# Making an impact

**The Surrey Heartlands care system believes using data is the best way to improve its quality – it has put impactability modelling at the heart of its PHM approach**

There are two schools of thought on the importance of data quality within population health management (PHM). One group argues that you can't start to base decisions on data until you have access to all the data you need and it is of sufficient quality. The other recognises that improving data quality is an ongoing challenge and the best way to improve the data is to share it and use it.

David Howell, deputy director of information at Surrey Heartlands Health and Care Partnership, is firmly in the second camp. Not that the integrated care system isn't taking the data quality aspect seriously – it is part of the Thames Valley and Surrey Care Record Partnership, which has signed a contract with System C and Graphnet Care Alliance to provide a region-wide shared record and population health system for 3.8 million people.

It is building its PHM approach on this platform and there is a major focus on getting the right digital infrastructure in place. But it is also keen to make practical progress and ensure that other levers are also in place to support the long-term use of PHM. 'We are also working on ensuring the right people can access this information and that they are trained with the skills and expertise to undertake PHM,' says Mr Howell.

'Up to now, a lot of analytics in the NHS has been around contract management processes, so we are really good at the first step in PHM, which is looking back and asking what went wrong, what worked well and why. But PHM is taking it a step beyond this and understanding where things will go in the future. Once you understand the direction of travel, it is then about using that information to better inform decision-making. That is quite a new skill set for a lot of people.'

This involves a general upskilling of capabilities beyond the use of SQL to pull out data and more use of newer statistical tools such as R and Python. 'These tools support analysts to understand patterns within data in more detail and allow for the onward sharing of more robust and detailed information to clinicians and commissioners,' he says.

However, recognising that PHM cannot be delivered by any single person, the system is also looking to bring together different analytical staff from across its area, including organisations outside of health, to 'join up all the bits of the jigsaw'.

It is frequently cited that only 20% of a person's health outcomes can be attributed to healthcare. Given this, some might question whether PHM should be a health-led initiative.

David Howell and Jane Johnston

However, Mr Howell believes that the NHS is well placed to take a lead role. 'We understand the outcomes really well,' he says. 'What we need to get better at understanding is why people end up with those outcomes – and that comes from bringing those analysts together and using those tools that can look at literally hundreds of thousands of biomarkers and get under the skin of the population.'

Surrey Heartlands is part of the second wave of the NHS England and NHS Improvement PHM development programme – although activities have stopped and started during the Covid-19 response. Four of the area's primary care networks took forward PHM projects, each looking at different local priority. One was focused on the health inequalities agenda, looking at a cohort of the population based on frailty, multiple long-term conditions, ethnicity and deprivation.

## Ongoing aims

Jane Johnston, the system's head of PHM analytics, says the initial focus was on how changes to direct care could improve outcomes. 'But as we move forward and develop our PHM capability, we will start looking at the secondary uses and that is where we start getting into more strategic areas – if we invest in this area, what will be the impact in another area?'

It is looking to expand its use of impactability modelling – a technique that measures the degree to which sub-populations will benefit from a range of interventions and uses this information to tailor pathway to optimise value.

She highlights an example around falls and how a system might traditionally target a simple overall 10% reduction in falls to save acute treatment costs. This target is then typically cascaded down to primary care networks. However, this takes no account of the different population characteristics that may trigger a fall, but only focuses on acute data and takes no account of future demographic changes.

Instead, the population can be segmented, future population growth and spend can be determined for each cohort at each touch point in health and care, and the segments identified where the greatest pressure is likely to arise. Then artificial intelligence can be used to identify new individuals who may become at risk of falling that meet the criteria of that particular segment. However, Ms Johnson warns that the results need to be considered carefully to ensure that the response is not exacerbating health inequalities. ○

**CIPFA**

# CIPFA Apprenticeships

Use your organisation's apprenticeship levy to create the next generation of counter fraud investigators and professionally qualified public finance experts.

- **Assistant Accountant Apprenticeship (Level 3)**
  *Includes study for the AAT Advanced Diploma*

- **Professional Accounting Technician Apprenticeship (Level 4)**
  *Includes study for the AAT Professional Diploma*

- **Accountancy Professional Apprenticeship (Level 7)**
  *Includes study for the CIPFA Professional Qualification*

- **NEW Counter Fraud Investigator Apprenticeship (Level 4)**
  *Includes study for the CIPFA Accredited Counter Fraud Specialist qualification*

**Contact the team today to learn more about taking on an apprentice. Enrolments for our next intake will open in December 2021.**

**Visit** www.cipfa.org/apprenticeships

**Phone** 0207 543 5796

**Email** apprenticeships@cipfa.org