Population Health Management Development Programme

Kent Surrey Sussex Academic Health Science Network and Beautiful Information Annual Conference

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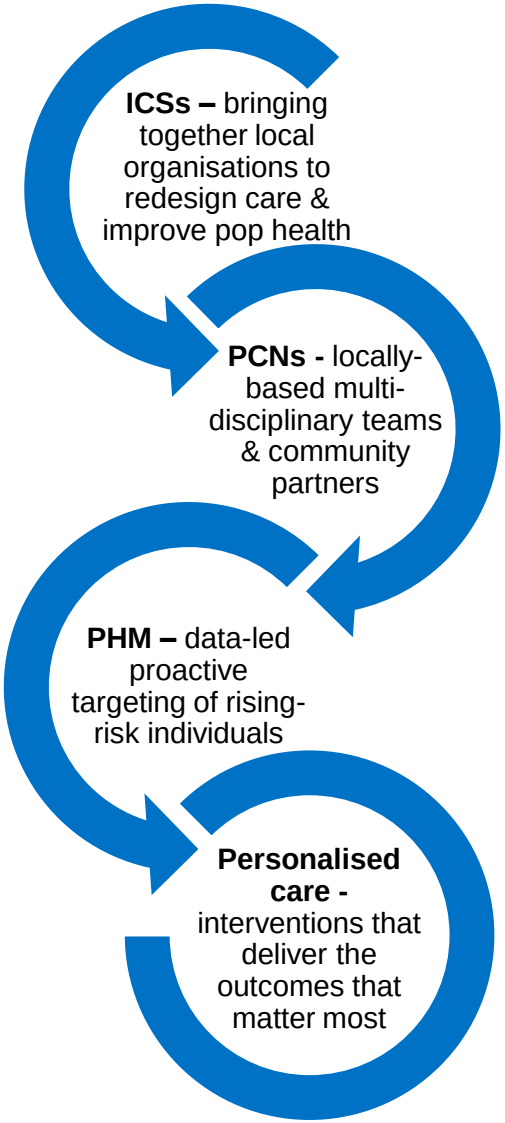
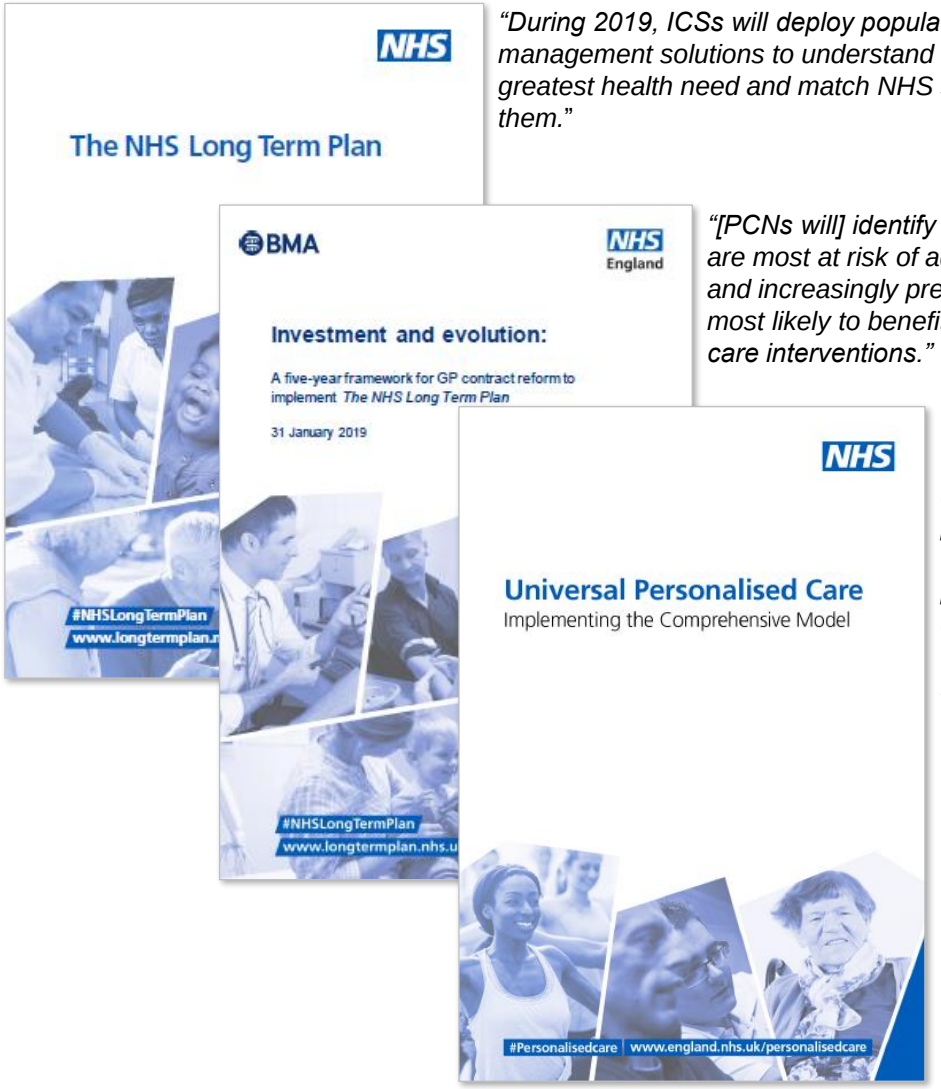
NHS England and NHS Improvement

