

Latest news: Adult-onset type 1 diabetes; inequalities in diabetes care; and final HCL recommendations

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

First study to screen adults for type 1 diabetes now recruiting

A world-first research programme to identify adults at high risk of developing type 1 diabetes has been launched in the UK. The Type 1 Diabetes Risk in Adults (T1DRA) study aims to recruit 20 000 participants, aged between 18 and 70 years, from the general population to assess their risk.

Although more than half of type 1 diabetes diagnoses are in adults, adult-onset type 1 diabetes is not well understood. T1DRA hopes to answer critical questions about its development and provide an idea of how many adults in the UK are at increased risk of developing the condition.

T1DRA is open to those with no close family members with type 1 diabetes. The research team will send test kits to participants in the post. Finger-prick blood samples will be screened for islet autoantibodies, which are markers for the development of type 1 diabetes that can appear in the blood years, or even decades, before symptoms are experienced.

Those identified as being at high risk will be followed by the research team to see how many go on to develop type 1 diabetes, how quickly they progress to a diagnosis, and to identify any genetic, biological or environmental factors that can be linked with symptoms developing quickly. They will also be provided with the opportunity to receive type 1 diabetes education and monitoring, and access to clinical trials looking at new treatments that could delay or prevent the condition.

T1DRA follows on the heels of ELSA (EarLy Surveillance for Autoimmune diabetes) study, a nationwide type 1 screening trial for children. ELSA is aiming to screen 20 000 children, aged 3–13 years. Together, these rollouts mean that the UK is the first country in the world to offer general population screening for type 1 diabetes for children and adults.

Dr Elizabeth Robertson, Director of Research at Diabetes UK, commented that the trials place the UK “at the forefront of research that will bring us closer to the day when risk of type 1 diabetes can be spotted early, and a diagnosis prevented.”

People can sign up to the T1DRA study here: t1dra.bristol.ac.uk.

Report seeks to address inequalities in diabetes care

A report containing a series of recommendations for healthcare professionals and policy-makers to deliver the changes needed to reduce inequalities in diabetes care has been published. Diabetes UK set up the Tackling Inequalities Commission of experts to address the poor access to care that some people with diabetes face.

It is recognised that diabetes does not affect everyone equally. The chances of developing type 2 diabetes, the care a person living with any type of diabetes receives and their long-term outcomes is affected by their ethnicity, where they live and their income. If a person is from an ethnic minority or living in deprivation, access to life-changing diabetes technology is far less likely.

To help understand where barriers to improvement exist, the Commission invited a diverse group of people living with diabetes and most affected by health inequalities to share their experiences. Input was also gathered from frontline healthcare professionals, community organisations and experts in social policy, health economics and public health.

Based around guiding principles, the Commission’s report sets out “calls to action” across seven areas. These include for organisations to be bold in their commitment to practices that are anti-racist. Working with communities, policies and practices should be reviewed to understand where there is a need to improve and adapt services to make them accessible to all ethnicities.

Organisations are also encouraged to understand and address deprivation, and the impact that it has on managing diabetes. As well as being more likely to develop a long-term condition, people living in deprivation are more likely to be caught up in NHS pressures, such as longer waiting lists.

The importance of working in partnership with local community organisations in a sustained way, through procurement, inclusion and consultation, is a theme that runs throughout the report.

It concludes by acknowledging the pressures faced by healthcare professionals in the UK and the progress that has been made. While inequalities faced by those living with diabetes are complex, interwoven and individual, the Commission hopes that the report provides

a case for change, evidence to provoke conversation and practical steps to reduce the harm that diabetes creates.

An executive summary of the report can be read [here](#), and the full report accessed [here](#).

Final recommendations on hybrid closed-loop systems announced by NICE

The much-anticipated final appraisal recommendations on the use of hybrid closed-loop (HCL) systems in people with type 1 diabetes in England and Wales have been released by NICE. Details of how the technology will be rolled out over the coming years are also outlined.

HCL systems use a mathematical algorithm to deliver insulin automatically in response to continuously monitored interstitial fluid glucose levels. They combine real-time glucose monitoring from a continuous glucose monitor (CGM) device and a control algorithm to direct insulin delivery through a body-worn insulin pump. Evidence shows that they help in the management of blood glucose levels, with fewer hypos and easier self-management.

NICE has recommended HCL systems as an option for managing

blood glucose levels in type 1 diabetes for adults who are finding it difficult to manage their condition (i.e. they have an average HbA_{1c} ≥58 mmol/mol or have disabling hypoglycaemia), despite the use of continuous subcutaneous insulin infusion, real-time CGM or intermittently scanned CGM.

HCL systems are also recommended as an option for managing blood glucose levels in type 1 diabetes for children and young people, and for people who are pregnant or planning a pregnancy.

NICE states, however, that the systems are recommended only if manufacturers and NHS England agree a cost-effective price on behalf of the relevant health bodies.

An HCL system may only be used with the support of a trained multidisciplinary team, and if the person or their carer understands how to use it and attends a type 1 diabetes structured education programme.

These recommendations are not intended to affect use of HCL systems that were started in the NHS before this guidance was published.

In order to provide the specialist support and clinical capacity to meet the recommendations, local health systems

overseen by NHS England and NHS Wales will be required to roll out the technology over an extended 5-year period.

Professor Jonathan Benger, the Chief Medical Officer at NICE, feels that the use of HCL systems will be a game-changer for people with type 1 diabetes. He commented that: “By ensuring their blood glucose levels are within the recommended range, people are less likely to have complications, such as disabling hypoglycaemia, strokes and heart attacks, which lead to costly NHS care.”

If no appeals are received, the final guidance is expected to be published in December 2023. By this stage, it should be known which HCL systems will be available under the guidance, and what funding arrangements have been made.

The current appraisal document can be read [here](#). ■

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