



# Population Health Management Roadmap

2022 - 2027



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## Foreword

As an emerging Integrated Care System (ICS), we set an ambitious vision in January 2020 to change the way we collectively understand our population and manage our resources for population health, putting positive outcomes for citizens at front and centre. Since then, we have been working to lay the foundations and begin to build our capability and capacity as a system to embed a population health management approach at every level – from neighbourhood to Place, from Care Collaborative to system.

The COVID-19 global pandemic demonstrated the urgency of this work. In the face of a public health emergency, we quickly learnt to work together and share data in a way we hadn't before to ensure that our COVID response was targeted and effective. The pandemic highlighted and increased inequalities in health outcomes and has rightly driven this up our agenda as a top priority for our ICS. Now more than ever we need robust, actionable insights about the needs of our whole population, and to work together proactively and innovatively to design care around those needs and reach out to those not able to access services, or experiencing inequalities in health care experience and outcomes. We need a population health management approach to shape proactive and anticipatory care, to inform prevention strategies, to target our resources and to better understand areas of pressure and risk.

Leaders in Coventry and Warwickshire health and care system recognise that we need to start to change the way we plan, design and deliver health and care, and that this is about more than a traditional focus on care pathways. Our vision for population health has profile and traction across the ICS, and encompasses the wider determinants of health, health behaviours and lifestyles, and the communities we live in and with. Our population health management (PHM) capabilities will enable us to understand our population and plan our health and care provision through that lens.

Over the past year, as we have taken part in the national PHM Development Programme, we have taken great strides forward in learning about what PHM looks like in practice and what it will take to make this our way of working in Coventry and Warwickshire. We have collaborated in new ways, begun to build new relationships right across the system, and have been given a glimpse of the impact that PHM could have on our population. Taking time out to do this in the midst of all the operational challenges of COVID escalation and recovery planning has not been easy, but feedback from senior leaders has confirmed that this has been the right thing to do. We have a real opportunity now to build on that activity and make this a change that lasts.

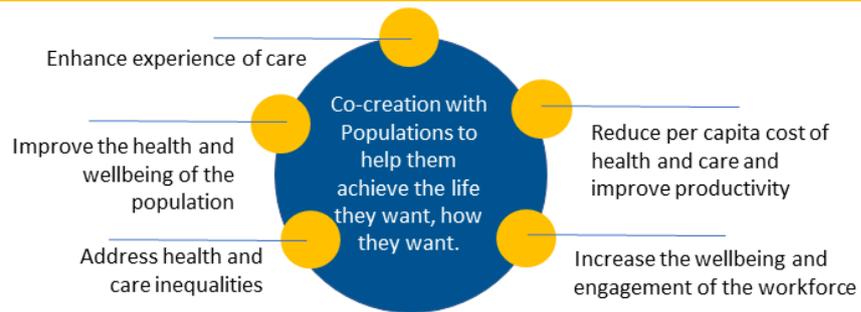
Our ICS Vision states: “We will enable people across Coventry and Warwickshire to start well, live well and age well, promote independence, and put people at the heart of everything we do”. If we are to genuinely take this whole population, whole person, whole life approach and shift to more proactive and preventative approaches, this must be underpinned by a commitment to embed PHM as ‘business as usual’ across each level of our Integrated Care System. This Roadmap sets out how we will do just that over the next five years.

Angela Brady,  
Chief Medical Officer,  
Coventry and Warwickshire  
ICB

Phil Johns  
Chief Executive,  
Coventry and Warwickshire  
ICB

Danielle Oum  
Chair,  
Coventry and Warwickshire  
ICS

## Population Health Management - The Common Cause



**Residents** benefit from more proactive and personalised health and care services, a wider range of support to better manage their health and wellbeing.

Hardeep is 60 years old, lives alone, has type 2 diabetes, high blood pressure and struggles with low mood.



"My GP reached out to me and organised with me to see a health coach."

"Together we developed a plan to help me lose weight for my daughter's wedding."

"I joined a walking club and diabetes management course which I enjoy."

"I'm more confident & optimistic."

**Clinicians** benefit from move away from firefighting to proactive care, and towards early prevention serving as part of a broad multi-disciplinary team. Greater efficiency and impact.

Tasneem is a GP Partner in a deprived inner city area.



"Robust holistic data builds our understanding quickly and leads to confident action and measured improvements."

"We've developed great links with our local authority and voluntary sector groups - it's a real team effort."

"It's really about getting back to the best bits about working in healthcare."

**Analysts** benefit from using their skills and competencies to ensure data can be turned into intelligence to inform decision-making, giving real job satisfaction.

Sophie is an analyst based in an integrated care system.



"We are finding that there is less need to carry out analysis around activity and contracts, and more focus on working collaboratively across partners to enhance knowledge of residents in our area and their needs using PHM techniques."

"I support a proactive approach to helping patients manage their health and wellbeing in their own homes."

**Local health and care service planners** benefit from improved understanding of what residents need to plan services, allocate resources, achieve impacts and reduce health inequalities.

Derek is the Long-Term Conditions Lead for an integrated care system.



"Population needs are the joint focus. This helps us begin to break down barriers between organisations and funding streams."

"We use data to explore what the future might look like - and how we can get better value from the NHS pound by changing how we deliver services locally, avoiding duplication, and improving the working lives of our frontline staff."

### This is Population Health Management.

## Population Health Management – What is it and why is it important?

### Explaining PHM

Population Health Management (PHM) improves population health through data-driven planning and delivery of proactive care, to achieve maximum impact. It employs analytical tools (e.g. segmentation, risk stratification, impactability modelling) to identify local ‘at risk’ groups of people; and brings multi-disciplinary teams together to use these insights to design and target activity to prevent ill-health, improve health outcomes and reduce inequalities.

### PHM analytical tools

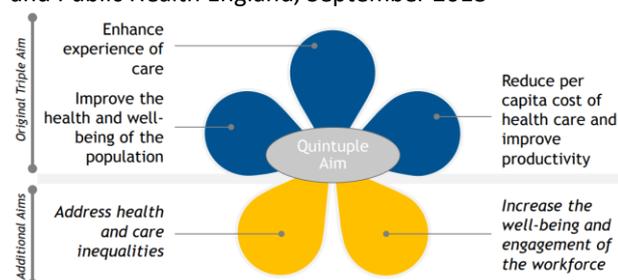


### Our Common Cause

Our PHM programme is the enabler to delivering the NHS quintuple aim<sup>1</sup>, and the core purposes of the ICS:

- improve outcomes in population health and healthcare
- tackle inequalities in outcomes, experience and access
- enhance productivity and value for money

<sup>1</sup>Quintuple Aim taken from nationally-developed [Population Health Management Flatpack](#), NHS England, NHS Digital and Public Health England, September 2018



- help the NHS support broader social and economic development.

There are deep-rooted health inequalities within our populations in Coventry and Warwickshire, and we know that to tackle these we need to do things differently. Our experience during the COVID-19 pandemic showed us the potential of sharing data to support our care delivery and respond to need in vulnerable populations. But it also highlighted some of the practical challenges and deficiencies in our data quality and infrastructure, and our ability to use insights effectively.

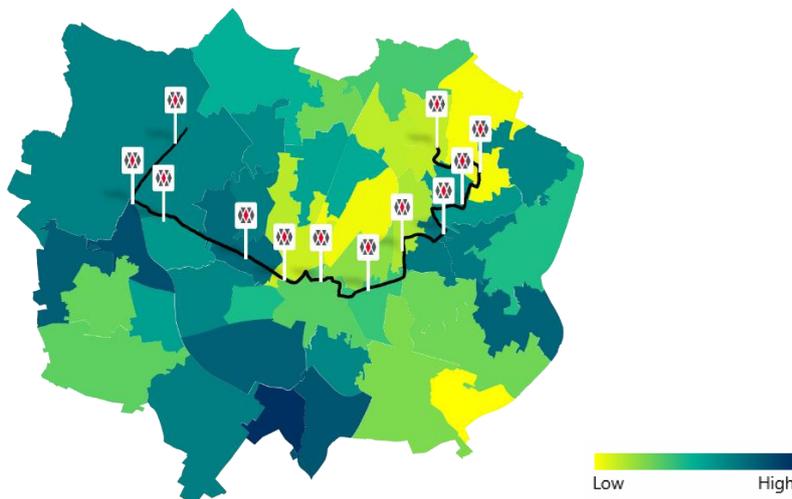
We are already seeing many examples of clinicians and commissioners taking a population health approach and thinking differently about how to plan and design care in an integrated way. **What our PHM programme seeks to do is to elevate this activity by providing the strategic infrastructure to enable Population Health approaches to be used consistently, and for this to become our ‘business as usual’ right across our integrated care system at every level – the way we are looking at health and care on a day-to-day basis.**

## Health Inequalities – Our case for change

There are deep and increasing inequalities in health outcomes, access and experiences in our population. **Life expectancy** quantifies the differences between areas in the years of life lived; and therefore, illustrates well the health inequalities across Coventry & Warwickshire.

