

Introduction to Healthtech in Leeds City Region

March 2021



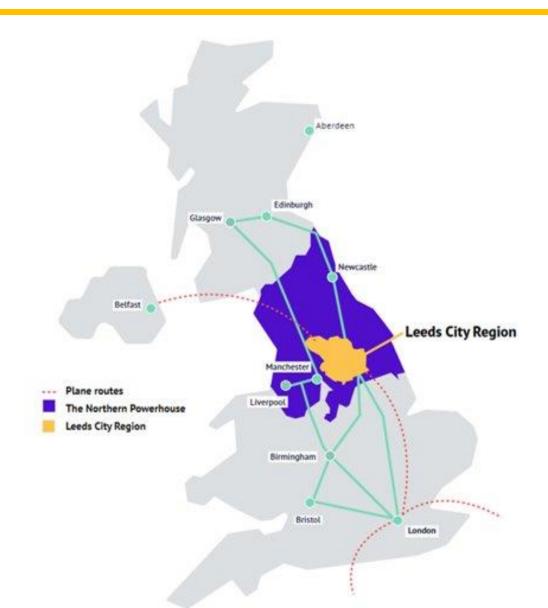


Welcome to Leeds City Region



Why Leeds City Region?

- Centrally located at the heart of the UK
- The largest city region economy outside London and the South East – close to £70 billion.
- A population of 3.08 million with over 7 million people within one hour's drive. Our population is larger than Greater Manchester, double the size of Glasgow, and almost triple the size of Bristol and the West of England combined
- The largest workforce in Northern England, with a working age population of 1.9 million
- The largest business base of any UK core city LEP with over 126,000 businesses
- Home to six significant government health head-quarters, including NHS Digital and NHS X.
- The largest concentration of Higher Education Institutions outside of London
- One of only two locations outside of London to be an importer of graduates





One of only two locations outside of London to be a **net importer of graduates**

The **largest workforce** in Northern England

Leeds City Region overview

9 universities
producing almost
39,000 graduates
each year

The largest concentration of higher education institutions outside of London

Working age population of

A population of 3 million

The largest city
region economy
outside London and
the South East –
close to
£70 billion



The largest
business base of
any UK core city
with over 126,000
businesses



Leeds City Region companies excel in



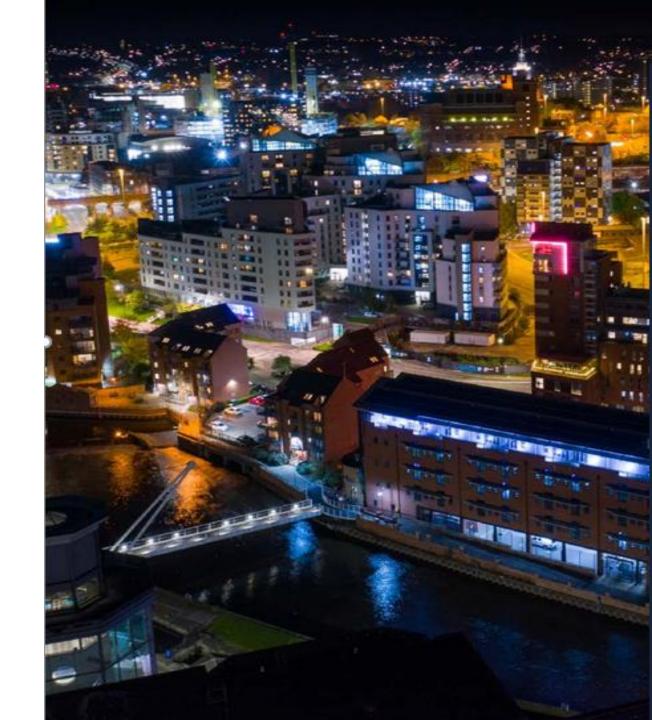
Digital Health in Leeds City Region



We excel in digital

We a thriving economy for your business to scale up:

