Population Health Management

KPMG point of view

February 2023

What is Population Health?

The King's Fund define Population Health as '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 within and across a defined local, regional or national population, while reducing health inequalities.'(a) Most health systems also include the objectives to reduce per capita cost of health care and increase the wellbeing of the health and care workforce as broad aims of population health, as illustrated in NHS England(b)'s Quintuple Aim diagram below.
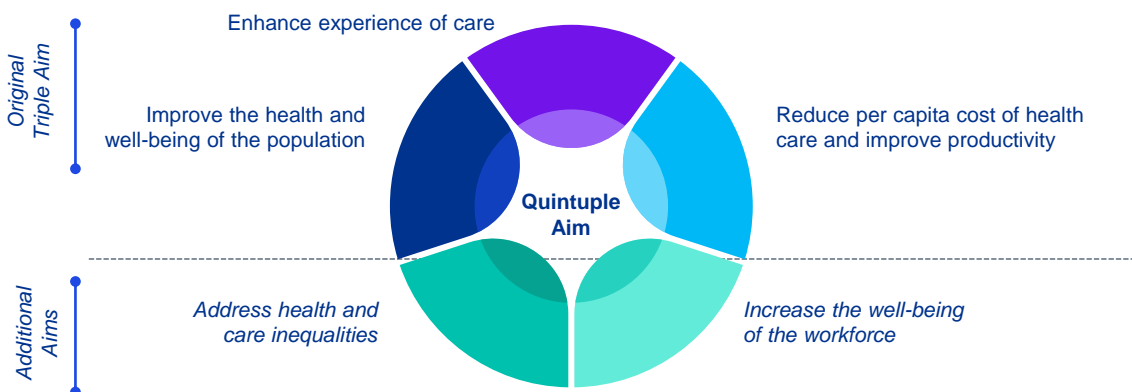
How is the NHS delivering Population Health?

Integrated Care Boards (ICBs) bring the NHS together across an Integrated Care System (ICS) to improve population health and establish shared strategic priorities within the NHS. Population Health Management (PHM) is one of the core strategic aims for ICBs, and their purpose, according to NHS England, is to bring partner organisations together to deliver the quintuple aim, and to help the NHS support broader social and economic development.

What are the challenges to delivering Population Health?

There are lots of great examples of successful PHM projects across the NHS, many of which were initiated as part of the NHS England PHM Development Programme. These were focused on a specific group of the local population in participating ICSs to develop leadership, knowledge and skills around using data and analysis for decision making. They were typically small-scale initiatives by their very nature, but the challenge now is how to scale and embed PHM across whole ICSs and regions, so all population groups have services designed to meet their current and future needs.

The pressures across the NHS are increasing with ambulance delays, longer waiting times in A&E departments, and lengthy elective waiting lists. Many of these issues are typically the result of a lack of a PHM approach, which would have shifted care out of the acute hospitals and into the community where the needs of patients could have been managed more effectively, providing a better experience, and reducing the need for escalation to urgent and emergency care services. This is why PHM should be at the top of all ICBs agenda.

Original Triple Aim

Enhance experience of care

Improve the health and well-being of the population

Reduce per capita cost of health care and improve productivity

Quintuple Aim

Additional Aims

Address health and care inequalities

Increase the well-being of the workforce

Another challenge is whether ICBs have the necessary capabilities and capacity to implement PHM at scale. NHS England's PHM Flatpack provides guidance on the 3 core capabilities: Infrastructure, Intelligence and Interventions. These include the basic elements of digital and data infrastructure, effective leadership, an understanding of population need, population segmentation, risk stratification, impact modelling, implementation of effective interventions, workforce modelling, care integration and evaluation.

How to overcome these challenges

To embed PHM, ICBs need to scale up interventions implemented at 'place' and 'neighbourhood'-level. A critical factor in this is understanding what interventions are effective and for which population groups. Key to this is ensuring that data is collected on the effectiveness, reach and costs of interventions, both at the current smaller scale, but importantly estimated at larger scale. The latter can be achieved through analytical techniques, including forecasting and impact modelling.

Measuring the effectiveness of interventions is challenging and often the wrong things are measured. To truly determine if an intervention is successful, we need to know whether it has shifted the dial in terms of the quintuple aim, including an improvement in both outcomes and the experience of care for patients, whilst reducing per capita cost. It is also necessary to have metrics that measure how well the interventions have been delivered (process measures), alongside monitoring measures to ensure there haven't been any unintended consequences. Given the need to reduce healthcare inequalities, the metrics should incorporate breakdown by factors that lead to inequalities, such as the wider determinants of health (housing, employment etc.).

We therefore need a balance of metrics to truly determine the success of interventions.

