



UKRI policy fellowships 2026

Fellowship position

Fellowship title:

Public Health Wales policy modelling and population health inequalities fellowship

Fellowship type:

Core policy fellowship

Host organisation:

[Public Health Wales NHS Trust](#)

Host team:

Public Health Wales Data Science and Analysis Division

Academic discipline/s:

Computational modelling, data science, economic sciences, population health sciences and demography

Summary:

Opportunity to embed and adapt the [SimPaths](#) microsimulation framework within Public Health Wales to inform policy on economic inactivity, labour markets and health inequalities in Wales and the UK.

Policy topic:

The fellowship will support policy development by embedding and applying dynamic microsimulation modelling (SimPaths) in Public Health Wales to assess the long-term health and distributional impacts of labour market, welfare and prevention policies, inform cross-government strategies on economic inactivity, workforce participation and population health, and provide robust evidence aligned with Welsh Government priorities on fair work, health equity and prevention, while also contributing to UK-wide agendas on economic growth, labour market participation and reducing regional inequalities.

This work aligns with wider UK policy priorities including:

- strengthening the use of data, modelling and evidence in policymaking
- improving population health and reducing inequalities
- supporting economic growth and productivity through increased labour market participation

Research career stage:

Open to early and mid-career researchers

Fellowship structure

The fellowship is estimated to begin in May 2027. The exact date will be confirmed by the host depending on onboarding and security clearance requirements. The fellowship will have three phases:

- inception: duration is 3 months at 0.4 FTE
- main placement: duration is 12 months at 0.6-1 FTE
- knowledge exchange: duration is 3 months at 0.4 FTE

Work arrangements

Location requirements:

The applicant can be based anywhere in the UK. The base for the role is the Public Health Wales Cardiff Office in Capital Quarter 2 (CQ2), with travel approximately once per month to the Office to meet with team members.

Hybrid working:

The successful applicant will be expected to travel to the Public Health Wales Cardiff Office in Capital Quarter 2 (CQ2) both during the inception and placement phases, approximately once per month to meet with team members. There may be occasional travel to engage with stakeholders including with Welsh Government and UK partners. A laptop will be provided enabling work from home or other sites, providing access to host systems. Eligible Travel and Subsistence costs are supported in the main UKRI grant. Please see full call text and guidance for more details.

Security clearance and nationality eligibility criteria:

The fellowship is open to candidates who have the right to work in the UK at the point of commencing the post. If you require sponsorship under the Skilled Worker or Health and Care Visa routes, please ensure you self-assess your eligibility for sponsorship for this role before applying. Check the [Skilled Worker visa](#) or [Health and Care visa](#) guidance for details on job eligibility, salary, English language, and sponsorship requirements.

Fellowship position description

Fellowship overview

The fellowship provides an opportunity to work at the intersection of public health, economics, and applied analytics to model the health impacts of economic inactivity, labour markets, and health inequalities. The fellow will deploy the SimPaths model on Public Health Wales's (PHW) Google Cloud Platform and adapt it for use with Welsh population data. They will also tailor and validate the SimPaths microsimulation framework to meet the modelling needs of PHW, the Welsh Government, and academic partners, enabling exploration of the distributional, economic, and population-level impacts of policy options. This work aligns with PHW's strategic commitment to addressing the wider determinants of health and reducing health inequalities.

Research scope

While the final scope and research questions will be codesigned during the inception phase, the fellow may undertake work in areas including:

- analysing causal pathways between labour market, economic disadvantage and health inequalities
- identifying and assessing regionally disaggregated Welsh input data around health and economic factors for potential use in the SimPaths microsimulation framework
- constructing an appropriate synthetic population for Wales for use in SimPaths

- adapting and validating SimPaths in relation to economic and health outcomes in Wales.
- working with PHW to run SimPaths within the organisational infrastructure
- modelling distributional impacts across population groups and evaluate potential policy interventions
- producing scenario analyses and briefings for policy audiences

Collaborative environment

The fellow will be embedded within the PHW Data Science and Analysis Division and will be supported to engage across the organisation. The fellow will work closely with teams across PHW, including Research, Data and Digital, Policy and International Health, and the Wider Determinants of Health Unit. They will also collaborate with Digital Health and Care Wales, particularly in relation to the NHS digital infrastructure, and with Welsh Government analysts and policy officials. In addition, the fellow will engage with academic partners with expertise in modelling, public health, and socio-economic research, including the SimPaths development team, as well as relevant cross-UK and international policy networks.

The fellow will receive:

- a PHW email account and IT access from day one
- office space in Cardiff
- inclusion in all relevant distribution lists and policy/analytic networks
- participation in team meetings, cross-directorate forums and stakeholder engagements
- a designated line manager with fortnightly structured check-ins
- senior sponsor oversight to enable strategic visibility and alignment

Benefits for the fellow

The fellow will undertake highly innovative and impactful work by adapting emerging academic approaches to address challenging, real-world policy questions at the intersection of economics and health. They will be embedded within PHW with access to internal systems and processes, enabling them to develop an in-depth understanding of how a public health organisation operates and how research informs policy. In addition, the fellow will have opportunities to publish and disseminate findings and to engage with a wide network of partners across government, policy, and academic research.

Person specification

Applications will be assessed by UKRI panel assessment against the following essential opportunity-specific requirements in addition to the generic eligibility and call criteria.

Essential criteria:

- developed skills in multiple programming languages such as R, Python, Java, or Stata
- strong quantitative analytical skills, such as statistical and computational modelling or advanced quantitative evaluation relevant to social policy or public health problems
- experience of conducting applied research using complex data from various sources

Applicants shortlisted from the panel assessment will be invited to a host led interview. At this stage the host will also take into account the following desirable fellowship-specific requirements.

Desirable criteria:

- experience of using Git-based version control for collaborative projects, for example using platforms such as GitHub
- experience of running analyses on remote cloud platforms or high-performance computing clusters, for example Google Cloud Platform
- a strong interest in health equity, health policy and the wider determinants of health

Processing personal data

If applicants are shortlisted by the UKRI assessment panel UKRI will need to share the application and any personal information that it contains with the host for the host led interview selection process.

Your personal data will be handled in line with UK data protection legislation and managed securely. If you would like to know more, including how to exercise your Rights, please see the UKRI [privacy notice](#).

Please see the Hosts' [privacy notice](#) and they will delete your data at the end of the selection process unless you are successful, in which case we will retain your data as an independent data controller.