

**Edinburgh
Children's
Hospital Charity**



LITT Impact Report 2026

The Welch Trust



Introduction

Five years on from The Welch Trust's incredible gift to children in the care of The Royal Hospital for Children and Young People, this report aims to update the Trustees on the continued life-changing impact of your donation.

The Trustees awarded £140,000 to Edinburgh Children's Hospital Charity (EHC) in 2020-2021. This generous gift transformed surgical care for children with epilepsy in Scotland. Your donation brought the LITT surgical procedure to Edinburgh and the Scottish Paediatric Epilepsy Surgery Service, working from within the hospital. EHC and our friends in the SPESS team will never forget your generous support in making this step-change possible – thank you.

If the Trustees have any questions on the information in this report, would like us to join a Trustee meeting, or visit EHC and the hospital, then please let us know and we will be delighted to make the necessary arrangements.

LITT Update

To remind the Trustees, LITT stands for Laser Interstitial Thermal Therapy (LITT). It is a minimally invasive laser surgery that targets and destroys the brain tissue causing seizures, offering a faster recovery and fewer cognitive side effects compared to traditional epilepsy surgery. It is only available in Scotland at The Royal Hospital for Children and Young People, and we remain the only UK children's hospital offering LITT as a free NHS service. The alternative to LITT is open brain surgery, which can take up to nine hours, has a higher risk of infection, a longer recovery period and less chance of success.

So far in 2026, four children have undergone LITT surgery, all of whom can report reduced seizures and better health and quality of life as a result.

Case Study One

This young patient experienced their first seizure at three years old. She could have up to four seizures a day and had emerging resistance to anti-epileptic drugs. She had the LITT procedure at four years with the following benefits to her and her family:

- At the five-month follow-up the girl was found to be seizure-free.
- Parents report their daughter has improved sleep and improved memory function.
- The short stay in hospital and quick recovery allowed the girl to return to nurse's soon after, which wouldn't have been possible with open surgery.
- Nursery report she can participate more in learning than pre-surgery, as she isn't as tired. She is already showing better retention with learning.
- The parents had been worried about how surgery recovery would affect transition to primary school, but this wasn't a problem with recovery being so quick.
- Dad and Gran both have a terminal cancer diagnosis, so for their child to be well and not having seizures has allowed them a 'breather', with no seizures to anticipate or manage they have better precious quality time as a family. This is cherished by family.

Case Study Two

This boy experienced his first seizure age eight, with seizures initially of 2-4 minutes occurring up to five times daily. He was diagnosed with drug-resistant epilepsy and his condition worsened, with seizures increasing in duration and frequency, eventually resulting in up to 50 seizures in one day. This young patient had often been admitted to Critical Care as an emergency as he required intubation and ventilation to support his breathing throughout seizures. These episodes not only required significant recovery for the boy but were extremely distressing for family. He had LITT surgery at ten years of age, with the following benefits:

- At one month follow-up the boy was found to have significantly reduced seizures, some days seizure-free.
- No seizures have occurred during football training where seizures used to be frequent. He is now able to participate in sports activities regularly with friends, benefitting his confidence, overall fitness and social relationships.
- He has returned to school full-time and is managing well, having previously had multiple absences due to seizure activity and hospital admissions. His school is reporting a positive difference in his ability to apply himself and interact with school.
- Mum reports he is doing well following surgery, with energy levels quickly recovering and they are enjoying this rare stable period of life as a family benefiting them all in terms of emotional wellbeing and quality of life

Case Study Three

This young patient first came to the Surgical Team's attention at five months old when she was having a few seizures every hour, eight focal seizures every day, followed by numerous spasms every night. Drug-resistant epilepsy diagnosis was made after three anti-epileptic drugs were trialled. Due to the high number of seizures, hospital admissions and failed medications there were significant concerns regarding impact on crucial development at her age and how this would affect future outcomes. She had LITT procedure at two years with the following benefits:

- Parents report they are delighted with the outcome as it is the first time in her life since seizures presented that she has been seizure free. This has allowed them to see her character and personality developing without interruption from daily seizures.
- Mum has noticed her daughter has a better understanding of language, will follow instructions which she couldn't do before, and they are noticing new levels of play from her.
- The child's health had caused the parents significant emotional and physical stress, which has contributed to their declining mental health and increased anxiety. The provision of LITT so close to home enabled their support network to be close by, visit and help them through the hospital stay and they already feel notable improvements in their own anxiety with the seizure freedom this surgery has brought.

Case Study Four

This young patient had his first seizure at six years old, presenting to the Surgical Team at 11 years having 10-20 seizures daily, lasting up to a minute. Various drugs, diets and other treatments were trialled, but the boy's epilepsy and behaviour became unmanageable, so the family opted to proceed with LITT with the following benefits:

- Patient was fit for discharge the day following the procedure, feeling very comfortable and with follow-up in place.
- He is now back at school and has had two very small seizures since discharge.
- Parents report they are very happy with seizure reduction.
- His family are aware that further treatment may be required for a remaining lesion on other side of his brain, but they feel reduction in seizure frequency is so significant and quality of life so much better that a second procedure is not required at present.

Donation Impact Summary

Edinburgh Children's Hospital Charity and our colleagues at The Royal Hospital for Children and Young People are incredibly grateful for the support shown to some of the most seriously ill children we see in the hospital.

We all know epilepsy is a chronic health conditions that has devastating impacts on children and their families. The Welch Trust's rare and generous support of this more hidden condition, and practical support to children who are going through the toughest of days and childhoods, leaves a legacy that is still changing childhoods today.

Thank you once again for your outstanding generosity and continued support.

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