetic
Responsiveness	Normal	Purposeful after verbal or tactile stimulus	Purposeful after repeated and painful stimulus	Unresponsive
Airway	Unaffected	No intervention required	Intervention may be required	Intervention often required
Spontaneous ventilation	Unaffected	Adequate	May be inadequate	Frequently inadequate
Cardiovascular function	Unaffected	Usually maintained	Usually maintained	May be impaired

Methodology:

A retrospective study of 50 cases between January 2017 and December 2017 was completed. Electronic case notes were reviewed.

Inclusion Criteria: Adult patients past their 16th birthday and patients undergoing procedural sedation at all levels.

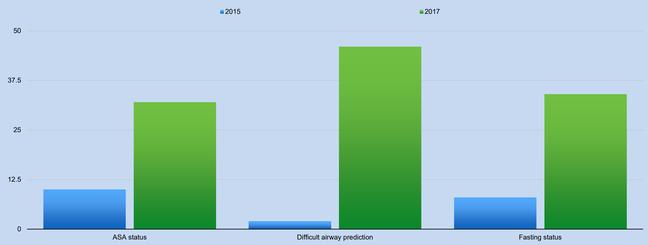
Exclusion Criteria: patients aged 15 or under or patients receiving: entonox only, opiates only, or entonox and opiates in combination.

Results:

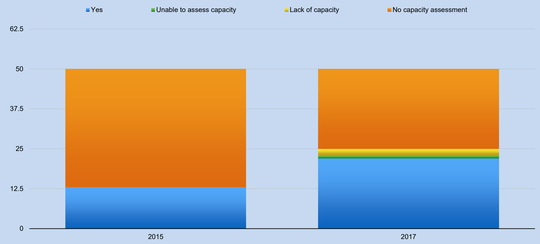
Previous percentage compliance achieved for each Standard (1-8) followed by new percentage achieved:

1. 6.6% to 37.3% 2. 26% to 50% 3. 82% to 74% 4. NA 5. 29% to 46.5% 6. 28% to 40% 7. NA 8. 1.2% to 44.6%.

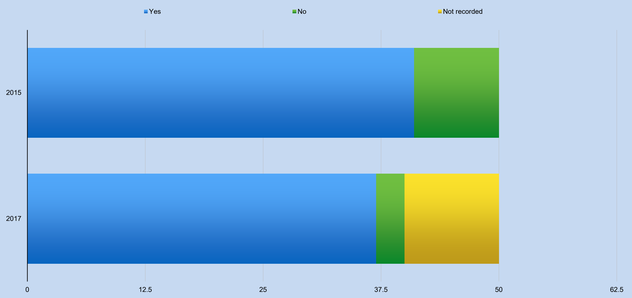
Standard 1: Patients undergoing procedural sedation in the ED should have documented evidence of pre-procedural assessment



Standard 2: There should be documented evidence of the patients informed consent



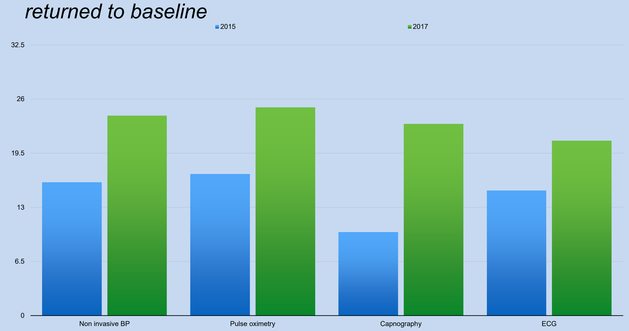
Standard 3: Procedural sedation should be undertaken in a resuscitation room or one with dedicated resuscitation facilities



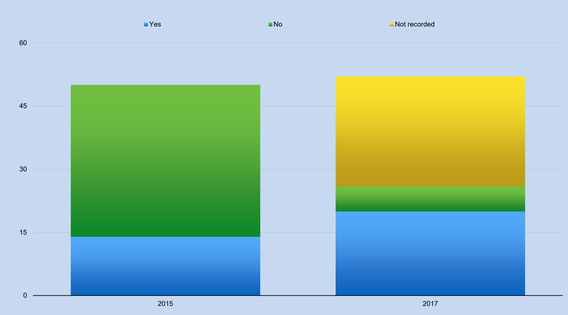
Standard 4: Procedural sedation requires the presence of all of the following:a doctor as sedationist, a second doctor or ENP or ANP as procedurist, a nurse

Doctor	50
2nd doctor/ANP	34
Nurse	10

Standard 5: Appropriate oxygen therapy should be given from the start of the sedative administration until the patient's condition is returned to baseline

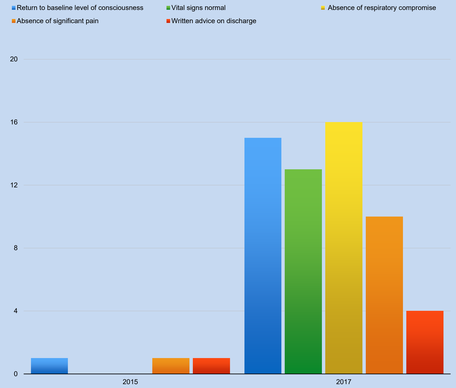


Standard 6: Appropriate oxygen therapy should be given from the start of the sedative administration until the patient's condition is returned to baseline



Standard 7 relates to use of the LocSSIP checklist for performing invasive procedures of which there was only 1 and it was not recorded whether the checklist had or hadn't been used

Standard 8: Following procedural sedation, patients should only be discharged after documented formal assessment of suitability, including all the following: return to baseline level of consciousness, vital signs within normal limits for the patient, absence of respiratory compromise, absence of significant pain,written advice on discharge for all patients



Conclusion & Perspectives :

The results show that in every category, NSECH EDis not meeting the RCEM standards.

However, the results do show an improvement upon the previous cycle. Moving forward, there are still improvements to be made.

Anecdotally, not all members of staff were aware of the sedation protocol. Suggestions to improve practice are to have the pro-forma introduced at teaching/training meetings and departmental inductions, further raising the profile of the guidance. This strategy could also be incorporated into nursing sessions/teaching. Nursing staff don't rotate in the way the junior medical staff do and are more likely to be the ones drawing up sedation medications. They could highlight to medical staff the existence of the protocol therefore increasing usage. Once these measures have been undertaken, another audit cycle will be undertaken in early 2019.