

Sheffield Olympic Legacy Park
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National Centre for Child Health Technology



National Centre for Child Health Technology in numbers

£2.13bn

net gross value added
to the region

£200m

in private sector
investment

£120m

of savings to the NHS
on an annual basis

£50m

of leveraged funding
from the private sector
research partners

£30m

of research funding
generated

The Summary

The new National Centre for Child Health Technology (CCHT) will be *the first of its kind in the world*, creating the most advanced and integrated healthcare system for children.

» The onsite ecosystem will bring together industry, academia, clinicians, patients and families to create high value products at pace.

The Centre, located at Sheffield Olympic Legacy Park and scheduled to open late 2022, will:

- Catalyse and accelerate the development, evaluation and commercialisation of child health technologies;
- Attract national and international inward investment, create jobs and develop new companies;
- Address national strategic health priorities;
- Reduce the need for medication in children;
- Create long term sustainable health change, reducing the burden of ill health for decades to come.



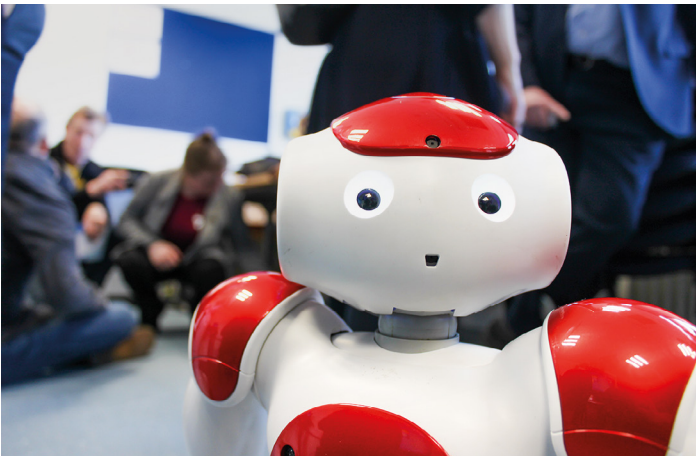
The Strategic Case

Children and young people make up 25% of our population, yet they are 100% of our future.

» Children and young people make up 25% of our population, yet they are 100% of our future. Novel innovations that prevent ill-health in children will reap rewards now and long into the future.

Long term health conditions and mental health disorders affect millions of children and cost the NHS billions of pounds annually. The National CCHT strategy is thus focussed on addressing the 'Super 7' national child health priorities through innovative solutions that avoid the need for medication.

The new centre will translate discovery into benefits for patients, building upon successful national networks including the National TITCH (Technology Innovation Transforming Child Health) Network and the NIHR Children and Young People MedTech Co-operative, supported by UKRI Innovate UK and the National Institute for Health Research.



The National CCHT strategy will be underpinned by 4 key principles:

- 1. Creation:** Create a life sciences ecosystem building on existing strengths and partnerships between universities, the wider research base, businesses, the NHS and patients.
- 2. Value:** Create high value jobs and regional growth by attracting, developing and rewarding the best UK talent.
- 3. Translation:** Translate discovery into tangible and sustainable benefits for patients, caregivers and service providers.
- 4. Growth and investment:** Bring products to market at pace and attract inward investment to drive economic sector growth, promote the development of SMEs and support collaborations with national and international companies.

The *Super 7* national child health priorities

- 01. Obesity
- 02. Children's Mental Health
- 03. Prevention
- 04. Long term conditions
- 05. Children's Disability
- 06. Children's Cancer
- 07. Maternal and Child Health

Delivering the Government's Policy Agenda

- » The Centre will address key areas of Government policy, including:
 - **Levelling-up agenda:** addressing health inequalities in the North through a digital and data-driven agenda.
 - **NHS Long-term Plan:** minimising the inequalities in health spend between children and adults.
 - **Prevention Agenda:** prevention is better than cure: our vision to help you live well for longer (DHSC, 2018).
 - Building a Society Which Is Fully Inclusive of Disabled People (DWP, 2019), enabling children with long-term conditions to go to school more often.
 - Driving high life sciences sector productivity in line with the **Life Sciences Industrial Strategy**.



The Commercial Case

- » Within ten years the National CCHT will deliver £30m of research funding, £50m of leveraged funding from the private sector, and £120m of savings to the NHS on an annual basis.
- Global industry partners, including IBM and Canon Medical, have shown significant interest in a CCHT-industry partnership. Each private sector partner will benefit from access to:
- Specialist clinical and academic expertise
 - Regulatory, manufacturing, business development and commercialisation expertise
 - Health technology real-world evaluation
 - New NHS and commercial distribution channels
 - Novel R&D initiatives



The Economic Case

- » The National CCHT has the potential to leverage substantial economic value. Each pound spent on children's health returns over £10 to society over a lifetime. The Centre will:
 - Create 113 high-value jobs in the National CCHT;
 - Support the creation of 5,600 jobs at Sheffield Olympic Legacy Park;
 - Support 1.3 million sq ft of new employment floor space and a private sector investment of £200m;
 - Additional £179m in GVA at NPV to the Sheffield City Region Economy;
 - £98.9m gross business efficiencies over the first ten years of operations;
 - Increase the flow of IP through Transferable Technology into start ups on the Park and the supply chain in the Sheffield City Region;
 - Increase the opportunities, scope and capacity of the Wellbeing Accelerator in the adjacent Advanced Wellbeing Research Centre.

When delivered with the additional assets a nett GVA of £2.13bn is created over ten years

The Facility

- » The Centre will be located on Sheffield Olympic Legacy Park where seven public sector Institutions, working alongside the private sector, create a unique world-class living laboratory focussed on improving the health and wellbeing of the population. These institutions include:
 - Advanced Wellbeing Research Centre
 - National Centre for Sport and Exercise Medicine
 - National Centre of Excellence for Food Engineering
- The National CCHT will be adjacent to the University Technical College, providing a supply of new skills and high-value job opportunities to young people seeking a career in the NHS and medtech industry. Comprising 42,000 sq ft of floor space the Centre will incorporate:
- Advanced Neuro-rehabilitation Centre (ANRC)
 - International Centre for Sleep Research and Technology (i-CSRT)
 - Advanced test-bed facility
 - Creativity and Manufacturing Zone for rapid prototyping, manufacturing, data analytics and predictive modelling
 - Paediatric Technology Assessment Zone encompassing rapid real-world evaluation of disruptive technologies
 - Immersive Technologies Zone and Robotics Centre



Sheffield Children's
NHS Foundation Trust

