



The Royal Surrey County Hospital delivers enhanced care to pregnant women with diabetes using remote monitoring and cloud technology

Case Study

The maternity services team at Royal Surrey County Hospital has to manage a growing volume of pregnant women with gestational diabetes or pre-existing diabetes – a condition that needs to be monitored closely to reduce the risks posed to both mother and child.



The Trust wanted to provide pregnant women with a technology approach that enabled women to record blood glucose readings from the comfort of their own home while providing reassurance that their condition was still being closely monitored by clinicians.

In April 2019, the Royal Surrey County Hospital began using GDm-Health™, a digital therapeutic smartphone application that helps clinicians remotely monitor blood glucose levels in near real time and helps pregnant women with diabetes better manage their condition.

Purpose

Prior to implementing GDm-Health, diabetes specialist midwives had to regularly call or email women to get blood glucose readings and dietary information which were then recorded in paper-based diaries. This manual method is time consuming and can lead to delays in identifying women that need treatment to manage blood glucose levels. Moreover, earlier intervention may improve blood glucose control and ultimately improve outcomes.

Midwives spent a large portion of their day calling or emailing to collect readings, on average ten calls per day and an average of 224 emails per month to/from expectant mothers. The Trust's aim was to significantly reduce this administrative burden for the team while at the same time increasing responsiveness of the service, reducing hospital visits and easing the burden of blood glucose management for women.

The work

Within the first six months of using GDm Health, the Trust achieved a high adoption of the technology among women, with 95% regularly recording blood glucose readings via the app.

A year later, this number has increased to 98% as more women recognised the benefits of using remote monitoring, especially at a time when social distancing guidelines require pregnant women to stay at home as much as possible.

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GDM-Health has made it so much easier for us to monitor women's blood glucose and meal information and communicate with them. Importantly, in some cases we are able to quickly identify those patients that need insulin treatment and arrange medication without having to see them in hospital. This means those women that need treatment now receive it quicker, and this is a great benefit, both for them and for us.

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Paula Fernandez, Diabetes Specialist Midwife at Royal Surrey County Hospital NHS Foundation Trust

With the help of GDM-Health, the Royal Surrey County Hospital achieved:

- an 18% reduction in the number of appointments with midwives/DSNs;
- a 47% reduction in the number of appointments with diabetes specialist doctors;
- clinical improvements – the average time to intervention has reduced by 21%. By identifying rising blood glucose levels more quickly and making earlier interventions, midwives at Royal Surrey are confident they are improving clinical care for both mother and child;
- the ability to conduct near real-time blood glucose readings providing clinicians with ongoing insight into patients' glycaemic control and contributing to service improvement, by allowing them to prioritise more urgent cases;
- increased communication for pregnant women with their clinician, with 100% of women using GDM- Health declaring that they are happy with the care provided by the diabetes team;
- reductions in administration – freeing up time for clinicians to focus on patients in greatest need. In the four-month period following implementation, email traffic reduced by 54% and call volumes by 70%.

GDM-Health has allowed the Royal Surrey County Hospital to digitise its approach in managing pregnant women with diabetes by adopting a “digital-first” approach with electronic notes and remote monitoring. Not only does this improve the effectiveness of its maternity services and clinicians, it provides valuable support and guidance for pregnant women, empowering them to manage their condition from home.

For more information on availability, please contact contact@huma.com



Huma Therapeutics is now the new home of GDM-Health after it's acquisition from Sensyne Health.

With thanks to:

