Public Health England

NHS

Population Health Management

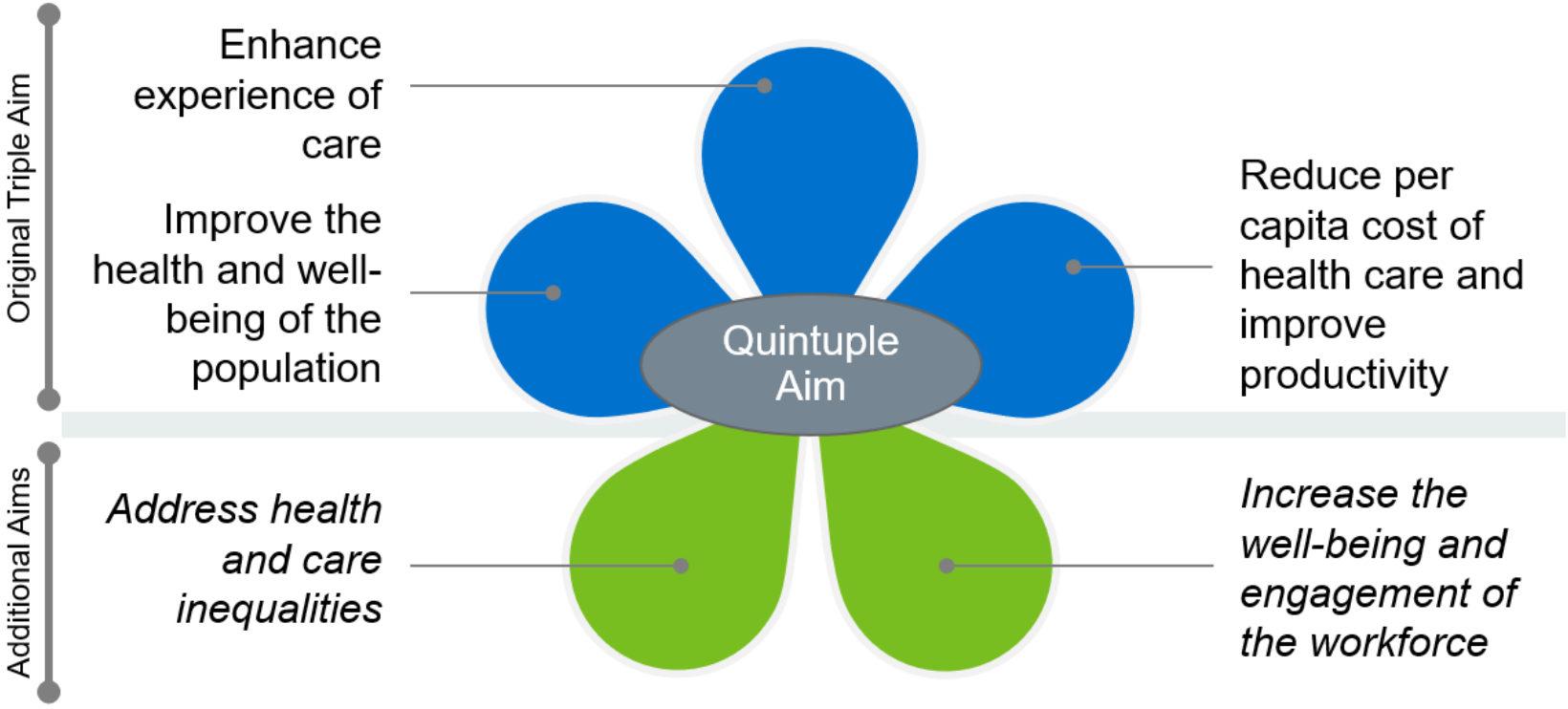
NHS England, NHS Digital and Public Health England

April 2019

NHS England and NHS Improvement

Setting a common purpose

There are five overall aims of Population Health Management



A common definition for PHE & NHSE:

Population Health…

… is an approach aimed at **improving the health of an entire population.**

It is about **improving the physical and mental health outcomes** and wellbeing of people, whilst **reducing health inequalities** within and across a defined population. It includes action to reduce the occurrence of ill-health, including **addressing wider determinants of health**, and requires working with communities and partner agencies.

A common definition – PHE & NHSE:

Population Health Management…

…improves population health by **data driven planning and delivery of proactive care to achieve maximum impact**.

