Report to:	Business, Economy and Innovation Committee
Date:	24 January 2023
Subject:	**Healthtech – Year One Update**
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Is this a key decision?	☐ Yes ☒ No
Is the decision eligible for call-in by Scrutiny?	☐ Yes ☒ No
Does the report contain confidential or exempt information or appendices?	☐ Yes ☒ No
If relevant, state paragraph number of Schedule 12A, Local Government Act 1972, Part 1:	
Are there implications for equality and diversity?	☐ Yes ☒ No

1. Purpose of this Report

1.1. The first West Yorkshire Healthtech Strategy was approved by the Combined Authority in February 2022, and launched during the West Yorkshire Innovation Festival in October 2022.

1.2 This report provides an update on activity and progress following creation of the Healthtech Regional Lead role, leading to approval of the Healthtech Strategy. It also provides an overview on key areas of focus for the coming year.

2. Background

2.1. Healthtech describes a broad range of products, services and solutions to improve and save lives, from prevention to diagnosis and cure. Healthtech products range from commonplace objects such as surgical masks and wheelchairs, through to non-invasive diagnostic tests like lateral flow tests, implantable devices such as heart valves and replacement joints, and to medical apps and healthcare IT systems.

2.2 West Yorkshire has a significant healthtech sector, with major business strengths across medical devices, diagnostics and digital health, alongside complementary research, clinical and system leadership advantages. The region is consistently identified as one of the UK's leading healthtech locations by business number and employment. For example, 22% of all UK digital health jobs are based within the region, and it is in the top 4 LEP areas by number of digital health companies. LEP research in 2019 identified £5.2bn revenues from 330 Healthtech companies in West Yorkshire, employing c.17,000 people. Nationally, there are over 4,300 companies operating in the sector, employing c. 145,000 people and generating £30bn turnover (Office for Life Sciences, 2021)

2.3 By virtue of the fact that the UK is one of the top three countries in Europe for business number and direct employment in the medical technology industry, the concentration of healthtech businesses in West Yorkshire forms a cluster of national and international significance. West Yorkshire outperformed Greater Manchester, West Midlands and South Yorkshire for goods exports in the scientific/technical sector over 2019 - 2020, achieving exports of £573m (2019) and £480m (2020), second only to London and ahead of Cambridge and Peterborough in 2019. The healthtech business cluster is continually growing at start-up/spin-out stage e.g. 50+ new digital health companies located at NEXUS since opening in 2019, and is attracting larger-scale inward investment e.g. Labcorp new 100-bed clinical research facility. In addition, some of the largest providers of digital services to the NHS (e.g. TPP, EMIS) were founded and remain in the region.

2.4 The European market for medical devices and diagnostics was estimated at €150bn in 2021, making it the second largest market after the US. The European medical device market has been growing on average by 4.8% per year over the past 10 years. The COVID-19 pandemic has demonstrated the importance of effective, rapidly deployed diagnostic testing, exemplified by 25% market growth in 2020 alone. Meanwhile, the global digital health market was valued at $175.6bn in 2021, with annual growth projected at 27% to 2030, largely driven by increased tele-healthcare (Grand View Research, 2022).

2.5 The business base is complemented by a concentration of world-leading clinical research and academic strengths – for example, drawing in the largest share of National Institute for Health and Care Research (NIHR) funding per head of population outside London, leading to advances in patient treatment and care locally and ultimately far beyond. Within our health and care organisations there is a high priority on research and innovation: for example, the new hospitals in Leeds will be enabled by health technology, and redevelopment of the Leeds General Infirmary site will create a global centre of excellence for healthcare technology on the doorstep of one of Europe’s largest medical establishments.

2.6 Our region’s academic institutions host numerous world-leading research centres around health and medical technology innovation, as well as providing vital training for the next generation of entrepreneurs and clinicians. Our academic institutions provide vital knowledge exchange and incubation/acceleration facilities across the region, including 3M Buckley Innovation Centre at the University of Huddersfield, the Digital Health Enterprise Zone at the University of Bradford and Nexus at the University of Leeds, with prominent healthtech community particularly around digital health, integrated with the Propel@Y&H digital health accelerator programme for SMEs with digital health innovations, led by Yorkshire and Humber Academic Health Science Network (Y&H AHSN).