Benefits so far …..

- Puts population health and the importance of the social determinants at the forefront of planning and delivery – “more than medicine”
- Catalyst for PCNs, place and systems in their transformation journey
- Builds relationships and trust from system to place to PCN
- Gives purpose and power to PCNs
- Puts the joy back into the workplace – practitioners, managers, analysts
- Embeds quality improvement methodology to enable rapid change in the care model

Population Health Management has become a central tenet of all major NHS strategies





"During 2019, ICSs will deploy population health management solutions to understand the areas of greatest health need and match NHS services to meet them."

"[PCNs will] identify those groups of people who are most at risk of adverse health outcomes and increasingly predict which individuals are most likely to benefit from different health and care interventions."

"Whole-population approaches to supporting people of all ages and their carers to manage their physical and mental health and wellbeing, build community resilience, and make informed decisions and choices when their health changes."

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What is Population Health Management?

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.

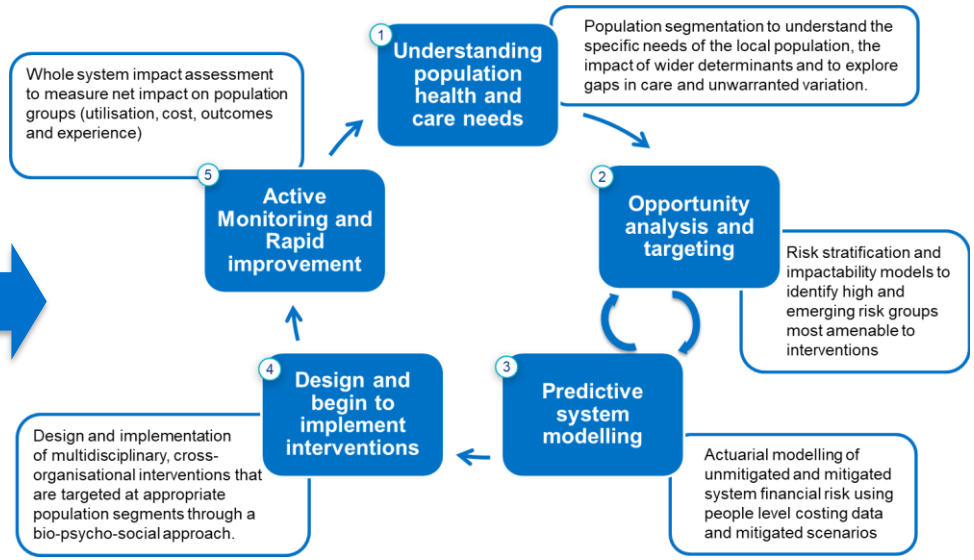
Population Health Management…

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

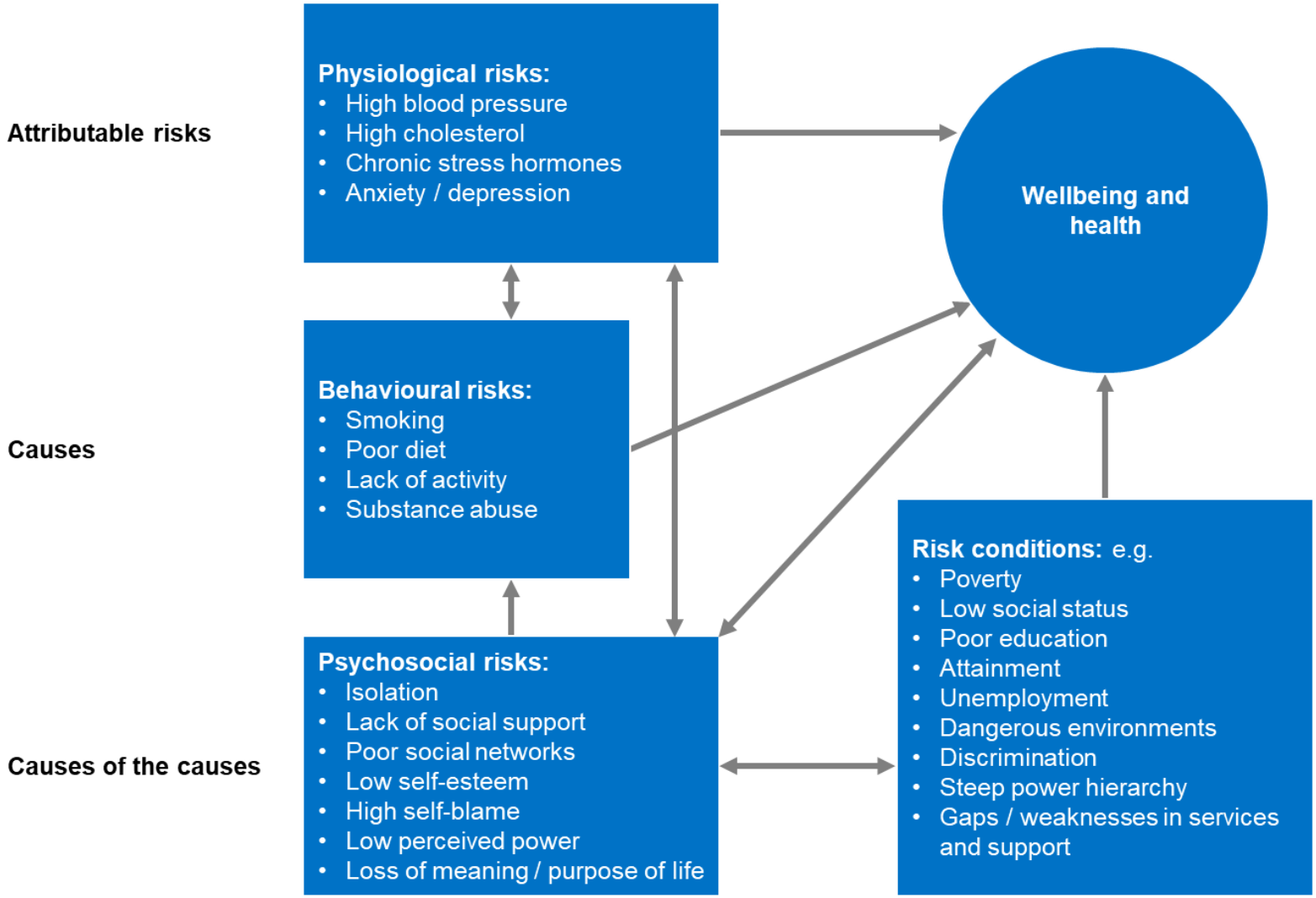
It includes segmentation, stratification and impactability modelling to identify local 'at risk' cohorts - and, in turn, designing and targeting interventions to prevent ill-health and to improve care and support for people with ongoing health conditions and reducing unwarranted variations in outcomes.

