Health Innovation **Manchester** 

# Leading with delivery: Our strategy for 2021 to 2024



Delivering health and care innovation at pace and scale remains a global challenge, and lags well behind other more digitally transformed industries such as banking, retail and travel. This is further characterised by innovations that have been proven to be beneficial in one place not being adopted elsewhere. There are real challenges for industry and academic innovators gaining purchase for their novel value propositions into healthcare delivery at scale due to the complexity of multiple front doors into the services. This is further complicated for digital innovation and new approaches to diagnostics by the need for health and care operating models (the way we do things) to usually change quite radically to leverage the opportunities created, coupled with payment models which have not yet caught up with wider innovations in care and those potentially generated by technology.

At a more local level, people in Greater Manchester have poorer health outcomes compared to national and international benchmarks and so Health Innovation Manchester was formed to drive innovation that tackles inequalities and supports economic growth. We realise that the challenges we face in Greater Manchester are resonant around the world; aging populations, epidemics of diseases caused by lifestyle factors, further augmented by a global infectious disease pandemic; escalating costs of health and care delivery which is having significant impact on wider economic health of people and nations; and unacceptable variation in outcomes across subgroups within our populations.

Alongside this there are novel approaches which potentially enable these challenges to be tackled, including better ability to understand the biology of individuals and the ability to leverage digital technologies to better understand citizen needs and implement relevant solutions for resolving prioritised problems.

As we progress through the COVID-19 pandemic and lift our eyes to recovery from the crisis, we realise more than ever that innovation needs to be at the centre of our collective activities. COVID has acted as a magnifying glass on a number of the inequalities which were already in place, specifically around access to healthcare services and clinical outcomes and we must do more to address this.

To this end collaboration across sectors is no longer an option, but a necessity to ensure that we can craft the health and care products and services that our citizens require, and use the power of innovation in GM to to improve the health, wealth and wellbeing of GM's citizens.

We must build on the existing health innovation assets in GM to stimulate local economic growth and prosperity as part of a joined up approach to innovation in GM, across the North of England and more widely contributing to the UK position as an independent trading national following our exit from the European Union.

There is government commitment to increasing current level of R&D spending to increase our global competitiveness and we know that investment from Government is not yet balanced across the UK but there is ambition to do so. GM has vibrant growth in R&D spending compared to national benchmarks creating real opportunity to further develop the city region as a national engine of growth at the heart of the northern powerhouse.

National policy is responding to the innovations taking place in Greater Manchester. The new proposed legislation for NHS integrated care systems is building on the approach taken here since the devolution deal was struck in 2016. And more recent commentary on the 'quadruple aim' for these systems of secure better health and wellbeing for everyone, tackling unequal outcomes, experience and access to health and care services, enhancing productivity and value for money, and supporting broader social and economic development is directly in line with the strategy we have built in our city region.

Through this new business plan, we will continue to build on the last four years of development and success, while putting GM in the best possible position to attract and deploy new innovations that will make the biggest difference to the health, wealth and wellbeing of the citizens of GM.

**Rowena Burns** Chair Ben Bridgewater Chief Executive

# Our purpose

Health Innovation Manchester's mission is to become a recognised international leader in accelerating innovation that transforms the health and wellbeing of our citizens.

We work with innovators to discover, develop and deploy new solutions, harnessing the transformative power of health and care, industry and academia working together to address major challenges and tackle inequalities.

# Our impact so far

Health Innovation Manchester has developed over the last four years to create a world-leading integrated health science and innovation system.

We have successfully integrated the Academic Health Science Network (AHSN), the Academic Health Science Centre (AHSC) and the NIHR Applied Research Collaborative (ARC), combined with deep digital and industry expertise.

We harness these capabilities through our innovation pipeline and delivery method to accelerate innovation at scale, which has been proven through delivery of a range of projects that are directly aligned to Greater Manchester's major transformation priorities.

We have now established a strong pipeline of potential and proven innovations that are 'made in GM' or from elsewhere that have been actively deployed across the city region to benefit health and care staff, services and patients. This is attracting interest from all over the world from innovators and places wanting to improve outcomes for our citizens and do business with GM.

