Health Education England

Population Health Fellowship – Rough Guide

A national programme to empower healthcare professionals to innovate at a population level

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Contents

Programme summary

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. Contemporary healthcare is increasingly focused on optimising patient care and outcomes at the population level and therefore clinicians across all of healthcare require skills in population health to achieve this. There have been many examples of population health approaches that have significantly improved patient care and outcomes.

This Rough Guide outlines the first national Population Health Fellowship for clinical healthcare workers in the NHS from a non-population health specialist background. After a successful pilot, the programme is recruiting its second cohort. The fellowship is a 1-year part-time programme (i.e., 2 days a week alongside their clinical practice) where fellows will lead on a population health project. Fellows will be supported by a blended learning programme. The aim of the programme is to develop a network of clinicians from a non-population health background with population health skills to benefit place-based healthcare systems across England. The programme is open to healthcare professionals from a broad range of clinical backgrounds who have not worked or trained in population health. We want to attract early to mid-career fully registered (and, where appropriate, licensed) healthcare professionals providing NHS services (AfC band 6 and above, or equivalent; dentists-in-training; doctors-in-training post-FY2 and their SAS equivalent).

The fellowship programme will be available across all HEE's 7 regions and will be supported by the HEE Long Term Conditions and Prevention Programme. The start date for the second cohort will be between August-September 2021, with the exact date varying between HEE regions. The virtual educational programme will commence from October 2021. Recruitment will start in Spring 2021 through an online application and an interview.

This guide presents the importance and value of population health in contemporary healthcare. The relationship of population health and public health is discussed. The guide outlines the structure of the fellowship and the eligibility. There are examples of population health projects in this guide to inform readers. This document only serves as a guide and is correct at the time of writing. The programme may change at any time and the guide will be updated accordingly.

What is population health?

There are many definitions of population health and recently it has proved to be an evolving discipline of medicine. The agreed definition across the NHS for *population health* is:

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.

The importance of population health

The NHS Long-Term Plan [2019] places significant emphasis on prevention of disease and population health. Contemporary healthcare is increasingly focused on optimising patient care and outcomes at the population level. Population health and individualised healthcare are essential partners rather than concepts in conflict. Population health applies a broader and more proactive view than traditional health care by extending the 1:1 individual approach to a targeted cohort of people (e.g., specific medical condition, community, age-group, etc.). It also adds the delivery of interventions such as risk factor modification, health promotion and community engagement within the interaction of a patient and a healthcare professional. Population health considers the determinants of health that fall beyond the immediate reach of the healthcare setting such as social circumstances, environmental exposures and behaviours. Chronic conditions such as obesity, diabetes mellitus and cardiovascular disease are suited to a population level approach. The vast majority of health determinants are associated with lifestyle, behaviours, social circumstances and environmental exposures, yet the focus is often aimed solely at medical care.

Defining populations

Populations can be defined using various parameters e.g., geographically, by medical conditions, ethnicities, disease risk factors, etc. Individuals can belong to more than one population and these can be viewed through different perspectives. Population health is therefore relevant across all the health disciplines.

Population health in action

Kaiser Permanente, a US based healthcare organisation, analysed data from a shared electronic patient record system to establish the health needs and outcomes of different groups. Individuals were then targeted based on their membership to a particular group. For example, the heart disease programme tackled smoking cessation, exercise promotion and lifestyle modification, which contributed to a 26% reduction in cardiovascular mortality among+ Kaiser Permanente members in Northern California from 1995-2004. Read more about Kaiser Permanente and the evolution of their population health services at: *https://www.kingsfund.org.uk/publications/population-health-systems/kaiser-permanente-united-states*

A GP practice in Surbiton, which has a 20% higher known prevalence of diagnosed mental ill

health than the national average, responded to the evidence that mental health patients often suffer from chronic physical illnesses by optimising the methods in which they conduct the Quality Outcomes Framework (QOF) physical health checks. The practice designed a new programme to invite patients for physical health checks. The new system was based on patient survey responses and involved nurse consultations and extended doctor consultations. Processes were also implemented to facilitate patient attendance and information sharing with patients and their specialists. This initiative was led by a previous fellow (London population health fellowship for GP trainees) and the abstract of the project can be found in Appendix 2.

Population health and public health

Some use the term ‘population health’ interchangeably with ‘public health’. In this proposal, we suggest that population health describes an approach that can be applied across all of healthcare. Increasingly evidence shows that applying population health skills in clinical practice can prevent disease and improve patient outcomes. Public health is the art and science of improving health and preventing disease across the whole of society, including in healthcare environments. It was never sufficient for solely public health practitioners and specialists to engage in population health. It is now widely accepted that population health competencies and mindset are essential at all levels in every00 healthcare organisation in delivering excellent healthcare and this is at the heart of this proposal.

What is a population health fellowship?