It includes segmentation, stratification and impactability modelling to identify local ‘at risk’ cohorts - and, in turn, designing and targeting interventions to prevent ill-health and to improve care and support for people with ongoing health conditions and reducing unwarranted variations in outcomes.

A common definition – PHE & NHSE (continued):

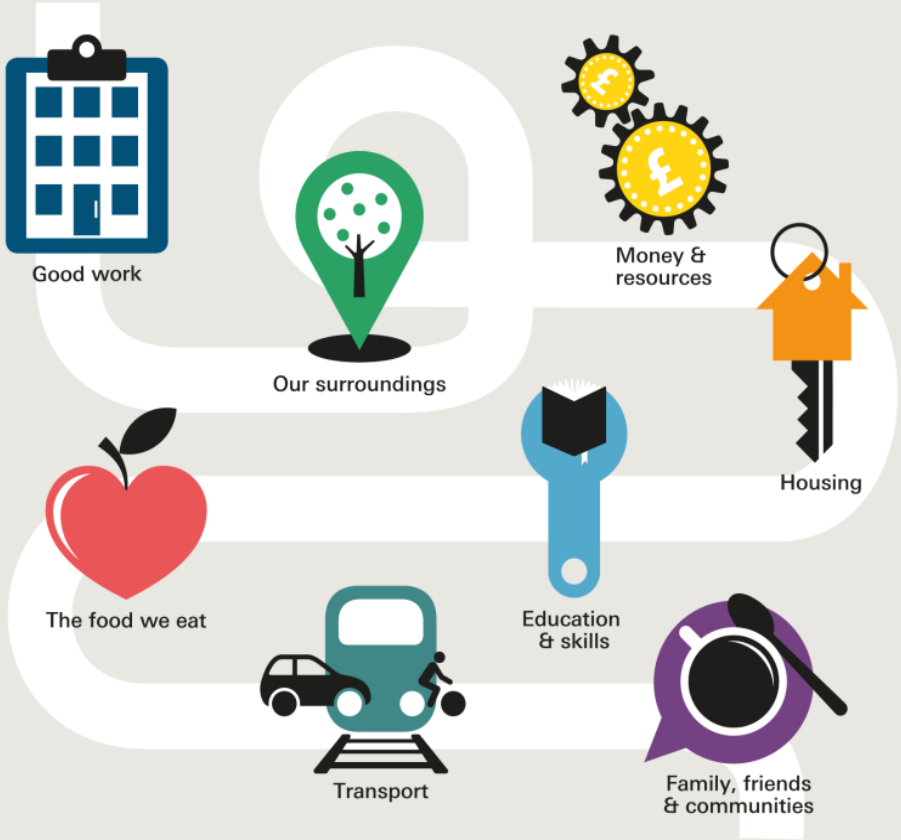
Population Health Management is about:

- Using data-driven insights and evidence of best practice to inform **targeted interventions to improve the health & wellbeing of specific populations & cohorts**
- **The wider determinants of health,** not just health & care
- **Making informed judgements**, not just relying on the analytics
- **Prioritising the use of collective resources to have the best impact**
- **Acting together** – the NHS, local authorities, public services, the VCS, communities, activists & local people. **Creating partnerships of equals**
- **Achieving practical tangible improvements for people & communities, e.g. 'Betty' in Bristol**

What makes us healthy?

AS LITTLE AS
10% of a population's health and wellbeing is linked to access to health care.

We need to look at the bigger picture:



But the picture isn't the same for everyone.

The healthy life expectancy gap between the most and least deprived areas in the UK is: **19** YEARS