We are also now taking a much bigger role in driving digital across GM, applying capabilities in solution design, delivery and analytics to underpin service

transformation that is focused on improving outcomes for GM patients and citizens. We have spent time on reviewing our internal operating model to ensure we are well configured to provide the core capabilities needed to drive innovation and transformational change enabled by technology, spanning across health and care, digital, commercial, academia and economic development domains.

As a result, we pivoted our focus and resources to tackling the COVID-19 pandemic, largely focused on accelerating digital solutions and a rapid research response. This has been a major test of our assets and capabilities and by using agile methods to really focus on delivery we have been able to make progress in months rather than years, accelerating many of our existing plans to benefit citizens, staff and the wider system.

The scale and impact of Greater Manchester's collective research and innovation response is outlined fully within our <u>COVID-19 impact report.</u>

The full range of projects in our innovation pipeline can be found on the HInM website, along with a series of case studies demonstrating the impact of our work click the links to the right:

#### Case studies

Digital care homes COVID-19 response

#### Accelerating the GM Care Record

Deploying the specialist Rainbow Clinic to support healthy births

Real world study to reduce cholesterol using an advanced theraputic

Digitally reimagining North Manchester

#### HInM innovation portfolio

# Leading with delivery

Working closely with health and care partners across GM, we have delivered:



#### Accelerated GM Care Record

Covers 99% of patients 10,000 clinical users 100,000 records accessed each month

#### Active innovation pipeline

90 projects across discovery. development and deployment



#### Strategy and proven method

120 stakeholders involved in co-creation of digital transformation method

### Leading research



AHSC and ARC designation £200,00 pump prime investment into domains 50 active ARC projects

#### Leveraged funding opportunities

£1.6m remote monitoring funds £1m Innovation Collaborative £4m pathology bid £26m diagnostics bid £500k Innovation Hub £4m ERDF programmes



#### Digital and research response to COVID-19

GM Research Rapid Response Group helped secure £8.5m UKRI funding

Major digital response across pathways including care homes, Urgent and Emergency Care, mental health and vaccine deployment



realisation

3:1 return on investment to GM partners

# Our focus and priorities for the next three years

# The big focus for the next three years will be leading with delivery.

We will continue to evolve our method and approach to develop a deeper understanding of the needs of citizens and co-design innovative solutions with our partners. We will move to a more agile approach to deliver so we can assemble the right blend of skills and capabilities to deliver at pace.

We will also have a greater focus on delivering larger innovative change programmes that transform services, pathways and outcomes for citizens. These will be defined against the priorities set by our partners to ensure we deliver maximum benefits.

At a city region level, health and care partners are focused on designing what the form and function of Greater Manchester as an Integrated Care System (ICS) will be, and there is recognition that digital, data and innovation are central enablers for realising GM's ambitions, in support of several other major priorities.

We will also form collaborative relationships with localities and provider organisations to focus on some specific communitybased work that looks to tackle inequalities by addressing the wider determinants of health. We have developed a framework against which we will align our delivery portfolio and resources:



#### Accelerate innovation at pace and scale

Close alignment of innovation to addressing GM's major health challenges, with a stronger affiliation to commissioning and service transformation to ensure maximal benefits are delivered.

Data science, pathway analysis and transformation

clinical trials and source opportunities to harness all of GM's

Continue to build on GM's excellence in recruitment to

data assets to deliver real world evidence studies





#### Conduct traditional trials and real-world studies

GM's strong digital and data assets are now globally important for analysing existing pathways and supporting pathway redesign to benefit citizens and the system.

#### Place-based transformation

Support localities to harness the power of digital technology to transform and regenerate local communities by addressing the many factors affecting health, wealth and wellbeing.

## **Business objectives**

We have defined five key business objectives for the next three years.