Successful applicants will embark on a year-long part-time fellowship, 2 days a week, alongside their permanent clinical post. Fellows will be leading on a population health project at a host organisation. Examples of possible host organisations include hospital and community trusts, public health organisations, integrated care systems (or sustainability and transformation partnerships), clinical commissioning groups and primary care networks.

Project supervision and support will be provided by a named supervisor from the host organisation. The project will also be supported by a formal blended educational programme, which will consist of a series of virtual contact days and e-learning modules. See Appendix 2 for examples of population health projects.

Fellows will sign a learning agreement. The approach to the assessment of the learning outcomes is entirely formative (via reflective learning logs and presentations). After successful completion of the programme, fellows will have developed the core competencies of population health. In addition to population health competencies there is also a strong focus on leadership development.

The value of a population health fellowship

The programme provides an infrastructure to train future population health practitioners. We aim to recruit clinicians with outstanding potential and develop them into a faculty capable of incorporating population health in their local work systems and thereby improve patient outcomes. As the programme develops there will be an ever-growing group of population health practitioners from various professions. Population health skills are highly sought after and fellows from a previous local population health fellowship have ended up working in leadership positions across the NHS.

Application cycle and number of posts

The fellowship is national and available in every HEE region. There are 21 posts in total, with 3 posts allocated to each region (the final numbers per region may vary). Each region will conduct its own recruitment process with support from the HEE national team. Prospective applicants will be expected to continue in their substantive NHS post alongside this part-time fellowship.

The process of identifying host organisations (including their proposed projects) will be undertaken from January 2021. The selected host organisations and the HEE regional teams will then advertise the available projects, with adverts going out in early Spring 2021. Applicants will complete a short application before the interviews in May 2021.

The year-long fellowship is planned to start in August-September 2021, with the exact date varying between HEE regions. The centralised educational programme will commence in October 2021.

Eligibility

The aim is to support early to mid-career healthcare professionals from diverse career paths. The fellowship is open to fully registered healthcare professional providing NHS services (AfC band 6 and above, or equivalent, dentists-in-training, doctors-in-training post FY2 and their SAS equivalent).

Appendix 1: selection criteria

Applicants will be judged against these criteria relative to their level of experience. Applicants can demonstrate achievements through certificates, CV, publications, letters, and other supporting information.

Selection Criteria

Academic	**Essential** • Registered healthcare professional providing NHS services (AfC band 6 and above, or equivalent; dentists-in-training, doctors-in-training post FY2 and SAS doctors). **Desirable** • Additional degree or postgraduate qualification (e.g., certificates, diplomas, etc.) • National or international award/prize in relevant area • Publication in peer reviewed journal • Presentations (poster/oral) at an external conference or author in a non-peer reviewed publication
Skills	**Essential** • Demonstrates strong oral and documented communication skills • Effective team player • Numeracy: able to understand and manipulate data • Able to search and critically review literature • Organisational skills including time management and project completion **Desirable** • Relevant leadership achievement
Understanding	**Essential** • Sound knowledge of the English healthcare system (i.e. service provision, research, education, primary and secondary care, etc), its current challenges and future national policy direction • Familiarity with the population health approaches in England **Desirable** • Involvement in driving service change in your current or a previous workplace
Interest	**Essential** • Has been involved with clinical audit or other quality improvement project • Demonstrable interest in population health approaches **Desirable** • Has contributed to health or other relevant research

Appendix 2: population health projects

In this section we provide examples of potential and previously delivered population health projects. A population health project is an improvement project with a focus on improving the outcomes for a group of patients. It is similar to a service or quality improvement. It is different however, from an audit in that the focus is on identifying population-based outcomes that matter (through an analysis of patient data), developing or re-designing interventions through an understanding of the needs of a local population or community and monitoring improvements in key outcome measures. A population health project can also demonstrate the importance of sectors outside health, particularly local government, in improving health outcomes.

Real life examples of population health projects

Example 1: Reducing spread of communicable diseases such as MRSA in the community

Need identified: Reduction in the spread of communicable diseases such as MRSA in the community.

Method chosen: Working with the local infection control team to undertake a root cause analysis for each case of MRSA identified in the community. Root cause analysis requires an analysis of the patient's journey and whether any lessons for prevention could be learnt. Usually, several patient journeys will be analysed at the same time to understand whether there are any trends/ patterns (such as antibiotics prescribing).

Learning points: To understand how to perform root cause analysis- there are well established toolkits available.

Possible barrier: To identify infection control team based in CCG as some may have moved to another sector.

Potential outcomes measured:

1. Reductions in levels of MRSA in the community.
2. Reductions in variations in antibiotic prescribing.

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Example 2: Preventing COPD admissions to secondary care

Need identified: GP practice has a high proportion of patients admitted to the local secondary care service with exacerbations of COPD.

