

# **GMCA** Sector Development Plan: Health Innovation and Life Sciences



## The Purpose of This Plan

In July a refresh of the Greater Manchester Strategy was published. The Greater Manchester Strategy 2025–2035 sets out a bold 10-year vision for a "thriving city region where everyone can live a good life. The strategy is structured around seven mission-led workstreams, including inclusive economic growth, net zero, and innovation. This plan as well, as the local growth plan support the delivery of the GMS, including via its focus on by driving innovation-led growth and creating high-quality jobs.

This Sector Development Plan is a foundational component of Greater Manchester's emerging Local Growth Plan (due to be published Autumn 2025) The Growth Plan will consolidate strategic priorities across sectors and geographies, leveraging devolved powers to deliver inclusive, innovation-led growth. The actions and ambitions outlined here will inform the Growth Plan's investment priorities, particularly in relation to the Integrated Pipeline, Industrial Strategy Zone, and national sector alignment

This plan, as well as corresponding plans for Greater Manchester's other frontier sectors (Advanced Materials and Manufacturing, Digital Creative & Media and Low Carbon Goods and Services) serve several purposes outlined below:

- To provide strategic direction for GMCA, local partners, institutions and businesses to work towards the development of each of Greater Manchester's Frontier Sectors, including shaping thinking regarding future funding utilisation (e.g. Industrial Strategy Zone phase 2). Plans will be "living documents", that will have an iterative approach to how it is written and implemented.
- To identify intervention priorities which the evidence suggests will support the development of
  the sector including areas such as physical developments, skills, business support, research and
  innovation programmes, or non-financial sector development initiatives and partnership models.
- To provide an updated understanding of the state of our frontier sectors including current and planned activity that is taking place within them, which were last reviewed as part of the Local Industrial Strategy process.
- To support the development of the Local Growth Plan and the National Industrial Strategy and its "targeted Sector Plans""
- To map out key inter regional partnerships and supply chain dependencies and links to National and international initiatives.

We know that there are deep connections between our frontier sectors be it in terms of cross-over supply chains, or technologically enabling one another, meaning these plans need to speak to one another. The plans include actions that are shared across some or all of the sectors, as well as activity which if delivered will also inherently benefit the other sectors. We are therefore working on delivery approaches and collaborative governance to ensure that this is done in as joined up, coherent manner as possible.

## How This Plan Will Work

One of GM's key strengths, underpinning its success in recent years in increasing productivity, driving growth and investment in its frontier sectors and making the clear case for the benefit of greater devolution to empower place led control is its partnership working across the public, private and academic sectors.



The ongoing development of devolution of powers and control of budgets has given GM greatly increased control of how it can deliver some of the changes needed to realise our vision and strategic priorities. However, in some areas this control remains limited so our ability to work collaboratively with partners to develop compelling cases for funding, more powers and control, and to develop collaborative, innovative ways of achieving our goals, will remain a primary element of how we deliver this plan.

There are therefore guiding approaches that will sit as overarching principals for how this plan develops and delivers.

- This is a living document, that will have an iterative approach to how it is written and implemented. As befits sectors that are so rooted in new developments and innovation, the plan cannot be set in stone, or it will rapidly become irrelevant.
- The Plans, from its vision, through its strategic priorities, to the interventions that deliver these, will be co-designed with the sector, as we will continue to strengthen our sectoral engagement as future iterations of these plans are developed
- Where possible, this will focus on impact and outcomes, to be delivered over realistic timescales, rather than the delivery of blunt outputs to arbitrary, short deadlines.
- Governance and oversight will be proportionate, flexible and responsive, rather than imposing rigidity, bureaucracy and excessive reporting requirements.

We will ensure that different parts of the ecosystem work together and that various interventions complement and support one another. To unlock new employment spaces for growth, and fill them with the high productivity, high pay, accessible employment we want to create, we must ensure the availability of the necessary skills supply and training provision, transport to get people there, leadership to communicate the vision and attract interest, and business support to help businesses to thrive. These components should complement each other, and we will work to break down silos and take a strategic approach to implementing, prioritizing, and sequencing interventions to create the most impact for the sector.

## Resources (inc The Industrial Strategy Zone)

The Industrial Strategy Zone (formally called the Investment Zone), launched at Spring Budget 2023, gives GM a £160 million envelope over 10 years to catalyse local growth and investment across the Advanced Materials and Advanced Manufacturing sector (AM&M). This focus on AM&M was selected as it offered a clear focus on one of GM strengths, whilst also allowing for the development of an approach that supported the adoption of AI, Cyber and Mixed Reality capabilities from our Digital and Tech strengths, created increased capacity for the manufacturing of diagnostics and advanced medicines in life sciences, and grew our focus on light-weighting and carbon intensive materials replacement to boost our clean growth ambitions.

GM has outlined its plans for the first 5 years of this programme, encompassing £80 million of grant funding. As well as being able to utilise grant funding for projects GM will retain the growth in business rates for 25 years across Sister and Atom Valley and can reinvest these into advanced materials and advanced manufacturing activity. This sector development plan, and future iterations of this plan will help inform thinking regarding future Industrial Strategy Zone funding allocations, as well as other funding streams.



This plan will also be supported by resources allocated via single settlement process, with an initial £1 million allocated over the next 2 years to support activity across all our frontier sectors. Other funding sources also support the activity outlined in this plan, including government funding supporting the GM Innovation Accelerator programme and the Local Innovation Partnership Fund.

The National Industrial Strategy launched in June 2025 announced a set of national Sector Plans and funding for sector-led growth that included the Life Sciences sector, and GMCA will actively pursue routes to aligning these national resources with the priorities in this plan and private sector investment opportunities.



## Plan on a Page

#### Sector Definition

Adopting a dual definition, including both a narrow understanding of research, supply and product development as part of the healthcare economy, and a wider understanding of any technology being adopted by, or adapted for use in, a healthcare setting

#### Current State of the Sector in Greater Manchester

- · Clear sub-sector specialisms in Biopharma, Pharmaceuticals, Medtech and Optics
- Around 10,000 jobs across Greater Manchester overwhelmingly high productivity, high skilled and highly paid jobs
- Key assets including UK Biobank, GM Patient Record, local universities, major hospitals, adjacent clusters in Cheshire and Warrington, Liverpool City Region.
- Health Innovation Manchester's (HInM) structured partnership between Local Government, Academia, The NHS and Industry, gives GM a nationally leading position on joint working.
- GM Care Record covers 99.7% of GM population, used by 25,000 clinicians for 350,000 direct consultations a month, providing the richest, most widely used Health Data set in the country

#### Strengths

- R&D Knowledge engine & Innovation Assets
- HInM's established sector leadership, joining up all parts of the system.
- Strong business base
- Leading clinical trials pathway
- · Digital assets & Diverse Data sets.

#### Opportunities

- Strong PSR agenda to drive sector in City Region, GM ICB leadership role.
- Collaborative, cross system working through HInM
- North-West recognised as national growth opportunity
- Strong planning pipeline of lab facilities
- Private sector buy-in for leadership roles.

## Weaknesses Constraine

**Threats** 

- Constrained patient PE/VC investment
- Lack of current supply of lab/manufacturing space at the right price

Competitive international landscape, with

highly capitalised global clusters.

abolition and ICB cuts

centre of excellence.

Uncertainty around NHS funding, NHSE

· Golden Triangle perceived as primary UK

- Scale of public funding and investment lags competitor countries.
- · Skills and expertise gaps j.e. Lab techs
- · Lack of employment diversityin sector

#### Infrastructure and physical development

- Insufficient, competitively priced wet lab space in the right locations
- Ability to attract/grow the development and manufacture of HI&LS products and devices is constrained by current industrial space supply issues.
- Low appetite for speculative development, meaning that anchor tenants, or significant de-risking funding are required to deliver the needed facilities.
- The North Fold, Airport City & Southern Growth Corridor and Central Growth Cluster Growth Locations have strategic ambitions to provide the spaces needed by the sector.
- Four planned Hospital site redevelopments offer the opportunities for Lab and Accelerator spaces to be co-located with health delivery facilities.

#### Vision for the sector

The Greater Manchester Health Innovation and Life sciences sector will be a leading engine of growth in the UK economy.

#### Strategic priorities

- 1 Building a strong sector leadership group that promotes the excellence of GM and the North-West.
- 2 Developing a highly active, closely networked ecosystem of businesses, academic institutions, innovation assets and NHS organisations.
- 3 Identifying a focused set of truly high growth potential sub-sector strengths to be our priority targets for investment and support.
- 4 Unlocking the full potential of GM's health and care data assets.
- 5 Increasing Public and Private investment in existing and new translational innovation support assets.
- 6 Aligning all our education institutes and skills providers with businesses and research institutes to ensure there is a robust and responsive pipeline of talent.
- 7 Increasing our effectiveness at securing the funding and financing that business and researchers need to innovate and grown in the city region.

#### **Key Actions**

Investigate the Health Innovation Manchester Board broadening its role as a leadership body for the sector in GM

Identify the key sub-sectors in which GM has specific strengths and opportunities to be truly globally leading to be our main focuses of growth activity

Accelerate the development of & secure greater local autonomy over the GM Secure Data Environment

Develop services and interventions to support businesses to access GM's Real-World Evidence and Clinical Trials offer

Establish pipeline of HI&LS innovation assets with business cases and routes to funding

Support development of self-sustaining HI&LS business cluster networks

Develop an employer and governance body endorsed HI&LS sector CPD framework for the sector in GM / the North-West

Link HI&LS sector expertise with GM Growth Location plans and GM Hospital site regeneration activity



### Sector Definition: Health Innovation and Life Sciences

At the highest level, Health Innovation is defined by the World Health Organisation as "a new or improved solution with the transformative ability to accelerate positive health impact" and the UK Government defines the Life Sciences sector as the core and service & supply activities carried out by businesses operating under the descriptors Biopharmaceutical and Medical Technology. Core businesses are those that research, develop and market new products, with service and supply referring to those businesses which are in the supply chain and specialist ecosystem.

Below these overarching definitions, Health Innovation can and does have much looser definitions, with the term being applied to any technology being adopted by, or adapted for use in, a healthcare setting. This encompasses "Med Tech" covering a range of applications such as; AI algorithms specifically developed for Health data sets that can reduce health inequalities through personalised care, diagnostic devices and the sensors which go in them, software packages for GP surgeries, wearables such as smart watches which can monitor pulses, mixed reality and AI tools for workforce training and drones being used for transporting organs, drugs and other health equipment,. This looser definition makes measuring and understanding the sector much harder and broadens out the scope and nature of what our ambitions for sector growth, and the interventions that can support this, may be. However, it also allows us to recognise and include those areas of cross-sector and cross-technology overlap, where Greater Manchester's strengths in AI, Data and Advanced Computing, and Advanced Materials and Manufacturing, interconnect with our strengths in Genomics and Diagnostics, to create new clusters and opportunities that may lie outside, or begin to stretch the boundaries of, the more rigid definitions.

For the purposes of this plan, we will look at how we can understand the sector's presence in Greater Manchester under both these definitions and then respond to what that tells us our focus should be. In doing so we will be conscious of how the sub-sector areas of strength we have can interplay with the broader GM eco-system, the <a href="UK's Modern Industrial Strategy">UK's Modern Industrial Strategy</a> and <a href="Life Sciences Sector Plan">Life Sciences Sector Plan</a>, and with the <a href="Fit for the Future: 10 Year Health Plan">Fit for the Future: 10 Year Health Plan</a> and broader Public Sector Reform and Public Health agendas, including GM's <a href="Live Well">Live Well</a> and Prevention Demonstrator approaches, which will shape the national and local marketplace for these businesses.



## Strategic Context

## Why This is a Greater Manchester Frontier Sector.

By frontier sector we mean a sector that:

- Has nationally & internationally recognised R&D strengths and complementary industrial / commercial assets
- Is innovative, bringing about new ideas, methods, products, services, or solutions and creating the jobs of the future
- Is high productivity, as well as helping drive productivity across the economy through the adoption of their innovations

The Greater Manchester Local Industrial Strategy made Health Innovation and Life Sciences a frontier sector, based on the findings of the 2016 GM and Cheshire Science and Innovation Audit, and the 2019 Independent Prosperity Review, which identified both a burgeoning private sector and a strong base of research and innovation assets. The LIS identified that the Sector's research and industry strengths could improve local population health, lead health and care system transformation and create nationally significant economic opportunities. It set out an ambition that the city-region would use its devolved health and social care arrangements, excellence in health research and thriving Life Sciences and digital industries to act as a test-bed for large-scale clinical and medical technology trials, accelerating the pace of application of new technologies to manage and treat physical and mental health problems, and integrate health and social care through digitalisation. The Sector can drive innovation linked to the city-region's core strengths in areas such as genomics, precision health, data analytics, and real world evidence generated by clinical trials, to improve Greater Manchester residents' health, create new, innovative industry and drive inward investment.