#### **Objective 1**

Enrich and deliver an effective innovation pipeline that is prioritised to meet the needs of the citizens of Greater Manchester

- Curate a constant innovation pipeline sourced regionally, nationally and internationally.
- Prioritise development and deployment innovations that meet the needs of GM citizens and system challenges.
- Accelerate delivery of proven innovations using a rigorous method to deliver maximal benefits.

#### **Objective 2**

Consolidate the relationship between Health Innovation Manchester and the GM system and evolve our method to deliver maximum benefits

- Work closely with GM partners to clearly define innovation priorities
- Ensure health innovation, digital and research is positioned as a top priority within the new GM integrated care system structures and plans
- Continue to develop and operate effective digital governance to enable streamlined decision making and rapid delivery
- Configure an expert ICS digital transformation office to deliver against GM's business priorities.
- Work with GM research and innovation partners to secure the redesignation of the NIHR GM Biomedical Research Centre.

#### **Objective 3**

Develop a strategy to attract industry investment and leverage additional capabilities to support delivery and development of novel solutions

- Develop an industry strategy and framework to ensure attractive value sharing with industry and our partners as a result of collaborative working.
- Generate value from access to GM's specific assets and capabilities, enhanced through effective industry partnerships.
- Explore the potential to establish a digital clinical trials unit and research platform, working in close partnership with the University of Manchester and GM research bodies.

#### **Objective 4**

Develop strategic partnerships with health and care innovation systems to support shared learning and continued development

- Play a leading role in the continued development of the AHSN Network nationally, as well as the network of AHSCs across the country, while also demonstrating the benefits of integrating the ARC
- Promote GM's unique value proposition on digital transformation and innovation to influence national policy and the formation of integrated care systems across England
- Form a network of other health and care systems globally who are working toward becoming a 'smart' health and care system
- Build on existing relationships which are in place through our partners, including the University of Manchester, the GMCA and MIDAS.

#### **Objective 5**

Continue to evolve our internal operating model and invest to enhance our infrastructure

- Continue to evolve our transformation method and pipeline process to focus on delivery excellence.
- Focus on building an agile delivery organisation comprising the core capabilities needed for a health and care digital transformation and innovation portfolio
- Invest in our people and attract new talent to build a leading agile delivery organisation

# What we will deliver in year one 2021/22

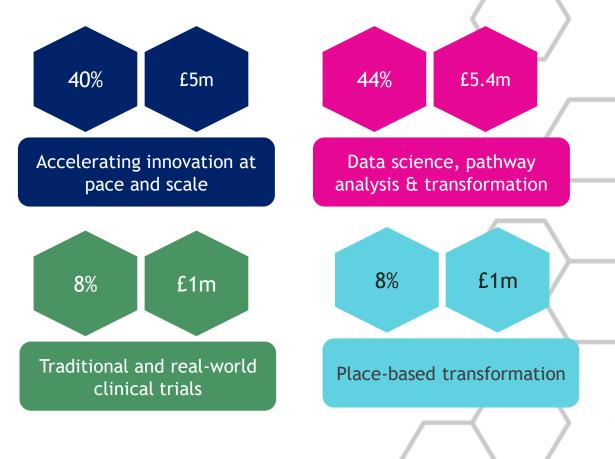
We have evolved our work to build on deployment of existing innovations to supporting the transformation of care pathways and services by understanding the needs of patients and citizens and co-designing new models of care using digital approaches.

We have identified our delivery portfolio for this financial year, which has been mapped according to a strategic framework agreed through discussions with our key partners.

Acceleration of innovation at pace and scale is still a big focus area, in keeping with meeting the requirements of our national AHSN requirements. The AHSC domains are also charged with identifying potential innovations that could be accelerated through the pipeline for deployment.

In terms of our digital work, we will continue to grow and develop the GM Care Record as a major asset for informing direct care and treatment, but will look to grow its use and potential to inform service planning, design and research. We have built the foundations for this as part of the COVID-19 response, but now need to expand on this further into other pathways, backed by the right governance and legal frameworks and conducting our business with openness and transparency.