The Health Foundation

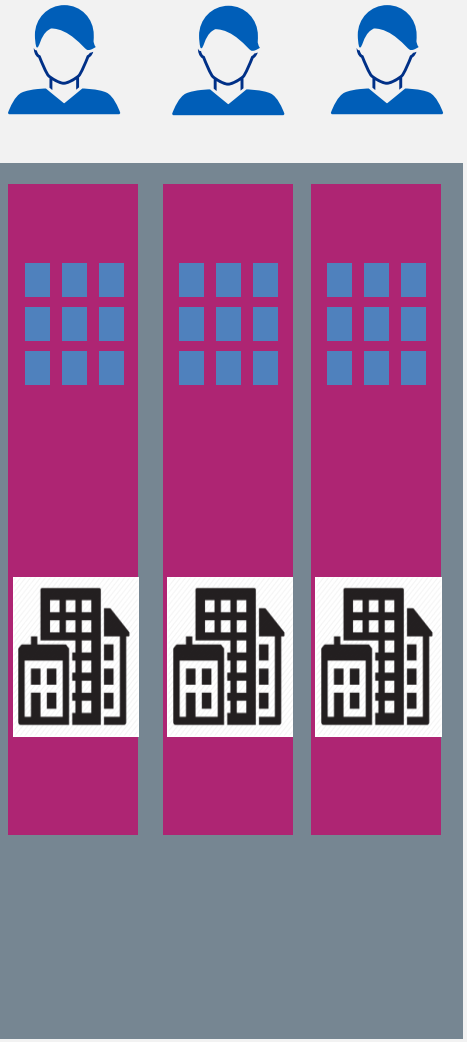
References available at www.health.org.uk/healthy-lives-infographics

NHS

Population Health Management looks beyond the health system to consider wider determinants of health

All tiers of a system undertake PHM

More timely joined up data flows and automated analyses will offer insight to enable more responsive anticipatory care, but it will be crucial that systems look to release and streamline capacity and capability to more effectively support care coordination and delivery.