2.7 There is strong endorsement for innovation to improve people's health and wellbeing, and alleviate pressure on vital services, within the West Yorkshire Health and Care Partnership. The creation of the new Innovation Hub, in partnership with Y&H AHSN, provides a focal point for innovation and improvement at the regional system level - including a focus on digital primary care, supporting access to a wider range of technology to ultimately improve primary care. The regional position is further enhanced by the major centres of health and social care decision making (NHS England, Department of Health and Social Care) concentrated in Leeds responsible for in excess of £135bn NHS commissioning, leadership and digital advancement.

<u>The Combined Authority's contribution to this agenda</u>

2.8 Our region has an unparalleled opportunity to foster economic and societal benefit from healthtech innovation, building on the strengths outline above. The role of Healthtech Regional Lead was created using year 1 gainshare to provide a focus in the Combined Authority to drive forward the region's approach to the sector. The following have directly resulted from the formation of this post since October 2021:

a. **Approval of the region's first Healthtech Strategy**, with strong buy-in across partners to the vision that the region will be the number one place for Healthtech entrepreneurs, innovators and industry. The strategy will deliver:
   - A well-aligned, innovation-driven healthtech ecosystem;
   - Innovation driven by regional NHS system need, and innovations adopted at scale across West Yorkshire;
   - West Yorkshire recognised as a leading place for healthtech innovation

b. **Partnership launch** of the Healthtech Strategy alongside the West Yorkshire Health and Care Innovation Hub, during West Yorkshire Innovation Festival, held at University of Huddersfield with a spotlight on the flagship National Health Innovation Campus (NHIC) being developed in Huddersfield which will be instrumental in training the next generation of health professionals.

c. **Profile of Mayor and BEIC Chair brought to healthtech sector and partnerships through involvement in flagship events** taking place in the region e.g. speeches at techUK health and social care dinner, strategy launch event, engagement and support to key partner initiatives such as Building the Leeds Way and utilising the Mayor/CA profile and convening power.

d. **Effective participation** in Innovate UK-funded national landscaping review into challenges for healthtech SMEs post-pandemic and post-Brexit

– in partnership with Y&H AHSN and industry body the Association of British Healthtech Industries (ABHI), held workshop with SMEs and industry stakeholders at Wellington House. Key challenges identified at regional level around funding, regulation and market access, concordant with challenges identified at the national level, and inform work to date and into 2023.

e. Ensuring healthtech sector is **represented and integrated** in wider CA programmes e.g. listening session held with healthtech stakeholders to inform the developing Innovation West Yorkshire programme, involvement of healthtech stakeholders as UK SPF Pillar 2 call being shaped

f. **Application submitted by CA to Innovate UK Launchpad** competition with broad partner support. Potential for £7.5m of IUK resources and support to the region's healthtech SMEs if successful. The launchpad will be informed by a regional project team brought together by the CA involving industry, higher education and clinical stakeholders. Further engagement ongoing with IUK Health Technologies division.

g. **Healthtech Cluster broadened and now being hosted by CA**, integrating with the West Yorkshire Innovation Network and BEIC, ultimately delivering the Healthtech Strategy.

h. Through engagement with partners we have played an influencing and supporting role in a variety of projects, **including shaping and supporting regional-level funding bids** such as the EPSRC Digital Health Hubs programme to promote knowledge and skills sharing across healthcare, academia and business, and drive innovation in digital health.

i. Through the strength of the cluster work and the new regional healthtech strategy, the **Trade and Investment** team have been able to leverage existing networks to strengthen the regional offer, and build on an external reputation that **West Yorkshire is the strongest hub in the UK for Healthtech.** Through work alongside partners including Y&H AHSN and the Leeds Teaching Hospital NHS Trust (LTHT), the partnership has delivered **several internationally focused delegation visits to the region**, from areas such as the Nordics, Estonia, Israel, the US, and India.

j. The team have supported the establishment of key international bridges: signing a Memorandum of Understanding to form the Leeds-Israel Innovation Gateway in May, the signing of an MOU between LTHT and Oslo University Hospital in November, and supporting the Israeli and Estonian embassies' visits to the region.

k. **This work has led to investment wins, with companies choosing to base themselves in the region**: for example, Y&H AHSN's international

Propel programme delivered 3 new wins for the region from the US into Nexus. This work has also supported the onboarding of 8 memberships to Nexus, 3 to the Innovation Pop Up at LTHT, and 1 to the 3M Buckley Innovation Centre at the University of Huddersfield.