Since the first Greater Manchester Devolution deal was signed in 2014, the city-region has sought to expand the range and reach of the powers and budget it controls. Health & Social Care was one of key elements that the City Region has sought control of from the early stages of the process, with the devolution of health and social care and a £6n budget, alongside a £450m Transformation Fund, being agreed in the 2<sup>nd</sup> Devolution deal signed in 2015. Greater Manchester had already been working to have as much join up between our Civil, Health and Academic leadership as possible, with assets like Manchester NHS Trust, the Christie Trust and the University of Manchester being co-located on the Oxford Road Corridor clearly demonstrating the opportunities for and be nefits of collaboration on research and skills development. The devolution of these initial budgets and powers allowed for the reinforcement of these links, and the forming of institutional ties that aligned governance and strategic direction.

As one of GM's frontier Sectors, Health Innovation and Life Sciences was identified as a key part of the GM Innovation Plan 2022's cluster led approach to innovation, where, aligned with the other three frontiers and three key technologies, including our international strength in Genomics and Diagnostics, it was a key element of the plan's approach to driving innovation led, inclusive economic growth in GM.

The 2025 refresh of the GM Science and Innovation Audit has confirmed that Health Innovation & Life Sciences is still an opportunity for innovation led growth, with Health Innovation & Life Sciences being identified as one of Greater Manchester's 7 Priority capabilities. This was assessed against the criteria that "there is outstanding knowledge capability in GM universities & a realistic prospect of this being translated into superior economic growth (new or additional) in GM's private sector, or that existing



strong sectors and/or high growth sectors in GM have strong demand for the knowledge capability area in view, irrespective of GM's universities' comparative advantage.

## Alignment with National and Local Policy

The potential for improved economic and health outcomes through the joining up of scientific and industrial strengths in GM is aligned with long-standing government policy, which has remained throughout several administrations. For example, the Office of Life Sciences (OLS), which currently sits across the Department for Science, Innovation and Technology (DSIT) and the Department for Health and Social Care (DHSC) was formed in 2009 to join up science and innovation policy and has remained despite several re-organisations of the departments that have hosted it..

The current government continued this commitment in their National Industrial Strategy Green Paper Invest 2035, which sees Life Sciences as a sector which "holds enormous potential to drive economic growth and productivity while significantly improving health outcomes for thousands of patients across the country". This carries through the position set out in Labour's plan for the life sciences, "A Prescription for Growth", launched at the Labour business conference 2024. Driving growth in the sector is seen as being a major contributor to both the mission to Kickstart Economic Growth and to Build an NHS fit for the future.

In June 2025, the <u>UK's Industrial Strategy 2025</u> was launched, which sets out a 10-year plan to grow future industries, with Life Sciences again identified as one of the 8 Growth Opportunity Sectors (The IS-8), and again called out as having "a unique role in the economy, raising productivity and supporting exceptionally valuable jobs while also boosting growth indirectly by improving the health of the population." This link between the sector's ability to drive growth and improve health has been reinforced by the joint development of '<u>Fit for the Future: The 10 Year Health Plan</u> for England' and the <u>Life Sciences Sector Plan</u>, which now form a joint policy and action framework. This joint development process recognised the need for the NHS to be cognisant of its potential role as a driver of economic growth and allowed for the Innovation chapter of 'Fit for the Future' to be informed by the Life Sciences Sector Plan. In addition, the Life Sciences Sector Plan was mutually informed by the public service reform elements of 'Fit for the Future', including changes to a data driven health service, the shift to prevention and new approaches to procurement which can support an innovation led approach.

The Life Sciences Sector Plan identifies a corridor through Greater Manchester, Cheshire and Liverpool as the North West Opportunity Growth Cluster for Life Sciences. Liverpool city-region, selected Life Sciences as their Industrial Strategy Zone (Formerly Investment Zone) focus based on their strengths in infectious disease control and pharmaceutical development and manufacture, and the Cheshire Science Corridor's focus on bioscience and chemical engineering.

There is a strong recent history of cross North West collaboration on the development of the Life Sciences Sector. The joint North West Secure Data Environment Bid, which secured funds for the further development of SDE's by Health Innovation Manchester in GM, Lancashire and South Cumbria ICS and Cheshire and Merseyside ICS, is an example of this alignment, and a practical collaboration which allows GM to build on its advanced position, whilst supporting the other two regions to share its learnings and catch up. The potential for collaboration across the region to drive national level growth has been recognised and supported by numerous interventions such as the Greater Manchester and Cheshire Life Sciences Fund 1 and 2, the establishment of the NW Health Innovation

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<sup>&</sup>lt;sup>1</sup> Invest 2035: the UK's modern industrial strategy



Cluster Network run by the STFC out of their Daresbury facility, and most recently the successful collaboration between University of Manchester, University of Liverpool and industry partners which secured the Industrial BioTechnology Innovation Catalyst.

In Greater Manchester there is a compelling need to drive development and adoption of new innovative technologies to deliver on the "shift to the left" towards prevention over treatment, as a "policy off" approach, which does nothing to address the growing demands for NHS Services has been predicted to lead to a £160m deficit by 2027/28<sup>2</sup>.

One of the GM responses to the opportunity and challenge has been to establish Health Innovation Manchester, which is a place based, health science and innovation organisation, working across local government, the NHS, academia and industry. The Health Innovation Manchester Board comprises the highest-level leaders from across these sectors, providing insight and guidance on how the City Region can respond to national and international health technology trends. Health Innovation Manchester is leading on the deployment of the novel cholesterol lowering medication Inclisiran, the recent announcement of the SURMOUNT-REAL Real World Evidence trial on obesity with Eli Lilly and the Advanced Diagnostics Accelerator, which is part of GM's Innovation Accelerator and is focused on developing both new diagnostic technologies and new approaches to engaging a more diverse range of our population to participate in the trialling of these.

Public Service Reform, which enables the adoption of; digitalisation and exploitation of large data sets to understand public health, better diagnostics enabling more targeted treatments to be prescribed earlier, and interventions such as better urban design, remote sensors, and virtual wards, which keep residents in their own homes for longer, is one of the main policy agendas of the Mayor's third term in office. Live Well is the Mayor and Greater Manchester's shared commitment to ensuring that every neighbourhood has access to great everyday support that enables people to live longer, healthier, and happier lives. It is a unifying framework that brings together health, social care, culture, and community sectors to address health inequalities and improve wellbeing across the region. There is an untapped role for innovation in a range of technologies here, supporting access to person centred and community based support, particularly for underserved communities and through harnessing the power of creative technologies.

GMCA also continues to develop our position as a global centre of excellence in the development of Healthy Ageing, both through technological and social innovation.

## Technology Families

In 2021 the government published the UK Innovation Strategy. The strategy contained a focus on missions & technologies that will stimulate innovation to tackle major challenges faced by the UK and the world, and drive capability in key technologies where the UK is considered to have an 'industrial and R&D edge'. Seven technology families were identified in the strategy, of which three listed below were adopted in the GM Innovation Plan due to GM's research, development, and innovation strengths, and for their cut across our frontier sectors in terms of potential applications.

 Sustainable Advanced Materials: Within GM, Sustainable Advanced Materials form a pivotal segment of the £49 billion global Advanced Materials market, projected to double by 2026.
 These materials play a crucial role in advanced manufacturing, net zero initiatives, and Health Innovation & Life Sciences with opportunities in industrial coatings, construction materials,

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<sup>&</sup>lt;sup>2</sup> Sustainability plan working group 18.7.24



textiles, acoustics, and the sustainable production of batteries. Moreover, they facilitate breakthroughs in Health Innovation, such as wearables and biosensors.

- Artificial Intelligence, Digital and Advanced Computing: The landscape of digital technology
  in GM is expansive and rapidly growing. Artificial Intelligence (AI), anticipated to revolutionize
  industries globally is set to reach a market value of \$294 billion by 2026. The Immersive Tech
  Economy, forecasted at £130 billion by 2023, opens avenues in manufacturing, construction,
  defence and security, Life Sciences, education, and training.
- Diagnostics & Genomics: In GM, Diagnostics & Genomics present a burgeoning opportunity. With 31 Genomics companies employing over 2,000 people, there's clear potential for growth. The intersection of genomics, diagnostics, AI, advanced computing, and sustainable advanced materials offers spillover benefits, fostering innovations in analytics, medicine, and diagnostic devices. Advances in personalized healthcare not only reduce NHS waiting lists but also address health inequalities, improving health outcomes for the residents of GM. The region's focus on R&D and technology has garnered significant funding, as evidenced by the NIHR grant of £59.1 million to the Manchester Biomedical Research Centre. This investment enhances GM's capacity to conduct cutting-edge clinical trials, contributing to advancements in healthcare.

#### Wider Context

Given the varying definitions of Health innovation, and the breadth of elements that they cover, it is difficult to quantify that element of the sector and its role in the national economy. However, it is possible to quantify the Life Sciences element based on the definition used by the OLS. The Life Sciences sector employs 304,200 people across the UK and grew by 15% between 2018/19 and 2021/22. It generated £108.1 billion in turnover, with 41% of that coming from outside the South East and East of England, and generated £35.7bn of exports.<sup>3</sup> It is likely that some of the growth in the sector between 2020 - 2022 was due to increased demand for products and services during the COVID-19 pandemic. There are clusters of Life Sciences businesses and research excellence across the country, with clusters of businesses often gathered around university assets.<sup>4</sup> The breadth of this excellence and the growth of clusters around it, despite the historic and ongoing concentration of public funding being invested in the South East<sup>5</sup>, is a clear indicator of the potential that exists for growth.

Health Innovation and Life Sciences has also been a strategic area of focus for the North-West for a substantial period of time. This has been driven by the proliferation of high-quality research institutions producing up-stream Research and Development, research hospitals, innovation assets, and major corporations such as Astra Zeneca that are based in the region. This has been recognised by the locating of the Medicines Discovery Catapult at Alderley Edge in 2019. The North-West remains the highest driver of turnover in the sector outside of the South-East<sup>6</sup>.

This strength in Health Innovation and Life Sciences is one of the key growth opportunities that underpins the proposed "Northern Arc". This is a strategic growth corridor stretching from the Mersey to the Pennines, linking Greater Manchester with Liverpool City Region, Cheshire and Warrington, and extending into West and South Yorkshire. It provides a counterbalance to the Oxford — Cambridge

<sup>5</sup> 2022-Health-data-analysis.pdf

<sup>&</sup>lt;sup>3</sup> The UK's Modern Industrial Strategy p. 13

<sup>&</sup>lt;sup>4</sup> Ibid pp.52-53

<sup>&</sup>lt;sup>6</sup> The UK's Modern Industrial Strategy p. 14



corridor as hub for innovation and nationally significant growth. The Heseltine Institute at the University of Liverpool has put forward the argument that, in terms of key metrics required for growth, including skills, productivity and GVA Growth, economic connectedness and residential desirability, the Northern Arc area matches the Ox-Cam Corridor, without suffering from the high land prices and other geographical and political constraints on growth that make significant growth, at a scale required to meet national ambitions, so difficult in the latter<sup>7</sup>.

Greater Manchester is one of the driving forces behind the North West's strength in the sector. It is a microcosm of the national position, with comparative business base strengths in several sub-sectors, leading up-stream research capabilities in Genomics and Bioinformatics, Health related Data and AI, and Materials for Devices, and the first Integrated Care Board in the country, backed by increasing levels of devolved powers. The Supercharging Our Collective Strength's report has highlighted that, with around 10,000 employees, the city-region has the highest employment in the sector outside London. The GM Independent Prosperity review and Local Industrial Strategy recognised these strengths and put the city-region forward as a leader in addressing the Healthy Ageing Grand Challenge, a position cemented by the World Health Organisation recognising GM as the UK's first Age-Friendly City region in 2018, and DBT identifying Greater Manchester and Cheshire as a High Potential Opportunity area for Healthy Ageing in 2021.

