The ABCD Nationwide Closed Loop Audit - Objectives

Using modern technologies on the Health and Social Care Network (HSCN), the network previously called N3, to facilitate easy gathering of anonymised data, ABCD has set up a nationwide audit of closed loops in real clinical use in the UK. The aims are twofold: to ascertain whether the experience in real clinical use matches the data from clinical trials and, where evidence is lacking, to provide evidence to support the use of these systems which may guide future practice. Clinicians with users of closed-loop systems under their care, are invited to submit the data that they routinely collect as they monitor the progress of their patients to the nationwide audit. An IT tool is being developed and will be held on HSCN. This tool will be fully GDPR/information governance compliant, to make this process as easy and user friendly as possible. It will also facilitate easy analysis of locally collected data by the local clinicians. ABCD hopes to gain insight into efficacy but, perhaps most importantly, the safety of closed loop systems. ABCD hopes that the data from the nationwide audit of closed loop systems will inform future practice and guidelines.

From the data submitted in the audit ABCD hopes it might be able to provide information about many points of interest including:

- How safe are closed loop systems? What *adverse events*, if any, are experienced by users?
- What are the *reasons for discontinuing* closed loops?
- What is the impact on *HbA1c*?
- What is the impact on *time in range* (3.9-10mmol/L)?
- What is the impact on *time below range* (<3.9mmol/L)?
- What is the impact on *time below 3.0mmol/L*?
- What is the impact on *time above range* (>10mmol/L)?
- What is the impact on *weight*?
- What is the effect on NHS resources, including *hospital admissions* and *ambulance callouts* for hypoglycaemia?
- What is the impact on *hypoglycaemia awareness*?
- What is the impact on *diabetic retinopathy*?
- What is the impact on *Diabetes Distress Screening Scale*?
- How *satisfied* are patients?