- £3.67 billion digital tech turnover
- 8,695 digital tech businesses
- 53,000 employed in digital tech
- 124 scale up alone in Leeds alone in 2020 (second only to London)
- 258 scale ups in Leeds City Region in Leeds City Region in 2020
- \$43.5m in venture capital investment in 2020 attracted by the Leeds tech sector
- 62 dedicated health tech firms
- TPP and EMIS Group, who are based in Leeds City Region, manage 90% of UK's NHS Patient records.
- The Leeds Care Record holds 2.8 million patient records which will be extended to 8.5 million to cover Yorkshire.
- The top 4 suppliers to NHS Digital by volume (BJSS, MASTEK, Infinity Works and Intechnology) are based in Leeds City Region.



Leeds City Region has:

27 NHS organisations

20 clinical commissioning groups

11 higher education institutions

600 health and life sciences' firms

250 MedTech companies

62 dedicated digital health firms

196,000

people are employed in health and science roles

Leeds City Region is home to:

NHS England

NHS Digital

Public Health England

NHS Leadership Academy

Health Education England

NHS X

Leeds Care Record

NHS Spine

- Leeds NIHR In Vitro Diagnostic Cooperative (MIC)
- · Leeds NIHR Surgical MedTech Cooperative (MIC)
- Leeds NIHR Biomedical Research Facility (BRC)
- . Leeds NIHR Clinical Research Facility (CRF)
- Leeds Institute of Data Analytics (LIDA)
- . Leeds Institute of Cancer and Pathology (LICAP)
- · Leeds Centre for Personalised Medicine and Health (LCPMH)
- . The Astbury Centre for Structural Molecular Biology
- Leeds Institute of Biomedical & Clinical Sciences (LIBCS)
- . Leeds Institute of Rheumatic and Musculoskeletal Medicine (LIRMM)





In pursuit of resilient sub sectors

The following sectors are bucking the trend and represent growth opportunities amidst the Covid-19 crisis



Connected Healthcare



Med Tech



Diagnostic Imaging



Immersive Tech (AR and VR)



Health Insurance



OTT (Over-The-Top Services)



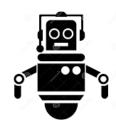
Video Conferencing



Tracking and sensors



Drug Discovery Clinical Trials



Robotics



Cyber Security





Working with the NHS

The Leeds Teaching Hospital Trust (LTHT) is the second largest in the UK and is responsible for 7 hospitals which are managed under one comprehensive health strategy with access to a single patient care record database.

We have established a working group with the business development team at the LTHT to facilitate access to the NHS for the companies we work with. We have developed similar working practices with the YHAHSN and the Northern Health Science Alliance ensuring that your route to the NHS is clear and accessible.

We also work closely with these organisations to ensure that you are supported effectively:

- The Yorkshire & Humber Academic Health Science Network (YHAHSN)
- The National Institute for Health Research (NIHR)
- Med-tech and In-Vitro Diagnostics Co-operatives (MICs),
- Nexus, (Leeds)
- 3M BIC, Huddersfield
- Grow Med-tech across geography multi-institute
- The Digital Health Enterprise Zone, (Bradford)
- Highly progressive NHS institutions such as the four teaching hospitals in Bradford, Leeds, Sheffield and York.



Health Innovation District Overview

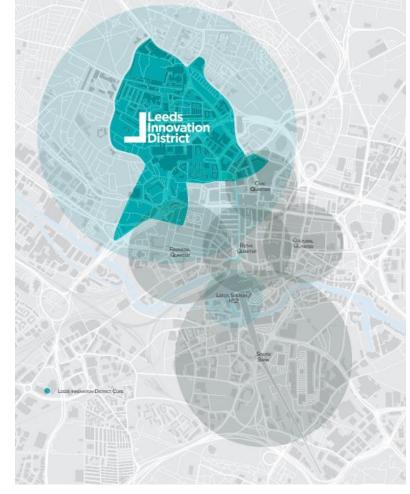
Leeds has a vision to create a world-class hub for research, innovation, and entrepreneurialism in sectors such as health and life sciences, creative and digital, data, engineering, advanced infrastructure, and urban services, unlocking significant development opportunities and promoting transformational growth.