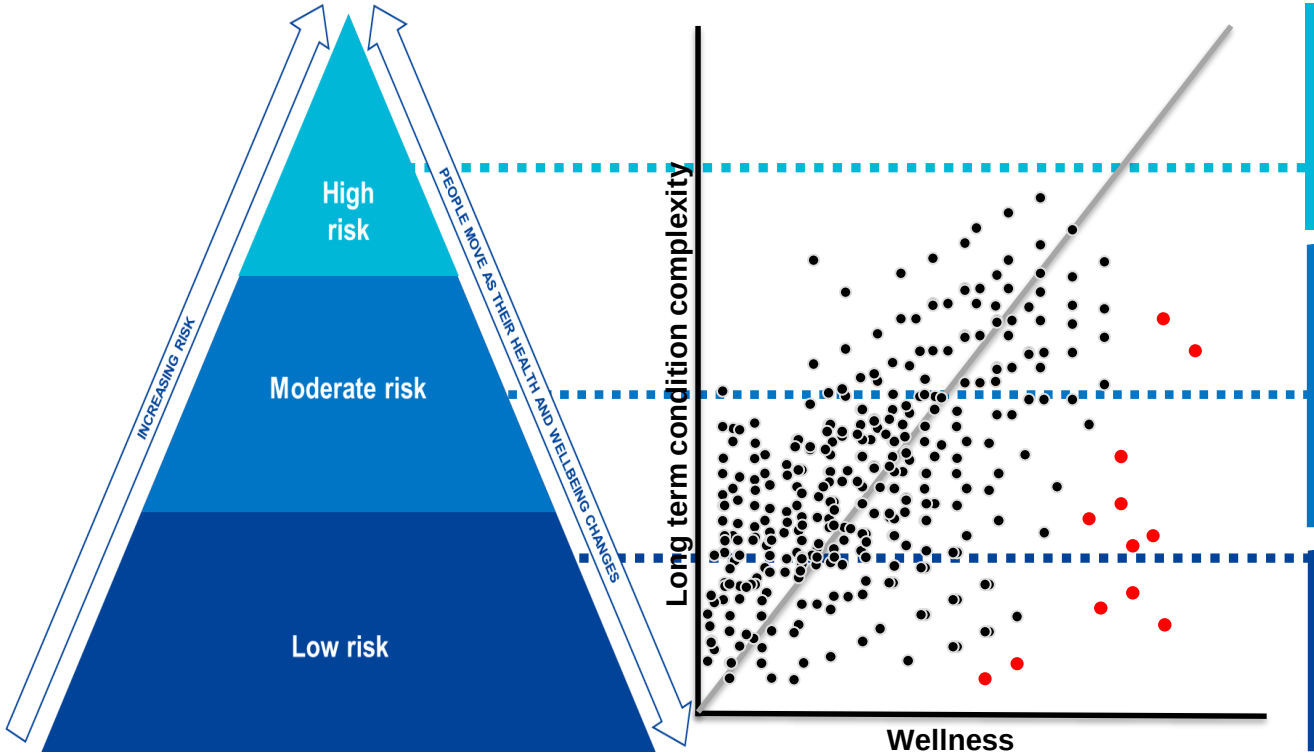


Individual	• Individual having access to and being able to amend their own care record enabling self care. • Health and care professionals across settings having access to an individual's care record to support personalised care, PHBs and targeted prevention.
Neighbourhood ~50k	• Multi-disciplinary teams using real-time risk stratification to flag interventions for populations and individuals. • Using person level data for case identification and management and to optimise how people are directed through their pathway of care.
Place ~250-500k	• In-depth segmentation, risk stratification, and actuarial analysis to identify opportunities to redesign care and develop proactive interventions to prevent illness and reduce hospitalisation. • Integrated Care Providers building capability to track people and combine real-time workforce, bed capacity and activity data to identify productivity opportunities
System 1+m	• Population Health Strategy based on whole population health and care needs assessment and gap analysis to identify overall priorities. • Whole population profiling and system modelling to understand likely future health outcomes and where system wide action may be effective. • Commissioning of outcome based care.

PHM involves exploring more advanced ways to target and tailor interventions

Segmentation and stratification identify the people most at risk of needing future care. **Impactability** goes a step further and **aims to identify people who could benefit most from particular interventions**, allowing for more effective personalisation of care plans.

Segmentation and stratification → **Impactability** → **Tailored interventions**



High risk
- Complex care management programmes, intensive case management and supported and quicker transitions of care

Emerging risk
- Proactive risk based case finding and management
- Prevention programmes, social prescribing and community initiatives
- Improving access to extended MDTs/ primary care teams

Low risk
- Wellness and self care programmes
- More convenient access and digital tools

Enriched integrated data comprising individual lifestyle factors (diet / exercise), social and community networks, genetics, money, education, housing, work / unemployment, pollution

There are three core capabilities for Population Health Management ICS will need to invest in

Infrastructure

What are the basic building blocks that must be in place?

- **Organisational Factors** such as dedicated system leadership and decision making on PHM
- **Digitised health & care providers** and **common health and care record**
- **Integrated data architecture** and a single version of the truth
- **Information Governance** that ensures data is shared safely, securely and legally

Intelligence

Opportunities to improve care quality, efficiency and equity

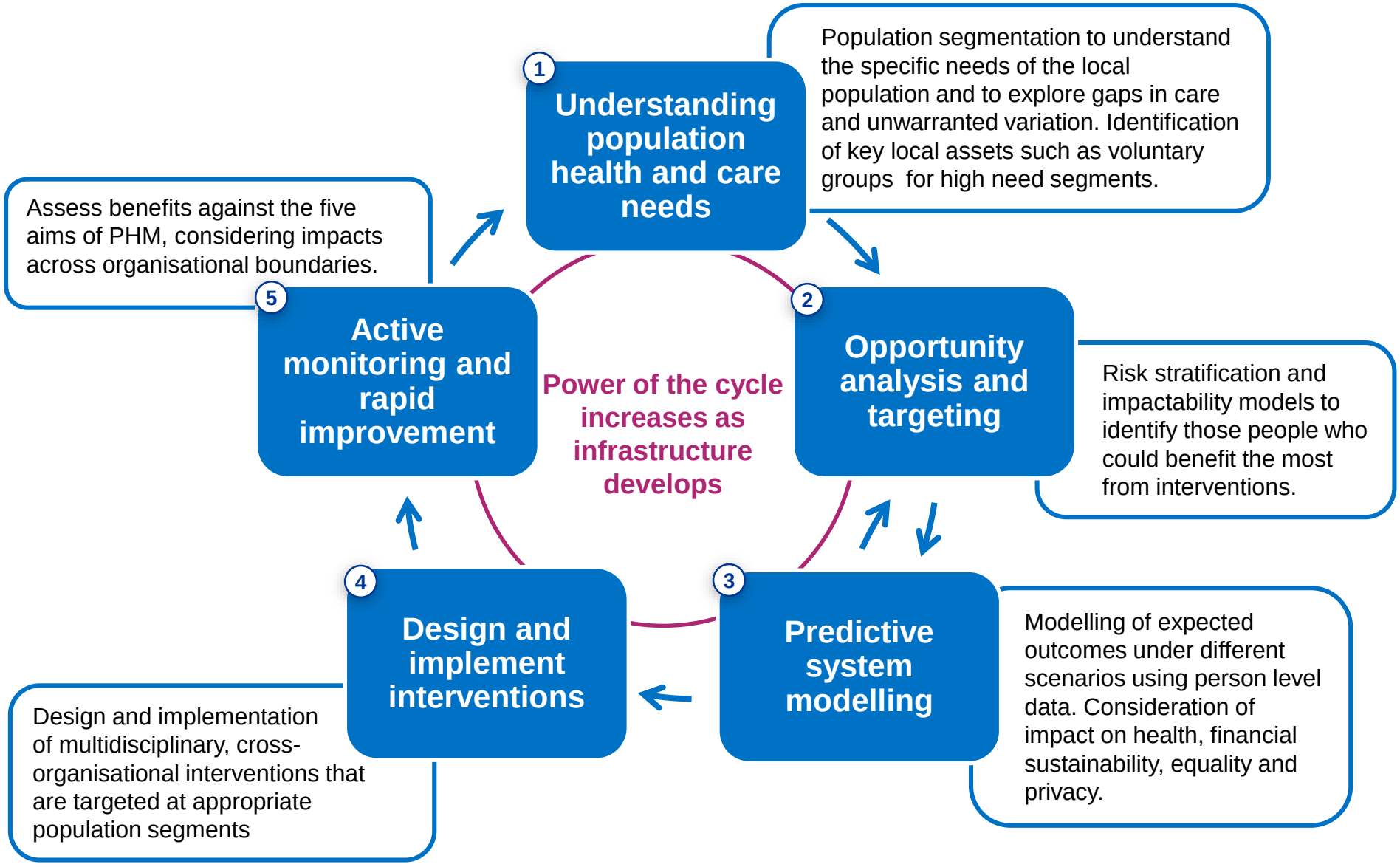
- **Supporting capabilities** such as **advanced analytical tools** and software and system wide multi-disciplinary analytical teams, supplemented by specialist skills
- **Analyses** - to understand health and wellbeing needs of the population, opportunities to improve care, and manage risk
- **Interpretation** of the data and analyses, to work with and advise providers and clinical teams