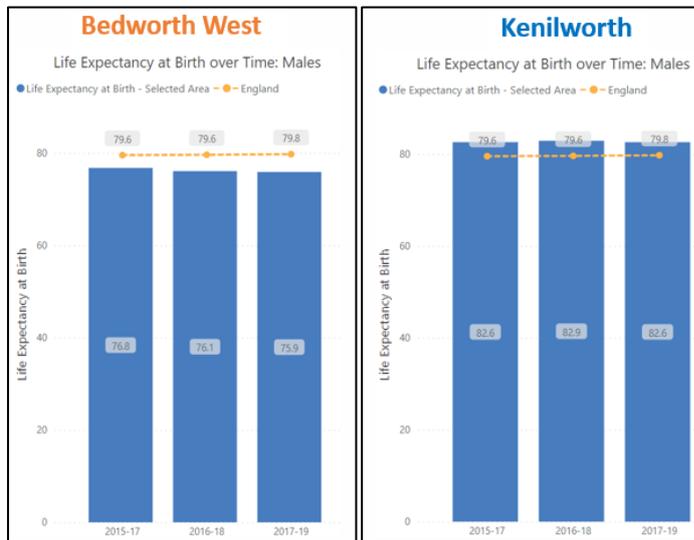
Within Coventry, along the number 7 bus route:

**7.0 years** is the difference in how long males are expected to live in two areas of Coventry, the gap increases to **10.1 years** for females along the same route<sup>2</sup>.



<sup>2</sup> <https://fingertips.phe.org.uk/local-health#page/0/gid/1938133185/pat/402/par/E08000026/ati/3/iid/93283/age/1/sex/1/cat/-1/ctp/-1/yr/5/cid/4/tbm/1>

Within Warwickshire at Joint Strategic Needs Assessment level, according to the latest data, **6.7 years** is the difference in how long males will live in Bedworth and Kenilworth. There is a similar gap when we look at females (**6.1 years** between Newbold and Brownsover, and Rugby Rural South – both areas within Rugby Borough).<sup>3</sup>



We can start to tackle these inequalities by enabling actionable insights from rich and timely linked datasets, and working together to design care differently to meet the needs of our population – i.e. by taking a population health management approach.

## Integrated Care System national requirements

The NHS Long Term Plan<sup>4</sup> set out a vision for new Integrated Care Systems (ICSs) everywhere, increasingly focused on population health. Population Health Management creates the conditions and foundation for delivery of these national ambitions and a shift away from reactive care towards a model embodying active management of population health.

Embedding PHM capability is now a core requirement of Integrated Care Systems. The Integrated Care Systems Design Framework<sup>5</sup> articulates an expectation that ICSs will:

- Agree a plan for embedding population health management capabilities and ensuring these are supported by the necessary data and digital infrastructure, such as linked data and digital interventions.
- Cultivate a cross-system intelligence function to support operational and strategic conversations, as well as building platforms to enable better clinical decisions. This will

<sup>3</sup> Source: Life Expectancy 2015-19 at JSNA level, Fingertips

<sup>4</sup> *The NHS Long Term Plan*, January 2019 <https://www.longtermplan.nhs.uk/>

<sup>5</sup> *Integrated Care Systems: Design Framework*, NHS, June 2021 <https://www.england.nhs.uk/wp-content/uploads/2021/06/B0642-ics-design-framework-june-2021.pdf>



require ICSs to have linked data, accessible by a shared analytical resource that can work on cross-system priorities.

- Establish Place-based partnerships as key to the coordination and improvement of service planning and delivery, and as a forum to allow partners to collectively address wider determinants of health – with plans to be built up from population needs at neighbourhood and place level, ensuring primary care professionals are involved throughout this process. (In Coventry and Warwickshire this relates to our geographical Care Collaboratives.)

### Timeline<sup>6</sup>:

**By June 2022**, to develop plans to put in place the systems, skills and data safeguards that will act as the foundation for PHM

**By April 2023**, to have in place the technical capability required for population health management, including:

- longitudinal linked data available to enable population segmentation and risk stratification;
- using data and analytics to redesign care pathways and measure outcomes, with a focus on improving access and health equity for underserved communities.

**By April 2023**, to put in place cross-system information governance arrangements, particularly between primary and secondary care and local government partners, that enable the safe and timely flow of information across the ICS and support the Integrated Care Board (ICB) to deliver its functions;

**By April 2023**, to appoint a clear analytical lead for the Intelligence Function, with the responsibility for putting in place clear reporting arrangements into ICB and Integrated Care Partnership (ICP) decision-making forums (and, where appropriate, Place-based decision-making forums), to ensure insight into population need is informing local strategies and transformation priorities.

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<sup>6</sup> 2022/23 priorities and operational planning guidance, NHS, December 2021



## **Our Vision for Population Health Management**

We have developed a draft Vision for PHM which aims to provide a shared understanding of what it is that we are trying to embed as our way of working, and why. This is meaningful to those involved in this work so far, but we plan to develop it further through public and stakeholder engagement so that it is meaningful to everyone.

Our draft Vision for PHM is:

### **Empowering everyone to live well by joined-up, proactive, data-driven health and care**

#### ***Why are we doing this?***

**We want to improve health and wellbeing outcomes.**

PHM enables us to target better care and support for communities.

We focus on what matters to people - not just their illnesses.

Addressing wider social issues is key to reducing inequalities.

#### ***How do we do it?***

**We understand the current and future needs of communities.**

We take a new partnership approach across health and care.

We listen to people to understand their physical, mental and social wellbeing needs.

We share data seamlessly between organisations to offer joined-up support.

#### ***What is the result?***

**We enable individuals to live as well as possible.**

Our services are joined-up, tailored and sustainable, making best use of resources.

We promote independence and encourage proactive care.

We enable people to start well, live well and age well.

## Our commitment as partners

Every part of our ICS has a role to play in embedding population health management as our 'business as usual'. In August 2020 we set out in our PHM Strategy some core values that underpin this way of working. These are further developed below. We need all partner organisations to make clear commitments about how we will work, commitments which transcend organisational boundaries and put positive outcomes for citizens front and centre. Our commitments are:

**We involve patients and clinicians in decision-making and care design.** This means all organisations building capacity for meaningful stakeholder engagement and co-production, and committing to move towards a personalised model of care.

**We readily share data, whilst adhering to statutory requirements.** This means all organisations contributing to and enabling the data and digital infrastructure required for population health management.

**We are rigorous in ensuring quality in the data we collect and analyse.** This means all organisations taking steps to improve data quality, and to support data testing and quality improvement as part of onboarding data to a digital platform for PHM.

**We use the insights we have available to deliver value for our population.** This means all partner organisations committing to enable their analysts to work in a different, collaborative way to develop actionable insights about the needs of our population.

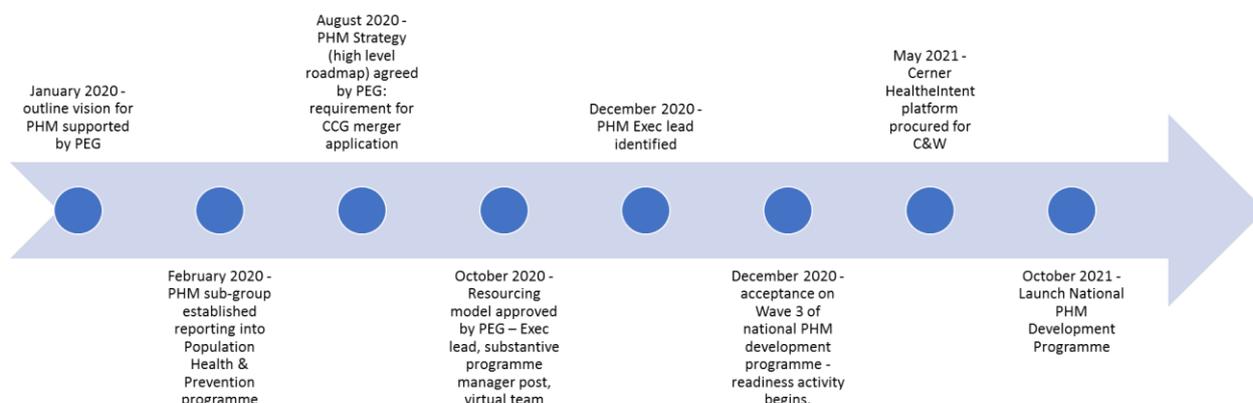
**The needs of our population take priority over our organisational agendas.** This means a commitment by decision-makers across the system to allocate resource and plan and design care collaboratively, based on population insights.

**We share a common vision and are all committed to making this a reality.** This means that the shared vision for population health which will be set out in the Integrated Care Strategy – informed by PHM – drives all of our collective activity.

**We are open and transparent with each other and the public about decision-making.** This means that we communicate the insights and evidence behind our decisions and make clear how we are using data to shape our services.



