

CASE STUDY: INSULIN PUMP **STRUCTURED PATIENT EDUCATION (SPE)** **Developed by York Hospital**

Driven by a desire to improve the quality and consistency of care for their patients, the team of Diabetes Specialist Nurses and Dietitians at York developed an Insulin Pump Structured Education course for new insulin pump users.

AT A GLANCE

280
patients are using
insulin pumps at
York Hospital more
than double the
national average

↑10%
Opportunity to
increase new
insulin pump users
by 10% each year



The Insulin Pump Structured Education Course

- Four day course delivered over a six week period
- Repeated three times per year
- Supported by Insulin Pump Companies
- Patients educated on choice and provided assistance through transition from no pump to use of pumps.

PATIENT FEEDBACK

"Having had diabetes for many years, I hadn't realised how much there would be to learn when York hospital started talking to me about moving onto a pump. However, the York team presented the information in such an informative way that it was easy to absorb and understand how I would be able to adapt to the pump. The variety of ways in which the information was presented and the interaction with the group was hugely beneficial to my understanding of how to make the changes in my life and it was an easy format in which to ask questions or share concerns about what was such a significant change. Being able to choose the right pump was an important step and seeing and discussing each of the available pumps with their representatives provided us all with essential information. Having gone through this process as a group, it was great to keep in touch once we started living with our pumps in order to continue to share our day to day experiences."

"Moving onto the pump was a big step for me, but I felt confident in the information that the York team provided me with. I also know that I have the support of the York team behind me if I need it – they are very responsive to any issues. Once I started using the pump, the difference in my diabetes control was immediate and I have maintained the improvement in my HbA1C ever since."

IN DETAIL

The Challenge

In the UK, young people with type 1 diabetes often have poor glycaemic control. Insulin pump therapy is recommended for this patient cohort when HbA1c levels have remained at 69 mmol/mol or above on multiple daily injection therapy despite a high level of care.

The National Paediatric Diabetes Audit Report 2014-15¹ revealed that the mean HbA1c levels are above this threshold for Type 1 diabetics in England and Wales between the ages of 10 and 24, suggesting that insulin pump therapy may be recommended for the majority of these individuals. NICE technology appraisals (NICE, 2003; 2008) recommend widening the use of pump therapy too, yet The National Diabetes Insulin Pump Audit Report 2013-15 revealed that an average of 12.2% of all children and adults in the UK with Type 1 diabetes were using an insulin pump² compared to around 40% in North America³.

Previous studies have shown a key barrier to increasing insulin pump therapy uptake was variable access to patient education.

The Solution

Driven by a desire to improve the quality of care for their patients, the team of Diabetes Specialist Nurses and Dietitians at York developed an Insulin Pump Structured Education Course.

The four day course takes place over six weeks, starting with an 'insulin pump show' in which patients are given a choice of four pumps to choose from, are provided education on each and decide which pump they want. This session is presented alongside four pump companies.

Three weeks later, the insulin pumps are fitted and a second session is provided to help patients manage the transition from no pump to pump. As this is a significant change and period of adjustment for the patients, a third session follows in the same week.

Two weeks later, the course concludes with the final session.

Initially the course was delivered formally via a presentation, however following feedback, the course has now taken a more discussion-based format, which was preferred by the patients. **This approach has been found to increase motivation through the sharing of experiences and learning from each other's success and challenges.**

The Impact

The course runs three times a year and accommodates 10 patients on each. This provides the opportunity for 30 new insulin pump users per year, whereas the national average is 14 new patients commencing pump therapy per year⁴.

York hospital now has over 280 patients using insulin pumps, which is higher than the national average. The average number of Type 1 diabetics using insulin pumps in England is 127, or 15.3% of the Trust's Type 1 diabetic population, according to the National Diabetes Insulin Pump Audit 2015-16⁵.

Clinical outcome data is currently being collected for an evaluation of the impact on HbA1c and quality of life.

1 <http://www.rcpch.ac.uk/sites/default/files/page/NPDA%20Report%202014-15%20v5.2%20sent%20to%20HQIP%2025.05.2016.pdf>

2 <http://diabetestimes.co.uk/resources/national-diabetes-insulin-pump-audit-report-2013-15/>

3 <http://diabetestimes.co.uk/uk-insulin-pump-use-goes-up/>

4 http://www.diabetologists-abcd.org.uk/Audits/UK_Pump_Audit_data.pdf

5 <http://www.digital.nhs.uk/catalogue/PUB30027>

WANT TO KNOW MORE?



Tara Kadis - Lead Diabetes Specialist Nurse
York Hospitals Nhs Foundation Trust



tara.kadis@york.nhs.uk