The below model shows how our funding and resources will be aligned to support delivery of projects against the strategic framework:



A considerable amount of work has gone into agreeing a digital maturity framework and investment priorities across GM, and we will now focus on setting up a series of delivery projects in progression of this work. Priority projects for this year will include expansion of the GM Care Record, a continued focus on remote monitoring, enhancing diagnostics and pathology systems, increasing digital infrastructure and developments in maternity services.

As well as undertaking activity at a pan-GM level, we recognise the need to work more closely with specific localities. We will work with a smaller number of localities on specific community-based projects to harness the power of digital technology to transform and regenerate local communities by addressing the many factors affecting health, wealth and wellbeing. This will be a partnership initiative as part of the broader Innovation GM programme to level up R&D investment across the North.

We have also identified that undertaking real world studies and clinical trials is an area with significant growth potential, and will develop our approach in this area over the coming year through a set of lighthouse projects, including a study involving a breakthrough drug to lower cholesterol in a community setting. We will seek to grow our work in this area by forming partnerships with industry, with the support of our academic partners.

A full summary of our projects that will be delivered this year can be found on our website.



## Delivery portfolio overview, 2021/22

A summary of the delivery projects that will be delivered this year have been mapped against the framework.

Data science, pathway analysis and transformation		Accelerating innovation	Place-based transformation			
Digital care homes • Care homes tool expansion • Frailty and dementia • End of life planning	<ul> <li>GM digital major programmes</li> <li>Maturity and investment roadmap</li> <li>Digital primary care business change</li> </ul>	<ul> <li>AHSN national projects</li> <li>Early Intervention Eating Disorders</li> <li>Improving Diagnosis of ADHD</li> <li>Lipid management and Familial Hypercholesterolaemia (FH)</li> <li>3 other areas TBC</li> <li>Rapid uptake products</li> </ul> Patient Safety Collaborative <ul> <li>Maternity and neonatal</li> <li>Deterioration</li> <li>Medicines management</li> <li>Mental health</li> <li>Adopt and spread</li> </ul>	<ul> <li>MAHSC domains accelerator projects</li> <li>3 innovations to take forward into deployment from the domains.</li> </ul>	• Innovation GM locality partnership projects - 2 to 4		
<ul> <li>GM Care Record</li> <li>Cloud migration</li> <li>New use cases development and deployment</li> <li>GM-wide IG framework</li> </ul>	<ul> <li>Digital elective care reform</li> <li>Pathology - LIMS and diagnostics</li> <li>Digital maternity pathway</li> </ul>		GM adopt and spread innovations • Linus brain health • Point of care testing	Traditional and real- world clinical trials		
<ul> <li>Data science</li> <li>GMCR research studies</li> <li>GMCR analytics</li> <li>Industry partnership - diabetes pathway</li> </ul>	<ul> <li>Remote monitoring</li> <li>Care homes</li> <li>Heart failure</li> <li>Health checks for people with severe mental health</li> </ul>		<ul> <li>SME development projects</li> <li>Momentum fund competition</li> <li>Innovation nexus</li> <li>SME engagement and value proposition development</li> <li>ERDF programmes x 3</li> </ul>	<ul> <li>Inclisiran - pop health RWE study to reduce cholesterol</li> </ul>		

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### How we will achieve this

HInM combines a core range of capabilities to discover, develop and deploy new innovations and digital solutions that result in pathway transformation, improved citizen outcomes and economic growth.

We do this by establishing a deep understanding of citizen need, clearly defining problems and co-design solutions - harnessing the transformative power of health and care, industry and academia. It is this combination of what we do and how we do it that creates value.

