## The power of numbers: Data on insulin pump use in the UK



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he National Paediatric Diabetes Audit (NPDA) data set not only collects data on key care processes, but also on what insulin regimen a young person is prescribed. The modality of insulin delivery, based on age, sex and ethnic minority status, and the impact of pump use on HbA<sub>1c</sub> levels were compared for the years 2011 and 2012. Data from 54 410 children and adolescents were collected from the Prospective Diabetes Follow-up Registry (*n*=26 198), T1D Exchange (*n*=13 755) and the National Paediatric Diabetes Audit (*n*=14 457; Sherr et al, 2015)

There has been increased use of insulin pump therapy internationally but there remains wide variation between countries, with the UK having the lowest uptake of this therapy type. The results of this collaborative article demonstrated an HbA<sub>1c</sub> reduction of 5.5 mmol/mol (0.5%) in those managed on pump therapy versus multiple injections. This important data could be used as a further incentive to reflect on our clinical practice and embrace this new technology into normal clinical practice.

August 2015 saw the publication of NICE guidance, Diabetes (type 1 and type 2) in children and young people: Diagnosis and management (NICE, 2015). This guidance suggests which groups would benefit from pump therapy, including its use from diagnosis. This will hopefully increase its use in diabetes centres that have appropriately-trained professionals.

This supplement includes an article in which the key recommendations of this new guidance are outlined. The article focuses on type 1 diabetes and it considers how we should ensure a consistent message to achieve the holy grail of improved control, with tighter blood glucose targets. Within our local team, the use of insulin pump therapy is increasing steadily.

This was reflected on our annual residential

holiday, where over a third of the children attending between the ages 8–13 years were on pump therapy. Several of these young people had been diagnosed at pre-school age and have been pumping for some years. The team commented on how much easier it was to manage these individuals, especially in the prevention of post-exercise hypoglycaemia and during the night.

Not all clinics run their own residential holiday but the benefits from these cannot be underestimated. Diabetes UK have been running residential trips for many years. These trips enable young people to experience a residential trip, which can prove invaluable to their self-confidence and self-management skills. Unlike a school trip where they may be the only one with type 1 diabetes, these trips enable them to have a shared experience with their peers who also have diabetes.

In our second article, Carol Metcalfe outlines the work that Diabetes UK do, including family weekends, and demonstrates the value not only to the young people but also the staff volunteers. I would suggest that staffing such a trip should be a compulsory training experience for all involved in managing type 1 diabetes. In particular, the night hypoglycaemia rounds give you insight into the daily toil of our families.

An article focusing on what the NICE guidelines recommend for type 2 diabetes will appear in the next paediatric supplement, which will be published in June.

NICE (2015) Diabetes (Type 1 and Type 2) in Children and Young People: Diagnosis and Management. NG18. NICE, London. Available at: www.nice.org.uk/ng18 (accessed 16.12.15)

Sherr JL, Hermann JM, Campbell F et al (2015) Use of insulin pump therapy in children and adolescents with type 1 diabetes and its impact on metabolic control: comparison of results from three large, transatlantic paediatric registries. *Diabetologia* **59**: 87–91