

Insulin pump services: Why are we behind other European countries and the US?



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In April this year, the Health and Social Care Information Centre (HSCIC) published the first insulin pump audit (HSCIC, 2016). The audit collected information on the number and characteristics of people with diabetes using an insulin pump, the reason for going on an insulin pump and the outcomes achieved since starting the pump. Despite not all pump centres providing data, the report suggests that uptake of pumps has increased over the past 3 years. Key findings include:

- Although more males than females have diabetes, more females than males are treated with insulin pumps.
- Pump use is lower in areas with a high degree of deprivation.
- There were gaps in the data submitted, including the reason for starting pump therapy and achievement of goals. However, more people started pump therapy due to problematic hypoglycaemia than to improve glycaemic control.
- People with type 1 diabetes on an insulin pump were less likely to have completed all eight care processes than those not on a pump.
- The composite measure of attaining all three NICE treatment targets (HbA_{1c} , blood pressure and total cholesterol) is more likely to be achieved by people with type 1 diabetes on a pump.
- Although more people on pumps achieved HbA_{1c} targets, 10% of people using pumps had HbA_{1c} levels ≥ 86 mmol/mol.
- The mean HbA_{1c} is lower in people on an insulin pump compared to those not on an insulin pump.

In the past there has been concern about access to insulin pumps being a “postcode lottery”. However, a UK audit in 2013 reported that 93% of centres (there was a 97% response rate) did not report any barriers in obtaining funding providing NICE criteria was met. The major barrier to pump service provision was reported to be lack of funding for healthcare professionals to run the service, with most centres providing a pump service within existing resources

(White et al, 2014). This is worrying as a successful pump service is dependent on trained, motivated professionals delivering patient-focused care.

Pump usage in the UK is thought to be lower than in other European countries and the US, and reasons for this are unclear. It is estimated that approximately 10–20% of adults with type 1 diabetes would meet the NICE criteria for pump therapy. However, not all people want pump therapy or are unsuitable.

At Aintree hospital, we established a pump service in 2008. In 2012, four years into the service, we had formally assessed 110 patients for insulin pump therapy and approximately 50% of those assessed did not proceed. The main reason for not pursuing pump therapy was patient choice. Some people thought the pump was a closed loop system and some did not like the idea of being attached to a pump. Only in a minority of cases were individuals considered unsuitable for pump therapy and this was largely due to poor commitment to blood glucose monitoring and/or carbohydrate counting. In the majority of these cases, the decision not to proceed was made jointly between the patient and healthcare professional. Furthermore this is most definitely an underestimation, as insulin pump therapy is discussed with many more people in routine appointments, but referral for formal assessment is declined by the patient. Regrettably, we have not kept ongoing data on the number of people referred for formal discussion on insulin pump therapy, although, anecdotally, we estimate that still about 40–50% of those offered pumps decline. This is fine as the ultimate decision to pursue insulin pump therapy should be with the person with diabetes. We should be focusing on appropriate use of insulin pumps and not merely numbers.

In this supplement, Muili Lawal reviews the benefits and challenges of group education compared with individual sessions. In addition, Meagan Brown and Courtney Davis describe how conversation maps can be utilised to facilitate patient diabetes education. ■

Health and Social Care Information Centre (2016) *National Diabetes Insulin Pump Audit Report, 2013–2015 (England)*. Available at: <http://bit.ly/29iZgR9> (accessed 04.07.16)

White H, Goenka N, Furlong N (2014) The UK service level audit of insulin pump therapy in adults. *Diabet Med* 31: 412–18