

Latest news: Hybrid closed-loop system rollout; glucose-lowering drugs and kidney outcomes; and childhood obesity clinics

Stay abreast of the latest news that could impact diabetes nursing.

New proposal for hybrid closed-loop system rollout

NICE has announced a new consultation on whether to accept a variation in funding request from NHS England for the rollout, over the next five years, of hybrid closed-loop (HCL) systems to people with type 1 diabetes.

In January 2023, NICE released draft guidance for England and Wales recommending the use of HCL systems for people with type 1 diabetes who meet the stated criteria. They were welcomed as a significant step in making the technology available on the NHS. HCL systems link insulin pumps and continuous glucose monitors using a computer algorithm in order to calculate the amount of insulin to deliver. Evidence shows that they help in the management of blood glucose levels, with fewer hypos and easier self-management.

If approved, the request from NHS England would result in local health systems not being required to provide HCL technology to all of those who meet the criteria within three months of the final NICE recommendation. Rather, a phased approach would be put in place to provide access sooner for those who would benefit the most. It is hoped that this would reduce pressure on stretched NHS services.

While a date has not been confirmed, NICE expects to finalise later this year who the technology will be recommended for and how it will be rolled out. Although the recommendations will apply only in England and Wales, the

Scottish government recently announced investment to accelerate the distribution of HCL systems.

In response to the news, Nikki Joule, Policy Manager at Diabetes UK, said: “Hybrid closed-loop technology has the potential to transform the lives of people with type 1 diabetes, improving both clinical outcomes and their quality of life. Getting that rollout right is of paramount importance, and we’re working with the NHS and NICE to help ensure everyone who could benefit from this technology has access to it.”

The draft technical appraisal from NICE is available [here](#).

Study compares effects of glucose-lowering medications on kidney outcomes

Several classes of glucose-lowering medications have kidney benefits in established type 2 diabetes that appear to be independent of glycaemic effects. It is not known, however, whether there are differential benefits from treatment with non-SGLT2 inhibitor glucose-lowering medication classes in people who are at an earlier stage of type 2 diabetes, and are largely free of diabetic kidney disease (DKD).

The GRADE (Glycemia Reduction Approaches in Diabetes: A Comparative Effectiveness) trial compared glycaemic and other outcomes in four commonly used medication classes when added to metformin. The trial recruited 5047 adults (63.6% men) across 36 US sites. At baseline, participants had had type 2

diabetes for <10 years, an HbA_{1c} between 6.8% and 8.5% (51 and 69 mmol/mol), an eGFR ≥ 60 mL/min/1.73 m² and were receiving metformin. They were randomised to start sitagliptin (a DPP-4 inhibitor), glimepiride (a sulfonylurea), liraglutide (a GLP-1 receptor agonist) or insulin glargine (100 U/mL), in addition to metformin. Basal and prandial insulin were added thereafter, if needed. The mean follow-up time was 5.0 years.

The co-primary outcomes were chronic eGFR slope (change in eGFR between year 1 and the trial end) and a composite of kidney disease progression (albuminuria, dialysis, transplant or death due to kidney disease). No significant differences were found between groups in these outcomes.

Nor were there significant differences by treatment assignment in the secondary outcomes. These included confirmed progression to eGFR ≤ 60 mL/min/1.73 m², a 40% decrease in eGFR, doubling of urine albumin–creatinine ratio to ≥ 30 mg/g and progression of KDIGO category. No adverse kidney events due to treatment assignment were recorded.

These null results suggest that, in people with type 2 diabetes predominantly without kidney complications at baseline, there is no substantial comparative advantage of a DPP-4 inhibitor, sulfonylurea, GLP-1 receptor agonist or insulin glargine, when added to metformin for preventing the development or progression of DKD in the first decade after diagnosis.

The full study can be read [here](#).

More NHS childhood obesity clinics planned in England

The NHS has announced that ten new specialist clinics to support severely obese children and young people (CYP) will be opened in England this year. This will bring the total number of clinics to 30, twice as many as was set out in *The NHS Long Term Plan* in 2019.

The clinics will be able to support around 3000 CYP aged between 2 and 18 years. Specialist doctors, nurses, psychologists, social workers and dietitians will support weight loss and treatment for complications, and produce tailored care packages with their families. As well as providing treatment, the clinics will work

to identify the factors that cause obesity in CYP by considering mental well-being alongside physical health.

This holistic approach is expected to reduce long-term complications of living with excess weight, such as type 2 diabetes, stroke, early joint replacements and mental health problems. Professor Simon Kenny, NHS England's National Clinical Director for CYP, commented that "these additional clinics are an important step in helping vulnerable children and young people live healthier and happier lives."

The number of children living with severe obesity doubles from the start to the end of primary school. Current data

indicates that, in England, one fifth of children aged 10–11 years are obese. The Government has a stated aim of halving childhood obesity by 2030.

The criteria for referral to an NHS Complications from Excess Weight Clinic are a BMI above the 99.6 percentile and a complication of excess weight or a BMI above the 3.33 standard deviation score. ■

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