

# Frimley Park Hospital Quality Improvement Initiative 2019 - 2020

## Ward Nurse Education: Quality Improvement Initiative supports education of ward nurses in the management of newly diagnosed children and young people with Type 1 Diabetes

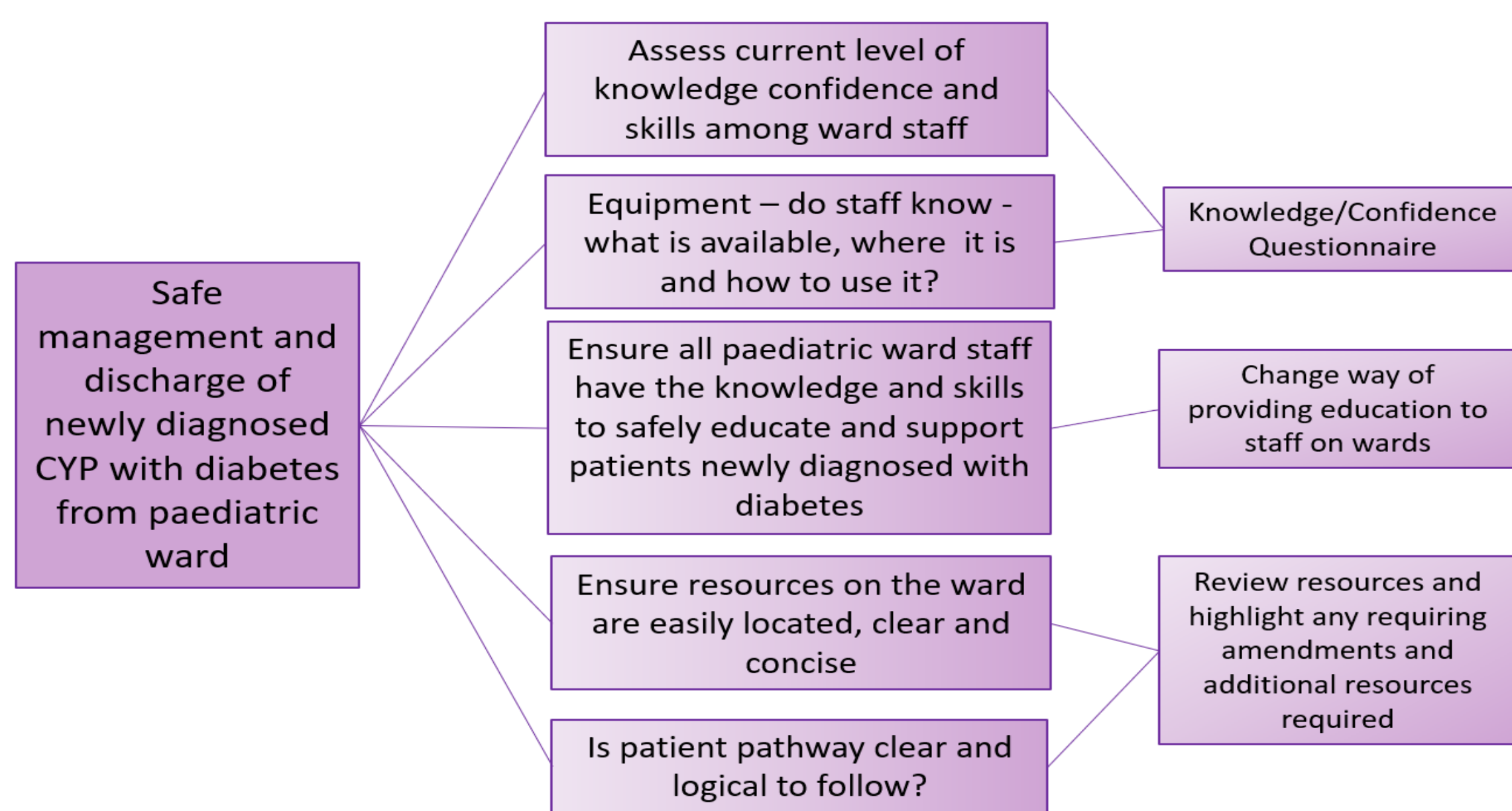
**QI Champion:** Stella Eve

**Current team members:** Dr Elizabeth George, Dr Aruna Goturu, Dr Adele Yeadon, Dr Katie Hamilton, Gemma Bryce, Sam Aldred, Sarah Bond

**Previous team members:** Gillian Adams, Julie Richardson

**Introduction:** Our initial team focus was the **safe management and discharge of newly diagnosed children and young people (CYP) with diabetes from the paediatric ward**. Fishbone analysis highlighted many essential factors to consider, such as staff knowledge, practical skills, equipment, resources and patient pathways. Although regular education sessions were available for nursing staff, attendance was generally poor and gaps were observed in ward staff knowledge and skills.

