

## HSL's Pulse Platform a 'lifeline' for NI heart families.

Since its introduction to the Clark Clinic at Belfast Children's Hospital in 2007, videoconferencing has played an integral role in providing major assistance in the post-operative care and monitoring of babies and small children with major congenital heart conditions. The HSL team has supported and further developed the Videoconferencing service and it is now available to all of the NHS across Northern Ireland.



HSL's team has been working with the e-Health and core ICT service in the HSC Board, in jointly developing the service so that it is much more scalable and affordable and can be used to provide support to many more families across the country. Since 2007, the video platform has been used by approximately 800 patients as part of Clark Clinic's Home Monitoring and Neonatal Tele-Echo programmes. Without access to telemedicine, more children would be admitted to hospital, more may have potentially life-saving treatments delayed, parents would suffer from added stress and anxiety and deteriorations in the underlying cardiac status may take longer to be detected.



Pulse  
care



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*Dr Brian McCrossan, Paediatric Cardiologist at Clark Clinic said, "Since its introduction in 2007, there have been incremental improvements in the video conferencing technology. As the platform has advanced, it has significantly improved the timeliness and ease of connecting with patients and the paediatric cardiology team. It is extremely reliable and easy to access. We are also reassured by the security of the platform compared to social media type platforms."*

*"Telehealth has played a vital role during the Coronavirus pandemic as it has enabled our team to conduct a number of urgent video-consultations for patients at home which have obviated the need for them to come to the emergency department. Parental anxiety has been more heightened than usual due to the pandemic, therefore we have found that supporting families at home with regular video-consultations has helped to reduce stress, reduce health service utilisation and is much appreciated by parents and clinicians alike."*

A highly important technology year-round for Clark Clinic's cardiologists and heart families throughout Northern Ireland for the past 15 years, during Covid-19 this was an invaluable platform for the families of children with heart conditions.

***"We have spent many years developing the conferencing and collaboration technology to ensure it can be easily accessed and used by as many of NI's heart patients as possible", said Sam McMaster, HSL's Director of Telehealth. "The home monitoring programme was previously limited to some extent by time taken to install individual videoconferencing equipment. However, advancements to the Pulse platform have solved this problem, as it is now accessible to patients via a simple download, making it more widely accessible to the growing number of patients supported by the Clark Clinic and their families."***

Reflecting on the importance this technology has had on her family life, Jo Hargan from Ballymoney, mum of Sasha who was born with a complex heart condition said, "Pulse was my panic button – we lived over an hour away from Clark Clinic and in the lead up to Sasha's operation it was extremely comforting for us as a family to be able to contact medical professionals immediately, any time we were concerned about Sasha's wellbeing. I had two other young children to look after, so having Telehealth installed also helped save us journeys to and from the hospital that without the technology would have been unavoidable."

This wider distribution of the technology has meant that Clark Clinic doctors have been able to monitor patients and perform emergency care consultations from the comfort and safety of their own homes during the pandemic. Telehealth has allowed Clark Clinic's young patients, who are extremely high risk of infection, to receive the same vital health care and emergency consultations without regular visits to the Belfast medical facility. The application has also provided advice and support for parents during isolation.

Working closely with the Northern Ireland's heart families connected with Clark Clinic, Chief Executive of The Children's Heartbeat Trust Sarah Quinlan said, "For many heart families, having access to the Pulse video platform has provided a lifeline when they needed it most. It connects concerned parents with medical professionals who can provide immediate advice or reassurance, significantly reducing the amount of time they have to spend travelling to and attending appointments by allowing them to access medical support from home.