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**

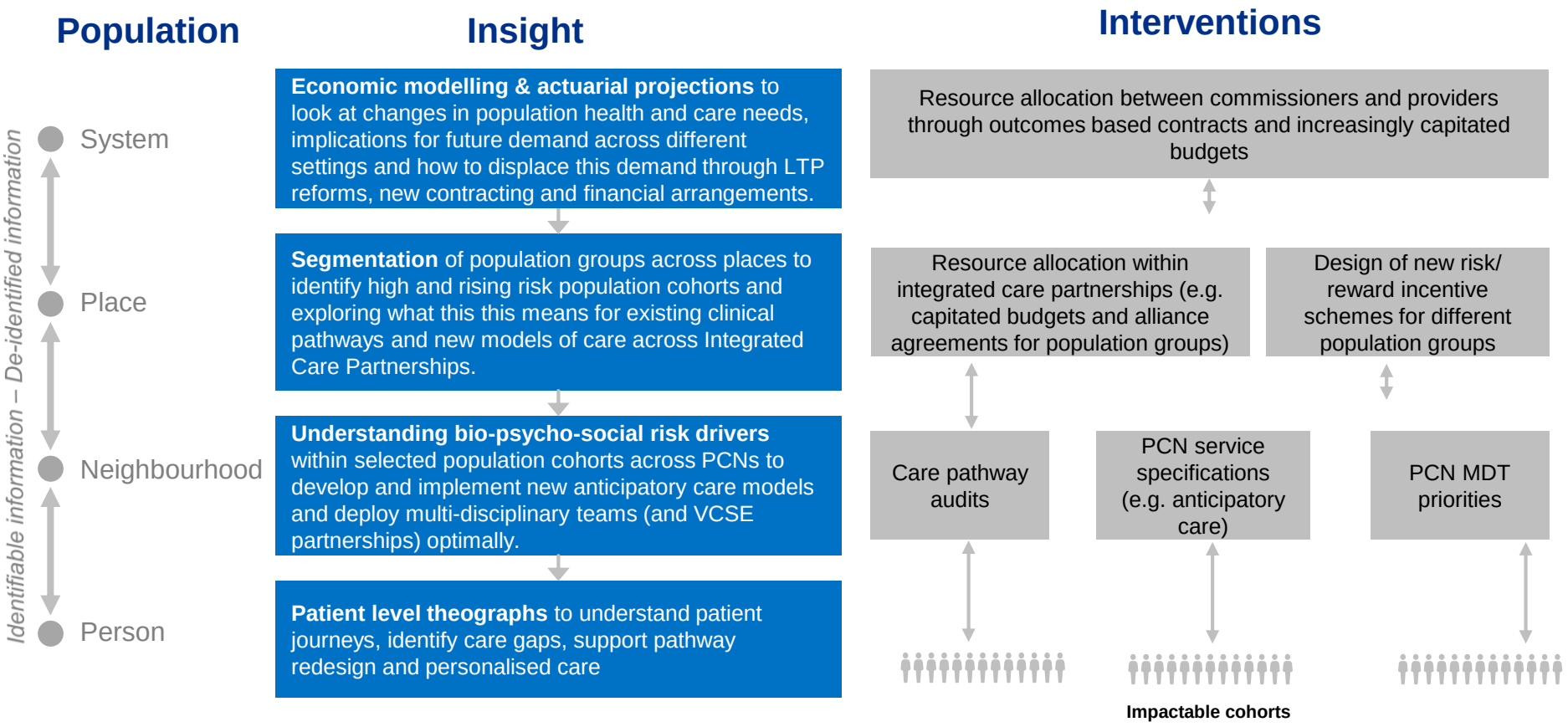


Important for PCNs and partners to identify rising risk cohorts and design new models which tackle broader risk factors to ill-health



Public Health England: Reducing health inequalities: system, scale and sustainability, 2007

