Quality Improvement in diabetes care for better outcomes for newly diagnosed patients- the Sheffield story so far…

Mission Statement: To empower, encourage and educate young people with Diabetes to confidently manage their Diabetes to live happy, healthy and successful lives.

Introduction

Large scale clinical trials have demonstrated that good metabolic control achieved early in the course of diabetes substantially reduces the development and progression of diabetes associated microvascular complications.

Our patients

220 Children and young people T1DM aged 0-17 yrs
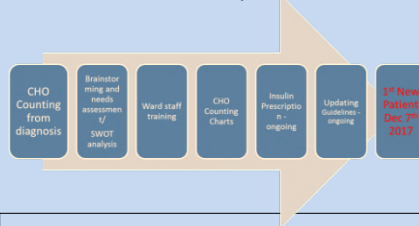
Dec 15-Dec 16 = 24 new patients

Median HBA1c: 53 mmol/mol at 3m;
                        56 mmol/mol at 12m

Aim: To achieve HBA1c of 48 mmol/mol at 3 and 12 months after diagnosis

1st QI project

To introduce CHO counting, from diagnosis, as an in-patient

Making it Happen…

- Team have pre-clinic QI meetings fortnightly 08.15-08.45
- All encouraged to attend
- Agenda sent out in advance
- Meeting chaired by QI Champion
- Time-keeping by co-Champion
- Tasks allocated, notes taken and circulated asap after meetings
- Bright Spots identified along with progress on tasks at each meeting
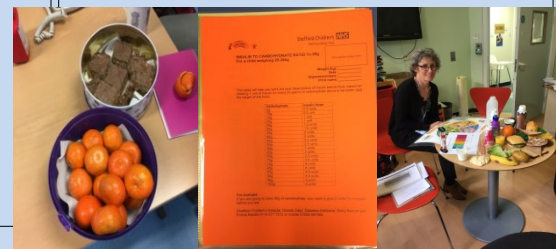
Data So Far…..

Median HbA1c @ 3months 44.5mmol/mol
Mean BG@ 30 days 6.7 mmol/l

DIAGNOSED	DATE OF DISCHARGE	7 DAY POST DISCH	Av Tests/Day	23-30 DAY POST DISCH	Av Tests/Day	HbA1c
07.12.17	10.12.17	11.4	8.4	6.6	9	42
22.12.17	24.12.17	12.6	6.8	8.1	10.1	51
05.01.18	16.01.18	9.5	7.9	6.1	7.6	50
17.01.18	19.01.18	8	5.4	5.6	10.1	33
17.01.17	19.01.18	9.6	8.8	8.8	7.3	44
06.02.18	11.02.18	13.3	8.9	6.2	9	45
26.02.18	28.02.18	7.6	7.4	5.9	7.1	
21.03.18	23.03.18	9.8	13.3			
03.04.18	06.04.18	13.8	7.3			
20.04.18	20.04.18	9.5	10.6			

Table1.. Average Blood glucose and HbA1c for Newly diagnosed patients to date

Effects of change on patients and the team

- More commitment and engagement from the patients.
- Building better rapport with the whole team as in patient for longer.
- Made us more cohesive and resilient.
- Better relationships with inpatient staff.
- Team working has improved.
- Increased appreciation for each other's skills within the team.
- We have to adapt to provide demand driven and more reactive service.
- We have better understanding of each others job roles and pressures.

Message for others

- Be brave
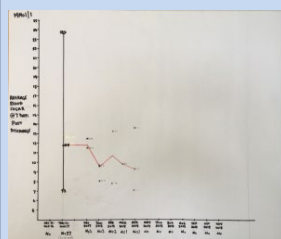- Fail fast
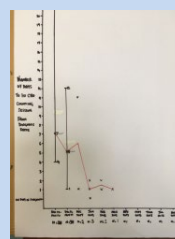- Put the fish on the table
- Team tenacity
- Enthusiasm is infectious

Fig.1

Fig.2

Run charts: Fig1. showing average BG @7 days after discharge Fig2. Number of days to carbohydrate counting.

Moving Forwards…

HBA1c 48 mmol/mol @ 3 & 12m
- CHO Counting from diagnosis
- Expert Meters from diagnosis
- Diasend Download from diagnosis
- Micro-teaching in clinic "My Diabetes Folder"

Lessons learnt:

- Start with the end in mind.
- Incorporate QI methodology in day to day working.
- Measure outcomes routinely.
- Learn quick through failing fast', not being afraid to try, not over-thinking things.
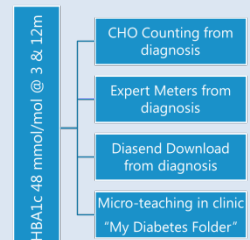
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