Interventions

Care models focusing on proactive interventions to prevent illness, reduce the risk of hospitalisation and address inequalities

- **Care model design** and delivery through` integrated personalised interventions tailored to population needs
- **Community well-being** - asset based approach, social prescribing and social value projects
- **Workforce development** - upskilling teams, realigning and creating new roles
- **Incentives alignment** – value and outcome based contracting

Systematic learning is integral to effective PHM – ‘the PHM learning cycle’



What is the PHM development journey for an STP / ICS?

	Emerging	Developing	Maturing ICS	Thriving ICS
Infrastructure				
Intelligence				
Intervention				

What is it?

The maturity matrix is a simple grid that **describes what a basic, middle range and advanced system looks likes** for each of the three capability areas of; infrastructure, intelligence and interventions

How should it be used?

The maturity matrix is intended to be tool to **help systems explore where they think their major gaps are and agree where they want to shift to and by when**

Our emerging support offer

1. National PHM delivery approach	2. Dedicated PHM Sponsor and support offer	3. Maturity Matrix and Library of Good Practice
4. PHM Community of Practice Forum	5. PHM 'Flatpack'	6. Support to engage and source external accredited development partners (HSSF)
7. PHM Localised Development Programme	8. How to guides and model specifications for capabilities	9. Performance and Population Health Dashboard

PHM Local Development Programme

A 20 week, externally supported, locally tailored programme of dedicated embedded analytical capacity and a series of action learning sets where clinicians and system leaders act on insights generated from linked patient level data.

Strong primary care and public health participation from systems is a pre-requisite to help generate insight and build PHM capability across the three tiers of an integrated care system. Local priorities will inform the focus of the programme but the aim is to explore interventions for different risk groups of patients.

Progress and next steps in each system

Leeds

Progress:

- 4 LCPs have been selected to take part.
- Extensive stakeholder engagement across clinical, business intelligence, execs and third sector groups.
- Well-attended exec kick-off meeting on 14th Dec with attendees from across local government and NHS.

Next steps:

- First frailty clinical workshop on 9 Jan (400 clinical reps).
- First business intelligence workshop on 21 January.

Dorset

Progress:

- Joint working with public health leads, Local Authorities, clinical leads and ICS leadership.
- 3 PCNs committed, with named clinical and programme management leads and outcome objectives aligned to work started in 2018.

