

A COMPREHENSIVE SURVEY OF LOCAL ANAESTHESIA STORAGE AND SAFETY, AND REGIONAL ANAESTHESIA EQUIPMENT IN A MULTIFACETED TERTIARY CENTRE

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Background and Aims

The Royal College of Anaesthetists has recommended guidelines for the safe storage of drugs, and provision of regional anaesthesia, in its Anaesthesia Clinical Services Accreditation framework. Each domain represents gold standard care mapped to the Care Quality Commission's (CQC) 'Key Lines of Enquiry', Health Inspectorate Wales and Health Improvement Scotland inspection domains. These domains are designed to achieve a 'Safe, Effective, Caring, Responsive and Well-Led' Service. We aimed to compare our tertiary referral centre against a target of 100% compliance as defined by the accreditation scheme.

Methods

A snapshot survey was performed across 3 hospitals and 44 theatres in our large NHS trust. Each surveyor attended an assigned theatre to individually assess clinical targets against gold-standard care as defined by the Royal College of Anaesthetists. The clinical workload across the hospital sites included Tertiary Orthopaedic, Obstetric, Transplant, Neurosurgical, Cardiothoracic, Paediatric and Bariatric specialties amongst others.

Domains examined included storage of local anaesthesia, availability of equipment (including documentation checklists, ultrasound provision, local anaesthetics, echogenic needles) and knowledge of intralipid, emergency drugs and resuscitation pathways.

Results from a standardized checklist were collated and analysed between sites.

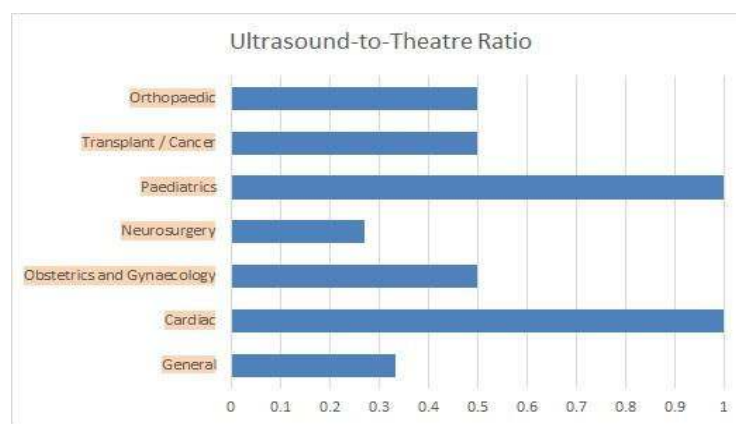


Figure 1: Ultrasound

Results

Our survey demonstrated standardised safety protocols across the trust, with some deficient areas highlighted. Ultrasound machines were available to every site with the lowest ratio of US-to-theatre being 1:3.75 (Figure 1)

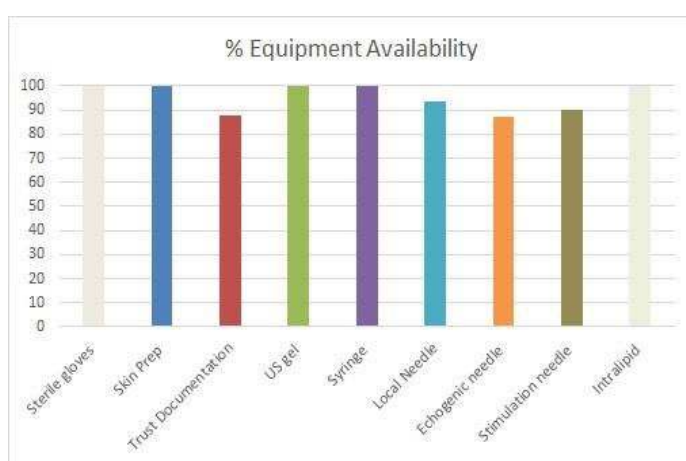


Figure 2: Equipment

Basic and emergency equipment was readily available (Figure 2), with echogenic and nerve stimulator needles available to most - but not all - clinical areas. Importantly, the survey highlighted deficiency in local anaesthetic storage with 16/44 theatres storing agents along potentially intravenous administered drugs. The majority of these instances referred to 1% or 2% lignocaine in the primary drug cabinet

Conclusions

Equipment, storage protocols, and practice of regional blocks will naturally vary within a large organisation. Whilst some variation is encouraged (use of different needles, techniques for block), it is important to maintain strict standards of patient safety.

Areas of deficiency highlighted within our survey have been addressed with education and reorganisation.

ACCS Accreditation Standards 2018

The ACSA standard has 5 DOMAINS:

- 1 The Care Pathway
- 2 Equipment, Facilities and Staffing
- 3 Patient Experience
- 4 Clinical Governance
- 5 Subspecialties

These are broken down further into SUBDOMAINS and AREAS

KEY

- DOMAIN
- SUBDOMAIN
- AREA
- STANDARD

The ACSA standards have been mapped against the Care Quality Commission Key Lines of Enquiry, Health Inspectorate Wales and Health Improvement Scotland inspection domains.

Guidelines for the Provision of Anaesthetic Services references.

The standard has to be a definitive statement which warrants a 'yes' or 'no', 'met' or 'unmet' response.

STANDARD	PRIORITY	CQC KLoE, HIW and HIS Domains	GPAS REFERENCES	HELP NOTE
1.1.1.1 All patients should have a named and documented supervisory anaesthetist who has overall responsibility for the care of the patient	1	Safe Effective Well-led Safe & effective care Safe, effective and person-centred care delivery	3.4.6 9.1.19, 9.1.20 10.1.4	This additional wording has been produced to clarify the standard where possible and has been agreed by the ACSA Committee.

Each STANDARD has a number. If a standard is removed, the number is not re-used, so some numbers are missing where standards have been taken out during the editing process. The standards themselves are grouped into these areas so that the standards are categorised and easy to find.

The text underneath each standard describes the evidence required to determine whether or not that standard is met.

Standards are either listed as Priority 1, Priority 2 or Priority 3. Priority 1 standards must be achieved in order for accreditation to be awarded. Priority 2 standards are aspirational, but may not be achievable because of mitigating circumstances (eg resource or geography issues) and may form part of ongoing issues. Priority 3 standards provide targets for the highest performing departments to achieve.

The standards all have one or more references to the GPAS document.