## Our PHM Journey



### Early progress

Since early 2020 we have been on a journey as a system to understand and begin to embed the required capacity and core capabilities for Population Health Management across our system. In August 2020 our system Partnership Executive Group approved a high level PHM Strategy which described an ambition to change the way we collectively understand our population and manage our resources for population health.

In recent years we have begun to see innovative examples of PHM in practice in our response to the COVID-19 pandemic and as our Places have developed their local plans, as outlined in the case studies that accompany this Roadmap<sup>7</sup>, but the picture has been fragmented.

A key focus of activity since early 2021 has been preparation for and participation in Wave 3 of the National PHM Development Programme. At the start of the programme, we reviewed our PHM maturity against the national PHM Maturity Matrix<sup>8</sup> and set out our objectives. We found that, whilst there was commitment to PHM at the most senior level, and a desire to see PHM embedded at every level of our health and care system, there was not yet a widespread understanding across and within our partner organisations about PHM. Similarly, while we had procured a local PHM data platform, this lacked system-wide ownership and understanding of the benefits it could deliver.

### Developing our PHM Roadmap

As the PHM Development Programme drew to a close in June 2020, we worked to develop a system-wide Roadmap, outlining how the ICS will continue to develop capability in population

<sup>7</sup> Case studies at annex 1

<sup>8</sup> PHM Maturity Matrix, shared with materials for national PHM Development Programme. See annex 2

health management within and across partner organisations. This presents an opportunity to align strategic activity to sustain and scale PHM in Coventry and Warwickshire.

Our Roadmap has been developed by a core reference group, with oversight from the PHM Board and Population Health, Inequalities and Prevention Programme Board, and has been informed by a series of group and individual interviews with around 60 senior stakeholders across our system<sup>9</sup>.

### Our way of working: embedding PHM as “business as usual”

We want to see PHM embedded as business as usual across our system, and for population health to be everyone’s business. This means that it will be built into strategic planning at all levels. Transformation activity across our system presents an opportunity to drive forward our ambitions for population health, and all of this should be underpinned (enabled and supported) by our PHM capability.

In 2021 we identified five key building blocks to be our priority areas of focus as we began to implement our PHM Strategy. These are aligned to the 4Is - the four, nationally-determined capabilities that ICSs should develop for PHM. Our Roadmap is framed around these capabilities, and builds on the progress we have made during Wave 3 of the National PHM Development Programme and existing PHM activity.

Data-sharing / linked data infrastructure	Resourcing – capability and capacity to support decision-making	Accelerating frontline implementation	Decision-making methodology and processes
Stakeholder engagement and culture shift			
Infrastructure	Intelligence	Interventions	Incentives

<sup>9</sup> See annex 3 for details of engagement to inform development of the Roadmap



Our focus going forward is on:

- Building the digital, data-sharing and leadership capability to enable PHM at all levels of our system.
- Developing analyst capacity and capability to support and enable use of actionable insights at all levels of the system.
- Putting PHM into practice, especially at Place and PCN level, to design and deliver targeted care and improve population health outcomes.
- Embedding a PHM approach in contracting and resource allocation within the new ICS arrangements.
- Engaging with stakeholders and generating interest in, and appetite for, population health management – bringing it to life with tangible examples of how taking this approach makes a difference.

## What system leaders have told us

### Key messages:

- Population health is the right approach – The King’s Fund’s population health model has profile within our ICS.
- Recognition of value of PHM in supporting shift to proactive, personalised and preventative care.
- The health inequalities agenda has traction – PHM should underpin efforts to tackle inequalities.
- PHM is currently seen as something separate, but it needs to be everyone’s business.
- This means upskilling staff and embedding PHM across our workforce.
- Importance of bringing PHM to life with case studies, and articulating purpose and value.
- Care Collaboratives are a vehicle to enable us to support population health, and their priorities should be driven by PHM insights.
- PHM can have most visible impact at Place and PCN, and needs strong Place leadership and ownership.
- Start small and identify low hanging fruit – pick a small number of key priorities and do them well.
- Resources are finite – we need to shift them.
- PHM is already happening – it’s just not recognised as such. There is a risk that we ‘professionalise’ PHM or make it too technical.

“We need to be honest about the issues we have and be willing to be radical about where we spend resource” (NHS Trust Chair)

“PHM and tackling health inequalities should be a core part of day job for all executives” (NHS Trust Chief Executive)

“PHM should be baked into our ICS decision-making structures” (ICB Chief Officer)

“For busy GPs, we need to show how it’s a win for business, and not over-complicate it” (Primary Care leader)

“Health inequalities and PHM should be the golden thread running through everything we do” (Chief Nursing Officer)

“PHM is a way of working – not a ‘thing’” (Consultant in Public Health)



## Our Delivery Plan

Our Delivery Plan<sup>10</sup> sets out specific actions to spread, scale and sustain our population health management capabilities over the next five years. The high-level actions are outlined below, framed around the nationally-defined '4Is' of Infrastructure, Intelligence, Interventions and Incentives, with an underpinning enabling workstream of stakeholder engagement and culture shift.

It is important to recognise that these actions do not sit with one organisation or team, and are not just system-level actions. As the detailed plan shows, all ICS partners have a role to play across all of the capabilities.

A key focus for the implementation of the Roadmap will be the roll-out of our local digital data platform, which will – in time – provide a near real-time linked dataset across all Coventry and Warwickshire data systems. Data will be normalised and standardised, and the platform will provide PHM analytics self-service tooling. The contract for this platform includes an ongoing transformation support offer, enabling us to scale and sustain the learning from the PHM development programme through the early implementation of the data platform. This support will be aligned to our Delivery Plan, and in the short-term we have agreed a specific focus on:

- continued support for the Place and Primary Care Networks that participated in Wave 3 of the National PHM Development Programme to progress their PHM-led interventions and embed and share learning;
- progressing system-wide actuarial coaching to support the development of a common local projection model to support resource and workforce planning; and
- building analytical support and capability, particularly in the area of evaluation of interventions.

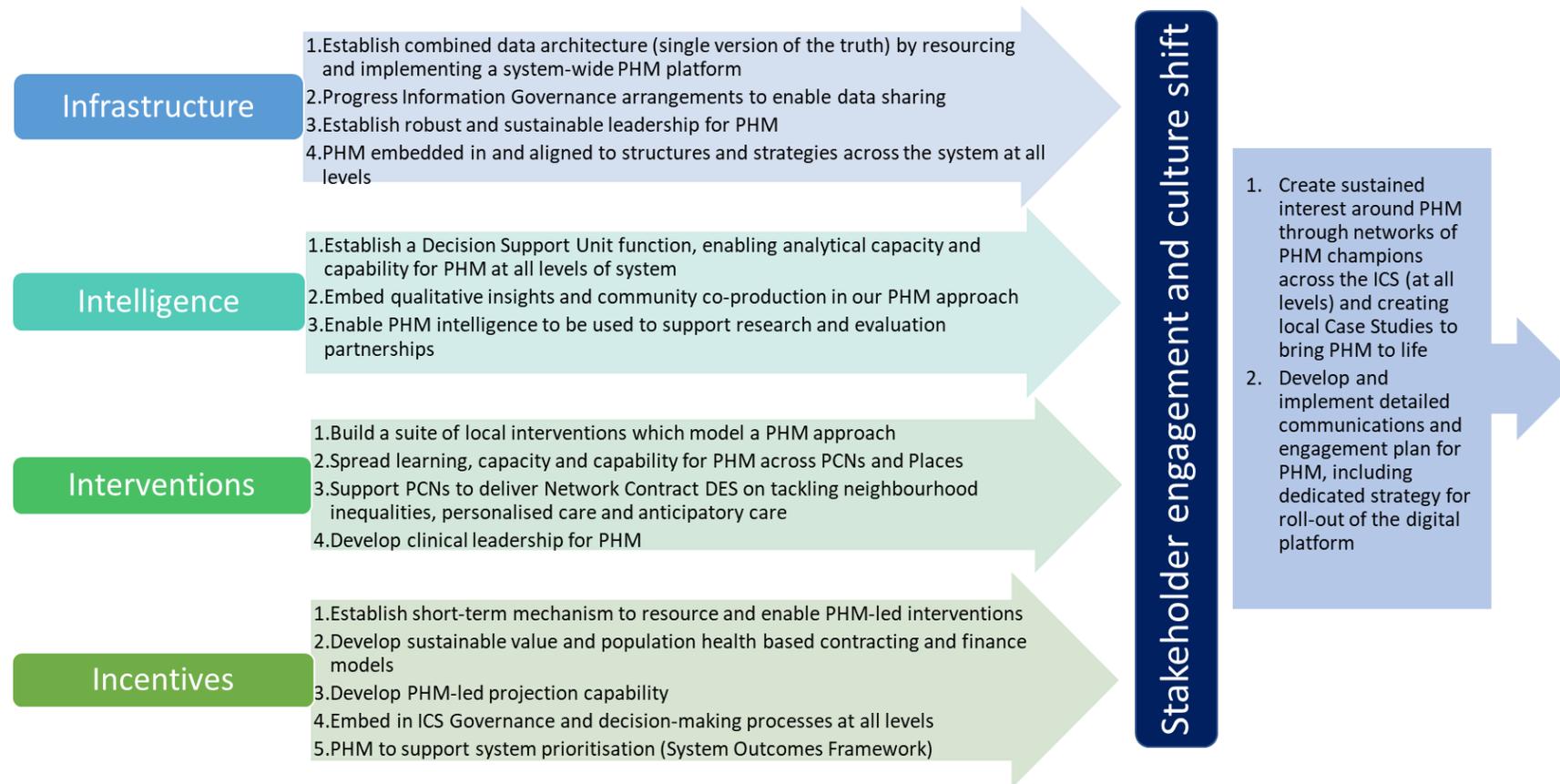
Some of our learning from the PHM Development Programme was about the challenge for colleagues – both frontline clinical staff and senior leaders at system and Place – of committing time outside of the 'day job' to participate in lengthy workshops. This approach risks exacerbating the sense that PHM is something separate, novel and requiring a level of expertise. As we implement our Roadmap, we are seeking to shift this approach and to wrap support around existing priorities and activity, providing external expertise into that where it can add value. We also want to support colleagues across the system to recognise where they are already taking a PHM approach, and to amplify this activity.