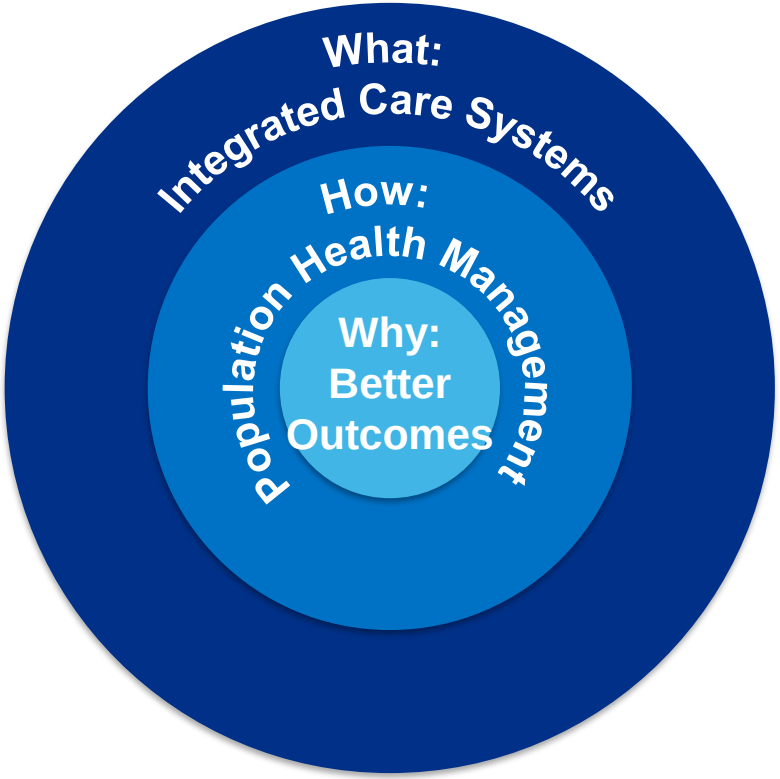
Population health intelligence should drive decision making at every tier of the system



PHM enables teams to deliver better value for their populations

$$\text{Value for our population} = \frac{\text{Improved outcomes in health and wellbeing}}{\text{Total available resources available}}$$

From System to Person and Person to System



Example system-level decision:
How can we use PHM to decide how best to allocate resources across providers?

Example place-level decision:
Why are we seeing unwarranted variation between these similar PCNs?

Example neighbourhood-level decision:
Which patient list can we prioritise to have the biggest impact on the next 6 months?

Example person-level decision:
How can we leverage our collective assets to support this person who is at risk?

Resources = money, time, people, skill level, etc.

All ICSs will need to develop strong PHM capability to support providers – this is a critical part of ICS maturity and development support

Infrastructure

Basic enabling building blocks that all systems will need 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

System wide intelligence capability identifying 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

Journey of development for building PHM capability

	Emerging	Developing	Maturing ICS	Thriving ICS
Infrastructure	• Limited use of local data. Reliance on national data to undertake analysis for planning and commissioning activities. • Poor digital maturity across health and care providers. No secondary care Global Digital Exemplar.	• Some linking of traditional data flows between primary and secondary care. • Information governance arrangements in place between commissioners and primary and secondary care providers to support analysis of population health. • Plans to establish Global Digital Exemplars to increase digital maturity of health and care providers. • No clear PHM vision shared across the system. Individual and sporadic leadership.	• 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 • ICS wide Information Governance arrangements which support analysis of linked data for care design including wider determinants • Clear plans for convergence of linked data set with population health data feed from Local Health and Care Record platform. • Demonstrable progress to increase digital maturity of providers through Global Digital Exemplar Programme. • Clear vision for PHM at system and place level, with some PCNs engaged and involved. Multi-professional leadership throughout the different tiers of the ICS.	• 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). • System wide information governance arrangements which allow for analysis of de-identified patient level data for care design purposes and smooth re-identification within ICPs and PCNs for proactive case finding and management. • Responsive data feed from Local Health and Care Record platform to support above data model. • Interoperable care records which support appropriate read and write access for clinicians and patients. • Global Digital Exemplar providers with fast followers across ICS. • Cross system leadership vision clearly articulated and embedded across the system.
Intelligence	• Disparate analytical teams spread across the system mainly undertaking traditional commissioning and reporting activities • Limited intelligence tools to help with understanding population health demands.	• Traditional reporting, intelligence systems and analytical outputs acting at organisation level with limited clinical engagement. • Use of analytical teams and support units to provide population health analytical insight, but not in a systematic and consistent way across the STP. • Costing and performance analysis is organisationally focused rather than patient focused. • An understanding of health inequalities at organisation/place level and insights used to shape delivery.	• 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. • Some social determinants information being used alongside health data. • Starting to map and understand system analytical workforce and intelligence tools with plans being developed for more networked or federated analytical teams'. • Analytical support made available for PCNs to help understand high and rising risk patients and to support care design activities.	• Well developed cross ICS analytical function with skills in predictive techniques that enables actionable insights to be regularly delivered to PCNs and Place networked or federated analytical teams. • 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 • Operating model in place between analytical team, place and PCN teams to provide responsive actionable insight to inform proactive and anticipatory care. • Systematic and sustained use of all insights (including Health Inequalities insights) to inform action and resource use at all levels of the system
Intervention	• Largely reactive health and care system delivered by providers where there is minimal collaboration. • Limited progress to tailor care models for different patient groups.	• Basic population segmentation in place to understand needs of key groups with early insight into resource use. • Limited engagement across primary and secondary care teams to integrate care around high need groups • Limited use of voluntary and third sector to respond to key patient groups. • Social prescribing and anticipatory care activity not linked to needs analysis.	• Forums and working arrangements being established between primary and secondary care, social care and public heath teams - and with third sector involvement - to design proactive care models for different patient groups based on patient level analysis. • Integrated teams (primary and secondary care) being supported to adopt rapid improvement cycles to implement anticipatory care interventions (including social prescribing), measure impact and refine approach. • Personalised care plans in place for at risk groups. • Population health analysis being used to inform modelling for integrated multi-disciplinary teams.	• Clearly defined care models in place for key population groups across vertically and horizontally integrated teams. • A range of anticipatory care interventions have been designed and financial incentives put in place to support implementation through PCN MDTs. • Clear working arrangements between PCNs and voluntary and community sector partners with clear offers of support for specific patient groups. • Ongoing systematic analysis and use of data in care design, case management and direct care interactions to support proactive and personalised care.

