PRE-OPERATIVE DIABETES OPTIMISATION IN ELECTIVE SURGERY: PATHWAY VARIATION AND STAKEHOLDER PERSPECTIVES

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Background
People with diabetes undergoing surgery are at increased risk of perioperative complications, prolonged hospital admissions and surgery cancellations. Optimising glycaemic management before surgery is essential to improve outcomes and reduce avoidable disruption to elective care. National guidance from the Centre for Perioperative Care (CPOC) recommends pre-operative glycated haemoglobin (HbA1c) <69 mmol/mol and access to diabetes specialist support. However, variation in local pathways may result in inconsistent care, delayed optimisation and inequitable access to specialist input.

Aim
This study aimed to evaluate pre-operative diabetes management pathways for adults with diabetes undergoing elective surgery within a National Health Service (NHS) Trust, assess alignment with CPOC recommendations, and explore stakeholder perspectives on barriers and facilitators influencing optimisation.

Method
A mixed-methods approach combined a clinical audit with stakeholder interviews. Retrospective data was collected from adults with diabetes attending pre-assessment clinics (n=224), with prospective follow-up over 18 weeks. Compliance with CPOC standards was assessed, including HbA1c management and referral to the Diabetes Specialist Team (DST). Semi-structured email interviews were undertaken with multidisciplinary stakeholders (n=13), including pre-assessment nurses, surgeons, anaesthetists, pharmacists and diabetes specialist nurses. Quantitative data was analysed descriptively and qualitative data using thematic analysis.

Result
Of 224 patients, 48 (21.4%) had HbA1c levels >69 mmol/mol. Only 14/48 (29.2%) received DST referral in accordance with guidance, highlighting variation in access to specialist optimisation. Among patients with elevated HbA1c, 18/48 (37.5%) experienced diabetes-related delays, 27/48 (56.3%)

had no surgery date by the end of follow-up, and five experienced day-of-surgery cancellations attributed to diabetes. Among the seven patients referred promptly to the DST, HbA1c improved in all cases, with five achieving pre-operative levels <69 mmol/mol. Stakeholder perspectives identified four themes: standardised pathways and specialist input; patient engagement and self-management behaviours; system-level gaps, delays, and optimisation; and system redesign and earlier identification.

Conclusion

Pre-operative diabetes optimisation pathways demonstrated variation despite national recommendations, contributing to delays and disruption to elective surgical care. Findings highlighted the need for earlier identification of high-risk patients, access to specialist diabetes support, multidisciplinary pathway redesign and patient-centred approaches to improve perioperative care.