Whilst the Health Innovation & Life Sciences sector in GM is small in comparison to the Advanced Materials & Manufacturing and Digital and Technology sectors in terms of numbers of businesses and employees, it is the sector's largest employment base outside of London. The predominantly high productivity, high skill and high pay jobs it creates, means that growing the sector in the city-region can be a major driver of moving more residents into good employment.

A stronger Greater Manchester sector cluster would support the broader aim of boosting the North West's wider Health Innovation & Life Sciences sector, boosting perceptions of the region's strengths as a major research, development and innovation hub for a wide range of sub-sectors and specialisms under the broader sector banner. This uplift in activity and reputation would help the region, as well as the broader North to begin to address the imbalance towards the South East in public investment in health research that currently exists, and attract levels of foreign direct investment and Private Equity and Venture Capital (PE & VC) funding to the region that is more in line with the level of Research, Development and Innovation (R&D&I) strengths and assets that exist here.

The development and adoption of new innovations in Health and Care, especially in diagnostics, digital tools, data analysis, workforce development and new ways of engaging communities, especially those that are underserved, will be integral to achieving the aims of the <u>Greater Manchester Model for Public Sector Reform</u>. The Model recognises that the reform of the Health and Social Care System is vital to improving GM's productivity, by helping more people to be fit for work, get jobs and stay in work for longer, whilst also being a potential asset that can be harnessed to drive economic growth and innovation<sup>8</sup>. By supporting the growth and development of innovations that enable and benefit from this in the city-region and the North-West, the multiplier effect of local public spend can become a virtuous circle.

<sup>&</sup>lt;sup>7</sup> The reality of the Northern Arc - Heseltine Institute for Public Policy, Practice and Place - University of Liverpool

<sup>&</sup>lt;sup>8</sup> greater-manchester-model.pdf (greatermanchester-ca.gov.uk) slide 10



Nationally, the growth of a Health Innovation & Life Sciences cluster that's strengths lie more in development and commercialisation, which compliments the earlier stage research strengths of the South-East cluster, is a major economic growth opportunity for the UK.

Greater Manchester is also a founding member of <u>The Great North</u>, the UK's first mayoral-led panregional partnership aiming to unlock £118 billion in economic value by coordinating investment in variety of key economic priorities, enhancing Greater Manchester's ability to attract global investment, influence national policy, and deliver large-scale development aligned with the ambitions of this plan

#### Growth Locations and the GM Investment Plan.

GM has identified six "Growth Locations" as prime opportunities for driving transformative change, each with brownfield and greenfield land for housing, employment and industrial growth. This plan aims to support driving growth in these locations, by identifying the physical and wider requirements for the sector to grow, provide a joined-up narrative of our ambitions and plan for supporting the sector going forward.

Through aligned strategy and planning policy, the growth locations will support clusters of innovation in all these areas, working with their existing business bases to maximise supply chain linkages, provide local grow-on space of the quality and type needed and establishing links into communities, schools and town centres to develop the spill-over for all the city-regions residents. This approach focuses on providing digital connectivity, integrated transport infrastructure, innovation assets, and tailore d support to foster innovative businesses.

To support this activity Greater Manchester has developed the Integrated Pipeline which captures the projects and interventions needed to deliver the full scale of our ambitions through investment in physical infrastructure including our strategic employment and housing sites, town centres and city centre developments over the next 10 years, bringing them together for the first time into a single platform. The pipeline will enable residents and businesses to see the type, scale and timing of development that is coming forward and ultimately enable us collectively to make better informed investment decisions

Three of the Growth Locations have identified Health Innovation as a key focus for their growth ambitions.

- Northfold, which covers Wigan and Bolton, including the University of Greater Manchester's proposed Health Innovation Campus.
- The <u>Central Growth Cluster</u> in which the established Oxford Road Corridor Health Innovation and Life Sciences cluster sits alongside complimentary assets such as SISTER, the Henry Royce Institute and DiSH.
- The <u>Airport and Southern Growth Corridor</u>, which includes the <u>MIX Manchester campus</u>, Wythenshawe General Hospital and Stepping Hill Hospital, and the emerging cluster of Health Innovation and Life Sciences sector businesses around Stockport and into Cheshire.

There are four hospital sites across the city-region that are currently working on redevelopment plans of various scales, which will provide co-location of commercial and research facilities alongside modernised health provision facilities. These are North Manchester General Hospital, Wythenshawe Hospital, Stockport, and Farnworth (Bolton). Following the 25<sup>th</sup> January review of that programme, the North Manchester General Hospital site has been named in Wave 1 of the revised plan, with construction to be carried out between 2030 and 2035. The 2020 Masterplan of the Wythenshawe



Hospital redevelopment proposals are being refreshed, supported by an investment of £309,000 from GMCA, with a focus on providing innovation facilities on site, co-located with some of the world leading research the hospital does in areas such as Lung Cancer Diagnosis.

This plan will ensure that local and national technology and sector expertise are included in the development of the infrastructure plan, the planning of the Growth Locations and the hospital site redevelopment works, to ensure that the right policies and conditions are in place and the necessary facilities and infrastructure are developed to support the growth of the sector.

#### Connections and interactions with other Frontier Sectors

GM's strengths in AI, and the development of ethical AI, cyber security and digital trust, and immersive tech provide a base of excellence in underpinning technologies that align extremely well with the cityregion's strengths in Diagnostics, Genomics, In-Silica Regulatory Science and drug development, and digital med-tech tools. The increasingly big, connected data sets being created by UK Biobank and the GM Care Record, which is being integrated into the GM Secure Data Environment, provides an opportunity for the development of, and a market for the procurement of, a range of data handling, visualisation and diagnostic tools, opportunities, further supported by the need for cyber and UX and UI elements, which could be seized on by GM's Digital and Tech sector

GM's Advanced Materials and Manufacturing sector and innovation assets create capacity for the commercialisation and scale up of innovations developed by the Health Innovation and Life Sciences sector. These strengths provide opportunities in diagnostic and therapeutic medical device development, and complex medicines / targeted therapies. GM's strengths in Biological Engineering also create advanced manufacturing opportunities for Industrial Biotech and Bio-Pharmaceutical manufacturing, with existing assets being able to support the economical scale-up out of the laboratory for these technologies. The Greater Manchester Industrial Strategy Zone (formerly Investment Zone) focus on attracting new advanced manufacturers and uplifting the existing manufacturing base to increase the city region's ability to grow and attract medicines and devices manufacturers, is an example of where frontier sector policy has deliberately been set with consideration for the crossover opportunity

Creative health, the use of arts, culture, and creativity to improve health and wellbeing—is an area of strength and potential growth for Greater Manchester. It aligns with the region's ambitions for inclusive innovation, prevention-led health systems, and place-based transformation. As part of the Live Well framework, creative health brings together cultural, health, social care, and community sectors to address health inequalities and improve outcomes, particularly in underserved communities. Greater Manchester's leadership in creative health is nationally and internationally recognised, bringing with it opportunities for partnership and attracting investment, and there is opportunity and potential to drive innovation and growth in digital tools, immersive technologies, and personalised care for health equity. There is an obvious opportunity for GM's burgeoning CreaTech and strong Cultural assets to support the shift to prevention, reducing costs to the NHS, but also opening up new markets for products and services based on crossovers between our virtual and mixed reality technology development assets and our health data and diagnostic strengths.

There is a major overlap opportunity across all 3 of the Greater Manchester technology family strengths around:

- the discovery, design and production of complex medicines / targeted therapies,
- the development of the technology, algorithms and materials required to enable the use and deployment of quantum sensors in medical settings.



• the development of nuclear medicine, especially the production and testing of isotopes in targeted therapies.

## Current State of the Sector in GM Governance and Leadership

A decade on from the 2015 devolution deal, Greater Manchester is now recognised as having the most joined up cross-sector governance, and most advanced thinking on how this can benefit residents, in the UK. The Health Innovation Manchester Board and GM Integrated Care Board bring together leaders from across the triple helix, to both carry out their defined rolls, but also be key contributors and consultees on the development of broader strategies, such as the refreshed Greater Manchester Strategy, and this Sector Development Plan.

The maturity of this leadership and it's joined up approach has been recognised in Fit for the Future, which announced that the first Prevention Demonstrator would be in Greater Manchester, as the Mayoral Authority whose thinking on devolution and focus on population health outcomes was "most advanced".9This focus on ensuring that joined up collaboration brings together all elements of the system has allowed the bringing together of the country's largest, most diverse health data set, a comprehensive business support offering from Health Innovation Manchester, and an openness to engage from local health system leadership to develop the country's best trials and Real World Evidence system, as recognised by Lord O'Shaughnessy's review of Clinical Trials in the UK. The Economic Growth and Research benefits this can bring were demonstrated by this test architecture underpinning the UK securing Eli Lilly's £279m 5-year Tirzepatide trial.

## Sub-sector and comparative advantage

Health Innovation Manchester recently commissioned the 'Supercharging our Collective Strengths' study into the Health Innovation and Life Sciences Sector of GM, which, through the use of government data, alongside novel new research methods developed by Data City, has given a strong insight into what the city region's subsector strengths are. As with many areas of the Greater Manchester Economy, the city-region's Health Innovation and Life Sciences sector has a wide range of comparative sub-sectors strengths, which interconnect across our whole ecosystem, rather than having one or two deep, stand out strengths. As with the other frontier sectors, this can be explained by the absence of any one dominant "Prime" business being based here, or any heavily backed research focus. The development of the sector, as with the broader GM economy, seems to have responded to the wide range of areas of up-stream research excellence in our universities, especially where these naturally co-align with our other areas of strength, or with supply chain demands from clusters in neighbouring regions.

Analysis of data collected using the Data City's novel approach, shows that, through applying a Location Quotient to emerging sub-sectors within the Health Innovation & Life Sciences, Greater Manchester has clear comparative strength's (LQ => 1.5) and strong representations (LQ 1 - 1.5) across a number of specialisms within all of BioPharma, Pharm, Medtech and Optics, as well as in related technologies of Sensors and Software as a Service in Healthcare. As highlighted in the previous

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<sup>&</sup>lt;sup>9</sup> Fit for the future: 10 Year Health Plan for England p. 83



chapter, these subsectors demonstrate the cross-sector influence of GM's strengths in AM&M and Al, Data and Advanced Computing.

| RTIC subgroup                                  | GM | % of businesses with a presence in GM | LQ   |
|--|----|---------------------------------------|------|
| Biopharmaceutical: Advanced Therapy            | 32 | 7%                                    | 1.29 |
| Medicinal Products (ATMPs)                     | 32 | 770                                   | 1.29 |
| Biopharmaceutical: Antibodies                  | 25 | 8%                                    | 1.55 |
| Biopharmaceutical: Blood & Tissue Product      | 0  | 0%                                    | 0.00 |
| Biopharmaceutical: Small Molecules             | 27 | 5%                                    | 0.91 |
| Biopharmaceutical: Therapeutic protein         | 7  | 4%                                    | 0.74 |
| Biopharmaceutical: Vaccines                    | 27 | 7%                                    | 1.25 |
| MedTech: Advanced Materials                    | 20 | 14%                                   | 2.63 |
| MedTech: Artificial Intelligence               | 25 | 6%                                    | 1.08 |
| MedTech: Extended Reality                      | 1  | 2%                                    | 0.33 |
| MedTech: Imaging                               | 19 | 10%                                   | 1.85 |
| MedTech: Monitoring Technologies               | 16 | 8%                                    | 1.45 |
| MedTech: Photonics                             | 16 | 6%                                    | 1.18 |
| MedTech: Robotics                              | 32 | 12%                                   | 2.27 |
| Omics: Epigenomics                             | 4  | 6%                                    | 1.15 |
| Omics: Genomics                                | 88 | 28%                                   | 5.43 |
| Omics: Lipidomics                              | 1  | 3%                                    | 0.49 |
| Omics: Metabolomics                            | 1  | 1%                                    | 0.20 |
| Omics: Proteomics                              | 6  | 5%                                    | 1.03 |
| Omics: Transcriptomics                         | 21 | 9%                                    | 1.75 |
| Pharma: Additive Manufacturing                 | 13 | 6%                                    | 1.20 |
| Pharma: Artificial Intelligence and Blockchain | 11 | 4%                                    | 0.75 |
| Pharma: Automation                             | 15 | 10%                                   | 1.93 |
| Pharma: Pharma and BioPharma                   | 53 | 4%                                    | 0.74 |
| Pharma: Precision Medicine                     | 9  | 6%                                    | 1.11 |
| Pharma: Research and Data Analytics            | 41 | 9%                                    | 1.76 |
| Pharma: Targeted Therapies                     | 12 | 4%                                    | 0.77 |