We therefore prioritised **ward staff education** as the fundamental basis for delivering safe care for this patient group.

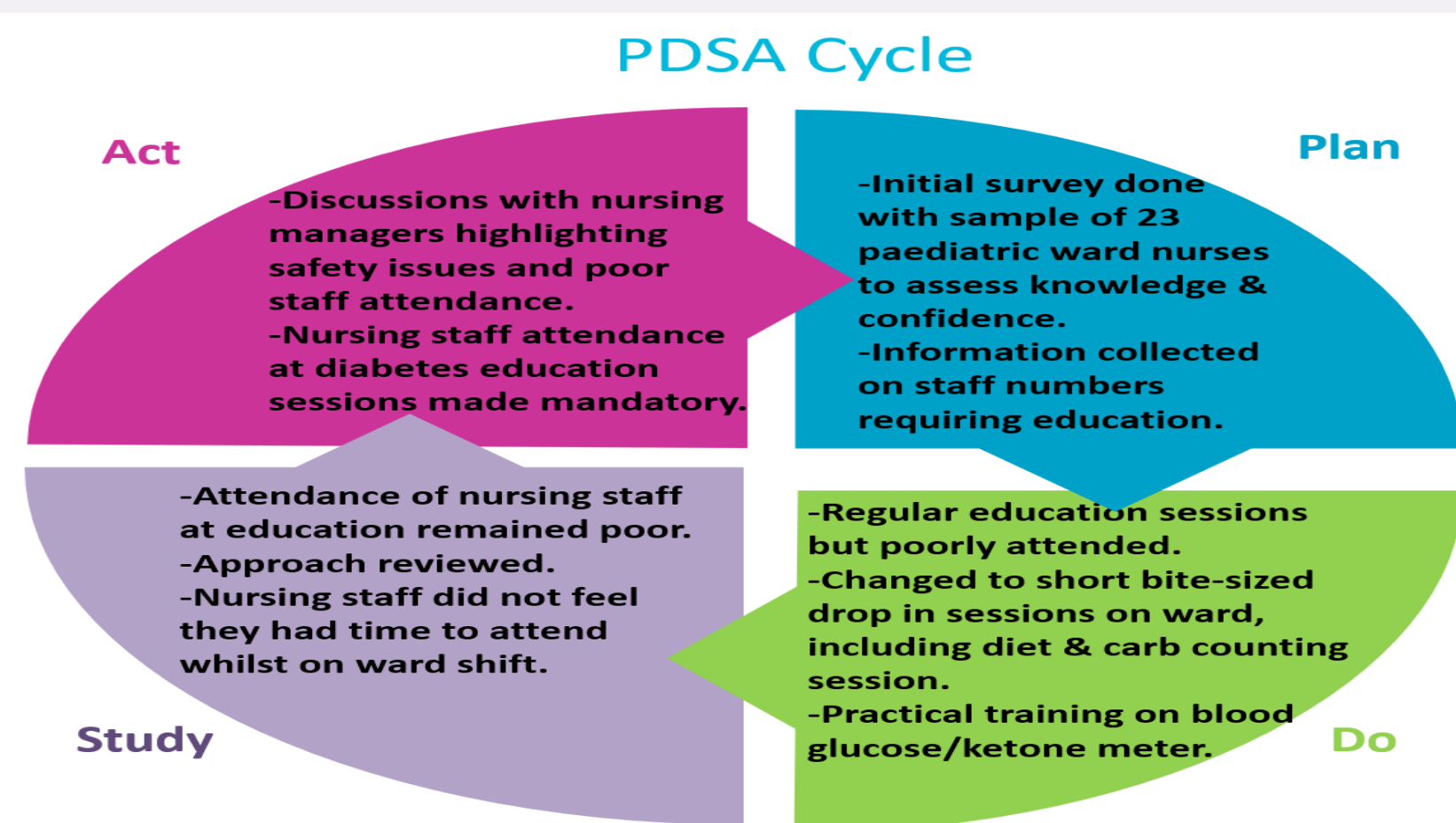


### Ward nurse education Phase 1

### Ward nurse education Phase 2

### Other interventions

#### INTERVENTIONS



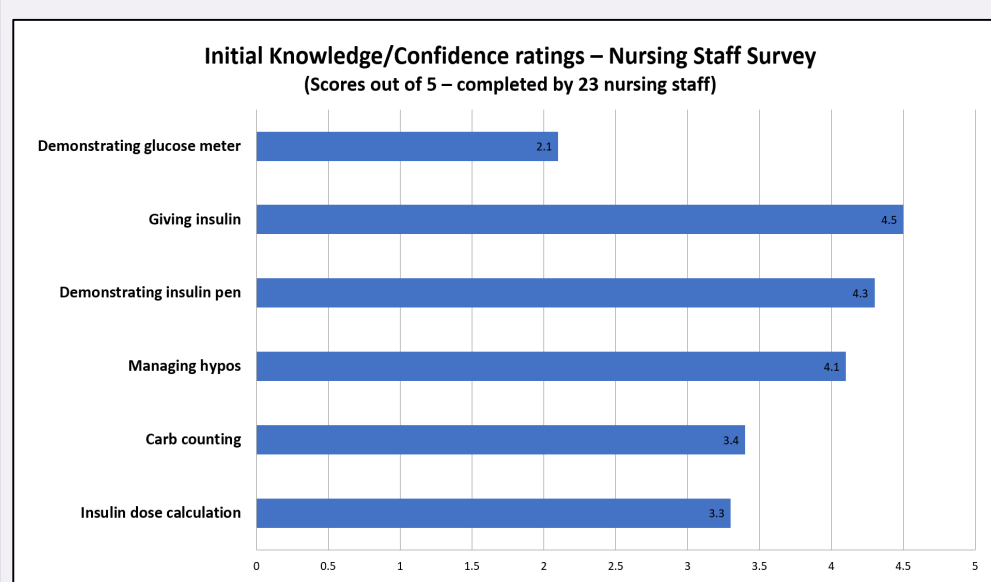
Insights into Diabetes: Ward Nurses' Study Day  
27th October 2020

9:00am - Welcome & Housekeeping
9:10am - Introductions, Expectations, Goals and Objectives
9:30am - Treatment and Management of Type 1 Diabetes - Ward Perspective
10:30am - Blood Glucose Testing & Continuous Glucose Monitoring (CGM)