Next steps:

- Programme kick-off workshop 17 Jan – with execs, GP leads and representatives from all localities.

Lancashire and South Cumbria

Progress:

- Strong engagement from system and ICP leaders, with clear support.
- Strong engagement from three neighbourhoods to date: Blackpool, Barrow and Blackburn w Darwen.

Next steps:

- Calls scheduled with neighbourhood leads to confirm commitment and agree cohorts.
- Programme kick-off session 18 Jan – with ICP and neighbourhood leads, ICS exec.

West Berkshire

Progress:

- Unified Executive gave formal approval to progress.
- System executive leader soft kick-off on Dec 20, well attended by NHS and local govt leads.
- Dedicated GP lead identified, with strong GP Alliance engagement underway (with focus on Reading).

Next steps:

- Final PCN selection to take place in early Jan.
- Programme kick-off workshop 17 Jan – with system and clinical leads.

PHM Flatpack

Approaches to Population Needs Assessment

↓

Tools to identify and target those in need

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Transformation using effective interventions

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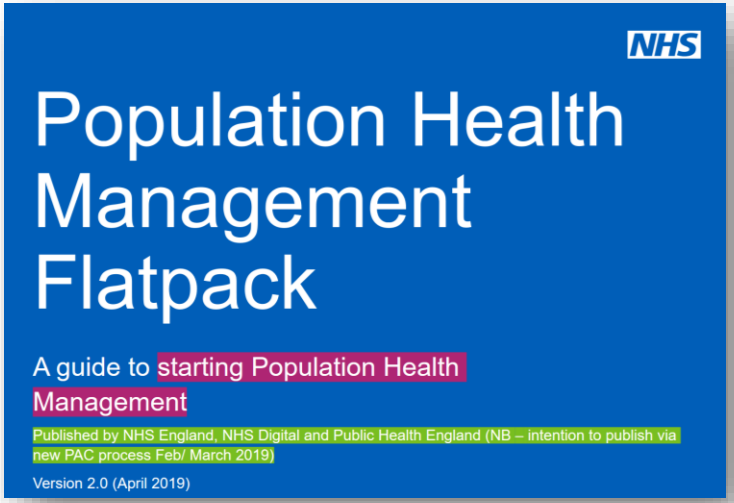
Quantifying Impact and Evaluation

Prospectus of best practice approaches, tools, techniques and interventions based on ICS, vanguard and international evidence.

Co-developed with and for you.



Support available through the HSSF

The HSSF will provide ICS and STPs with access to experienced external development partners & coaches, innovative technologies and digital vendors to help develop and deliver population health management capabilities and drive forward the national system reform and IT strategies.

Infrastructure

1 **Care setting agnostic EPR (Acute, MH)**

LAUNCH 2019

2 **Local Health and Care Record solutions**

- **A** Strategy / implementation support
- **B** Infrastructure

3 **ICT infrastructure support and strategic ICT services, including Primary Care IT support and cyber security**

Intelligence

4 **Informatics, analytics and digital tools to support system planning, assurance, evaluation and research.**

- Actuarial analysis and intervention modelling
- Supporting system financial management, quality and outcomes measurement
- Planning and evaluation, needs assessment and opportunity analysis
- Research tools

5 **Informatics, analytics and digital tools to support care co-ordination and management, risk and impactability models**

- Risk stratification and impactability modelling for early intervention and preventive care
- Supporting systems for the development of individual care co-ordination and management
- Services to support clinicians to make faster and better interventions at the point of care with a patient

Intervention

6 **Transformation and Change Support**

- Patient pathway optimisation and care model design
- Specialist advice on organisational redesign, governance and payment and contract reform
- Communications and engagement
- Workforce and leadership development support
- Primary Care at scale support

7 **Patient empowerment and activation**

- Support for implementing shared decision-making
- Support for implementing Self-Care programmes (including social prescribing, innovative digital design, remote technologies and e-consultations)
- Support for implementing Personal Health Budgets and Integrated Personalised Commissioning

8 **Demand management and capacity planning support**

- Services to support smooth transition of care into, out of and between organisations
- Control Centres

9 **System assurance support**

- Provider relationship management and supply chain support
- Financial and quality measurement and assurance
- Provider modernisation and waste minimisation

