Protocol

The national **P**eri-**O**perative **D**iamorphine **S**hortage: an organisational and individual anaesthetist survey of practice. **(PODS)**

Study Summary

Study Title	The national **P**eri-**O**perative **D**iamorphine **S**hortage: an organisational and individual anaesthetist survey of practice **(PODS)**.
Project Leads	Vitul Manhas Brian Herath Sarah Ranson Ismaa Aslam Ailbhe Brady Lauren Glen Nicola Johnson Prof Shiva Tripathi – Consultant supervisor
Research Groups	PainTrainUK Group
Project Design	UK Multicentre Organisational survey of practice and individual survey of anaesthetists
Participants	Sites that provide surgical services to adult patients where anaesthetic care is required to provide these services. Anaesthetists who provide care to adult patients
Inclusion Criteria	As above
Exclusion Criteria	Hospital sites that only provide paediatric or obstetric services. Anaesthetists that exclusively do paediatric anaesthesia or obstetric services.
Time Period	One month
Objectives	Describe the organisational response to the national diamorphine shortage in the management of non-obstetric peri-operative pain. Document individual anaesthetists' change in clinical practice related to the diamorphine shortage.
Recruitment	Involvement of this project will be via the Pain Train Trainee Research Network across the UK
Data Storage	No patient or clinician identifiable information is collected. All anonymised data will be kept electronically in a secure web based encrypted application requiring multi-factor authentication (MFA), NHS.net Microsoft forms.

Background and Rationale:

There is evidence that use of intrathecal hydrophilic opioids reduces postoperative pain scores within the first 24 hours and reduce I.V opioid consumption. However, there is a lack of guidance regarding choice and dosage of various opioids for non-obstetric patients.

Since 2019 there has been shortage of diamorphine in UK, with it being widely used in obstetric practice, the Obstetrics Anaesthesia Association (OAA) issued a commentary based on the NICE guideline for caesarean section in 2021. The recommendations included use of alternative opioids for intrathecal use and hourly monitoring of patients for respiratory depression for 24 hours when morphine has been given intrathecally.

Despite diamorphine also being the opioid of choice in many non-obstetric cases, there has been an absence of similar recommendations to guide the enforced change in practice brought on by this

shortage. This is a field where practice is likely to vary depending on the organisational structure of different hospitals and surgical services.

The aim of this project is to understand the impact of reduced diamorphine availability on UK anaesthesia practice in non-obstetrics patients for postoperative pain management and describe individual practice of current practicing anaesthetists around the UK. This project is undertaken by PainTrainUK which is a network of postgraduate doctors with special interest in pain medicine. We are recognised by Research and audit federation of anaesthetic trainee (RAFT) and Faculty of pain medicine.

Project aims

Describe the organisational response to the national diamorphine shortage in the management of non-obstetric peri-operative pain.
Document individual anaesthetist's change in clinical practice related to the diamorphine shortage.

Inclusion Criteria

Organisational survey:

All adult surgical departments perioperative services that do elective and/or emergency procedures

Individual anaesthetist survey:

Anaesthetists who work in adult non-obstetric surgical and perioperative services.

Exclusion Criteria

Organisational survey:

Sites that exclusively deliver paediatric or obstetric surgical services

Sites that do not delivery surgical services or have theatre complexes on site

Individual survey:

Anaesthetists who exclusively cares for paediatric or obstetric patients

Methods

This is a prospective multicentre survey. Local coordinators at individual sites will be required to complete one organisational survey with the trusts acute pain lead. Local coordinators will also be required to disseminate the consultant anaesthetist survey with aim for 25% response out of whole cohort in their trust. Local coordinator will also PainTrainUK about total number of consultant anaesthetist present in the trust. We will advise local coordinators that they need to register this project with their local audit departments.

Data collection

There are two data collection forms:
1. The organisational survey: one form completed by the site lead for each trust
2. The individual anaesthetist survey: individual anaesthetists will have access to a separate survey which will be disseminated by the Pain Train network.

Sample size:

We aim to survey at least 100 hospital sites.

Statistical analysis

Both surveys will be reported using descriptive statistical analysis.

Data management

No personal patient or clinician data is collected or processed. Hospital location will be collected to determine whether there are any systematic differences in findings between different types of hospital. Specific hospitals or trusts will not be linked to specific data in reports or publications. The contact details provided to the project team by registered sites will only be used for direct communication regarding the study. All anonymised data will be collected digitally in a secure web based encrypted application requiring multi-factor authentication (MFA), NHS.net Microsoft forms.

Ethical considerations

This project is a clinical service evaluation and is not considered as research as per criteria set by the Health Research Authority (HRA). It does not involve any randomisation, intervention or changes to patients' care. No personal patient or clinician data is collected or processed. For these reasons Research Ethics Committee (REC) approval is not required. Local coordinators will need to inform your local audit department however, some may prefer to inform their R&D department or Caldicott guardian also.