11:15am - Tea Break
11:30am - Diet and Carbohydrate Counting
1pm - Lunch
1:30pm - Insulin Pumps and Technology Update
2pm - DKA and Illness
3pm - Tea Break
3:15pm - Injection Technique
4pm - Insights into Home and School Life
4:30pm - Q&A Session, Knowledge Assessment and Feedback Questionnaire
5pm - Finish

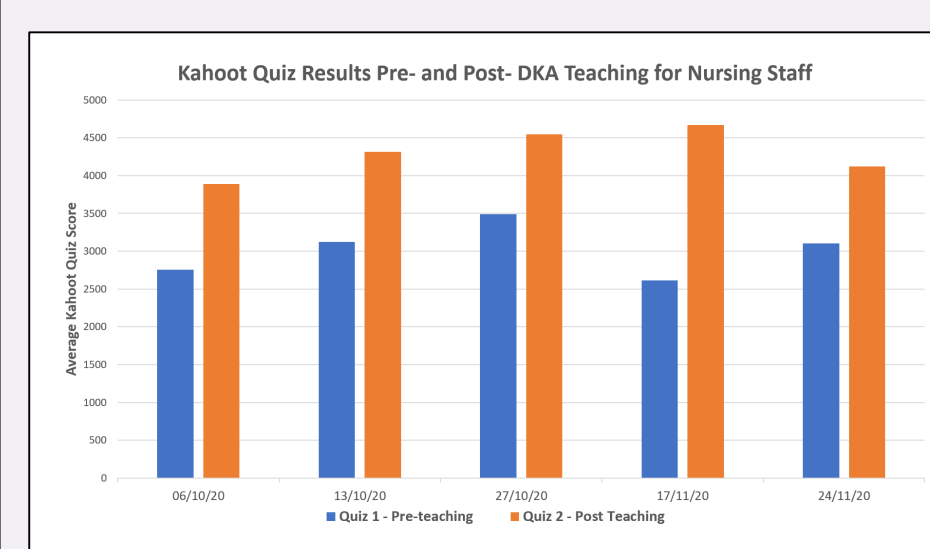
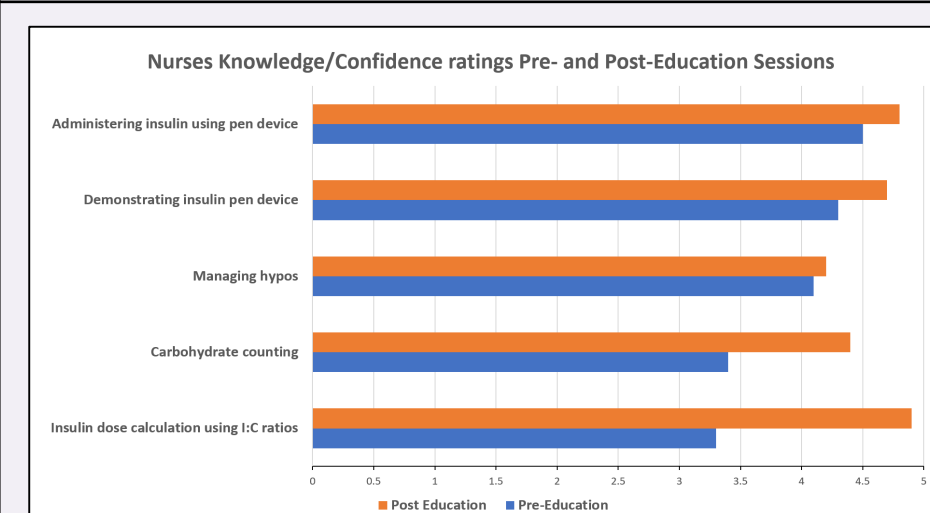
Full day mandatory education sessions planned and implemented.  
Nursing staff placed on rota to attend.  
Full attendance at first five Covid safe sessions – maximum 5 staff in each.  
To date 25 members of nursing staff have attended education day.

- Education of doctors following a preliminary survey of knowledge and confidence.
- Secured funding for Deapp (Diabetes Education App) through competitive 'Dragon's Den' trust initiative.
- Updated newly diagnosed paediatric diabetes guidelines and pathway.
- Age specific standardised insulin to carbohydrate ratio reference sheets created for doctors reference.
- Standardised newly diagnosed paediatric diabetes discharge letter.
- Cross-Trust Pathway for Primary Care to assist in Early Referral of Newly Diagnosed Paediatric Diabetes Patients.

#### OUTCOME DATA

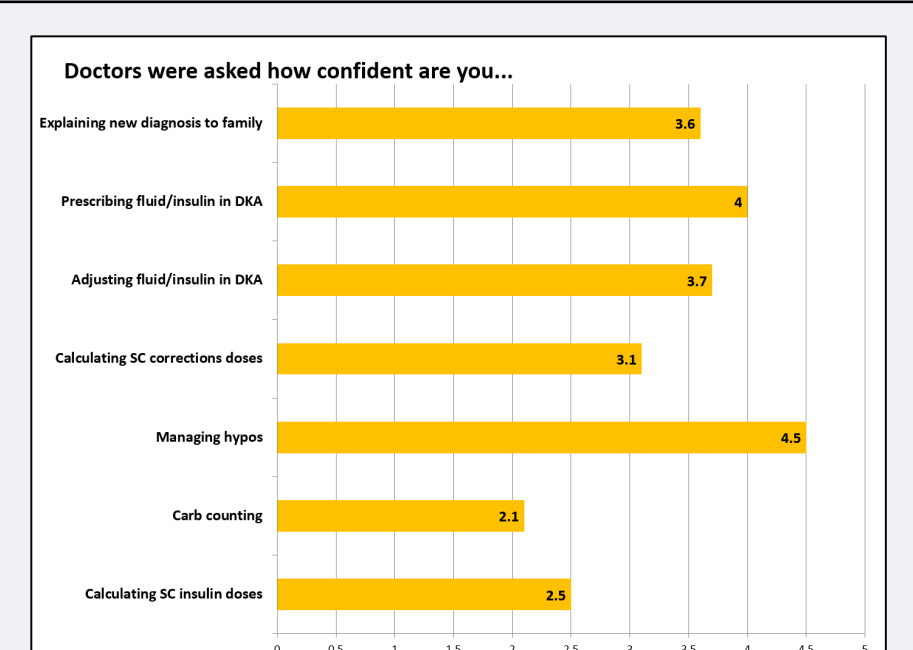
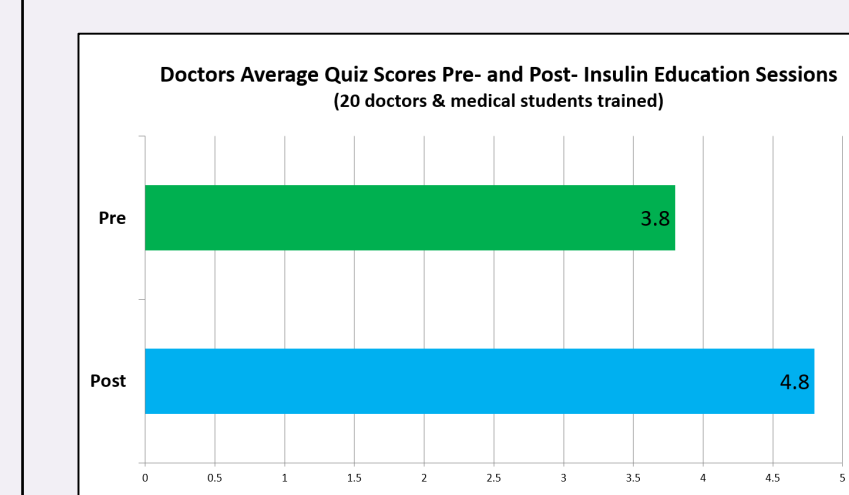


