

Title

Maintaining continuity of care for neonates using a remote digital health solution

Organisation

International Hospital Federation

Author

Simon Minford

Alder Hey Children's NHS Foundation Trust

Country

United Kingdom

Dr C Dewhurst

Liverpool Women's NHS Foundation Trust

Key learning points

- A novel telemedicine service was effective in ensuring continuity of neonatal care and promoting team cohesion during the COVID-19 pandemic.
- The preferences of families and caregivers is important in determining on how best to integrate the use of telemedicine in clinical care.

How has COVID-19 impacted essential health services?

Liverpool Neonatal Partnership is a two-site model between Liverpool Women's Hospital (LWH) and Alder Hey Children's Hospital (AHCH) covering all modalities including surgery, cardiac and foetal medicine.

AHCH is the largest children's hospital in the UK. If a baby needs specialist surgical care in Liverpool, they have to be transported 3.5 miles between the two sites for their care. The model is supported by a team of 14 neonatologists.

The challenge the partnership faced in Spring 2020 was to protect neonates from COVID and continue to care for those who require monitoring and/or urgent clinical opinions. This meant looking at options that avoided delays and unnecessary travel for clinicians.

With staff absences due to self isolation/shielding as a result of COVID-19, the consultant team at LWH was reduced by 50 per cent in March 2020. This resulted in a loss of approximately 40% of clinical facing time, and potential significant disruption to clinical care.

What was the intervention to mitigate this impact?

In order to mitigate the impact of COVID-19 on neonatal care, a telemedicine service was launched to ensure clinical input from neonatal doctors who were able to work remotely from home whilst shielding or self isolating.

When connected, a neonatal surgeon uses a high-definition camera which can zoom in close to a baby (close enough to see the weave in a baby's bonnet). That allows clinicians to remotely make decisions.

Conversations and advice are facilitated through Microsoft Teams or over the phone. The telehealth service allows neonatal surgeons to make clinical decisions where they would otherwise have to be physically present in the room. These decisions are especially important in neonatal practice, such as whether to transfer a sick baby for an operation.



Photo Credit: International Hospital Federation

How did this intervention help in the maintenance of essential health services?

The telemedicine service was successful in ensuring continuity of care at a time of significant disruption. For example, 90 per cent of the consultant neonatal surgeons are now trained on using the service. Sharing of the workload has meant that the neonatal team did not need locum staff support despite the significant challenge to their capacity. Consequently, the team had restructured work patterns so that there was always a 'Virtual Consultant' available. This provided full clinical cover.

Moreover, the shielded neonatologists remained 'part of the team', contributing to the service. The solution was found to be easy to use, with training completed within 15 minutes, after which staff would be ready to do a ward round. This helped telemedicine to become the norm for those at home providing the services and nurses in the hospital and other medical staff and families.

Families especially liked the speedy reviews. In the past, babies with surgical problems would have to contact the surgeon, wait for a response and it would take time to arrange for a visit. With telemedicine, it would only take 15 minutes for a clinical review.

What were the key challenges involved?

- Expectations and familiarity with the telemedicine service were a key challenge. Although parents quickly adapted to the use of a telemedicine platforms, some preferred to meet the doctor or surgeon first before switching to virtual format.