The Leeds Innovation District brings together the Leeds NHS Trust, University of Leeds, Leeds Beckett University, Leeds College of Art and Leeds City Council in an ambitious partnership to create a 21st century science and innovation park in the centre of Leeds.

The Innovation District is a five hectares area of land for development bringing together some of the city's most creative and innovative anchor institutions and businesses. The Innovation District, where science meets creative arts and healthcare, has already benefitted from a series of significant developments, primarily within healthcare and academia. Recently delivered or on-site investment includes Leeds Beckett University's £80 million creative arts building, an expansion of Leeds Arts University, and the University of Leeds has invested £40 million in the new Nexus innovation hub, providing seamless access to its research and innovation expertise.

The Leeds Innovation District is immediately adjacent to the major cultural, financial, retail centres of the city, which means that it is primed to take advantage of the rich array of existing and planned uses which attract and retain the businesses and talent essential for success.





The hospital of the future

Leeds Teaching Hospital NHS Trust has a vision to reshape healthcare for patients from Leeds, West Yorkshire, and the wider region. The 'Hospitals of the future' project aims to build two state of the art hospitals on the Leeds General Infirmary site, one for adults and a brand-new children's hospital. Both will be flagship hospitals, digital by design, built to enable exceptional health care and specialist services for patients based on modern technologies, treatments, innovation, and research.

Fantastic new facilities will include

- Expanded critical care services to support the delivery of highly specialist treatments
- Brand new state of the art theatres as part of a dedicated theatre suite for day case procedures
- A high-tech radiology department that will serve other specialities in the hospital
- One central department for all adult outpatient services.
- A therapies hub
- A new facility for endoscopy services



Research Excellence

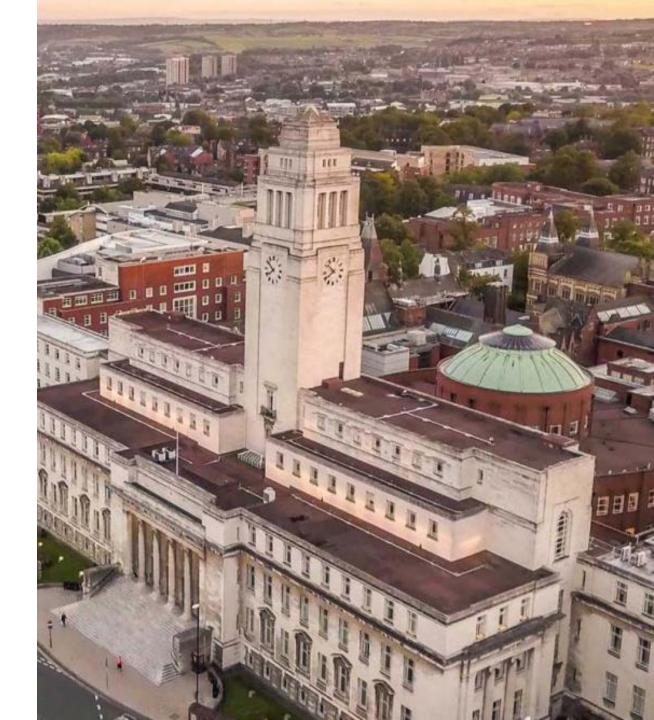


The University of Leeds

Leeds Institute for Data Analytics (LIDA) - LIDA is developing data analytics as a transformative technology and playing a crucial role where research, education and industry meet. LIDA is underpinned by the Integrated Research Campus (IRC), an advanced computational infrastructure that is highly secure and scalable, to meet the needs of data-intensive research using personal and sensitive data securely.

LIDA brings together the Economic and Social Research Council (ESRC) Consumer Data Research Centre and the Medical Research Council (MRC) Medical Bioinformatics Centre, as well as applied research groups and data scientists from all eight academic faculties. Through these collaborations, they are opening up new ways of understanding health and human behaviour, and a range of social and environmental challenges. The institute's partnerships demonstrate the breadth and the relevance of its research, from supporting NHS Digital to analyse and visualise its data, to working with Asda-Walmart to quantify the food waste of their customers.

The Alan Turing Institute - The University of Leeds is one of thirteen UK universities which have been brought together by the British Library to form the Alan Turing Institute. This is in recognition of the leading Al research and significant data science capability within the university. The institute is a collaborative hub, with roots in universities and centres of research excellence across the UK, and strong links to a growing network of industry, public sector, and third sector partners.



Our Graduates

Leeds City Region has an unrivalled supply of talent. Home to nine universities teaching 116,000 students and a further 14 further education colleges, there is no better place to locate to ensure a sustainable supply of skilled candidates.

The region is a net importer of graduates, one of only two areas outside of London that can boast this. We retain an exceptionally high level of students; 56 per cent of students who study here, stay to live and work after graduating. Just as importantly, our talented young people come back, with 70 per cent of graduates that leave the region to study elsewhere returning to live and work in the City Region







For further information please contact:

Jennifer Robson

Sector Manager – Health and Life Sciences Leeds City Region Enterprise Partnership Jennifer.robson@westyorks-ca.gov.uk

Lauren Thomas

Business Development Executive Leeds City Region Enterprise Partnership Lauren.thomas@westyorks-ca.gov.uk







Remote monitoring – focus around clinical need, building partnerships, and gathering real world evidence

March 2021





In good company















































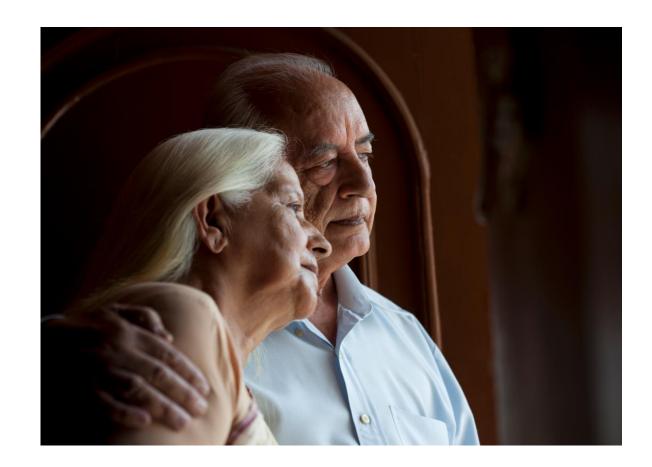




Inhealthcare

- Inhealthcare delivers remote home monitoring solutions to more than 1,000,000 UK citizens across almost every clinical setting
- supports vulnerable high-risk patients, including those in care homes, and patients living with long-term conditions such as diabetes, COPD and heart failure.
- The digital care home service coordinates the monitoring of blood pressure, temperature, weight, heart rate, C02, Sp02 and risk of undernutrition. The service acts as an early warning system, highlighting changes in health.
- The service can be accessed by health and social care staff through a desktop or by logging into the Inhealthcare Professional app. The data integrates into clinical systems, meaning it can be accessed by NHS teams remotely. Staff can input resident's readings directly into the portal using the app offline, without the need for a WiFi connection
- The service can be used to intensively monitor patients discharged from hospital and data can be reviewed by NHS teams including an NHS 111 operator or a GP.

Cardale House, Cardale Ct, Harrogate HG3 1RY



Medisoft

- Medisoft is the UK's leading supplier of electronic records for ophthalmology.
- The systems provide instant access to patient information from any location, allowing clinicians to deliver better, safer care.
- Over 150 hospitals have chosen Medisoft to enable paperless working and rapid audit of clinical outcomes.



33 Park PI, Leeds LS1 2RY