For ICBs to deliver PHM at scale, they need to have the right building blocks in place. Expanding on NHS England's PHM Flatpack, it's our view that ICBs need the following capabilities under Infrastructure, Intelligence, Interventions and Incentives.

Infrastructure
– to lay the foundations

- Leadership & organisational development
- Clearly defined populations
- Linked health and care patient records
- Information Governance
- Digital maturity
- Analytical capacity and capability

Interventions
– to successfully implement PHM

- Effective interventions
- Outcomes framework
- Workforce planning
- Personalised care
- Care integration
- Evaluation

Intelligence
– to understand the population

- Needs assessment
- Segmentation and risk stratification
- Opportunity analysis
- impact modelling

Incentives
– to drive adoption of best practice

- Financial baselining (cost of care)
- Provider incentives (risk/gain share)
- New payment models

How can we help ICBs?

1. **Understand your current position and gaps**
   We provide a maturity assessment to determine where an ICB is on the PHM lifecycle. We assess maturity against the capabilities in the boxes above right and rate on a scale of Emerging, Developing, Maturing or Thriving. We provide clear short-term to long-term practical next steps.
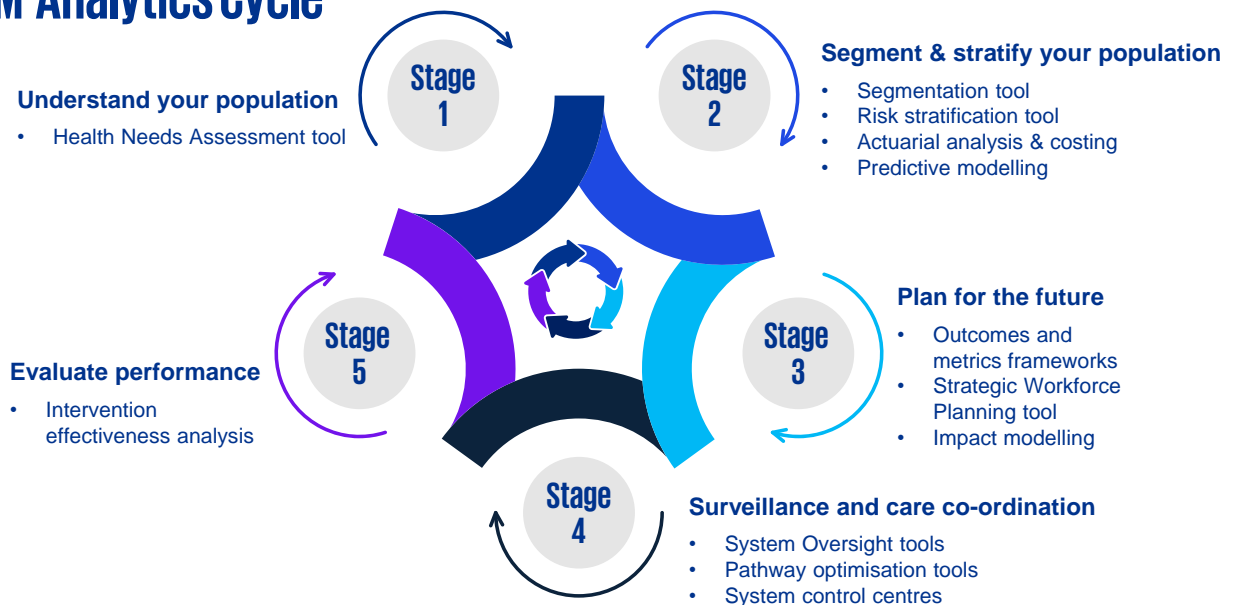
2. **KPMG and partner products to accelerate your progress**
   Examples illustrated in the PHM Analytics Lifecycle diagram below.

3. **We provide bespoke support or full end-to-end PHM implementation support**
   Examples include:
   - Developing segmentation models
   - Developing metric frameworks
   - Developing predictive models
   - Developing and implementing new primary care operating models
   - Bringing together integrated neighbourhood teams, inc. primary care workforce planning & team OD/culture

PHM Analytics Cycle

Understand your population
- Health Needs Assessment tool

Segment & stratify your population
- Segmentation tool
- Risk stratification tool
- Actuarial analysis & costing
- Predictive modelling

Plan for the future
- Outcomes and metrics frameworks
- Strategic Workforce Planning tool
- Impact modelling

Surveillance and care co-ordination
- System Oversight tools
- Pathway optimisation tools
- System control centres

Evaluate performance
- Intervention effectiveness analysis

Stage 1 · Stage 2 · Stage 3 · Stage 4 · Stage 5

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