#### HINM SUPERCHARGING OUR COLLECTIVE STRENGTHS REPORT P. 58

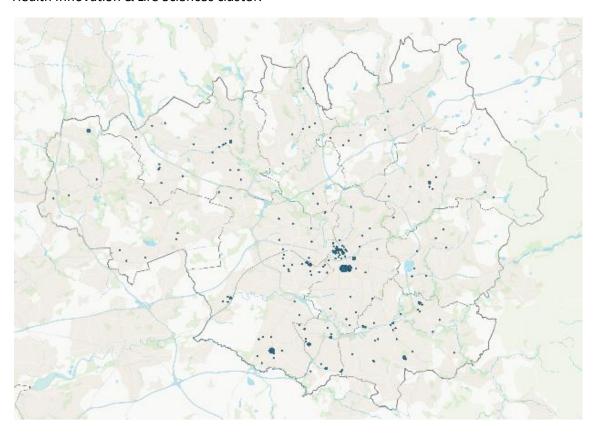
| RTIC subgroup                          | GM Business<br>Count | % of businesses with a presence in GM | LQ   |
|--|----------------------|---------------------------------------|------|
| Sensors: Medical                       | 47                   | 7.70%                                 | 1.47 |
| Software as a Service (SaaS):          | 16                   | C 400/                                |      |
| Healthcare                             | 16                   | 6.40%                                 | 1.23 |
| Artificial Intelligence: Life Sciences | 11                   | 3.40%                                 | 0.65 |
| Internet of Things: e-Health           | 8                    | 3.40%                                 | 0.65 |
| Wearables and Quantified Self:         | 3                    | 1.80%                                 |      |
| Medical                                | 3                    | 1.80%                                 | 0.34 |
| Immersive Technologies: Healthcare     | 2                    | 4.50%                                 | 0.87 |

HINM SUPERCHARGING OUR COLLECTIVE STRENGTHS REPORT P.60



## Geographic distribution of the sector

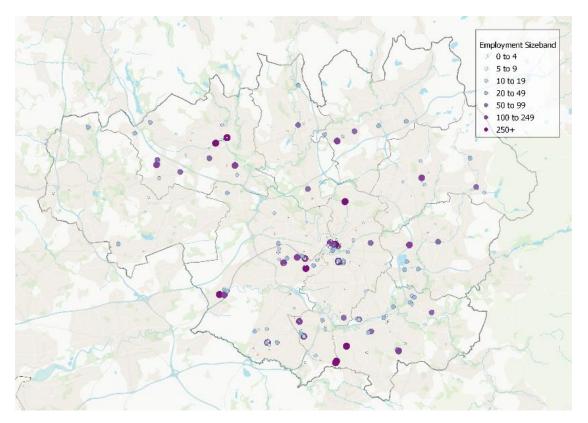
The sector's sites in GM are spread across the city-region, with distinct clusters in Manchester City Centre and on the Oxford Road corridor, and concentrations to the south of the city in Trafford, around Altrincham, and in Stockport, between the city centre's concentration of activity and the Cheshire Health Innovation & Life Sciences cluster.



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This spread in the distribution of sites is largely mirrored by the estimated spread of employment in the sector across GM's boroughs, with Manchester and the Southern boroughs hosting the bulk, but with Bolton also performing well, possibly because of the University of Greater Manchester's health focus.





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| Borough    | Estimated Employment |
|------------|----------------------|
| Manchester | 3,647                |
| Trafford   | 1,373                |
| Bolton     | 1,244                |
| Stockport  | 1,086                |
| Salford    | 611                  |
| Oldham     | 530                  |
| Rochdale   | 372                  |
| Tameside   | 359                  |
| Bury       | 200                  |
| Wigan      | 123                  |

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## The Knowledge Engine - Research and Innovation assets

As a heavily R&D dependent sector, the Health Innovation & Life Sciences business base of Greater Manchester has developed in a historical partnership with the forming and growth of excellence in the city-region's related upstream research base, both in our universities and research-intensive NHS foundation trusts, and the associated data, innovation and translation assets which have developed



alongside this. As with Greater Manchester's Advanced Materials and Manufacturing sector, the codevelopment of the region's universities alongside the industries that needed their research capabilities means that, whilst our institutions do excellent research, they, and the ecosystem that have developed around them have strong links to the needs and drivers of development and commercialisation of innovations.

#### **Upstream Research and Development**

- University of Manchester Faculty of Biology, Medicine and Health
- Manchester Metropolitan University Department of Sports and Exercise Science
- University of Salford School of Health and Society

#### Research Intensive NHS Foundation Trusts

- Manchester NHS Foundation Trust
- The Christie NHS Foundation Trust
- The Northern Care Alliance

#### **Catapult Centres**

The Medicines Discovery Catapult (At Alderley Park, Cheshire.)

#### **Data and Research Assets**

- UK Biobank Headquarters.
- <u>National Institute for Health and Care Research</u> Significant assets hosted in Manchester Foundation Trust and co-chaired by University of Manchester and Manchester Foundation Trust leadership.
- The Stoller Biomarker Discovery Centre
- The GM Digital Care Record, 10 covering 99.5% of citizens, social care, all acute hospitals and 440 GP practices.
- The <u>GM Secure Data Environment</u><sup>11</sup>, which enables researchers from academia and industry to access the city-region's health data assets, which have been accelerate by COVID

Trials, Translation and Commercialisation support.

- Health Innovation Manchester
  - Innovation Accelerator funded Health Innovation Accelerator
- The <u>Christabel Pankhurst Institute</u> for Health and Technology, providing translational support for health applications of digital tools and advanced materials.
- Translation Manchester
- University of Manchester Innovation Factory Tech Transfer Office
- NW Regional delivery network hosted at Manchester Foundation Trust

#### BioTechnology

- The Manchester Institute of Biotechnology
- Industrial Biotechnology Innovation Cluster

<sup>&</sup>lt;sup>10</sup> Developed by Health Innovation Manchester

<sup>&</sup>lt;sup>11</sup> Developed by Health Innovation Manchester



#### Skills Development

- University of Manchester School of Medical Sciences
- University of Greater Manchester's College of Medical Sciences
- Manchester Metropolitan University Department of Life Sciences
- University of Salford School of Health and Society

The growth of our crossover strengths in AM&M and Digital related sub-sectors is also supported and driven by similarly strong knowledge engine asset bases, outlined in their Sector Development Plans.

## Current growth performance and direction of travel

Between 2016 and 2021 the North-West Life Sciences sector experienced more than double the national rate of business creation. This growth only resulted in a small outperformance of national employment generation, and lagged in turnover growth, suggesting that whilst lots of businesses were formed, either as start-ups or spin-outs, they have been small and have not grown at pace. This is possibly due to the reported difficulty businesses in the NW find in securing the investment needed to scale-up staffing or to finance major capital expenditure within that timescale.

|                         | Measure        | North-West | UK     |
|-------------------------|----------------|------------|--------|
|                         | Business Count | 13%        | 5.20%  |
| % change 2016 -<br>2021 | Employment     | 10.30%     | 9.90%  |
|                         | Turnover       | 15.80%     | 23.80% |

Source: UK bioscience and health statistics

## Real estate premises and requirements

Surveys and engagement with businesses and support organisations within the sector generally return a belief that there is insufficient, competitively priced wet lab space in the right locations in Greater Manchester<sup>12</sup>. Alongside this shortage, GM's ability to offer facilities to attract or grow business in manufacturing in Industrial Biotechnology, BioPharma, Medical Device and Contract Manufacture and Development subsectors is constrained by the current lack of capacity in the industrial space market<sup>13</sup>.

There are developments in the pipeline, at varying stages of readiness for delivery, that could potentially begin to address these shortages, but there has been little appetite for speculative development, meaning that anchor tenants, or significant de-risking funding are required to begin delivery against established planning permissions.

#### **Geographical Distribution**

Whilst GM has significant Research and Innovation assets within the region, this is largely clustered within Manchester city centre along the Oxford Road corridor, creating potential constraints for spinout and start-up growth. Atom Valley (a vision to create an innovation mega-cluster situated between Rochdale, Bury and Oldham) and Sister (providing first step grow on space next to the cluster of R&D facilities on the Oxford Road Corridor) are a response to this, both of which have received Industrial

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<sup>&</sup>lt;sup>12</sup> 7i North West Science Corridor report

<sup>&</sup>lt;sup>13</sup> Track report for MIDAS, 2022



Strategy Zone (formerly Investment Zone) funding. New industrial and warehousing development also have an important role to play in addressing the economic disparities across GM, and to boost the competitiveness of northern areas.

Consequently, as outlined in <u>Places For Everyone</u>, GM's long-term plan of nine GM districts for jobs, new homes and sustainable growth, the planned release of Green Belt for employment use is focused primarily in the northern parts of GM, with a string of high quality opportunities of varying sizes focused particularly around the key motorway corridors. Overall, this will result in around two-thirds of the supply being in the districts of Wigan, Bolton, Bury, Rochdale, Oldham and Tameside, boroughs with embedded engineering and manufacturing strengths, which lend themselves to supporting growth in commercialisation to full production of a range of Health Innovation and Life Sciences technologies.

#### Skills and Talent

A 2021 Labour Market and Skills Intelligence report produced by the GMCA<sup>14</sup> identified a number of key workforce and skills issues at both national and GM level, for the Health Innovation & Life Sciences sector, which could have serious implications for sustained growth across the sector. Some of these are unique to the Health Innovation & Life Sciences sector, such as a shortage of lab technicians joining the sector to provide a base of skilled entrants to develop onwards, the need for more health economists to use the increasing data sets in the sector and the skills required to be able to keep up with and respond to the technological and regulatory changes in the Sector. However, several of the skills gaps are consistent with those affecting the other GM frontier sectors including "soft skills" such as leadership, communication and translation and commercialisation and technical sales and marketing skills, as well as general digital, computational and statistical analysis skills and the ongoing shortage of data scientists being produced. The sector has an issue with attracting talent from outside and retaining entry level staff to progress to more senior and technical positions. It has been posited that this is due to poor visibility of progression routes and a lack of a recognised Continuous Professional Development pathways to support upskilling for progression.

There is a demand for a large number of new, skilled workers to fill technical and professional roles, being exacerbated by the approaching retirement of a significant proportion of the workforce. The sector is white, male and middleclass, and struggles with recruiting and retaining women, people from the global majority and people from economically disadvantaged backgrounds. Whilst there was some evidence that employers were open to the use of advanced apprenticeships to address their skills gaps, there are still barriers to wider access to these opportunities based on perception and economic costs.

#### **Further Education Colleges**

Greater Manchester is served by 9 further education colleges, working to ensure students are equipped with the technical skills and real-world experience needed to excel driving the skills pipeline needed for the sector. These colleagues have in recent years made several investments in cuttingedge facilities with funding provided via the Local Skills Improvement Fund. This includes

 9 Anatomage Tables that enable students to digitally dissect the human body in full 3d, vastly reducing the cost, space and regulatory burden of training in human dissection. Alongside the

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<sup>&</sup>lt;sup>14</sup> GMCA Labour Market and Skills Intelligence report 2021.



"Train the Trainer" activity undertaken, this is the densest cluster of take-up of this technology in Europe.

- 9 "Caves" A CAVE (Cave Automatic Virtual Environment) is an immersive VR system that projects 3D images onto the walls, floor, and ceiling of a room-sized cube. It allows users to explore and interact with virtual environments in a life-sized, collaborative setting.
- 39 new teaching facilities created or enhanced across Greater Manchester (e.g. workshops / classrooms refurbished / fitted out with new industry standard equipment).