In this way, we will seek to embed PHM as 'business as usual' and 'everyone's business' across our system.

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<sup>10</sup> Full Delivery Plan at annex 4

## Coventry & Warwickshire PHM Roadmap – high level actions



## Our Governance Arrangements for PHM

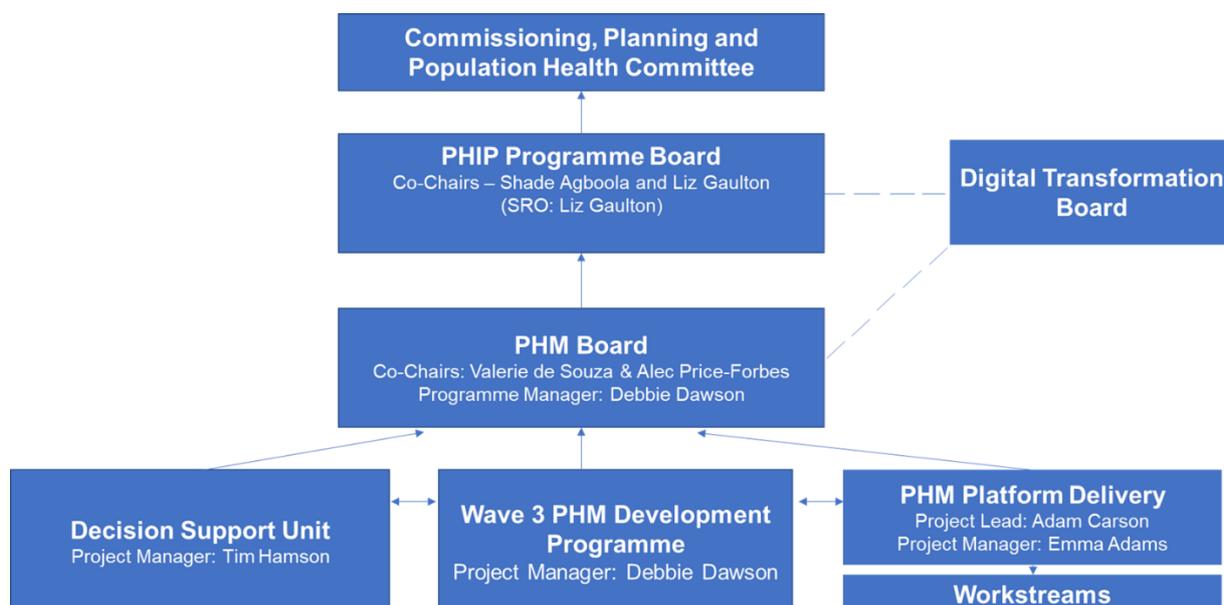
The PHM Roadmap will be approved and owned by Coventry and Warwickshire Integrated Care Board, with a clear commitment that this is how we are going to work as an ICS and that it will require whole system buy-in, at all levels, and is not a discrete activity delivered by one part of the system.

The current governance for the PHM programme is outlined below. Membership at all levels is broad, with representation from all ICS partner organisations.

The PHM Board will provide detailed oversight of the delivery of the PHM Roadmap. Its role is to lead the delivery of the vision and strategy for Population Health Management in Coventry and Warwickshire, and oversee implementation of the PHM programme and associated resource. Membership includes representation from Public Health, Adult Social Care, Data and Analyst leadership, Digital Transformation Board, Clinical Forum, Place PHM leads, Primary Care, Acute Providers and ICB Finance. Third party providers are invited as guests on a meeting by meeting basis, and excluded for private items. Members are encouraged to provide delegates where they are unable to attend, to ensure there is appropriate representation and involvement of all partners in Board decision-making.

The link with the Digital Transformation Board (DTB) is important, as this Board has responsibility for the system’s overall digital strategy which is key to delivery of our PHM capabilities. The chair of the DTB also co-chairs the PHM Board.

The PHM Board reports into the Population Health Inequalities and Prevention Programme Board, which oversees the connected workstreams of the population health framework, inequalities, prevention and PHM. This Board reports for assurance into the Commissioning, Planning and Population Health Committee of the Integrated Care Board, which has oversight of development of PHM as one of its specific responsibilities.



## Our resource commitment to PHM

Our PHM programme requires whole system commitment and resource. Outlined below are the current commitments, with identified risks. It should be noted that, in addition to the dedicated staff commitment identified below, PHM already benefits from the involvement of a large number of other professionals across all organisations, for whom supporting PHM implementation is a core part of their role.

Local PHM data platform contract		Dedicated staff resource commitment
Funding was committed via SWFT for 2 years to kickstart implementation of local PHM data platform		Chief Population Health and Inequalities Officer (fixed term - 1yr) - part of role
Contract for the platform includes significant transformation support offer aligned to the Roadmap		Population Health Transformation Officer (0.8) - part of role
Contract 2 + 8 years		PHM Coordinator (fixed term – 1yr)
		Head of Programme Delivery – Population Health Management Data Platform (fixed term – 2yrs) – to be appointed
		Business Intelligence PHM team (X3) – Head of BI, PHM; Senior Business Intelligence Manager – PHM; Analyst – PHM (vacant)
		Communications and Engagement Lead (PHM) (fixed term - 2yrs) – to be appointed
<b>Total allocated</b>	2 years' funding committed	£560k annual costs
<b>Gaps / Risks</b>	£14.5m funding gap over contract lifetime	Fixed term posts – unclear recurrent funding

There are some other PHM programme costs that are not yet budgeted for. These include recruitment of a designated Programme Clinical Safety Officer, and resourcing of an IT support function for the platform in order to support log-on requests, password help, diagnosing and solving software faults, and managing patient opt-outs.

## Risks to delivery of our PHM Programme

	<b>Risk</b>	<b>Mitigation</b>
1.	Lack of understanding, commitment and ownership of PHM by system leaders.	Senior stakeholder interviews to inform development of a Roadmap to scale and sustain PHM, to be signed off by ICB. System Action Learning Sets as part of the PHM Development Programme (PHMDP).
2.	Resourcing: failure to secure required long-term funding for digital infrastructure.	PHM requirements embedded in Digital Transformation Strategy.
3.	PHM data platform implementation: failure to identify/recruit key project team members.	Funding for the positions agreed (January 2022) and recruitment commenced.
4.	PHM data platform implementation: risk that we cannot realise the intended benefits of the project within the initial two years of the contract.	Ongoing contract negotiations to extend the break period.
5.	Information governance: failure to secure agreement by partners to data-sharing.	IG lead identified and series of engagement workshops held to inform IG arrangement. Robust DPIA and related documentation approved by IGAG.
6.	Communications and engagement: failure in comms and engagement creating lack of awareness and understanding, and undermining support for the programme.	Support from system Comms and Engagement lead; explore potential to deploy funding for comms and engagement support to facilitate creation of and implementation of a comms and engagement plan for PHM.
7.	Fragmentation of PHM initiatives: impact on wider programme in terms of alignment, messaging and resourcing.	Work to ensure alignment of activity, nationally and locally.
8.	Capacity and willingness within system to deliver PHM core capabilities at time of transition and significant operational pressure.	PHMDP to build capacity and capability; Roadmap to be signed off by ICB identifying how this will be scaled and sustained.
9.	Analytical capability: mismatch of analyst skills.	PHMDP Analytical workstream and ongoing transformation support developing skills of system analysts. DSU function to be



		established, drawing on support of regional Decision Support Centre and network.
10.	Clinical engagement: system operational pressures impacting capacity of clinicians to engage with PHM programme.	PHMDP engaging clinicians and creating champions. Roadmap and PHM Data Platform early use cases to extend this further.