What are we doing to support development?

Population Health Management Academy

Practical e-learning on PHM for different stakeholder groups, pipeline of educational webinars, videos and ted talks, blogs, case studies, guidance, discussion forum, event calendar. Over 1400 members and growing. Email england.stgphm@nhs.net to register.

PHM Development Programme

20 week action learning programme for PCNs and ICSs to link local data, build capability to analyse to find rising risk cohorts, predictive modelling using costed segmentation, design and deliver new models of care for impactable patients, track and monitor impact of interventions. Education and learning workstreams and coaching throughout. AgeUK and NAVCA support to VCSE partners.

Workforce development

- HEE/NHSE/I Population Health Fellowship
- HEE/PHE/NHSE/I analytical skills training modules as part of building a digital ready workforce
- PHE analytical skills mapping and development
- ICS Intelligence Function Specification
- Informing wider educational and development curricula

Care Model Design Toolkit

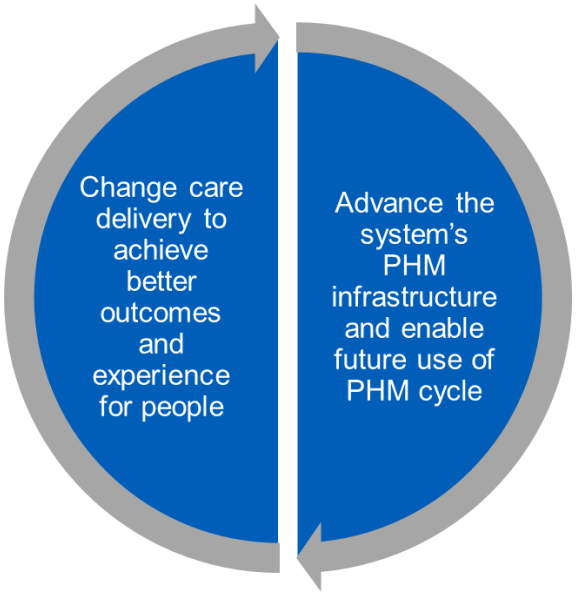
Decision-making framework for supporting local integrated care teams, analysts and finance and contracting teams to think through the design implications of new care models which tackle bio-psycho-social risk factors and how to sustain these by redesigning existing pathways, contractual incentives and payment reform.

The 'art of the possible'

Series of task and finish groups to explore how linked data and predictive analytics can inform:

- Commissioning and contracting for population segments and outcomes
- Payment reform and development of new risk/reward incentives
- Workforce modelling and development

What is the Population Health Management Development Programme?