#### Wider trends and drivers of the future direction of the sector

The global population is ageing as people worldwide are living longer, according to the WHO<sup>15</sup> by 2030 1 in 6 people in the world will be 60 years old or over, increasing from 1bn to 1.4 bn people. This shift started in wealthy countries but is now a trend in middle- and low-income countries as well. As populations age, they largely decrease in physical and mental capacity, with a growing risk of disease and death. There are common health issues associated with ageing, such as hearing loss, sight deterioration, osteoarthritis, chronic obstructive pulmonary disease, diabetes and dementia, with an increased likelihood of experience of several of these at once. These are also accompanied by complex issues commonly known as geriatric syndromes, which result from multiple underlying factors such as increased frailty, delirium, falls and pressure ulcers. This increased population is placing growing pressure on health and care systems globally.

This trend for an ageing population is reflected in the UK, where the number people aged 65 and over increased from 9.2, in 2011 to over 11 million in 2021, going from 16.4% of the population to 18.6% <sup>16</sup> By 2041 there will be over 900,000 residents aged 55 and over in Greater Manchester, an increase of 17% from today. Over the same period, Greater Manchester is predicted to see its population aged 75 and over grow by almost 50%, resulting in nearly 100,000 more residents over this age in the region. <sup>17</sup>

Alongside this demographic pressure, there is an increasing belief that climate change and biodiversity loss will lead to an increase in the frequency and severity of pandemics, with globalization exacerbating their speed and reach of spread. 18

This increase in the ageing population, and the increasing risk of new pandemics, provide an opportunity for economic growth in those regions where a responsive and aligned research, development and innovation base sits alongside the right ecosystem. An area which can rapidly respond to align skills, translational infrastructure and digital and manufacturing capacity to develop and commercialise new faster and more accurate diagnostic devices, followed up with novel, targeted medicines and complex therapies, will be able to drive economic growth, have better public health outcomes and be more resilient to short termshocks and the impact of longer-term population trends.

This presents a huge opportunity for Greater Manchester, where the innovation ecosystem across these factors exists at scale, especially if the broader North West's capabilities and capacity in these areas can also be aligned, through strong leadership and strategic alignment of goals. By presenting a

<sup>&</sup>lt;sup>15</sup> Ageing and health (who.int)

<sup>&</sup>lt;sup>16</sup> Profile of the older population living in England and Wales in 2021 and changes since 2011 - Office for National Statistics (ons.gov.uk)

<sup>&</sup>lt;sup>17</sup> gm\_ageing\_strategy.pdf

<sup>&</sup>lt;sup>18</sup> Pandemics to increase in frequency and severity unless biodiversity loss is addressed | UNESCO



united case to Government, public and private health research funders, the patient investment community and other stakeholders, the opportunity exists to make the case that the excellence that exists in our up-stream science base, our existing innovation assets and our growing sectors can and should be invested in as a potentially globally significant growth cluster.

## Business Support and Peer Networks

As a sector operating in a highly regulated market, operating with rapidly developing changes in technology, businesses support for the Health Innovation and Life Sciences sector needs to be responsive to the requirements these create. Whilst generic business support offerings in areas such as leadership, marketing and business planning can offer some value to the sector, business support interventions specifically designed for and preferably with the businesses operating within this trading environment, and that can address these extra requirements will offer greater value.

#### The Greater Manchester Growth Company

The Growth Company (GC) is a key strategic partner in Greater Manchester's economic development ecosystem. Operating as a social enterprise, GC delivers a range of services that support inclusive growth, employment, and innovation across the city-region. Its activities are closely aligned with GMCA's priorities and contribute directly to the delivery of this Sector Development Plan.

GC's business support functions are delivered primarily through the GM Business Growth Hub, which provides tailored advice and guidance to businesses across the advanced materials and advanced manufacturing sector. This includes support for innovation adoption, workforce development, access to finance, and sustainability. The Hub's publicly funded model ensures that services are accessible to businesses of all sizes and stages, helping to unlock productivity and growth across the sector.

MIDAS, Greater Manchester's inward investment agency, also sits within GC and plays a critical role in attracting and supporting businesses seeking to invest in the city-region. Through market intelligence, property search support, and stakeholder engagement, MIDAS helps businesses navigate the local landscape and connect with relevant networks and assets.

The Growth Company's wider priorities that will contribute to the growth of the sector are:

- 1. GM Global Promotion & Propositions: Take the growth ambition, including Investment Pipeline, new innovation and experience assets to audiences through activation of our global networks, international missions to key markets and city to city partnerships that profile GM as a superlative place to visit, invest, study, live and do business.
- 2. Upgrade our Global Investment Outcomes: create new, and leverage existing international networks, with segmented market strategy to attract transformative high value investment in priority sectors and markets, maximising knowledge base/university linkages, workforce/employment opportunities and local business benefits.
- 3. Increase impact of Business Support and simplify customer access building on opportunities to be presented by the SME Review, devolution (also national government Business Growth Service), with more Local Authority and local partner integration. Extend provision in key theme of innovation, export and scale-ups whilst maximising use of business relationships across GC as key mechanisms for GMCA business engagement.
- **4. Step Change Sector Development**: including frontier sectors, foundational and visitor economy (where we have unique leadership role via Marketing Manchester), particularly centred on strategic and research insight, market opportunities, supply side and workforce development.



Leverage as a key mechanism for business engagement to maximise buy-in and support for the GM Vision.

- 5. Enable Sustainable Growth, making GM the easiest place to be a net zero business. Also grow Low Carbon sectors by transforming the climate challenge into economic opportunities, through innovation, inward investment, local business and upskilling residents.
- 6. Realise Workforce Opportunities and Better Connect Residents to Good Work: through Business Workforce Development activities create more and more inclusive opportunities including promotion of technical education pathways (Tlevels and apprenticeships) and increase the ability of residents to access these through upskilling and personal support (Education & Skills and Employment) assisting the key GM objective of having 80% of residents economically active.

The Growth Company also continue to deliver the highly successful GM <u>Innovation Navigator</u> Service - which connects businesses to commercialisation-focused resources, university expertise and research, and private sector providers, to help take their innovations forward, making the existing ecosystem much more integrated and accessible.

#### **Specialised business support**

The Growth Company will develop enhanced support through the introduction of a new BGH sector lead to drive the sector forward in BGH, building on previous successes and enhancing the evolving needs of the sector, bringing together key assets in GM across the ecosystem to stimulate growth and ensuring that GM businesses are investing in innovation and helping to link GM innovation assets to GM businesses.

There are also a number of highly specialised Life Sciences and Health Innovation business support offers in the city region, including those offered by Health Innovation Manchester, the Pankhurst Institute and the University of Manchester and Manchester Science Partnerships. Manchester Foundation Trust's <u>Innovation Technology Adoption Programme</u> (iTAP) is an example of the developing offering, being specifically created to support businesses to commercialise their innovations more quickly and reliably.

## Intellectual Property

Intellectual property (IP) is a critical enabler of innovation-led growth across Greater Manchester's frontier sectors, where businesses are often IP-rich but may not be able to fully realise the commercial value of their intangible assets. SMEs in these sectors may lack the knowledge and understanding to fully realise the benefits of IP protection, which can act as a barrier to scaling and investment.

Greater Manchester benefits from a strong local offer through the <u>Business & Intellectual Property Centre (BIPC) Greater Manchester</u>, <sup>92</sup> part of a national network supported by the British Library and the <u>Intellectual Property Office (IPO)</u> <sup>93</sup>. The BIPC provides free access to expert guidance, market intelligence, and IP databases across a network of libraries, including Manchester Central Library and key locations in Bury, Stockport, and Tameside. This offer is complemented by regular workshops and events, often delivered in partnership with the IPO, to build IP literacy and support businesses to protect and exploit their innovations. The region also benefits from a strong partnership between the GM Business Growth Hub and the IPO with both organisations working together to ensure that SMEs within the region receive IP support and guidance at the right time in their journey in order that they can make informed decisions in respect of their IP assets.



#### International Trade

The UK has traditionally been a strong exporter of Health Innovation and Life Sciences products. However in Pharmaceutical products it has seen it's global position slip over the last decade of available data, according to data from the Life Sciences Competitiveness Indicators 2024: summary

"In 2023, the value of UK exports of pharmaceutical products was £25.6 billion, placing the UK tenth amongst comparator countries. The UK saw its highest value in 2017, at £27.6 billion, and subsequently saw a declining trend until 2021, with the value dropping by 19% over this period. In 2022 exports recovered to £25.8 billion, a 16% increase from 2021, and then saw a modest decrease of 1% between 2022 and 2023.

In contrast to the UK, several comparator countries saw high growth over the period 2013 to 2023. Germany and Switzerland were consistently the top 2 comparators for the entire period, with both countries seeing substantial overall growth over time. The USA and Ireland also saw notable growth, with Ireland having a similar value of exports to the UK in 2013, but nearly 3 times the value of the UK's exports by 2023."

For Medtech this trend is reversed.

"The value of UK exports of medical technology products in 2023 was £10.1 billion, an increase of £0.5 billion (5%) since 2022. UK medical technology exports increased between 2013 and 2019 from £7.5 billion to £10.1 billion, an increase of 34%, and the value of these exports has been broadly consistent since then with the exception of a slight decrease in 2022.

In 2023, the UK ranked eleventh amongst comparator countries in terms of the value of medical technology exports. The USA, China and Germany have consistently been the top 3 comparator countries since 2013, with the value of the USA's medical technology exports in 2023 (£68.0 billion) being over 6 times that of the UK for the same year. There was a large spike in China's medical technology exports in 2020, with the value of these exports rising to £92.4 billion, which was more than double the value of £38.8 billion seen in 2019. A sharp decline between 2020 and 2021 was followed by a second, smaller spike in 2022."

The <u>Greater Manchester Export Plan 2022 - 25</u><sup>19</sup> identifies Health Innovation as one of Greater Manchester's 7 primary export sectors, which showed significant Export Growth over the years or have high potential to contribute greatly to the city-region's total exports over the next 3 years.

The city-region's approach to direct diplomacy with potential trade partners across the world, is central to bringing to life the Free Trade Agreements being established at a national level post-Brexit. This direct diplomacy approach has led to the development of relationships with, and a range of agreements being signed between Greater Manchester and other regions with strong Health Innovation and Life Sciences focuses, such as an Innovation Bridge with the Ruhr and an MoU's with Osaka, as well as ongoing discussions with Carolina and New Jersey and Boston.

#### Investment

Increasing the availability of investment for businesses has been a key strategic growth priority for Greater Manchester City region since the Manchester Independent Economic Review. Since that review interventions such as the <u>GM Core Investment Fund</u>, and the <u>GC Angel</u> service, which brings innovative entrepreneurs together with sector-specific syndicates of Angel investors, to directly invest

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<sup>&</sup>lt;sup>19</sup> Greater Manchester Export Plan 2022-2025, p. 20



in them, and to boost their access to wider networks. As this is a particularly acute issue in the Life Sciences sector, which needs patient investors due to longer product development, testing and licensing requirements. The GMCA has been a key investor in the <u>Greater Manchester and Cheshire Life Sciences Fund</u>, round 2 of which is currently open, being managed by PNX, whilst round 1 reportedly passed the milestone of generating over £100m of private sector co-investment in March 2025.<sup>20</sup>

As this is still one of the key barriers to innovation and growth being reported by the sector, Greater Manchester is working closely with national investment institutions to ensure alignment with the UK's evolving industrial strategy and to unlock long-term, mission-aligned capital for the city-region. The British Business Bank (BBB) and the National Wealth Fund (NWF) have both been given a strengthened remit to support the growth of the eight priority sectors identified in the UK's Industrial Strategy (IS-8), including Advanced Manufacturing.

The British Business Bank is prioritising regional investment and scale-up finance through initiatives such as the British Growth Fund and Strategic Equity Programme. These are designed to address structural gaps in access to capital for high-potential businesses and to support innovation, commercialisation, and productivity improvements in key sectors. Greater Manchester will continue to work with BBB to ensure that local businesses in the advanced manufacturing ecosystem can access these opportunities, particularly those with strong growth potential or operating in strategic supply chain

The National Wealth Fund, launched in 2025, is focused on crowding in private investment to support the UK's clean growth and industrial transformation missions. Its priorities include supporting the development of strategic infrastructure, accelerating the commercialisation of innovation, and enabling the scale-up of technologies aligned with net zero and digitalisation. GMCA is engaging with the NWF to explore how its capital can be deployed to support the delivery of a number of key areas including the Industrial Strategy Zone, the Integrated Pipeline, and the ambitions of this Sector Development Plan.

The GMCA is also currently undertaking research to understand what additional public investment tools could be developed to address key investment gaps for our frontier sectors, building upon the success of the GM Advance programme.