Potential reasons identified:

1. Lack of awareness of COPD guidelines and training for clinicians managing COPD exacerbations.
2. Lack of engagement with local rapid response community COPD team.
3. Lack of discussion about end-of-life care for COPD patients with severe disease.
4. Lack of access to smoking cessation interventions.

Interventions:

1. Development of practice guidelines based on local and national information.
2. System for linking at-risk patients with a named GP to improve continuity of care for vulnerable individuals.
3. Educational sessions involving practice GPs, nurses, district nurses, and community COPD liaison nurse.
4. Referrals to community COPD team to improve patient education on managing exacerbations, assessing psychological health, and preventing social isolation.
5. Information on accessing rapid response community COPD team made available to all through practice intranet.
6. Liaison with local palliative care consultants in education on end-of-life care for those with severe end-stage COPD.
7. Education for patients and carers so they can better manage their own condition and recognise and treat an exacerbation at an early stage.
8. Smoking cessation advice tailored for this patient population.

Outcomes measured:

1. Number and cost of admissions for exacerbations of COPD.
2. Smoking quitters among patients with COPD.

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Example 3: Health needs of patients with serious mental illness (SMI)

Need identified: Patients with SMI are at high risk of potentially preventable physical conditions.

Potential reasons identified:

1. Patient group difficult to engage with.
2. Sharing of information with CMHT variable.
3. Lack of awareness of the physical healthcare needs of SMI patients.

Interventions:

1. Set-up a nurse-led physical health check clinic with proactive sharing of information with specialists.
2. Support from reception with patients to arrange appointments, and where appropriate, reminders.

Results:

1. Proportion of SMI patients with health checks increased.
2. Satisfaction with the health check clinic high.
3. Perception of communication with CMHT improved.
4. Patient satisfaction with service improved.

Example 4: Improving diabetes care in general practice

Need identified: Significant variation exists across GP practices in a local area in the proportion of diabetic patients meeting national diabetes audit criteria for good quality care (e.g., HbA1C, BP, and Cholesterol levels, annual foot exam).

Method chosen: A multi professional team - including GPs, diabetologist, practice nurses, clinical nurse specialist, podiatrist, managers, and patient representatives – undertook a process mapping exercise of current diabetic management in primary and secondary care. National and international evidence and guidance were reviewed, and best practice was identified in other parts of the country.

The diabetes pathway was re-designed. Local care networks of GP practices agreed to review diabetes care data, and community-based diabetes review clinics were established in each care network, serving all GP practices within the network. Clinics were run jointly by the diabetes clinical nurse specialist and practice nurses, including podiatrists and dieticians. Clinical management and referral guidelines were agreed, with MDT meetings established with GPs and diabetes medical and nursing specialists to manage complex cases.

Regular GP practice educational roadshows and learning events were established, with training for practice nurses. An expert patient programme was established, with peer-support groups in each local care network.

Outcomes:

1. Increased compliance with national diabetes quality standards and reduced variation between GP practices.
2. Reduced referrals to out-patients and in the longer term, reduced inpatient admissions, reduced incidence of diabetic complications.

Appendix 3: aims and competencies to be achieved

The programme has been designed to encourage and support you to develop competencies that will enable you to incorporate population health in your local work systems to improve patient outcomes. Fellows should discuss learning from this fellowship in their annual appraisal with their substantive employer. Fellows who are also doctors-in-training should link their learning to relevant competencies in their training programme curriculum.

The learning programme comprises blended learning content that includes:

- Virtual contact days
- Online learning
- Host workplace Project based learning
- Peer learning
- Reflective learning
- Presentations

The programme aims and objectives and the project learning outcomes are outlined below.

Aims

- Encourage a mindset among clinicians that encourages an appreciation of the potential for prevention and improved outcomes, particularly in the presence of health inequalities
- Appreciation of the impacts, beyond medical interventions, on the health and wellbeing of their patients and factors that may influence outcomes of care
- Application of their knowledge and skills to exploit opportunities for prevention and to improve patient outcomes, including through the population health project to be undertaken in this Fellowship
- Encouraging creation of a sustainable network of population health-oriented clinicians
- Inspire ongoing application of population health competencies

Learning objectives

- Understanding population health
- Appreciating why population health is relevant to clinical practice
- Understanding what we mean by health inequalities and why it is imperative to tackle them
- Identifying a population
- Accessing and utilising routine sources of population health data
- Understand and contribute to population health status assessment
- Understand and contribute to population health and healthcare needs assessment
- Understanding and explaining risk
- Appreciate ethical dimensions and resource distribution in health care
- Encouraging healthier behaviours: understanding behaviour change
- Understanding leadership and project management

Project planning and delivery

- Defining a deliverable project
- Managing expectations - your own and others'
- Teamwork
- Expert support
- Literature review - learning from others' experience
- Project planning and management
- Staying on track and being prepared for challenges
- Survey and other core methodologies
- Capturing your learning
- Disseminating learning
- Landing your message