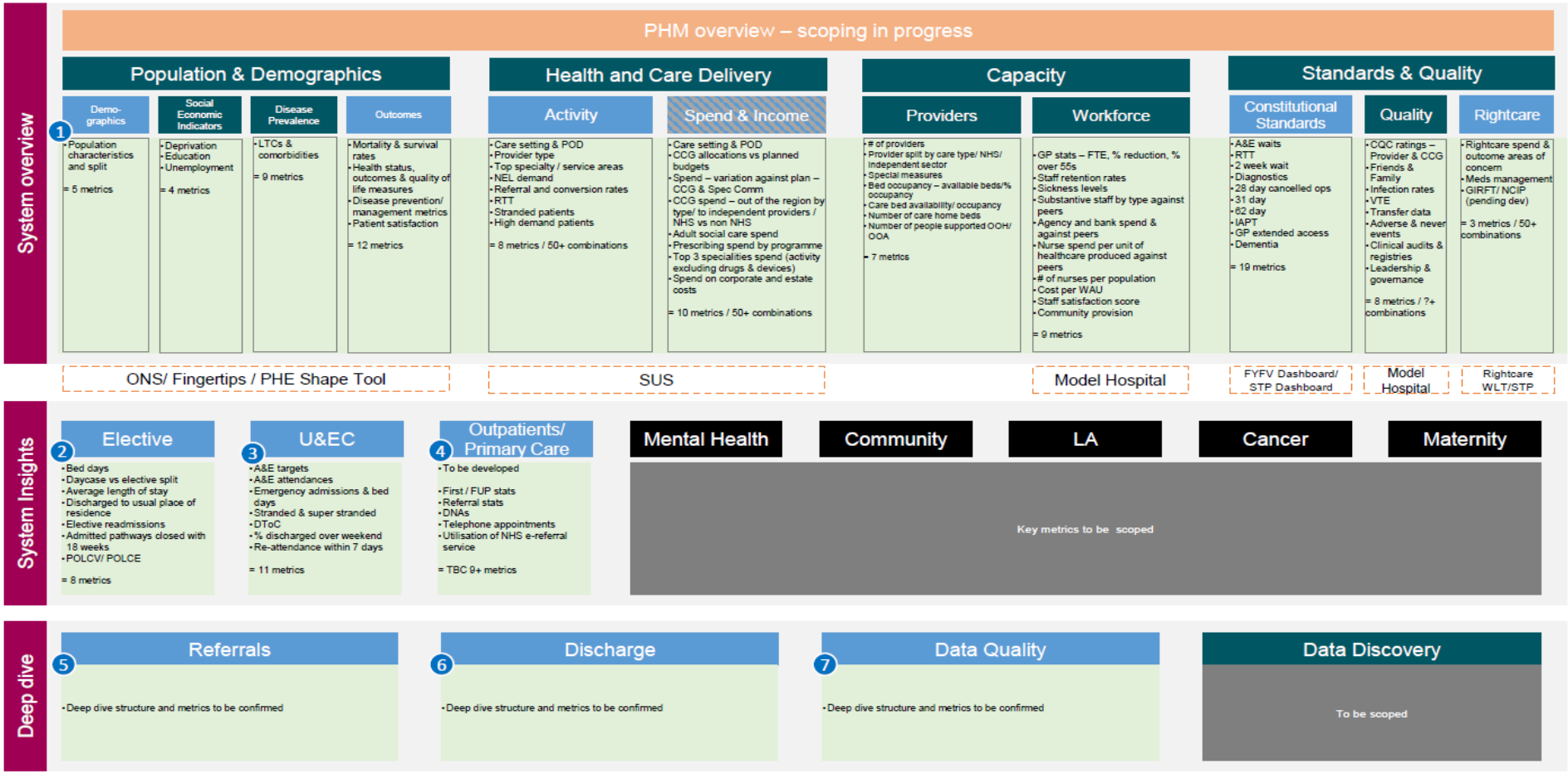
10 **Medicines optimisation support**

National Performance & Population Health Dashboard

A National Performance and Population Health Management Dashboard that allows NHS England, and all partners in an Integrated Care System to have a consistent view of benchmarks and other metrics.

This will enable all parties to compare and contrast variation and have a better understanding of the potential causes of variation.

The dashboard will provide a mechanism to support the national, regional and local teams to have a consistent view of ICSs, and to support discussions with ICSs.