#### **Foreign Investment**

MIDAs, the Greater Manchester Inward Investment agency have adopted a strategy of directly promoting the city-region to businesses and markets aligned with our four frontier sectors. They have been pro-actively engaging with a range of markets and responding to enquiries for Health Innovation and Life Sciences opportunities, attending events such as Arab Health, and sending sector specialist staff on visits to Osaka, Germany and the United States. These efforts have been supported by the designation of GM as a high value opportunity area for Healthy Ageing by DBT. MIDAS and Health Innovation Manchester have recently visited and signed an MOU with Telangana State Government for a health innovation and Life Sciences partnership.

However, the attraction of inward investment in Health Innovation and Life Sciences is a highly competitive field, due to the economic and social value of securing these investments. Greater

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<sup>&</sup>lt;sup>20</sup> <u>GM&C Life Sciences Fund announces £100m+ in matched private sector investment for Greater Manchester, Cheshire and Warrington | Catapult Ventures</u>



Manchester is competing both with better capitalised hubs in other countries, who can offer more generous subsidy packages, as well as the global brand of Cambridge, Oxford and London which is reinforced by the discrepancy in the public funding of research being so heavily weighted towards the South East.

Despite its research strengths and competitive price point compared to the South-East, Greater Manchester does not receive many incoming enquiries from potential investments. Those that are generated come from our pro-active outreach, or are general enquiries, shared by DBT, and are generally from businesses whose priority focus is the South-East or London.

GM has a cross sectoral focus on attracting high value manufacturing of Health Innovation and Life Sciences medicines and devices to the City region. To this end, a joint approach will be adopted across our frontier sectors, growth location planning and inward investment activity in engaging with the £520m Life Sciences Innovative Manufacturing Fund, and £600m Strategic Sites Accelerator fund, to investigate if we can secure support to attract a significant, strategic international investment to the region.



## Strengths, Weaknesses, Opportunities and Threats

#### Strengths

- A strong Knowledge Engine in GM and the NW, with upstream science excellence and a growing range of innovation and translational assets.
- An established Sector Leadership body (Health Innovation Manchester) with strong triple helix representation and ambition to broaden its reach and remit.
- Strong existing business base, with a broad range of sub-sectors strengths in place and emerging, linked to GM's crossover technology strengths.
- The best performing city-region in the Northin attracting public sector Health Research Funding.
- GM Digital assets, SDE and diverse data set in the Patient Record provide a unique asset, with collaboration at NW Level driving that forward.
- Support services for business and links across NHS, have established our Clinical Trials Pathway as the best in the country.

#### **Opportunities**

- Strong political focus on Public Sector Reform in Health and Social Care.
- The GM ICB can take the role of a Prime in a way that is lacking in GM
- Data, support services and clinical trials infrastructure is in place, and being strengthened, to take a lead the Real-World Evidence market.
- A strong planning pipeline of potential lab and high-end manufacturing facilities.
- Increasing recognition of the need to fund translational facilities that focus on the confluence of technologies where GM is strong.
- Several major Innovation ecosystem proposals in development or already in competition for funding.
- Growing recognition of the North-West as a hub of excellence and a willingness to work together across the region's centres.
- Private sector buy in to establishing stronger sector leadership, networking and mutual support offers.

#### Weaknesses

- Constrained Private Equity and Venture Capital investment.
- Lack of sufficient scale of public funding to commercialise breakthroughs in science where major capital investment is needed.
- Broad sub-sector strengths but no clear stand out deep strengths.
- The city-region and broader North West lack a clear narrative and our leading positions aren't established with key funders etc.
- Clinical Trials and Data assets are still hampered by disjointed national picture and slow access to broader data sets and larger patient groups.
- We aren't linking enough GM developments to the GM trials architecture.
- Current lack of supply of "the right Lab and Manufacturing space in the right areas at the right price" with low appetite for speculative development.
- Persistent skills, labour supply and expertise capacity gaps in key areas.
- Poor visibility of careers development and progression opportunities

#### Threats

- Level of NHS funding in general and specifically for providing capacity for innovation adoption & appetite for risk remains unsure.
- Lack of cohesion across national NHS re: data access, trials infrastructure, testing and procurement could see other countries continue to establish leads in what used to be a UK strength.
- A competitive international landscape with numerous better capitalised hubs.
- Foreign Graduate talent being lost due to government policy.
- Perception of the Golden Triangle as primary centre of excellence in UK draws disproportionate levels of Research Funding and FDI.
- Lack of sector knowledge in planning and economic development teams could lead to poor quality or future limited facilities being developed.
- Clear messages on GM strengths may be diluted if growth location plans are not aligned with sector plans.



## Ambitions for growth

#### The vision for the sector in GM:

The Greater Manchester Health Innovation and Life Sciences sector will be a leading engine of growth in the UK economy.

Building on the largest sector employee base outside London, the research excellence across our universities, our nationally leading development and commercialisation capacity, the most joined up trials, data and regulatory support infrastructure in the country, and a central position in the North West Health Innovation and Life Sciences Corridor. Greater Manchester will be an internationally renowned hub for innovation, delivery and growth, attracting major outside investment, whilst nurturing and retaining start-ups, scale ups and spin-outs from our universities.

## Strategic priorities:

- 1) Building a strong sector leadership group that promotes the excellence of GM and the North-West, ensuring our businesses and research base's voice is heard, and that the sector is getting the recognition that its excellence deserves.
- 2) Developing a highly active, closely networked ecosystem of businesses, academic research excellence, innovation assets and NHS organisations in the city-region and across the broader North-West, with an aligned and targeted business-support offer to enable growth.
- 3) Identifying a focused set of truly high growth potential sub-sector strengths to be our priorities for investment and support.
- 4) Unlocking the full value of GM's health and care data assets, aligning them with a full suite of wrap around support services, to seize the Real-World Evidence growth opportunity.
- 5) Increasing Public and Private investment in existing and new Translational Innovation Support Assets in GM and across the NW, to support the acceleration of R&D into commercial products and services.
- 6) Aligning all our education institutions and skills providers with businesses and research assets to ensure there is a robust and responsive pipeline of talent and easy to access upskilling opportunities.
- 7) Increasing our effectiveness at securing the funding and financing that business and researchers need to innovate and grow in the city-region.

## What we need to do to achieve growth

## Our approach to delivery

The current GM Sector Support picture has developed over years, shaped by short-lived national strategies, rapidly changing senior ministers, and short-term funding allocations from various sources, often allocated by competition and driven by the output-based approach of EU funding programmes. Sector leadership bodies like GAMMA or Health Innovation Manchester, and business support schemes like Made Smarter, have developed mainly due to GM's efforts to influence National policy, and often budgeted for in response to funding being provided on a year-to-year basis.



The development of examples such as Places for Everyone, the GM Good Employment Charter, GM Innovation Plan, Innovation Accelerator Pilot Programme, Further Education Innovation Programme, and the UKSPF Funded Innovation Ecosystem Navigation Service show that, despite short-term strategic and funding limitations, a place-led approach to shaping interventions for our frontier sectors can deliver better outcomes.

With the new government taking a new approach to National Industrial Strategy and local growth plans and suggesting longer-term funding settlements will now be the norm, and the powers and funding control coming to the city-region, we are now able to review what is in place and begin to plan and deliver on a longer-term basis.

There are widespread changes in how the NHS is organised, outlined in Fit for the Future. With it being a major funder of research, a major research body in it's own right, and one of if not the biggest potential customers for many businesses operating in the Health Innovation and Life Sciences Sector, the key changes that affect this plan look likely to be it now having to consider its role as a driver of economic growth, the changes being proposed to open up access to health and genomic data, the acceleration of trials, and the speed of adoption and procurement of innovations.

Greater Manchester is already a leader in the country in how well it's NHS, Academic and Public Sector leadership collaborate, which means we are well positioned to seize on the potential opportunities these changes may bring. This plan intends to build on this position and continue to work to ensure that different parts of our ecosystem work together and that various interventions taken across our system, such as the Prevention Demonstrator, Live Well and the Local Innovation Partnership Fund, complement and support one another.

Theres is a need to unlock new employment spaces for growth, ensure the availability of necessary skills, transport links to get people to jobs being created, leadership to communicate the vision and attract investment, and business support to help businesses locate and thrive. This plan recognises that these components complement each other, and we will work to break down silos and take a strategic approach to implementing, prioritizing, and sequencing interventions to create the most impact for the sector. This is especially important for the Health Innovation and Life Sciences Sector, where the need for regulation, rigorous testing and good governance is high, and the rewards and impact of a more joined up system that innovates to bring new products and services to market faster, is broader than just generating GVA and jobs.

This section below outlines how Greater Manchester is and will continue to support the sector with the resources and leavers at our disposal, including via collaboration with delivery partners, government and industry. Whilst some of the actions outlined in this plan are currently funded, or already in delivery, others represent early-stage exploration or proposition development intended to lay the groundwork for future investment.

## How our action plan is structured: Levers of growth

Realising our vision and delivering on our strategic priorities will require a joined up, coherent, interconnecting action plan, built on a principle that collaboration and co-design with the sector is the best way to proceed, and siloes of activity should be prevented wherever possible. Our approach will prioritise building on existing capacity where possible, creating new interventions where needed, learning from what has worked elsewhere and being innovative where this may not work in GM. To ensure uniformity of approach across all five Sector Development Plans, enabling the opportunities



for cross cutting interventions and maximise knowledge sharing, we will develop our approach under 5 key "Levers of Growth":

#### **Sector Leadership:**

Strong local leadership is central to the economic prosperity of an area and to be successful requires partnership across the political, business and institutional spectrum. Local leaders know the needs and opportunities of their areas best and can build coalitions with entrepreneurial leaders from business, research institutions and other local stakeholders to forge a clear vision for their Industrial Strategy Zone (formerly Investment Zone).

The Health Innovation Manchester Board and Greater Manchester's Integrated Care Board are well-established bodies which are continuing to develop their capacity and focus to lead the city-region in the delivery of Public Sector Reform and Private Sector growth, building on the powers that were devolved in the first City Deal, and that have developed throughout the devolution process. Alongside GM's Business Board, the Innovation Greater Manchester Partnership Board and the democratic oversight of the GMCA, this is a strong base for the development of a triple helix focused sector leadership group that can provide the insight and guidance needed to develop our understanding of the city-regions Health Innovation & Life Sciences strengths, and co-design and support the implementation of the interventions needed to deliver on this.

#### Skills and labour supply:

Industry and business often raise the challenge of available skills and expertise as a barrier to investing and expanding. Lack of necessary training and skills can also shut existing communities out of new innovative opportunities in their local area.

Since the 2014 City Deal, Greater Manchester has been lobbying for greater local control of skills funding and policy, on the principal that we better understand the needs of our employers, residents and the capacity of our providers. Under the latest devolution deal we will have increased control of post 16 skills provision and the Adult Education Budget for the city-region. Work already done on the Manchester Baccalaureate, Local Skills Improvement Plan and improvements from the Local Skills Improvement Fund has better prepared us to be able to look at short courses, apprenticeships and other interventions to address broad skills, whilst our success in securing Centres of Doctoral Training funding provides a model for how we can look to boost higher level skills.

#### **Research and Innovation:**

Evidence demonstrates that R&D grants, loans, and subsidies have a positive impact on R&D expenditure and increase the rate of innovative activity that takes place. Innovation is a key to raising long term productivity, outputs, and economic growth, with higher levels of R&D spend associated with higher growth.

The Greater Manchester Innovation Plan has laid out a Cluster-Led approach that the city-region will take to developing its Innovation Ecosystem, looking to develop translational capacity, and build linkages and networks, which support our frontier sectors to develop and commercialise innovations based on our key technology strengths. As the reform of certification and procurement of innovation put forward in Fit for the Future and the IS-8 Life Sciences plan come into affect, we will build on our joined up local governance to ensure that these bring the maximum possible advantage for our innovation ecosystem.



The GM Health Innovation Accelerator, funded through the Innovation Accelerator has shown how place led interventions can strengthen the links between GM's knowledge engine, industry and the NHS and we will look to continue to build assets and programmes that develop on this, whilst exploring how we secure the patient finance needed to ensure they can scale in Greater Manchester.