The core services we offer are:

	Digital strategy, solution design and delivery	Innovation development and deployment	Business insights, intelligence and benefits	Strategic industry partnerships	Academic partnerships and applied health research
•	Develop digital strategy and deliver a prioritised digital investment portfolio Define and implement digital transformation methods and tools, and build digital capabilities Inject digital delivery skills to drive outcomes led service and pathway transformation	<ul> <li>Curate a rich innovation pipeline from discovery, to development, to deployment</li> <li>Develop a deep understanding of citizen need, clearly define problems and co-design innovative solutions</li> <li>Demonstrate value and deliver benefits at scale</li> </ul>	<ul> <li>Combine analytical and clinical capabilities to understand pathways and problems</li> <li>Deliver benefits from delivery programmes across fiscal, societal and economic domains</li> </ul>	<ul> <li>Form partnerships with industry to develop innovative solutions that can be deployed at scale.</li> <li>Leverage capabilities and resources from industry to augment innovation</li> </ul>	<ul> <li>Leverage academic capabilities from the four GM universities</li> <li>Apply research methods to understand citizen need and discover new innovations</li> <li>Support systematic development, implementation and evaluation of innovations, approaches and outcomes</li> </ul>

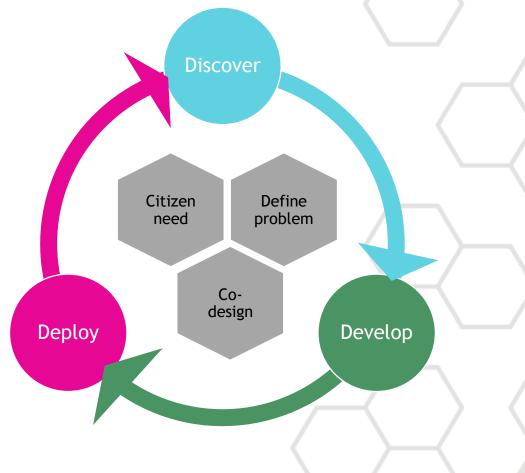
### Our method and pipeline

Our transformation method and innovation pipeline is how we combine our unique skills and capabilities to develop a deep understanding of citizen need, clearly define problems and co-design innovative solutions.

We work closely with our health and care, industry and academia partners along the pathway to develop and deploy innovations at scale, leading to transformation of care pathways and citizen outcomes.

#### There are five critical stages to our pipeline approach:

- 1. Ideation curating a range of potential innovations from multiple sources.
- 2. Qualification assess proposals in terms of complexity and benefits, against defined GM priorities and citizen outcomes.
- 3. Solutioning detailed development of the programme of work including identifying the citizen need and problem to be solved, clinical pathway mapping, redesign and technical development.
- 4. Proof of value testing the viability and value of the solution by deploying it into practice, identifying improvements and adjustments that need to be made.
- 5. Deployment at scale -if full benefits are proven and the solution has been refined, use agile delivery methods to deploy at scale.



## HInM plan on a page

infrastructure

Aim of HInM		Achieving five core business objectives	ef	By managing an effective innovation pipeline		Providing a unique value proposition		Through a range of core capabilities	
	<ul> <li>pipeline prioritised citizens of Greater</li> <li>Objective 2</li> <li>Consolidate the related Health Innovation A system and evolve of maximum benefits</li> <li>Objective 3</li> <li>Develop a strategy investment and lev capabilities to supp development of nor</li> <li>Objective 4</li> </ul>	<b>Objective 1</b> Enrich and deliver an effective innovation pipeline prioritised to the needs of the citizens of Greater Manchester			1	Digital strategy, solution design and delivery	$\Theta$	Technical architecture / delivery	
Become a recognised international leader		Consolidate the relationship between Health Innovation Manchester and the GM system and evolve our method to deliver		Discover	$   \rightarrow $	Innovation development and deployment		Experience design	
in accelerating innovation that transforms the health and wellbeing of our citizens.		<b>Objective 3</b> Develop a strategy to attract industry investment and leverage additional capabilities to support delivery and development of novel solutions		Develop		Business insights, intelligence and benefits		Product and project management	
		Objective 4		Deploy		Strategic industry partnerships		Data analytics and insights	
		Develop strategic partnerships with health and care innovation systems to support shared learning and continued development		Беріоу		Academic partnerships		Commercial expertise	
		<b>Objective 5</b> Continue to evolve our internal operating model and invest to enhance our				and applied health research		Translational research	

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