

# UKRI policy fellowships 2026

## Fellowship position

### Fellowship title:

HMT epidemiological-economic modelling for pandemic preparedness fellowship

### Fellowship type:

Natural hazards and resilience fellowship

### Host organisation:

[HM Treasury](#)

### Host team:

Economic Risks: the team provides economic analysis of the most pertinent risks to the UK economy, covering both acute and chronic risks. The team focuses on risks exogenous to key economic variables and maintains an overview of the economic risks landscape, understands economic implications, and influence policy responses.

### Academic discipline/s:

Health economics, macroeconomic modelling, epidemiology, public policy

### Summary:

Opportunity to develop and embed an epidemiological–economic model for HMT and wider UK government to strengthen preparedness, decision-making and macroeconomic analysis during future public health shocks, building on lessons from Covid-19 and the Covid Inquiry.

### Policy topic:

This fellowship will address the policy challenge of improving the UK government’s ability to respond to future pandemics and health-related shocks by strengthening the integration of epidemiological and economic modelling.

It aligns with:

- government mission on economic growth and resilience
- pandemic preparedness and national resilience priorities
- cross-government analytical capability building following lessons from covid-19

### 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:

HMT operates an office based working approach across Darlington and London Treasury sites. This opportunity is open to both locations, in particular the team has agents on both sites (please be aware that this role can only be worked in the UK and not overseas). There will be some requirement to travel between sites and to meet with cross-government stakeholders, expected to be occasional throughout the year.

## Hybrid working:

HMT has an expectation of a minimum of 60% attendance in the office during the main placement phase, along with working remotely. This blended working approach allows you to work collaboratively, meet stakeholders face-to-face, support others and promotes a healthy work life balance. During the inception phase, the fellow is expected to travel for in person meetings for about two days. HMT values and champions diverse and inclusive working practices and will consider requests for reasonable adjustments to the hybrid working policy on a case-by-case basis. 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:

Counter Terrorism Checks (CTC) are required and are expected to take ten weeks. We would expect the successful applicant to start the security clearance application process, with support from the host team, as soon as their fellowship has been confirmed by UKRI. Ideally the security clearance process would be completed before the inception phase begins, however, some initial inception work can begin before the security clearance is complete (albeit with restrictions on access to the HMT office and sensitive material without additional clearance or a pass). Clearance means applicants will normally have to have lived in the UK for at least three out of the last five years and have a UK address. Please see [national security vetting: clearance levels](#) for further information.

# Fellowship position description

The fellowship is expected to focus on the economics of epidemiological-economic modelling to shape HMT's interests in the project, working in close collaboration with UK Health Security Agency. It will also liaise across other relevant health/epidemiological stakeholders across government, such as Department of Health and Social Care, Cabinet Office, and relevant scientific and analytical bodies such as the Scientific Advisory Group for Emergencies and the Government Office for Science, to bridge and integrate health and economic modelling approaches with the aim of creating a coherent, policy-ready framework usable across government.

The fellow will design and deliver the economic component of an integrated epidemiological-economic model for HMT, suitable for use in future pandemics and health shocks. During the inception phase, the exact analytical focus, approach and scope of the work will be determined by host priorities with input from the fellow and depend on their interests and experience.

They will first assess appropriate model types and classes (e.g. structural epi econ models), relevant granularity (sectoral, demographic, regional), and optimal coding tools in consultation with HMT and health

departments. This work will build on current academic research and relationships in this space. They will then develop the economic module to dovetail with health models, document assumptions and limitations, and hand over a fully documented model and user manual to ensure sustained departmental capability.

Alongside delivery of the core modelling framework, the fellowship may provide opportunities for the fellow to contribute to publishable research outputs where appropriate. As the epidemiological–economic model will be an internal government analytical tool, outputs will be subject to organisational governance, security and publication protocols.

We expect the fellow to add value by providing in-depth health economics and/or macroeconomic modelling expertise in order to:

- address a critical capability gap identified during Covid-19 and reinforced by emerging Covid Inquiry findings: the absence of a joined-up, operational epi economic model for central decision-making
- improve HMT’s ability to assess trade-offs between public health interventions, economic activity, fiscal costs, and longer-term scarring in real time
- strengthen macroeconomic shock analysis by explicitly modelling health-driven labour supply, demand, productivity, and sectoral impacts
- deliver a reusable, transparent modelling framework and guidance to complement further analytical tools in future crises
- build lasting in-house expertise through structured handover, documentation, and training

This fellowship offers a unique opportunity to undertake original, high impact, policy relevant research at the interface of epidemiology, economics and real-world policy decision making, embedded at the centre of government.

The fellow will benefit from:

- knowledge-exchange opportunities, including participation in policy roundtables, cross-government analytical workshops, engagement with departments such as UKHSA, DHSC and the Cabinet Office, and interaction with wider scientific and analytical networks
- development of advanced expertise in operational epidemiological–economic modelling within central government, highly relevant to senior roles in academia, government, international organisations, and policy advisory institutions
- direct access to leading academics in the field, with the opportunity to build relationships with expert infectious disease modellers, health economists and macroeconomists as well as gain exposure to government’s role in supporting grant-funded academic work
- opportunity to undertake independent analysis alongside development of the core modelling framework, including extensions informed by emerging policy needs and the fellow’s research interests
- embedding within HM Treasury’s Economic Risks team, working directly with analysts and policymakers on live economic risk and resilience issues
- direct exposure to how economic and epidemiological evidence informs policy decisions during periods of uncertainty and crisis preparedness
- structured workplace support, including line management, office space, appropriate IT equipment, and access to internal systems and processes

In doing this, the fellow will directly support progress on government’s strategic gap in pandemic preparedness.

## 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:

- a strong academic track record in economics, epidemiology, or a closely related quantitative discipline
- expertise in developing and applying quantitative modelling approaches relevant to macroeconomic or epidemiological analysis, or integrated modelling frameworks
- experience translating modelling or analytical outputs into insights relevant for policy decision making

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 working at the interface of research and public policy, including engagement with policymakers or government bodies
- experience with infectious disease modelling, health data, or modelling of shocks affecting labour supply, productivity, or economic activity
- experience collaborating across disciplines, particularly integrating methods or insights from economics and health or life science

## 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.