## Annex 1 – Local Case Studies

### PHM in action: Clinically Extremely Vulnerable as part of the response to COVID-19

#### Common Cause

Providing help to prevent people catching COVID-19 and to stay safe and well

#### Segment for Prioritisation, Risk Stratification

Those at **high risk** if they catch COVID-19. A list of medical conditions was determined to **identify this group**, health patient databases from many organisations throughout the country were drawn together into one list called the **Clinically Extremely Vulnerable List**.

#### Action and Intervention Impactability

- Support those most at risk from COVID-19.
- By supporting them to stay at home.
- By ensuring this high risk group have food, their prescriptions and contact calls.
- And offering advice on any other areas they may need help with to stay safe and well.
- Prioritisation of calls was made on **impactability**, those with assisted bin collection contacted earlier for example.

#### Outcome

In March 2020:  
 • 14,000 people were contacted by telephone.  
 • 7,000 contact calls were made  
 • 2,000 food parcels were delivered  
 • 150 prescriptions were delivered  
 The lockdown started on March 26<sup>th</sup> 2020 with no preparation time the whole system was built and the first food parcel was delivered 9 days later on 4<sup>th</sup> April 2020

#### How this was achieved

- Clear Aim and clear population segment for focus, directed by government scheme and national press coverage.
- Cross-organisation and cross-team working
- Speed, given the highest priority
- Right team and right skills and people willing to 'move out of their usual jobs'
- Data sharing

### PHM in action: Spirometry Waiting List Ordered by Deprivation

#### Common Cause

Providing COPD diagnosis to those affected negatively by inequalities first.

#### Segment for Prioritisation, Risk Stratification

Those who are on the waiting list for the diagnosis process spirometry used for COPD and who are living in the most deprived areas of Coventry.

Low deprivation groups of undiagnosed COPD population have a higher risk status of being found to have COPD, have more progressed disease and die earlier.

#### Action and Intervention Impactability

- For a limited time (May to June 2022) the waiting list was re-ordered from 'first come first served' to ordered by most to less deprived by Indices of multiple deprivation decile.

"I think this is a great idea, people from more deprived area usually present later with their health conditions and can't afford alternative routes to health care."

#### Outcome

- 34 of the 75 on the waiting list were in the 1-3 most deprived deciles (as at 14/4/2022).
  - These 34 were seen first.
- Consideration has been given to how the difference of an earlier diagnosis can be measured.

#### How this was achieved

- Openness to try new approaches.
- Willingness to move quickly to maximise opportunity.
- Right team and right skills.
- Data sharing, use of the openly available government tool to match postcodes to IMD deciles avoiding DPIA.

## Annex 2 – PHM Maturity Matrix

### PHM maturity matrix: core PHM capabilities overview



Infrastructure	Intelligence	Interventions	Incentives
<p><b>Organisational and human factors</b> such as dedicated systems leadership and decision making on population health and PHM</p> <p><b>Digitised health &amp; care providers and common integrated health and care record</b></p> <p><b>Linked health and care data architecture and a single version of the truth</b></p> <p><b>Information Governance</b> – whole system data sharing and processing arrangements that ensure data is shared safely and securely and legally</p>	<p><b>Advanced analytical tools</b> and software and system wide multidisciplinary analytical teams, supplemented by specialist skills</p> <p><b>Analyses and actionable insight</b> – to understand health and wellbeing needs of the population, opportunities to improve care, manage risks and reduce inequalities</p> <p><b>Alignment of multi-disciplinary analytical and improvement teams</b> to work with and advise providers and clinical teams</p> <p><b>Development of a cross system ICS intelligence function</b> providing support to all levels of system</p>	<p><b>Care model design</b> and delivery through 'proactive and anticipatory care models with a focus on prevention and early intervention and reducing health inequalities</p> <p><b>Community well-being</b> – asset based approach, social prescribing and social value projects</p> <p><b>Citizen co-production</b> in designing and implementing new proactive integrated care models</p> <p><b>Monitoring and evaluation</b> of patient outcomes and impact of intervention to feed into continuous improvement cycle</p>	<p><b>Incentives alignment</b> – value and population health based contracting and blended payment models</p> <p><b>Workforce development and modelling</b> – upskilling teams, realigning and creating new roles</p> <p><b>Enabling governance</b> to empower more agile decision making within integrated teams</p>

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### PHM maturity matrix: Journey of development for building PHM capability

	Preliminary	Foundation	Advanced
Infrastructure	<ul style="list-style-type: none"> <li>Organisational and human factors such as dedicated system leadership and decision making on population health and PHM</li> <li>Some linking of traditional data flows between primary and secondary care.</li> <li>Information governance arrangements in place between commissioners and primary and secondary care providers to support analysis of population health.</li> <li>No clear PHM vision shared across the system.</li> <li>Individual and sporadic population health and health inequalities leadership.</li> <li>Digitised health &amp; care providers and common integrated health and care record plan in place</li> <li>Linked health and care data</li> </ul>	<ul style="list-style-type: none"> <li>Whole system linked primary, secondary, community, mental health care data available for direct care and care redesign, with plans to link wider data sources, including social care and other wider determinants – and an ICS-wide IG framework that allows analysis and identification for care purposes</li> <li>Clear plans for converging shared care records with linked data for PHM</li> <li>System wide IG arrangements which allow for analysis of de-identified patient level data for care design purposes and smooth re-identification for clinical purposes.</li> <li>Development of a PHM data and analytics platform that provides insights to support strategic, operational and clinical decisions</li> <li>Clear vision for PHM at system and place level, with some PCNs engaged and involved.</li> <li>Clear multi-professional leadership throughout the different tiers of the ICS, with named leads for health inequalities.</li> </ul>	<ul style="list-style-type: none"> <li>Single integrated health and care record that features PHM insights, based on the linked data set.</li> <li>Full flows of data from all health and social care sources available for direct care and care planning, including demonstrable efforts to link patient level information on wider determinants (housing, unemployment, income etc).</li> <li>Information Governance- whole system data sharing and processing arrangements that ensure data is shared safely, securely and legally</li> <li>Fully-fledged PHM data and analytics platform that is maintained by the ICS intelligence function and is well understood by decision-makers.</li> <li>Cross system leadership and vision clearly articulated and embedded across the system, with a clear health inequalities responsibility.</li> <li>Whole System Population Health Intelligence Function with multi-disciplinary analytical and finance teams with skills in predictive techniques that enables actionable insights to be regularly delivered to strategic, operational and clinical decision-makers equipped with advanced analytical tools and software</li> <li>The intelligence function provides bespoke support to PCNs, places, the ICS and provider collaboratives where needed, and can direct these teams to the PHM data and analytics platform for the majority of their data needs.</li> <li>Analysis which shows current and future costs of different cohorts, key risk factors (across health and wider social needs) and those patients who are at greatest risk of a deterioration in health and care.</li> <li>Comparing current and predicted health status of the local population with achievable health and well-being outcomes and performance standards for populations of similar size, demography and epidemiology to understand mitigated scenarios</li> </ul>
Intelligence	<ul style="list-style-type: none"> <li>Traditional reporting, intelligence systems and analytical outputs acting at organisation level with limited clinical engagement.</li> <li>Use of analytical teams and support units to provide population health analytical insight, but not in a systematic and consistent way across the system.</li> <li>Costing and performance analysis is organisationally focused rather than patient focused.</li> <li>Occasional assessment and monitoring of health inequalities data</li> <li>Mapping the system analytical workforce and intelligence tools, with a view to formalising cross-system analytical collaboration in an ICS intelligence function.</li> </ul>	<ul style="list-style-type: none"> <li>Starting to use local linked data to segment and stratify population to understand needs of different patient groups and risk factors. The costs of different cohorts are understood now and in the future.</li> <li>Some social determinants information being used alongside health data to examine inequalities questions.</li> <li>Timely analyses and actionable insight to understand health and wellbeing needs of the population, opportunities to improve care, manage risk and reduce health inequalities, including support to PCNs</li> <li>Population health costing data starting to be used for forecasting demand and risk to inform future payment and contracting models.</li> <li>Agile and responsive ways of working across multi-disciplinary groups comprising clinical, improvement, analytical teams working hand in hand with providers</li> </ul>	<ul style="list-style-type: none"> <li>Single integrated health and care record that features PHM insights, based on the linked data set.</li> <li>Full flows of data from all health and social care sources available for direct care and care planning, including demonstrable efforts to link patient level information on wider determinants (housing, unemployment, income etc).</li> <li>Information Governance- whole system data sharing and processing arrangements that ensure data is shared safely, securely and legally</li> <li>Fully-fledged PHM data and analytics platform that is maintained by the ICS intelligence function and is well understood by decision-makers.</li> <li>Cross system leadership and vision clearly articulated and embedded across the system, with a clear health inequalities responsibility.</li> <li>Whole System Population Health Intelligence Function with multi-disciplinary analytical and finance teams with skills in predictive techniques that enables actionable insights to be regularly delivered to strategic, operational and clinical decision-makers equipped with advanced analytical tools and software</li> <li>The intelligence function provides bespoke support to PCNs, places, the ICS and provider collaboratives where needed, and can direct these teams to the PHM data and analytics platform for the majority of their data needs.</li> <li>Analysis which shows current and future costs of different cohorts, key risk factors (across health and wider social needs) and those patients who are at greatest risk of a deterioration in health and care.</li> <li>Comparing current and predicted health status of the local population with achievable health and well-being outcomes and performance standards for populations of similar size, demography and epidemiology to understand mitigated scenarios</li> </ul>

