

Hybrid Closed Loop (HCL) Technology for Patients with Diabetes

This information is a brief overview of the HCL technology that you may have heard about that is be rolled out following its review by the UK, National Institutes of Clinical Excellence (NICE). In December 2023, NICE approved HCL systems for patients with Type 1 Diabetes.

If you have any further questions, please speak to a doctor or nurse caring for you.

What is Hybrid Closed Loop Technology?

The HCL system is a development of the delivery of insulin using a pump and has three components: -

1. The insulin pump delivering continuous, small doses of insulin
2. The glucose sensor that monitors glucose every few minutes
3. The information from the sensor measuring glucose adjusting the insulin being delivered according to an algorithm.

The HCL system typically helps to achieve glucose within range for >70%, and low readings (hypoglycaemia) occurring <4% of the time.

There are several different configurations of pumps and sensors making up the HCL system which are comparable in terms of the outcomes above.

Who can receive the service?

The roll-out of this technology is being co-ordinated across the country with local administrative authorities. Centres are being

developed to ensure that professional expertise is increased and available to safely deliver this treatment to patients. The NHS England phased roll-out plan started in April 2024 and is expected to develop and deliver to all qualifying patients over the next five years.

The guidelines recommend that the following groups with Type 1 diabetes would be eligible:

Patients with HbA1c ≥ 58 mmol/mol (7.5%) or with disabling hypoglycaemia despite best management with insulin pump or glucose sensors.

However, adhering to NHS England's Guidelines the phased roll out will commence with the group listed below. These groups include:

- Children and young people under the age of 18
- People who are pregnant or planning pregnancy
- Patients already on insulin pumps.

Useful sources of information

The Diabetes Service at St George's University Hospitals Foundation Trust is committed to ensuring our patients receive this treatment and are supported according to national guidance. Our local policy will take account of safety, resources and ensure this is done equitably for all our patients.

Contact us

If you have any questions or concerns about Hybrid Closed Loop Technology, please contact the Diabetes Technologies Coordinator on 020 8266 6718 (Monday to Friday, 8am to 4pm), alternatively please contact insulin.pumps@stgeorges.nhs.uk

For more information leaflets on conditions, procedures, treatments and services offered at our hospitals, please visit www.stgeorges.nhs.uk

Additional services

Patient Advice and Liaison Service (PALS)

PALS can offer you advice and information when you have comments or concerns about our services or care. You can contact the PALS team on the advisory telephone line Monday, Tuesday, Thursday and Friday from 2pm to 5pm.

A Walk-in service is available:

Monday, Tuesday and Thursday between 10am and 4pm

Friday between 10am and 2pm.

The Walk-in and Advisory telephone services are closed on Wednesdays. Please contact PALS in advance to check if there are any changes to opening times.

PALS is based within the hospital in the ground floor main corridor between Grosvenor and Lanesborough wings.

Tel: 020 8725 2453 **Email:** pals@stgeorges.nhs.uk

NHS UK

The NHS provides online information and guidance on all aspects of health and healthcare, to help you make decisions about your health. **Web:** www.nhs.uk

NHS 111

You can call 111 when you need medical help fast but it's not a 999 emergency. NHS 111 is available 24 hours a day, 365 days a year. Calls are free from landlines and mobile phones. **Tel:** 111

AccessAble

You can download accessibility guides for all our services by searching 'St George's Hospital' on the AccessAble website (www.accessable.co.uk). The guides are designed to ensure everyone – including those with accessibility needs – can access our hospital and community sites with confidence.



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