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Aim: Improving Prescriber Confidence In Managing Hyperglycaemia In The Inpatient Setting By End Of May 2024

Conditions For Change

Since introducing a single internal phone number for inpatient advice in October 2021, the Diabetes Team had identified an increasing number of calls relating to the management of high blood glucose, hyperglycaemia. Episodes of hyperglycaemia are a key harm for people living with Diabetes admitted to hospital, leading to poorer outcomes in a number of care domains (1). Hyperglycaemia is also a recognised contributor to extended hospital stay and delayed discharge, an increasingly important consideration as acute service capacity is stretched (2).

We used the structure and timeline of Scottish Improvement Foundation Skills (SIFS) to focus our ideas and efforts with guidance from our Cohort 1 group mentor, Sue Vest.

Understanding Systems

Using a validated tool, baseline prescriber confidence was assessed and information regarding educational interventions they have been exposed to gathered allowing the team to target interventions (3). Our responses clearly identified the need for further education for prescribing colleagues to improve patient care and reduce reliance on the inpatient team.



Measure

We also looked at quantitative data to help measure the impact of our interventions.

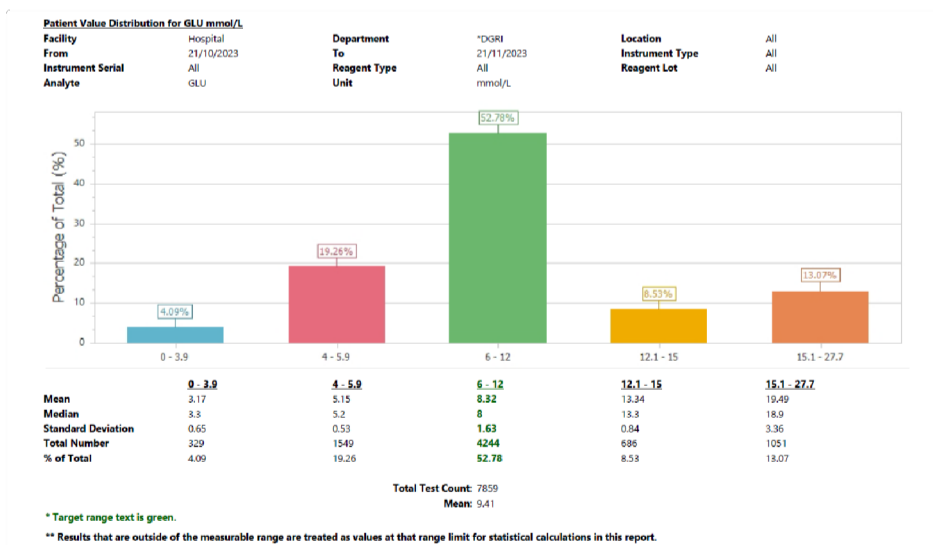


Fig. 1 Bar chart showing all Capillary Blood Glucose readings for DGRI for 30 Days to November 21st 2023 (Pre Intervention).

Developing Aims

Rather than trying to absorb this ever-increasing workload within our own team, we evolved a solution to use education as an intervention to create lasting change and self-sustaining improvement. Our baseline survey identified Foundation Year 1 Doctors as a target audience, given their engagement in responses and early stage of influence.

1. Kerr M (2011) Inpatient Care for People with Diabetes - the Economic Case for Change. Quoted in Joint British Diabetes Societies for Inpatient Care (2019) A Good Inpatient Diabetes Service. Available at JBDS_14_A_Good_Inpatient_Service_Updated_060720.pdf (abcd.care)

2. Public Health England (2020) Briefing for the Variation in Inpatient Activity (VIA) Tool: Summary of Results 2014/15 to 2017/18. Available at Briefing for the Variation in Inpatient Activity: Diabetes (VIA) tool (publishing.service.gov.uk)

3. George JT, Warriner D, McGrane DJ et al (2011). Lack of confidence among trainee doctors in the management of diabetes: The Trainees own perception of delivery of care. Quoted in Joint British Diabetes Societies for Inpatient Care (2019) A Good Inpatient Diabetes Service. Available at JBDS_14_A_Good_Inpatient_Service_Updated_060720.pdf (abcd.care)

Testing Changes

Using information gathered from the prescriber's confidence tool, the team developed key Bitesize training sessions to deliver to staff in CAU. Verbal feedback was obtained at the end of each session and informal case discussions encouraged. After delivering 6 key learning sessions, prescriber's confidence levels were retested using the same validated tool.

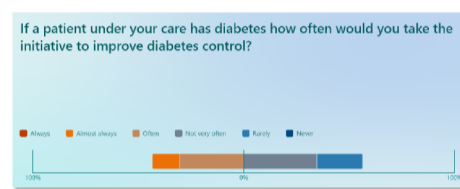


Fig. 2 Initiative Pre Intervention.

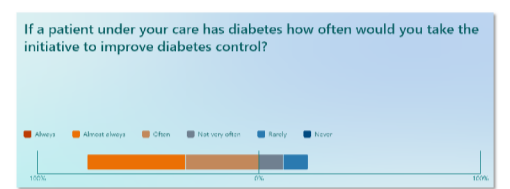


Fig. 3 Initiative Post Intervention.

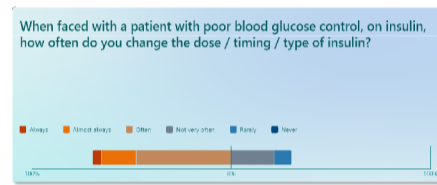


Fig. 4 Insulin Therapy Pre Intervention.

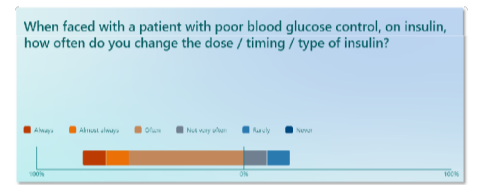


Fig. 5 Insulin Therapy Post Intervention.

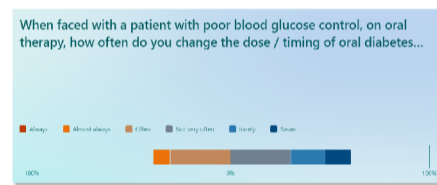


Fig. 6 Oral Therapy Pre Intervention.

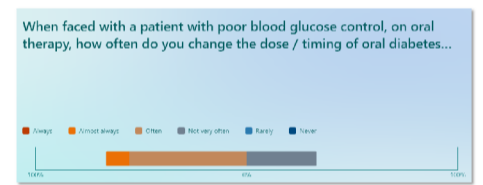


Fig. 7 Oral Therapy Post Intervention.

Measure Again

Capillary Blood Glucose readings within Target Range improved by 3.67%.



Fig. 8 Bar chart showing all Capillary Blood Glucose readings for DGRI for 30 Days to May 21st 2024 (Post Intervention).

Implement

Our project suggests an increased focus on Bitesize interactive teaching sessions should be implemented in our education strategy going forward. Adapting traditional education measures to address identified needs also created greater engagement.

Spread

Participants have begun to take initiative in disseminating change themselves, with FY, IMT and CDF colleagues working on updated Hyperglycaemia and HHS Guidelines. We also intend to widen our audience to capture those with influence in other specialties and directorates.