## PHM maturity matrix: Journey of development for building PHM capability

	Preliminary	Foundation	Advanced
Intervention	<ul style="list-style-type: none"> <li>Limited engagement across primary and secondary care teams to integrate care around high need groups</li> <li>Limited use of voluntary and third sector to respond to key patient groups and health inequalities.</li> <li>Social prescribing and anticipatory care activity not linked to needs or inequalities analysis</li> <li>Ad-hoc approach to co-production</li> </ul>	<ul style="list-style-type: none"> <li>Care model design and delivery through proactive and anticipatory care models with a focus on prevention and early intervention and reducing health inequalities established between health and care providers including and with third sector involvement - to design proactive care models for different patient groups based on patient level analysis.</li> <li>Integrated MDTs (all providers involved in care delivery to those patients within cohort) being supported to adopt rapid improvement cycles to implement anticipatory care interventions which includes social prescribing).</li> <li>Personalised care plans in place for at risk groups and those at the sharp end of health inequalities.</li> <li>Population health analysis being used to inform shared workforce models between primary and secondary care.</li> <li>Community wellbeing - asset based approach, social prescribing and social value projects</li> <li>Citizen co-production in designing and implementing new proactive integrated care models</li> </ul>	<ul style="list-style-type: none"> <li>Clearly defined care models in place for all population groups across vertically and horizontally integrated teams.</li> <li>Clear working arrangements between PCNs, secondary care and voluntary and community sector partners with clear offers of support for specific patient groups.</li> <li>Progress in reducing health inequalities is routinely monitored and iterated, leading to continuous improvement.</li> <li>Making use of service-user tracking, patient activation outcomes, experience and utilisation measurement tools to enable partners to monitor, understand and influence how interventions impact on required outcomes and how workflow presents itself to build the future evidence base and continually learn</li> </ul>
Incentives	<ul style="list-style-type: none"> <li>Basic population segmentation in place to understand needs of key groups with early insight into resource use.</li> </ul>	<ul style="list-style-type: none"> <li>Whole population segmentation approach agreed by ICS and starting to be used to organise planning and delivery</li> <li>Some system outcome metrics based around population segments</li> <li>Payment models based around future health needs of the population, rather than organisations, in place for some cohorts and incentivise proactive and holistic support, collaborative workforce models and a community asset based approach.</li> <li>Frictionless movement of workforce between settings in place to support specific care models</li> <li>Enabling governance to empower more agile decision making within integrated teams</li> </ul>	<ul style="list-style-type: none"> <li>System oversight metrics based around population segments and chosen to deliver agreed population health outcomes.</li> <li>Payment models based around future health needs of the population, rather than organisations, in place across population groups</li> <li>Contracting approaches encourage shared accountability for outcomes</li> <li>Workforce planning performed across organisations, based on expected future need and representative of population</li> <li>Incentives alignment – value and population health based contracting and blended payment models</li> <li>Workforce development and modelling - upskilling teams, realigning and creating new roles</li> </ul>

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## Annex 3 – PHM Roadmap Engagement, March – July 2022

	March	April	May	June	July
Board Leads for Health Inequalities					
Population Health and Inequalities Programme Board					
Population Health Management Board					
System Strategy and Planning Group					
PHM Development Programme – System, Place, Analytics and PCN Workstream Action Learning Sets					
Warwickshire Service Resilience & Recovery Forum					
Primary Care Development & Delivery Groups (system and Place)					
System Finance Advisory Board					
Shadow Integrated Care Board					
ICS Execs					
Digital Transformation Board					
PHM Platform Project Board					
Coventry and Warwickshire People Board					

In addition to the meetings above, the Roadmap was also informed by a series of individual and group interviews with senior leaders from across the system. This included: NHS Trust Chief Executives and Chairs; the ICB Chair, Chief Executive and Chief Officers; local authority senior



leaders – including Directors of Public Health and of Adult Social Care; NHS and local authority analyst and BI leads; NHS Finance Directors; Primary Care leaders; colleagues from local universities, voluntary and community sector and other partners.

Representatives of the following local organisations were involved in these meetings and interviews:

- Arden PCN
- Arden & GEM Commissioning Support Unit
- C&W Health and Care Partnership
- Coventry & Warwickshire CCG
- Coventry and Warwickshire Shadow ICB
- Coventry & Warwickshire Partnership NHS Trust
- Coventry and Warwickshire LMCs
- Coventry Central PCN
- Coventry City Council
- Coventry Marmot Partnership
- Coventry University
- George Elliott NHS Trust
- Healthwatch Warwickshire
- Innovate Healthcare Services
- North Warwickshire Borough Council
- Nuneaton North & South PCNs
- South Warwickshire NHS Foundation Trust
- Sowe Valley PCN
- University Hospitals Coventry & Warwickshire NHS FT
- University of Warwick
- Warwickshire County Council
- Warwick District Council
- Warwickshire North Place

## Annex 4 – PHM Roadmap Delivery Plan

### Infrastructure

1. Establish combined data architecture (single version of the truth) by resourcing and implementing a system-wide PHM data platform			How will we make this happen?
Short-term (2022/23)	Medium-term (2023/24)	Long-term (5 years)	
PHM data and digital requirements underpinned by Digital Transformation Strategy.	Work to improve data quality and tackle digital barriers to analysts working <u>inan</u> integrated way, reviewing analytical tools and aligning where possible.	System-wide use of PHM platform at PCN/Place level for service redesign and identification of cohorts of patients eligible for PHM-based interventions.	<p>Coordinated by: PHM Platform SRO and PHM Platform Delivery Board</p> <p>Involved:            Head of Programme Delivery – PHM Data Platform            Digital Transformation Board            ICS <u>CCIO</u>            ICS CIO            Arden GEM CSU            GP practices            PCN Clinical Directors            Care Collaboratives            Place Executives            Finance Advisory Board            Clinical Safety Officer (to be recruited)</p> <p><b>Implementation of the local PHM data platform requires commitment of resource for onboarding of data from all ICS partners – specifically NHS provider trusts and Primary Care in the short term.</b></p>
Resourcing and recruitment to posts to support local PHM data platform implementation.	Identify resource to secure continued implementation of digital platform beyond contract break.	The ability to use data insights from PHM platform to allocate resources to PCNs and Place via the Care Collaboratives to support interventions designed through analytical tooling.	
Onboarding of EMIS data to PHM data platform from primary care PCNs, aligned to the planned rollout.	Using PHM data platform for case identification of individuals amenable to interventions to improve direct patient care.	Onboarding of social care data and other data sources, e.g. pharmacies to PHM platform aligned to the planned rollout.	
Start the onboarding of acute and secondary care data to PHM data platform aligned to the planned rollout.	Review benefits of PHM data platform/ programme with pilot PCN cohort.		
Develop and deliver a Clinical Risk Management System across PHM services for C&W, signed off by a designated Programme Clinical Safety Officer (post yet to be filled).			
Resourcing of an IT support function for the PHM data platform to support log-on requests, password help, diagnosing and solving software faults and managing patient opt-outs.			

## Infrastructure

2. Progress Information Governance arrangements to enable data sharing			How will we make this happen?
Short-term (2022/23)	Medium-term (2023/24)	Long-term (5 years)	
DPIA and accompanying IG documentation agreed for implementation of PHM data programme.	Local authorities included in DPIA to enable wider data sharing.	Wider health partners (eg Pharmacy, VCS providers, housing etc) included in data-sharing for PHM.	Coordinated by: system IG lead and Information Governance Advisory Group  Involved: Data owners/data controllers Data Protection Officers Caldicott Guardians ICS Communications and Engagement lead
Develop and put in place the recommendations from the IG workstream (opt-out process, new use case process, audit process).	Develop IG documentation for planning and research use cases.		
Develop and deliver communications and engagement plan for PHM data platform/programme roll-out, including public and LMC/GP engagement.			