#### **Local Enterprise and Business Support:**

Studies indicate that collaboration with business, universities and research institutions such as Catapults play a vital role in regional and national growth, while SMEs play a large role in local economic performance but often lack knowledge of applicable University support to improve performance.

As with Skills, local enterprise and business support has been an agenda the Greater Manchester has been working towards greater local control of for some time, working to the principle that a place-based approach, with local knowledge and understanding, coupled with a strong evidence base will achieve better outcomes. Success stories such as Made Smarter, which was developed in GM, initially delivered across the North-West, and will soon be rolled out nationally, show how we have been able to develop impactful interventions, in the face of uncertain budget allocations and shifting strategy. The sounder footing that the next phase of devolution will bring will allow for more such focused and targeted interventions to be developed across our frontier sectors.

The Health Innovation and Life Sciences Sector can benefit from wider support programmes, but also needs specialised support, reflecting its more regulated nature. We will work to ensure that businesses in the sector both appreciate and access the broader generic business support offer, but also have access to the more specialised advice and guidance they need.

#### **Planning and Development:**

Increases in commercial property space, spaces for innovation, collaboration and sharing of ideas, enabled through the planning system, has been found to positively impact employment and turnover in local areas.

Through the adoption of Places for Everyone and the developing Stockport Local Plan, Greater Manchester has established a clear pipeline of future employment and housing growth opportunities. This has allowed the identification of 6 key growth locations in the city-region, allowing for the development of investment pipelines and strategic planning to begin focusing on getting the maximum impact from the funding that GM controls to develop economic infrastructure across Greater Manchester.

We will ensure that the growth zones with potential to drive growth in the Health Innovation and Life Sciences sector have the right planning expertise and foresight of need to allow for the development of the wide range of different, sometimes highly specialised, spaces that the sector needs, and to ensure that the rebuilding of the North Manchester General Hospital, the master planning of Wythenshawe Hospital and the development of propositions for the renewal Stepping Hill and Farnworth Hospital are realised as opportunities to drive economic growth and strengthen the innovation ecosystem, as well as meeting the primary aim of delivering world-class health facilities for their communities.



## Delivery Plan.

The below plan provides a series of actions that we believe GM needs to take to support the sector going forwards.

The table below outlines how these actions are aligned to our different leavers for growth, if this activity is ongoing or new activity proposed in this plan, organisations and timeframes for this activity (short term – 25/26 FY or medium term - beyond this timeframe).

We also categorise actions in 3 different ways

- "Distinctive" actions, that are only relevant to this sector development plan
- "Shared" actions that thread together our frontier sectors and their plans
- "Strategic" actions that sit above sector development plans and support business activities across the economy

| Lever             | Action  | Lead                                      | Kind             | Strategic<br>Priority | Timeframe | Programme | Shared / Distinctive Action |
|-------------------|---|---|------------------|-----------------------|-----------|-----------|-----------------------------|
| Sector Leadership | Investigate the Health Innovation Manchester board broadening its role as a leadership body for the sector in GM.   | Health Innovation<br>Manchester / GMCA    | New Activity     | 1, 2                  | Short     |           | Distinctive                 |
| Sector Leadership | Review how GM's leaders can take a more pro-active role in the sector nationally, engaging with the National Industrial Strategy Life Sciences Plan and other emerging strategies.  | GMCA                                      | New Activity     | 1, 7                  | Short     |           | Distinctive                 |
| Sector Leadership | Strengthen Business and Academic Sector Voices in Public Service Reform discussions.  | GMCA                                      | New Activity     | 1, 2                  | Short     |           | Distinctive                 |
| Sector Leadership | Establish a full GM System response to the reforms put forward in the Fit for the Future 10 Year Health Plan and the IS-8 Life Sciences Sector Plan to attempt to ensure that we maximise the positive impact of the Prevention Demonstrator and NHS trials and procurement reform for the GM Sector, and try to ensure that Health Data reforms and the HDRS do not undermine the advances made in GM regarding public engagement and innovation supported by the GM patient record and SDE. | GMCA & Partners                           | New Activity     | 1,4,5                 | Short     |           | Distinctive                 |
| Sector Leadership | Ensure Greater Manchester is represented on relevant national industry groups supporting the delivery of the national industrial strategy   | GMCA, UK Govt.                            | New Activity     | 1                     | Medium    | NIS       | Strategic                   |
| Sector Leadership | Develop a mechanism for ongoing review of the evidence base regarding GM's frontier sectors, sub-sector strengths, and their development needs, responding to emerging capabilities.  | GMCA / Health<br>Innovation<br>Manchester | Ongoing Activity | 1, 2, 4               | Short     |           | Shared                      |
| Sector Leadership | Identify the key sub-sectors in which GM has specific strengths and opportunities to be truly globally leading to be our main focuses of growth activity.   | GMCA / Health<br>Innovation<br>Manchester | New activity     | 3, 5, 6, 7            | Short     |           | Distinctive                 |
| Sector Leadership | Establish a focus group of NW region leadership to investigate developing stronger regional strategic links, messaging and collaboration approaches for the growth of the sector  | GMCA                                      | New Activity     | 1, 7                  | Medium    |           | Distinctive                 |
| Sector Leadership | Bring together an effective, representative, private sector led North-West Life Sciences leadership group.  | GMCA                                      | New Activity     | 1, 2, 7               | Medium    |           | Distinctive                 |
| Sector Leadership | Build on and establish more city-regional collaborations on Life Sciences growth, such as the Manchester – Cambridge partnership, Ruhr Innovation Bridge and Osaka MoU.   | GMCA & Partners                           | Ongoing Activity | 1, 7                  | Medium    |           | Distinctive                 |
| Sector Leadership | Communicate the narrative of GM's cross cutting sectoral strengths to internal and external stakeholders, including industry and government, to inform national policy & strategy for the   | GMCA & Partners                           | Ongoing Activity | 3, 7                  | Short     |           | Shared                      |



| Lever                   | Action  | Lead  | Kind             | Strategic<br>Priority | Timeframe | Programme                            | Shared / Distinctive Action |
|-------------------------|---|---|------------------|-----------------------|-----------|--------------------------------------|-----------------------------|
|                         | sector and ensure they are aware of GM's strengths and opportunities, initiatives locally, and gaps in our ability to develop the sector locally  |   |                  |                       |           |                                      |                             |
| Sector Leadership       | Undertake research to map the gap between where sectors are now and where they need to be to deliver the 5Y Environment Plan's targets, considering what sectors are currently delivering, what they are capable of, and focused activity required to plug the biggest gaps                 | GMCA & Partners                               | Ongoing Activity |                       | Medium    |                                      | Shared                      |
| Sector Leadership       | Explore options to develop a mechanism to facilitate cross sector communication between frontier sectors and increase engagement in decision making processes.  | GMCA  | New Activity     | 1,2                   | Medium    |                                      | Shared                      |
| Sector Leadership       | Explore options to increase our understanding of the supply chains that both services, and our businesses in the sector service, including the businesses in GM that make up these, and what is driving key decisions around supply chain management for OEMs and key opportunities for GM. | GMCA  | New Activity     | 1,2                   | Medium    |                                      | Shared                      |
|                         |   | I   |                  |                       | I         |                                      |                             |
| Innovation and Research | Lobby for Greater Manchester to be selected as a Health Innovartion Zone, to support the acceleration of adopion of innovative products and services developed in the city region.  | All System                                    | New Activity     | 2, 4, 5               | Short     | IS-8 Life<br>Sciences<br>Sector Plan | Distinctive                 |
| Innovation and Research | Maximise the impact of the Extended Innovation Accelerator Pilot and centre frontier sector needs in the development of Greater Manchester's response to the Local Innovation Partnership Fund  | GMCA  | Ongoing Activity | 2, 4, 5, 7            | Short     |                                      | Shared                      |
| Innovation and Research | Support and input into the Science and Innovation Audit on behalf of all frontier sectors.  | GMCA & Partners                               | Ongoing Activity | 3, 5                  | Short     |                                      | Shared                      |
| Innovation and Research | Drive the development of, and lobby for greater local autonomy over, the GM Secure Data Environment, and secure access to broader health and social data sets that increase its efficacity.   | Health Innovation<br>Manchester /<br>GMCA     | New Activity     | 4, 5                  | Short     |                                      | Distinctive                 |
| Innovation and Research | Identify gaps in the HI&LS translational and scale-up innovation asset base, aligned with needs of identified key growth opportunities.   | GMCA  | Ongoing Activity | 5, 7                  | Short     |                                      | Distinctive                 |
| Innovation and Research | Create better links between HI&LS technologies developed in Greater Manchester and the Cityregions leading Real World Evidence and Trials infrastructure.   | Health Innovation<br>Manchester &<br>Partners | New Activity     | 2, 4                  | Short     |                                      | Distinctive                 |
| Innovation and Research | Establish a pipeline of needed HI&LS innovation asset investment, with developed business cases, aligned with identified key growth opportunities, identify possible routes to funding these and engage with potential investors / funders.   | GMCA & Partners                               | New Activity     | 3, 5, 7               | Medium    |                                      | Distinctive                 |
| Innovation and Research | Explore the creation of a localised GM fund which reinvests the value from innovation into social value projects, e.g. data assets for health.  | GMCA  | New Activity     | 2, 7                  | Medium    |                                      | Shared                      |
| Innovation and Research | Explore the creation of a seed fund for high risk/reward pilots that industry cannot absorb but tackle key socio-economic challenges including healthy ageing and the move towards prevention   | GMCA  | New Activity     | 2, 3, 7               | Medium    |                                      | Shared                      |
| Innovation and Research | Increase our understanding of industry and academia R&D partnerships in the city-region relevant to the frontier sectors, to drive for GM to be a testbed for investment in innovation with commercial application.   | GMCA & Partners                               | New Activity     | 2, 3, 7               | Short     |                                      | Shared                      |
| Innovation and Research | Explore potential opportunities for a Joint Technology Transfer office to sit across all universities and maximise technology transfer opportunities across GM  | University Partners<br>Innovation GM          | New Activity     | 2, 7                  | Medium    |                                      | Strategic                   |



| Lever                              | Action  | Lead                                    | Kind             | Strategic<br>Priority | Timeframe | Programme               | Shared / Distinctive Action |
|------------------------------------|---|---|------------------|-----------------------|-----------|-------------------------|-----------------------------|
| Enterprise and Business<br>Support | Expand Made Smarter to support technology adoption in Health and Social Care organisations.   | GMCA & Growth<br>Company                | New Activity     | 2, 6                  | Short     | Care<br>Smarter         | Distinctive                 |
| Enterprise and Business<br>Support | Support HI&LS businesses to access Innovation Navigator, Made Smarter, GM Advance or the GM&C Life Sciences fund where appropriate.   | GMCA & Growth<br>Company                | New Activity     | 2, 7                  | Short     | Made<br>Smarter,<br>ISZ | Distinctive                 |
| Enterprise and Business<br>Support | Support the development of self-sustaining HI&LS business cluster networks  | GMCA, GM Growth<br>Company              | Ongoing Activity | 2                     | Short     |                         | Distinctive                 |
| Enterprise and Business<br>Support | Develop an approach that supports GM businesses to engage with the expanded Governemnt Export Support offer and Export Guarantee Fund.  | GMCA / Growth<br>Company                | New Activity     | 2                     | Short     | NIS                     | Distinctive                 |
| Enterprise and Business<br>Support | Develop a suite of services and support that sit around the GM SDE and trials system, to support enterprises of all sizes to engage with GM's Real World Evidence and Clinical trials offer.  | Health Innovation<br>Manchester         | Ongoing Activity | 2, 4, 7               | Short     |                         | Distinctive                 |
| Enterprise and Business<br>Support | Ensure that the commercial offer of GM SDE and access to the data in it is proportionately priced and easily accessible for SMEs, and that a support offer is in place to uplift and that are prevented from accessing the asset by information governance and cyber security requirements  | Health Innovation<br>Manchester         | Ongoing Activity | 2, 4                  | Medium    |                         | Distinctive                 |
| Enterprise and Business<br>Support | Explore options for how additional business incentives (e.g. match funding) to attract businesses to the region could be structured if resources are made available.  | GMCA & MIDAS                            | New Activity     | 2,7                   | Medium    |                         | Shared                      |
| Enterprise and Business<br>Support | Explore how we can enhance resources available to proactively engage major, global innovative firms and develop sophisticated inward investment plans to attract them, including via lunching key campaigns working with MIDAS  | MIDAS<br>GMCA                           | Ongoing Activity | 2, 7                  | Medium    |                         | Shared                      |
| Enterprise and Business<br>Support | Continue to develop closer working with DBT teams in post in target markets to strengthen FDI relating to cluster focus areas.  | MIDAS<br>GMCA                           | Ongoing Activity | 2                     | Short     |                         | Shared                      |
| Enterprise and Business<br>Support | Explore the introduction of a GM programme that provides an easily navigable platform for all frontier sector organisations to understand the current ecosystem of innovation support organisations and access opportunities for investment and grants, with regularly updated data, as well as options for creating "innovation" champions to support business with accessing grant support and other opportunities in the ecosystem | GMCA                                    | New Activity     | 2, 7                  | Medium    |                         | Shared                      |
| Enterprise and Business<br>Support | Strengthen and tailor Greater Manchester's intellectual property (IP) support offer across all frontier sectors by working with the Business & Intellectual Property Centre (BIPC) Greater Manchester and the Intellectual Property Office (IPO), maximising our support to IP-rich SMEs most in need of support, and ensuring that IP is embedded into wider business support and innovation programmes across GM.                   | GMCA<br>Intellectual Property<br>Office | New Activity     | 1                     | Medium    |                         | Strategic                   |