A nationally funded intensive 20-week programme to enable ICSs and PCNs make faster progress in the use of PHM techniques through the adoption of data-led anticipatory care projects that deliver improved outcomes for people and build capability and energy within integrated care teams.

Systems receive dedicated transformational, analytical expert support from NHSE/I teams and the Optum Alliance to establish, tailor and deliver a local action learning programme that helps PCNs and wider partners to identify rising risk cohorts and design and deliver new care models which improve health outcomes for these patients. This action learning is then used to stimulate conversations at system and place level about sustaining these proactive approaches and what the data is telling them about future risk across the system and how to mitigate that risk through delivering the vision of the Long Term Plan.

Wave 1 with 4 ICS and 20 PCNs showed tangible changes in care models and stimulated powerful energy amongst PCN MDTs. Wave 2 with 2 systems and more than 40 PCNs underway. Plans to roll out to rest of the country from Apr 2020 are being explored.

Key elements of the programme include:

- **Facilitated cross system workshops for all levels**
- **Specialist and expert coaching**
- **Peer action learning sessions for PCNs and their MDTs**

There are four key phases

20 weeks

Readiness
Initiating and localising the programme and linking data

Insight
Creating impactful analysis and modelling with local teams

Improvement
Bringing together care professionals to drive change

Spread
Rolling out the learning to the wider ICS

PHM Development Programme workstreams

PHM education & spread workstream

- **Best practice webinars**: global and national best practice and national LTP team briefings (PHM, PCN development, personalised care, LHCRE, social determinants.
- Access to Advisory Board research resource packs.
- **PHM Community of Practice (COP)** to share progress with other ICSs at quarterly points.
- **Peer learning webinars** for wave 1 and wave 2 sites.
- **Analytical skills and tools mapping** (with Public Health England (PHE)).
- **Case study & roadmap** upon completion.

System-wide data, analytics and actuarial workstream

- **Data linking support**: LHCRE 'journey 3' (Secondary Use Data Governance Tool (SUDGT)) and NHSD approval support.
- PHM ICS **actuarial modelling** (system-level actuarial model) produced based on whole population health risk.
- Series of **population health data packs** using local linked data supplied to each PCN.
- **Regular analytics ALSs** during insight phase to co-design analytics and build capability; 'analyst huddles' for the rest of the programme.

Design to Action workstream

- 5 ICS-level DTA workshops where system leaders, analytics teams, public health and PCN teams come together to share and learn;
    1. Kick-off ICS workshop introducing the programme and the PHM approach.
    2. Targeting at-risk population cohorts.
    3. Data-driven intervention design.
    4. Scale and sustain.
    5. Celebration and lessons learned.

Local PCN implementation workstream

- 3-5 PCNs per system supported through programme (for example 1 PCN per 'place').
- ALSs (group coaching) for each PCN through MDT coaches (General Practitioner (GP), Nurse) delivered as a mixture of in-person and virtual sessions. Please see annexes for what a series of ALSs could look like.
- Virtual coaching for clinical leader from each PCN.

Wave 1 demonstrated some valuable learning and success

The PHM journey as described by one of Lancashire and South Cumbria's PCNs – Skelmersdale

What did the leads from Wave 1 say about PHM?

> *Data isn't the whole story, sometimes it tells you things you already know. Don't be scared of the data or the graphs, they can be used to support conversations and evidence the point you've been trying to make.*

We've begun to build relationships. That's the biggest and most important factor [of success]: [bringing together] organisations that traditionally don't speak to each other. You would [have] assumed people already had these relationships, but they didn't.

> ***Using our data on our cohorts helped and brought our team together** to help us work out, for that prioritised group, what were we going to look at. We had a checklist of things to go through as a team, which gave us a format for our MDT.*

*We used to think the system was working against us. [Now] we see an opportunity to align our goals. I think we have **ignited the fire.***

> *Trying to isolate a cohort and designing an intervention for that cohort rather than doing the whole thing is a good approach and not something I was familiar with as a GP. And **to have the freedom to actively change throughout**, not feeling like that's a bad thing because we can **test and learn** as we understand the cohort and interventions.*

*"**It's about treating everyone as an equal partner.** Trying to see things from their perspective. When we started this we all thought we needed to be protective of our organisation … But only by working together can we actually **solve the problems of working together in future**."*