## Infrastructure

3. Establish robust and sustainable leadership for PHM			How will we make this happen?
Short-term (2022/23)	Medium-term (2023/24)	Long-term (5 years)	
PHM Roadmap approved by ICB.	Monitor progress against PHM Roadmap.	PHM is business as usual across all clinical care pathways, commissioning decisions, service redesign etc.	Coordinated by: Chief Officer, Population Health and Inequalities and PHM Board  Involved: ICB Chair ICB Chief Executive ICB Chief Medical Officer ICS HR Director ICS Corporate Governance Team Clinical Forum/Clinical Executive People Board Care Collaboratives
Include oversight and decision-making for PHM in governance structure for statutory ICS, including reporting on Roadmap.	Review and refresh PHM governance as required.	PHM becomes a core competency for all staff.	
Leadership for PHM embedded in new system OD plan and core leadership competencies.	Training and coaching support for system leaders to deliver PHM.		
Agreed priority area(s) of focus for PHM activity in short-term across ICS.	Develop a prioritisation process for what we work on as a system, based on intelligence.		
Agree and resource long-term executive level leadership for PHM within ICS.	Leadership for PHM embedded in Care Collaboratives.		
Work with new Care Collaboratives to define a sustainable model for PHM leadership at Place.			

## Infrastructure

4. PHM embedded in and aligned to structures and strategies across the system at all levels			How will we make this happen?
Short-term (2022/23)	Medium-term (2023/24)	Long-term (5 years)	
Establish PHM as key enabler in the delivery of ICS Health Inequalities System Plan.	Establish Care Collaboratives' leadership in driving and enabling PHM approaches in PCNs.	Establish PHM as underpinning ICS transformation work at system and Place.	<p>Coordinated by: Chief Officer, Population Health and Inequalities and Population Health Transformation Officer</p> <p>Involved:</p> <ul style="list-style-type: none"> <li>System Strategy and Planning Group</li> <li>Care Collaboratives</li> <li>Population Health, Inequalities and Prevention Programme Board</li> <li>Inequalities Working Group</li> <li>Place Leadership</li> <li>Boroughs and Districts</li> <li>Clinical Forum and Clinical Executive</li> <li>People Board</li> <li>ICB Corporate Governance team</li> </ul>
Develop Integrated Care Strategy with PHM and health inequalities at core.	Identify opportunities for PHM resource to align to major transformation programmes.		
Embed PHM capabilities in ICS Transition Programme.			
Determine where responsibility sits at PCN/Place/Care Collaborative/ICS, and begin to devolve accountability/ decision-making.			
Identify opportunities for early PHM use cases aligned to clinical pressures in PCNs and secondary care.			
Embed PHM into the work of the Clinical Forum.			
Identify opportunities for ICS People Strategy to be informed by PHM insights.			

## Intelligence

1. Establish a Decision Support Unit function enabling analytical capacity and capability for PHM at all levels of system			How will we make this happen?
Short-term (2022/23)	Medium-term (2023/24)	Long-term (5 years)	
Develop and agree our model for a DSU within the ICS.	Identifying and harnessing skills of SMEs across the system, including strategists and transformation leads (more than BI).	Multi-disciplinary working across organisations, bringing together analysts and other SMEs to provide insight.	Coordinated by: <u>ICB</u> Head of Business Intelligence - PHM  Involved: Analyst Network Organisational BI leads Commissioning Support Unit System Strategy and Planning Group Care Collaboratives PHM Board People Board Universities Midlands Decision Support Network
Develop an initial work programme of deliverables for the DSU.	Mechanism in place for agreeing the ongoing work plan for the DSU.	An established work plan is in place agreed across the ICS with a programme of analytical outputs.	
Look for opportunities to align some analyst resource to collaborative system-wide working and lessons learnt so far (e.g. Place Development Programme working).	Develop mechanisms (through DSU) for alignment and allocation of analyst resource for PHM work to support our system aims.	Have in place a robust mechanism for allocation of analyst resource to support collaborative system-wide PHM working.	
Integrated PHM capability/resource included in design of Care Collaboratives.	Development programme with support from partners such as the Strategy Unit.	Professional career development and a shared approach to <u>CPD</u> in place to support analysts across the system.	
Upskilling analysts using available transformation support: e.g. enabling to work with clinicians; building up consultancy and problem formulation skills; predictive analytics.	A programme of knowledge sharing and peer-to-peer learning in place.	Knowledge sharing, peer support, time-banking embedded as common practice.	
Building analytical community of practice including knowledge sharing.	Embedding standardised policies and practices across the ICS with a review mechanism in place.		
Agreeing and implementing standardised data policies and practices across ICS.			

## Intelligence

2. Embed qualitative insights and community co-production in our PHM approach			How will we make this happen?
Short-term (2022/23)	Medium-term (2023/24)	Long-term (5 years)	
PHM embedded in ICS Community Engagement Strategy.	Develop mechanism for capturing and using qualitative data to inform PHM insights.	Establish community co-production as consistent approach to care design and planning.	Coordinated by: ICS Comms and Engagement Lead  Involved: Local authorities' communities teams ICS Involvement Network ICB Head of Business Intelligence - PHM Healthwatch (Coventry and Warwickshire) PPI network Voluntary and Community Sector Healthy Communities Together Partnership
Learn from and align with local authorities' work to strengthen approaches to listening to communities.	Community co-production of health solutions in PHM pilot activity.		
Analyst and coaching support to advance capability in understanding of PHM, including supported use of Intelligence dashboards/tools that will be provided through the PHM data platform.	Embed learning from Healthy Communities Together programme into PHM approach to co-production.		

## Intelligence

3. Enable PHM intelligence be used to support research and evaluation partnerships			How will we make this happen?
Short-term (2022/23)	Medium-term (2023/24)	Long-term (5 years)	Coordinated by: ICS CCIO  Involved: People who have existing links with universities across all ICS organisations Universities Analyst network
Model PHM learning cycle through evaluation of PHMDP interventions.	Establish process for ongoing evaluation of PHM interventions.	PHM begins to be used for research and development purposes (supported by robust IG arrangements).	
Map existing links with universities.	Use PDSA-type cycle to evaluate PHM approach.		
	Explore opportunities for PHM to support research, through links to universities.		
	Work with universities to support upskilling of analysts (within analyst network) with research skills.		

## Interventions

1. Build a suite of local interventions which model a PHM approach, to exemplify and ignite change (short-term goal)		How will we make this happen?
<b>Short-term (2022/23)</b>	<b>Medium-term (2023/24)</b>	Coordinated by: Population Health Transformation Officer and PHM Coordinator  Involved: Head of Programme Delivery – PHM Data Platform PCN Clinical Directors (Wave 3 participants) PHM leads (Consultants in Public Health) PHM Platform Delivery Board Analytics Workstream Place leadership/Care Collaboratives Personalisation Programme Manager Primary Care Delivery Group Clinical Forum/Clinical Executive
Scale PCN PHMDP interventions across member practices and to wider cohort, initially using updated snapshot dataset.	Demonstrate impact through ongoing evaluation of PHMDP, Place Development Programme and other PHM-led interventions, with a particular focus on impact on reducing inequalities.	
Support Warwickshire North Place in progressing the intervention for identified cohort developed through PHMDP through their Wider Determinants of Health delivery programme.	Embed new working arrangements between PCNs and wider partners (including community, social care, mental health, and secondary care teams) providing support for specific patient groups developed through PHM-led interventions.	
Work with Clinical Forum to identify opportunities for PHM approaches to support elective recovery and other immediate clinical pressures, with a focus on reducing inequalities.	Use local PHM Data Platform to monitor progress in reducing inequalities through the ICS Health Inequalities Strategic Plan.	
Work with Primary Care Delivery Group to identify opportunities to align PHM activity with Primary Care Strategy priorities.	Engage wider services (e.g. social care, VCS, community pharmacy) in design and delivery of interventions.	
Alignment with Personalisation Programme to model how PHM approach can be used to target personalised care interventions.	Selection and supported implementation of PHM data platform use cases.	
SW and Coventry participation in Place Development Programme.		

## Interventions

2. Spread learning, capacity and capability for PHM across PCNs and Places			How will we make this happen?
Short-term (2022/23)	Medium-term (2023/24)	Long-term (5 years)	
Share learning from and enable ongoing evaluation of PCN and Place interventions with consideration of monitoring/future evaluation of outcomes.	Offer all PCNs opportunity for transformation support for a PHM pilot programme.	Evaluate the impact of what we thought would be different in 5 years: PCNs are driving change in care models at Place.	<p>Coordinated by: Population Health Transformation Officer and PHM Coordinator</p> <p>Involved:                      Head of Programme Delivery – PHM Data Platform Communications and Engagement lead (PHM) – to be appointed                      PCN Clinical Directors                      PHM Platform Delivery Board                      Transformation support                      C&amp;W Training Hub                      Primary Care Delivery Group                      Public Health Consultants</p>
Support PCNs financially to engage in pilot PHM projects and as early PHM data platform adopters.	Develop local communities of practice around PHM.	PCNs and Places are organising care around the stratified populations they serve.	
Support PHM Fellow in Primary Care to share learning and champion PHM approach within primary care.	PHM champions advocating and driving change in practice – carrying the communications and engagement message forward.	Health need, not demand, determines investment at PCN and Place level.	
Programme of engagement with Primary Care to support roll-out of PHM data platform.	Ongoing coaching and support for Place leaders to build on learning from PHMDP and Place Development Programme.		
Identify the best Place to exemplify the use of the local PHM Data Platform and PHM at scale.			