In November 2019 it was identified that there were 57 members of nursing staff needing training on ward.  
A knowledge and confidence questionnaire was completed by 23 nursing staff at that time.  
Conclusions from data gathered:  
➢ variable confidence  
➢ staff banding not relevant to knowledge  
➢ all staff need education  
➢ failing on practical skills of blood glucose testing and insulin injections.



Mandatory Nurse Education Sessions:  
➢ Evaluation forms for education day scored 121/125.  
➢ Observed improvement in management and support of recent newly diagnosed and patient admissions.  
➢ Knowledge/Confidence survey and Kahoot Quiz completed following attendance at education days showed improvement in knowledge.

Doctors education was carried out over the year and took a number of different formats:  
➢ Face-to-face sessions  
➢ Online Kahoot quizzes  
➢ Simulation sessions.  
This is a sample of some of the pre- and post education data collected.



DKA simulation session with A&E staff in June 2020  
All participants reported to 'strongly agree' with all of the following statements:  
• I found this simulation training useful  
• I understand more about the topics covered  
• I have more confidence to deal with this subject  
• Material covered was relevant to me  
• Topics covered will change and enhance my practice

#### QUALITATIVE FEEDBACK

No official qualitative data was collected at this point in the QI journey.

However -  
Nursing staff commented that they found it difficult to attend even short education sessions as too busy when working on ward.

#### Comments following mandatory nurse education days (Completed by all 25 nursing staff)

Definitely needed knowledge with the current level of newly diagnosed that have been seen on the ward.  
Nice to have current knowledge tested and ensure on the same wavelength.  
Best study day I have been to in a long time!  
Good day. Delivered at level could understand.  
Made it very engaging. I have learnt a handful of things I did not know in a fun way that will ensure I won't forget.  
I can definitely 100% apply it at work.  
Really thorough sessions that were relevant to my job role.  
Everything covered and everything linked well.  
All the information was very relevant to apply in clinical area.  
Good knowledge update. Quite helpful with learning.  
Presentations were very informative. Would have liked more interactive stations.  
Very informative and useful information that is current and relevant.  
I feel much more confident to care for these patients on the ward.  
Fantastic day with lots of tips & info delivered at right level for understanding. Updated knowledge base.

#### Are there any other aspects of diabetes that you would like to be educated on?

14/22 requested more... (doctors)

- Carb counting
- More teaching
- Hypoglycaemia
- Real time examples
- I am petrified of DM management!
- Carb ratios
- Clinic
- Switching IV to SC
- Correction doses
- Education please!
- Follow up
- Insulin pump
- We enjoy all your teachings! Very entertaining!

### Challenges:

Our journey was complicated by 2 key challenges:

1. Covid-19
2. Nearly 3 months with no PDSNs!

In order to keep our patients safe, we had to make significant changes to our wider service delivery, including:

- Virtual clinics
- Face-to-face annual review clinics
- Manning the PDSN phone (day time phone advice line)
- Consultants delivering school staff training
- Ensuring Covid safe training rooms, with limited numbers per training room (for school and hospital staff training).

### What we have learned:

- Number of nursing staff needing training on ward greater than anticipated, as it was found that there was a significant lack of knowledge amongst staff.
- Engagement in staff training was key barrier.
- Small goals with short deadlines kept us moving forward.
- Collation of data and evaluation is key to progression.
- Remember and be proud of your achievements (and praise or thank others who help you).
- Motivation - Communication - Teamwork - Support  
With these you can achieve anything no matter what challenges are encountered!

### There's more to come...

- Continue ongoing review and education of paediatric ward staff – further dates booked for 2021.
- Need to evaluate the data from study days so far and use these as building blocks for enhancement of future education events.
- Further plans for progressing education of ward doctors and GP's.
- Psychology input to future ward staff education sessions.