

Diabetes in Surgery: Study Protocol

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Background & Aim

Approximately 10-15% of the surgical population have a diagnosis of Diabetes Mellitus. The control of diabetes in pre-operative surgical patients has been demonstrated to have an impact on post-surgical outcomes. The national guidelines jointly developed by the British Association of Day Surgery, Royal College of Anaesthetists and Joint British Diabetes Societies Inpatient Care Group are clear in stating that in elective, planned procedures, a for a person with known diabetes, their pre-operative HbA1c (taken with three months of any planned procedure) should be $<69\text{mmol/mol}$ where it is safe to be achieved to reduce chances of developing complications. If this requirement is not met, the patient should not undergo the elective procedure until there is better glycaemic control and the HbA1c falls below this threshold. The aim of this multi-centre study is to determine how many patients who underwent elective day-case surgery have a HbA1c higher than this threshold and whether any had their procedure delayed.

Outcome of Interest

Primary Outcome:

- The number of patients who had an HbA1c $\geq 69\text{mmol/mol}$ at the time of referral from primary care to surgical outpatients.

Main Secondary Outcomes

- How many of the individuals with an HbA1c $\geq 69\text{mmol/mol}$ at the time of referral had their procedure delayed/deferred
- Speciality (Surgeon/Anaesthetist) of person making the decision to delay/defer surgery
- Seniority of person making the decision to delay/defer surgery
- Time taken from decision to operate to time taken to defer surgery
- Time take to achieve glycaemic control

Methods

Data will be collected from as many sites as possible within the East of England Deanery for all patients undergoing day-case elective (planned) surgery (general surgery) for a duration of three months (Oct-Dec 2017). Anonymised data on patient demographics (age, gender, comorbidities) as well as procedure and pre-operative HbA1c will be collected and analysed. Results will be presented at national and international meetings as well as published in peer review journals. The project will be spearheaded by surgical trainees through the regional research collaborative (STEER) and will also involve other trainees from other deaneries as part of a wider collaborative effort.

Inclusion:

- Age 18+
- Diabetic (Type I or II)
- Elective Day-case (benign surgery):
 - Gen Surgery (hernia repair, lipoma, cysts, skin lesions)
 - Upper GI (cholecystectomy)
 - Colorectal (EUA, haemorrhoidectomy, fistula, fissure)
 - Breast (benign lumps, fibroids)