Areas of focus for 2023

2.9 The Healthtech Strategy will continue to provide the overarching direction with priority work areas as follows:

a. **Funding** – a key issue for healthtech SMEs with recent reports highlighting financial uncertainty and regulatory uncertainty as the two key issues for the sector. To help address this the Combined Authority is working with partners to attract further external funding to support our regional healthtech sector.
The launchpad application recently submitted seeks to address this issue; irrespective of the outcome of that application, we will continue to work within the funding landscape to open up opportunities at all levels, from early stage innovation funding through to private capital working with key partners.

b. **Market access** - *"access to the domestic market is the key to internationalization."* (ABHI landscaping review, 2023)
Working with health and care partners, through the Innovation Hub and acute trusts, we will continue to align the access routes for innovators to develop and test products – importantly that meet local health and care priorities, i.e. the 'pull' from the system as well as the 'push' from the market.

c. **Promoting the region** remains a priority – building on the forthcoming Health and Life Sciences Showcase published by the CA with support from Y&H AHSN, we will develop a comprehensive regional healthtech narrative and online presence. This will incorporate updated data on our business base and integrate messages about partners' key programmes and investments. We will also develop a prospectus on the market opportunity around life sciences real estate in our region, to represent the region and market the opportunities here to best effect. This prospectus will be valuable in driving a pipeline of future investments into strategic developments in the region – e.g. Leeds Innovation Arc, National Health Innovation Campus. The Trade and Investment team will continue to promote the regional strengths in Healthtech, utilising the Mayor's platform to showcase our regional excellence, at events such as Arab Health, MIPIM, UKREiiF, Medica and others in 2023.

d. **Convening the ecosystem** – we will continue to provide a leadership role to convene partners in the healthtech ecosystem, primarily through hosting and further developing the Healthtech Cluster, connecting regional partners and supporting national stakeholders such as UKRI & Innovate UK, ABHI, techUK etc to engage in the region.

e. **Pipeline development** – healthtech is a prime regional growth opportunity, developing transformative products and services for a growing global market. It is imperative that we nurture the long-term growth potential offered by this sector. We will do this by identifying opportunities to support and invest in regional healthtech initiatives, via appropriate funding sources including gainshare and SPF.

2.10 Outcome measures over the lifetime of the healthtech strategy include tracking:

a. Number of healthtech SMEs supported through various partnership programmes

b. Number of new healthtech startup companies in the region

c. Number and value of funding bids/investments secured to support regional activity and projects over time

d. Feedback from stakeholders across business, academic and clinical settings including Healthtech Cluster members

e. Monitor engagements with communications programme around system innovation needs

f. Track value of funding granted towards proof of concept / early evidence projects

g. Monitor number of regional healthtech inward investment wins annually

h. Track number and impact of regional marketing and comms opportunities realised

3. Tackling the Climate Emergency Implications

3.1. Many of the innovations developed by healthtech may have positive net zero implications for health system processes and services, directly reducing waste and inefficiencies e.g. increase in telemedicine reducing carbon emissions

4. Inclusive Growth Implications

4.1. It is well established that health and wealth are intrinsically linked. The innovations provided by healthtech have the potential to have a disproportionate positive impact on those who have the greatest health needs, working closely with the WY ICS.

5. Equality and Diversity Implications

5.1. The outcomes of the healthtech innovations supported will have an impact across health inequality and equity – with equality, diversity and inclusion central to all partners' approaches on healthtech. For example, helping to address disparities in diabetes care: the region has led on piloting and adoption of new home testing technology, to enable patients living with diabetes and high blood pressure to identify early signs of chronic kidney disease. This is a complication of diabetes which has traditionally been identified via a GP-administered test - clinically-critical but poorly accessed, particularly within the pandemic. The new technology is helping to identify people at risk of chronic kidney disease to receive appropriate treatment, and overcome issues around low uptake of the standard test by focusing on people living with diabetes who do not have current readings at all.

6. Financial Implications

6.1. There are no financial implications directly arising from this report.

7. Legal Implications

7.1. There are no legal implications directly arising from this report.

8. Staffing Implications

8.1. There are no staffing implications directly arising from this report.

9. External Consultees

9.1. No external consultations have been undertaken in respect of this specific paper, but this work takes place in a partnership landscape within which there is ongoing dialogue and engagement.

10. Recommendations

10.1. That the BEIC notes the progress made over the first year of this sector-focused approach to innovation, and endorses the areas identified for future work including pipeline development.

11. Background Documents

There are no background documents referenced in this report.

12. Appendices

None.