| Lever                              | Action  | Lead                     | Kind             | Strategic<br>Priority | Timeframe | Programme | Shared / Distinctive Action |
|------------------------------------|---|--------------------------|------------------|-----------------------|-----------|-----------|-----------------------------|
| Enterprise and Business<br>Support | Work to develop a framework for higher quality output metrics for support programmes that focus on capturing progress towards commercialisation and quality of programme benefits for businesses  | GMCA                     | New Activity     | 2                     | Medium    |           | Strategic                   |
| Enterprise and Business<br>Support | Support the continued operation of Growth Company networks, and ensure we are maximising the reach of current initiatives to support businesses to access programmes and funding, such as Made Smarter Programme, innovation ecosystem navigation service and BeeNetZero programme.   | GMCA & Growth<br>Company | Ongoing Activity | 2                     | Medium    |           | Strategic                   |
| Enterprise and Business<br>Support | Support the GM Business Board with their review of the publicly funded Business Support offer in GM, to identify gaps and / or the need for specialisation of support for target sectors.   | GMCA & Growth<br>Company | Ongoing Activity | 2                     | Short     |           | Strategic                   |
| Enterprise and Business<br>Support | Undertake a cross-sector mapping exercise to identify key international markets and trade relationships for each of Greater Manchester's frontier sectors. This will include analysis of sub-sector strengths, export potential, and alignment with global demand, and will inform the development of targeted international engagement and trade propositions. | GMCA & MIDAS             | Ongoing Activity | 2                     | Medium    |           | Strategic                   |
| Enterprise and Business<br>Support | Support the UK Governments Supply Chain Centre and Digital Supply Chain Hub with the data and collaboration activities as required  | GMCA, UKGov              | New Activty      | 2                     | Medium    | NIS       | Strategic                   |
| Enterprise and Business<br>Support | Ensure we are maximising opportunities for GM businesses to access funding via the British<br>Business Bank, including the Industrial Strategy Growth Capital, Strategic Equity, IP-Backed<br>Lending and Nations and Regions Investment programmes   | GMCA, UKGov              | New Activty      | 2,7                   | Medium    | NIS       | Strategic                   |
| Enterprise and Business<br>Support | Complete research to understand what additional public investment tools could be developed to address key investment gaps for our frontier sectors.   | GMCA                     | New Activty      | 2,7                   | Short     |           | Shared                      |
| Enterprise and Business<br>Support | Support the role out of UKGovs cluster champions programme and their North West Deployment, and maximise opportunities presented via the innovation cluster programme.  | GMCA, UKGov              | New Activty      | 2,7                   | Short     | NIS       | Strategic                   |
| Enterprise and Business<br>Support | Ensure we are maximising opportunities for GM businesses to access funding via the enhanced remit of the National Wealth Fund announced as part of UK Government's National Industrial Strategy   | GMCA & Growth<br>Company | Ongoing Activity | 2,7                   | Medium    | NIS       | Strategic                   |
| Enterprise and Business<br>Support | Complete a review of our current business engagement forums and processes across our frontier sectors and strengthen businesses voice in the development of our strategies and plans, including further iterations of sector development plans  | GMCA & Growth<br>Company | Ongoing Activity | 1,2                   | Short     |           | Strategic                   |



| Lever                    | Action  | Lead   | Kind             | Strategic<br>Priority | Timeframe Programme | Shared / Distinctive Action |
|--------------------------|---|--|------------------|-----------------------|---------------------|-----------------------------|
| Skills and Labour Supply | Bring together Schools, FE and HE institutions to enable up to date teaching, access to industry standard equipment and establish better pathways into HI&LS careers.   | GMCA & Education<br>Institutions                                       | New Activity     | 2, 6                  | Medium              | Distinct                    |
| Skills and Labour Supply | Create better links for Health and Social Care companies with Digital Skills and Leadership Skills programmes.  | GMCA & Growth Co.  | New Activity     | 2, 6                  | Short               | Distinct                    |
| Skills and Labour Supply | Develop an employer and governance body endorsed HI&LS sector CPD framework for the sector in GM / the North West.  | GMCA   | New Activity     | 6                     | Medium              | Distinct                    |
| Skills and Labour Supply | Enable the retention of more HI&LS related overseas graduate talent in GM, with a particular focus on those who have been supported in their studies by local employers.  | GMCA   | New Activity     | 2, 6                  | Medium              | Distinct                    |
| Skills and Labour Supply | Work with partners to increase the impact of employer engagement in shaping the curriculum within colleges by working with existing advisory boards within colleges and facilitating events/conferences at a GM level where they add value  | GMCA & FE<br>Colleagues  | New Activity     | 2, 6                  | Medium              | Shared                      |
| Skills and Labour Supply | Review the opportunities for frontier sector relevant short courses, bootcamps etc. opened up by the new Devolution Deal on skills funding  | GMCA   | New Activity     | 2, 6                  | Short               | Shared                      |
| Skills and Labour Supply | Ensure that we are aligning sector priorities with MBacc, and that young people have a clear line of sight to jobs in the sectors.  | GMCA   | Ongoing Activity | 4                     | Medium              | Strategic                   |
| Skills and Labour Supply | Align Skills and Employment Support interventions with Greater Manchester's Local Skills Improvement Plan (LSIP), led by the GM Chamber of Commerce and utilise new devolved powers from the Integrated Settlement and existing programmes (e.g., Adult Education Budget, Skills Bootcamps) to address priority skills gaps. Support young people and adults in developing academic and technical skills identified through sector skills analysis, informed by business needs and feedback on the Skills System. | GMCA   | Ongoing Activity | 2, 6                  | Medium              | Strategic                   |
| Skills and Labour Supply | Work to ensure that employers and learners are more aware of existing provision and access points into it. This will include a concerted effort to link employers with providers to ensure that awareness of current provision is up to date taking in established options such as Apprenticeships and 'newer' options such as T-Levels and a range of shorter course options around HTQs   |  | Ongoing Activity | 2, 6                  | Medium              | Strategic                   |
| Skills and Labour Supply | Explore opportunities for new paid internships placing university students in SMEs to provide innovation support  | GMCA & Universities  | New Activity     | 6                     | Medium              | Strategic                   |
| Skills and Labour Supply | Increase our understanding of specific graduate needs for frontier sectors and developing our approach to increasing retention in GM.   | GMCA & Universities  | Ongoing Activity | 3, 6                  | Medium              | Strategic                   |
| Skills and Labour Supply | Foster greater collaboration between all parts of the skills systems (HE institutions, FE colleges, ITPs), facilitate shared learning by exemplar institutions on effective programmes, and join up existing assets within GM, using this as a platform to better engage industry and connect their future skills needs to available  | GMCA, FE Colleges,<br>Higher Education<br>Institutions and<br>Partners | Ongoing Activity | 6                     | Medium              | Strategic                   |
|                          |   |  |                  |                       |                     |                             |



| Lever                                    | Action   | Lead  | Kind             | Strategic<br>Priority | Timeframe      | Programme | Shared / Distinctive Action |
|--|--|---|------------------|-----------------------|----------------|-----------|-----------------------------|
| Development, Planning and Infrastructure | Link HI&LS sector expertise to Planning Teams in LAs targeting the sector for their Growth Locations, ensuring the right infrastructure and policies are in place and needed facilities are planned for.   | GMCA  | New Activity     | 5, 7                  | Short          |           | Distinctive                 |
| Development, Planning and Infrastructure | Develop a cross GM System approach to identifying opportunities to bring together the GM Growth Locations approach, Innovation Strategy Zone, the Strategic Sites Fund and the Life Sciences Manufacturing Innovation Fund to put forward a compelling case that can secure a major FDI investment in an appropriate location in GM. | GMCA / MIDAS                                | New Activity     | 3, 5                  | Short / Medium | NIS       | Shared                      |
| Development, Planning and Infrastructure | Ensure that HI&LS sector expertise is called upon in designing and planning the delivery of regeneration linked to the upgrading of Wythenshawe and North Manchester Hospital sites.   | GMCA and Health<br>Innovation<br>Manchester | New Activity     | 2                     | Medium         |           | Distinctive                 |
| Development, Planning and Infrastructure | Investigate the development of an offer to support the conversion of empty office space into lab, clean room or other required facilities.   | GMCA  | New Activity     | 2                     | Short          |           | Distinctive                 |
| Development, Planning and Infrastructure | Ensure we are maximising opportunities to unlock key strategic sites via the UKGovs Strategic Site Accelerator, Mayoral Recyclable Growth Fund and Connections Accelerator Service.  | GMCA, UKGov                                 | New Activity     | 6                     | Medium         | NIS       | Strategic                   |
| Development, Planning and Infrastructure | Develop a better understanding of the Quantum of market demand for physical infrastructure, including modular lab space, scale up space, larger sites for larger businesses including via FDI as well as GPU compute, and digital connectivity infrastructure requirements.  | GMCA  | New Activity     | 1                     | Short          |           | Shared                      |
| Development, Planning and Infrastructure | Ensure the Investment Plan embeds provision for digital-first infrastructure (including Al Growth Zones, dark fibre, and 5G/6G) and clean energy systems required by the sectors at key locations to ensure sustainable development.   | GMCA  | Ongoing Activity | 2                     | Medium         |           | Shared                      |
| Development, Planning and Infrastructure | Launch and utilise £2m Planning & Development fund for Districts to draw from to plan and prepare for the development of strategic sites   | GMCA  | Ongoing Activity | 2                     | Short/Medium   | ISZ       | Shared                      |
| Development, Planning and Infrastructure | Support the development of cross-sector creative hubs for collaboration and innovation.  | GMCA / Local<br>Authorities                 | New              | 4                     | Medium         |           | Shared                      |
| Development, Planning and Infrastructure | Explore interim commercial space solutions for start-ups and scale-ups guided by the Integrated Pipeline and Regional Economic Spatial Plans (RESPs). This includes identifying opportunities to accelerate delivery through the Strategic Sites Accelerator and Mayoral Recyclable Growth Fund.                                     | GMCA & Partners                             | Ongoing Activity | 2                     | Medium         |           | Shared                      |



## How we will measure success

These metrics (alongside delivery of actions outlined in this plan) will be used for the process of monitoring and evaluation. These metrics have a 10-year time horizon, and therefore GM should aim to achieve these by 2035. As outlined, this is a living document, that will have an iterative approach to how it is written and implemented, and as such these metrics may change in response to this. We will continue to evaluate our approach and the success of the delivery of these plans on a regular basis and adapt them as required in response to changing circumstances. These will also change in line with emerging information regarding National Industrial Strategy implementation (and corresponding national sector plans) as well as single settlement governance.

#### Measures:

- Number of jobs created
- Amount of private sector investment leveraged towards the sector
- Number of people trained in key skills suitable for jobs in the sector
- Number of businesses supported via schemes to grow in the sector
- Number of businesses able to commercialise due to interventions
- Amount of floor space unlocked for the sector

#### Impacts:

- Increase in productivity and growth in the sector
- Increased earnings of businesses in sector
- Increased proportion of businesses signed up to the good employment charter
- Increased investment in R&D (public and private)
- Reductions in Carbon emissions from business in the sector