## Interventions

3. Support PCNs to deliver Network Contract DES on tackling neighbourhood inequalities, personalised care and anticipatory care			How will we make this happen?
Short-term (2022/23)	Medium-term (2023/24)	Long-term (5 years)	
Identify opportunities to drive PHM through Network Contract DES.	Identify and implement mechanisms to incentivise proactive and personalised care in primary care.	Use the linked data platform to meaningfully evaluate unwarranted variation and health inequalities.	Coordinated by: Primary Care Delivery Group and Population Health Transformation Officer  Involved: Head of Programme Delivery – PHM Data Platform Primary Care Delivery Group Primary Care Clinical Advisory Group Personalisation Programme Manager Inequalities Working group ICS Frailty Strategic Delivery Lead
Promote examples of PHM in practice through PCN health inequalities activity.	PHM data platform used to enable and inform anticipatory care across the system.		
Build on learning from PHMDP about PCN support needs to map out support offer for primary care, utilising Personalisation programme resource allocation aligned to PHM transformation offer for pilot PCNs.			
Support submission of Anticipatory Care Plan to NHSE by 30 September, with clarity about how we will enable populational health management approaches to anticipatory care.			

## Interventions

4. Develop clinical leadership for PHM			How will we make this happen?
Short-term (2022/23)	Medium-term (2023/24)	Long-term (5 years)	
Role of PCNs to lead PHM in primary care articulated/identified.	Support PHM Fellow in Primary Care to help develop primary care leadership for PHM.	PHM becomes a core competency for all staff, including clinicians, and analysts.	Coordinated by: Population Health Transformation Officer  Involved: PHM Board Chief Medical Officer Clinical Forum/Clinical Executive Director of Primary Care NHS Clinical/Professional Leads Primary Care Delivery Group Primary Care Clinical Advisory Group Coventry and Warwickshire Training Hub  People Board Care Collaborative leads
Embed PHM into PCN Clinical Director, Place leadership, and ICB leadership development.	Ongoing coaching and support for Clinical Directors as part of transformation support.		
Support PCNs to use PHM insight to inform delivery of additional roles.	Identify opportunities for PHM to support development and implementation of Clinical Strategy.		
Connect with new clinical/professional leads who have role to change pathways and support shift to more preventative/ community approach.	Ensure link across to acute trusts to support PHM working in neighbourhoods, communities and in hospitals.		
Leadership for PHM embedded in new system OD plan and core leadership competencies.			
Coaching and support for early adopter Clinical Directors as part of transformation support.			

## Incentives

1. Establish a short-term mechanism to resource and enable PHM-led interventions			How will we make this happen?
<b>Short-term (2022/23)</b>	<b>Medium-term (2023/24)</b>		Coordinated by: Chief Officer, Population Health and Inequalities and Directors of Finance  Involved: Population Health, Inequalities and Prevention Board Health Inequalities Programme Managers Inequalities Working Group
Consider how can use non-recurrent HI funding to support and progress outcomes of PHM work.	Establish routes into investment resource to enable reactive/proactive initiatives.		
Establish system-wide investment panel.	Create system-wide investment plan with mechanism to prioritise.		
2. Develop sustainable value and population health-based contracting and finance models			How will we make this happen?
<b>Short-term (2022/23)</b>	<b>Medium-term (2023/24)</b>	<b>Long-term (5 years)</b>	Coordinated by: Directors of Finance and Population Health Transformation Officer  Involved: Chief Finance Officer Chief Officer, Population Health and Inequalities Chief Officer, Planning and Performance PHM Lead, Warwickshire North ICB Head of Business Intelligence - PHM
Implement and evaluate pilot finance model for identified cohort in Warwickshire North Place, developed through PHMDP and support WN Place Readiness programme to embed PHM model.	Measure and evaluate success of the pilot model in Warwickshire North.	Shift funding to reflect outcomes of PHM activity.	
Identify the best Place to exemplify the use of the local PHM Data Platform and PHM at scale.	PHM informs outcomes-based commissioning, which underpins shift towards aligned incentives contracts.	Funding framework for Care Collaboratives underpinned by PHM.	
	Use PHM-led projections to understand future financing and investment in value-based care models.	Decisions about prioritisation / allocation of resource to be informed by PHM impactability modelling.	

## Incentives

3. Develop PHM-led projection capability			How will we make this happen?
<b>Short-term (2022/23)</b>	<b>Medium-term (2023/24)</b>	<b>Long-term (5 years)</b>	Coordinated by: Directors of Finance  Involved: Chief Finance Officer CCG Director of Business Intelligence ICB Head of Business Intelligence - PHM
Develop common local projection model to support resource and workforce planning, with external transformation support.		Embed projection modelling in ICS decision-making.	
4. Embed a focus on population health outcomes in ICS and organisational Board's decision-making, at all levels			How will we make this happen?
<b>Short-term (2022/23)</b>	<b>Medium-term (2023/24)</b>	<b>Long-term (5 years)</b>	Coordinated by: Population Health Transformation Officer and Chief Officer, Population Health and Inequalities  Involved: System Strategy and Planning Group Chief Officer, Performance and Planning Corporate Governance Lead (ICB) ICS HR Director Care Collaborative leads
Leverage and integrate PHM activity within Transition workstreams.	Embed PHM in processes for planning, business cases and performance management.	Embed PHM in training for all NHS staff, and all system analysts, managers, and clinicians.	
PHM capabilities embedded in system OD plan.	Assurance framework for Care Collaboratives to include evidence of how PHM is driving and shaping their programmes of work.	Evaluate how PHM has informed and shaped the development of the care collaboratives.	
	Understand workforce resource implications of a more integrated PHM-based approach to delivering care.	Evaluate impact of understanding the workforce resource implications of a more integrated PHM-based approach to delivering care.	



5. PHM to support system prioritisation (System Outcomes Framework)			How will we make this happen?
Short-term (2022/23)	Medium-term (2023/24)	Long-term (5 years)	
Agree System Outcomes Framework, aligned to Integrated Care Strategy, with identification of some system outcome metrics based around population segments.	Agree whole ICS population segmentation approach and start to use this for planning and delivery.	Evaluate impact against agreed outcomes and key indicators.	Coordinated by: Population Health, Inequalities and Prevention Programme Board  Involved: Integrated Care Partnership ICB Care Collaboratives

## Stakeholder engagement and culture shift

1. Create sustained interest around PHM through networks of PHM champions across the ICS (at all levels) and creating local Case Studies to bring PHM to life			Who will make this happen?
Short-term (2022/23)	Medium-term (2023/24)	Long-term (5 years)	
Identify and establish network of champions from PHM Development Programme.	Expand networks, by identifying other PHM advocates.	Ongoing engagement with stakeholders and communication of successes and benefits as the programme develops.	Co-ordinated by: Comms and Engagement Lead (PHM) – to be appointed  Involved: ICS Comms and Engagement Lead PHM Coordinator Population Health Transformation Officer Head of Programme Delivery – PHM Data Platform System, Place, and PCN leadership PHM Champions
Create suite of local case studies exemplifying PHM impact on: inequalities; finance shift; outcomes for individuals; better use of workforce.	Linking with OD and workforce plan to build organisational skills in PHM.	Ongoing development and engagement of workforce.	
Begin to develop patient stories, using PHM data platform to track patient journeys.			
Start to involve and enthuse staff across participating organisations on the benefits of PHM.			

## Stakeholder engagement and culture shift

2. Develop and implement detailed communications and engagement plan for PHM, including dedicated strategy for roll-out of the digital platform			Who will make this happen?
Short-term (2022/23)	Medium-term (2023/24)	Long-term (5 years)	
Appointment of dedicated Comms and Engagement post to support roll-out of the PHM data platform.	Deliver communications and engagement plan for PHM.	Ongoing engagement with stakeholders and communication of successes and benefits as the programme develops.	Coordinated by: Comms and Engagement Lead (PHM) – to be appointed  Involved: ICS Comms and Engagement Lead PHM Coordinator Population Health Transformation Officer Head of Programme Delivery – PHM Data Platform System, Place, and PCN leadership PHM Champions
Identify local ‘brand’/terminology for PHM.	Ongoing engagement with stakeholders to support onboarding of data to the PHM data platform.		
Co-produce PHM Vision and undertake stakeholder mapping.			
Create overarching communications and engagement plan for PHM that incorporates the public patient engagement process.			
Establish ICS PHM website presence.			
Articulate what PHM means for key stakeholders and what are the benefits.			
Develop and deliver strategy for PHM data platform roll-out, including public and GP engagement.			
Continue to socialise and promote the Roadmap at relevant Boards,			