Population Health Management Network

Population Health Management (PHM)

What is PHM ?

The three 'building blocks' of Population Health Management are seen as being

- Infrastructure
- Intelligence
- Transformation

Webinar Recordings

Checkout or recently recorded webinars :

What's New in the last 30 days ?

We'll be placing links to interesting articles, documents, videos and recorded webinars in this area along with the date of posting. If you'd like to share anything on the network please get in touch with us at england.ncmpophealth@nhs.net

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VIDEO The Vanguard Journey : Tower Hamlets vanguard has a population with a much lower healthy life expectancy than the national average and many health challenges. Tower Hamlets Together vanguard have transformed the way they are delivering care in order to benefit patients through integrated working across health and social care. posted 03/05/18

VIDEO The Vanguard Journey : All Together Better Dudley vanguard have redesigned care around the patient, joining up GPs and other healthcare professionals around the patients in a "team without walls" as well as supporting people to self-care and referring people to voluntary and community sector to support their wellbeing. posted 01/05/18

PHM Network Chat

Population Health Management - general chat area
Welcome to the Population Health Management forum - feel free to join conversations or start new ones
Modified by Sonny Patnaik 6 days ago

Analytic workforce audit
I am currently in the process of organising a conference call which a number of you have requested, please look out for an email from me requesting...
Modified by Sonny Patnaik 6 days ago

Impact Assessments
Thanks Stuart - really helpful Sam also look at http://understandingpatientdata.org.uk/ re talking to patients and think Kat Stolworthy ...
Show more »
Created by me 2 weeks ago

Impact Assessments
On Privacy IA then the ICO webpage is best source of guidance on this and one key thing to be aware of is that as a result of GDPR ...
Show more »
Created by Stuart Bolton 2 weeks ago

Impact Assessments
Dear all, At the Population Health Management event in February, Geraint highlighted a number of Impact Assessments relevant to PHM

Population Health Management Network: Join us!

Join our FutureNHS online community – for discussion forums, news, webinars, information exchange and helpful resources.

Email us and ask to join: england.STGPHM@nhs.net

PHM Making a Difference!

‘Betty’, 87, is a widow who lives alone. Her health and mobility had deteriorated in recent years and she had suffered numerous falls. She no longer drove her car as it wasn’t safe, and was reluctant to go out. She was housebound, had lost her independence and had become isolated and depressed.

Community Navigator Sarah visited Betty five times over 6 months. She helped her apply to the Bristol Community Transport Social Access scheme for help getting out and about. Betty decided to try the Shared Reading Group at the local Library. Betty loved discussing the short stories and poems and meeting other people. She keeps everything they’ve read as she sometimes reads it again later. Betty had been referred to Staying Steady classes by her GP, but she had given up attending. With transport now in place, Sarah encouraged Betty to revisit the classes.

Betty regularly attends the **Shared Reading Group** and **Staying Steady**. **She has reduced the number of falls from 7 last year to 1 this year.**

Surrey Air Alliance: Working in partnership to improve air quality

1 Surrey School's Air Quality Programme

Focusing on 40 primary/ secondary schools the project, funded through a DEFRA Air Quality Grant, seeks to increase awareness, improve air quality and reduce local air pollution from vehicles idling at drop-off/ pick-up points at school gates to more sustainable options.

Key activity:

- Theatre in education for students which looks at sustainable options to get to and from school
- Support to pupils to measure air quality at the roadside and in the playground
- Bikeability training – help pupils to learn to ride a bike safely with an advance level for cycling on busy roads
- Encouraging walking and cycling to school to also support the Surrey Healthy Weight Strategy for Children Young People & Families 2017- 2022.

2 Detailed Air Quality Modelling

Through the Alliance partnership local authorities have commissioned detailed air quality modelling. The project aims to highlight areas where air quality levels may be approaching or exceeding the relevant national air quality objective; provide an understanding of PM2.5 levels across Surrey; inform policies and provide baseline to measure impact of interventions; and provide an indication of local health impacts.

The modelling project will provide the partnership with:

- Surrey-wide air quality concentration maps of nitrogen dioxide (NO2), nitrogen oxide (NOx) and particulate air pollution (PM2.5 and PM10);
- source sharing for selected locations across the county (for example broken down by traffic and non-traffic sources);
- indicators of local health impact.