

April 2024

# Invitation to tender: | Productivity in health care

The Health Foundation is seeking a supplier to work with it to identify, categorise and compare a range of potential approaches for measuring productivity in health care.

Also included:

- Sample contract
- Tender response form (via the online applicant portal)
- Contract budget template (via the online applicant portal)

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## About the Health Foundation

The Health Foundation is an independent charitable organisation working to build a healthier UK. We will play our part in building a healthier nation by focusing on three key priorities:

<b>Improving people's health and reducing inequalities</b>	We will work with others to improve people's health and reduce inequalities by: <ul style="list-style-type: none"><li>• increasing understanding of the economic and societal benefits of good health</li><li>• focusing on the key role of economic, social and environmental factors in shaping health and driving inequalities</li><li>• working with stakeholders to build cross-sector support and mobilise action for the changes needed to promote healthier lives.</li></ul>
<b>Supporting radical innovation and improvement in health and care services</b>	We will support radical innovation and improvement in health and care services by: <ul style="list-style-type: none"><li>• promoting and evaluating new approaches to improve and transform services</li><li>• helping to build an ecosystem for the generation, spread and adoption of new ideas and innovations</li><li>• strengthening cultures and capability to deliver change among health and care professionals, organisations and systems.</li></ul>
<b>Providing evidence and analysis to improve health and care policy</b>	We will provide evidence and analysis to improve health and care policy by: <ul style="list-style-type: none"><li>• publishing high-quality research</li><li>• producing analysis, insights and commentary to inform discussion and debate</li><li>• working with stakeholders to develop long-term thinking and solutions to the challenges facing the health and care system.</li></ul>

We are also continuing to develop our thinking and practice on the ways we can have a positive impact on our mission through how we work, particularly through the following three cross-cutting themes:

**Equity, diversity and inclusion:** We are committed to equity, diversity and inclusion as an employer, a funder, and in our contributions to health and care policy and practice in the UK, as set out in our equality and diversity policy.

**Public participation:** We are also developing how we engage and involve people – individuals and communities – in what we do. We want to embed public participation more consistently and more widely across our work, to realise the benefit of multiple and diverse perspectives.

**Environmental sustainability:** We are committed to our environmental sustainability work, through both our research and analysis, and through our grant programmes.

Further details about the organisation can be found at [www.health.org.uk](http://www.health.org.uk)

## Summary

The Health Foundation is seeking a supplier to work with to identify, categorise and compare potential approaches for measuring NHS productivity, where productivity is defined as the quality and quantity of output produced with a given set of inputs.

The primary objectives for this project are two-fold:

- To gain a comprehensive understanding of the strengths and weaknesses of current approaches to measuring productivity, what types of questions those metrics can be used to address, and how they might be improved.
- To assess the scope for additional metrics or novel approaches to measuring productivity, and what these might be useful for. We are particularly interested in potential new methodologies for measuring productivity itself or the drivers of productivity, which complement the existing main metrics from the Office for National Statistics (ONS) and the University of York.

This project is the initial phase of a broader programme of work on NHS productivity. The overall aim of the wider programme of work is to develop a new set of measures for health care productivity that can be updated over time. The methods described and compared through this commission will guide us in commissioning the next phase of the wider programme. Subsequent commissions will involve the selection of a limited number of potential approaches for piloting, from those identified in this project, and then fully developing the chosen method after piloting and testing.

The budget for this project is set at a **maximum** of £60,000, inclusive of VAT and expenses. Work is scheduled to commence in July 2024, with the final deliverables expected by January 2025, subject to agreement at the contracting stage.

## Background

NHS productivity is always of critical importance because it determines the level of care that can be delivered with a given level of resourcing. However, the current and anticipated future challenges faced by the NHS in meeting demand have led the Health Foundation to make productivity a research priority. In recent years, increases in funding and staffing have not led to a commensurate rise in NHS activity, particularly in the acute sector, and there remain widespread workforce shortages and variations in care quality across the country.<sup>1</sup> In the longer term, levels of ill health in England are projected to rise, driven in large part by the ageing population.<sup>2</sup> With low economic growth and constraining tax revenues, maintaining a focus on productivity is vital to ensure the sustainable delivery of high-quality health care in the long term. The Chancellor's 2024 Spring Budget announced £3.4 billion of planned spending between 2025/26 and 2027/28 for digital and technological transformation in health care, and to support an NHS productivity plan. Alongside this, the NHS has committed to

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<sup>1</sup> Freedman S, Wolf, R. The NHS productivity puzzle: Why has hospital activity not increased in line with funding and staffing? Institute for Government; 2023.

<https://www.instituteforgovernment.org.uk/publication/nhs-productivity>

<sup>2</sup> Watt T, Raymond A, Rackett-Jacquet L, Head A, Kypridemos C, Kelly E, Charlesworth A. Health in 2040: projected patterns of illness in England. The Health Foundation; 2023.

<https://doi.org/10.37829/HF-2023-RC03>

delivering 1.9–2% productivity growth per year over the next five years, and to improve the way it measures productivity to facilitate assessment against this figure.

## **Productivity measurement**

The measurement of the productivity of a health system such as the NHS is complex. On the output side, just like other sectors such as education, there is no single metric that adequately captures all that we may value about what the NHS delivers. This is reflected in the seven NHS principles, which cover access, quality of care, value for money and accountability. Yet measuring output and understanding how it relates to inputs is crucial for guiding NHS operational decisions, including staff mix and how to allocate funding across services and settings. At the macroeconomic level, measurement is important for incorporating health care into measures of whole economy output and evaluating allocative efficiency. and evaluating allocative efficiency.

Adding to the complexity, the NHS produces a wide range of health services which can be aggregated in different ways. To address system-level questions, we might want to know the productivity of the NHS overall by summing all NHS outputs. For example, the ONS measures overall NHS and public sector productivity, which can be used to make assumptions about future funding requirements and to compare performance with other countries. At the sub-national level, we might also want to understand the productivity of specific sectors (eg, acute care), specialties (eg, orthopaedic surgery) or procedures (eg, knee replacements).

### *Current measures of productivity in the UK*

The Atkinson Review sought to improve the way public service outputs and productivity were measured.<sup>3</sup> The review identified direct methods of measuring health care outputs for a large proportion of health care activity, making the measurement of health care outputs and health care productivity more reliable. These measurements use the cost of health care services as a proxy for the value of the service. However, the current aggregate measurement of health care productivity (originating with Atkinson) has some limitations in guiding policy.

Two such measures from the ONS and the University of York estimate productivity using the cost of inputs and outputs, but with several key improvements. Both methodologies are based on health care outputs such as surgeries, hospital attendances and diagnostic tests, weighted by their cost. They adjust these health care outputs for quality, for example using waiting times and survival rates after hospitalisation. In doing so, the measures capture some important aspects of care that are not reflected in activity volumes and cost alone. In measuring inputs, they use expenditure data to measure the change in spending on capital, materials and staff. The University of York also offers a ‘mixed’ method, which uses staffing data to measure the volume and cost of staff, and expenditure data for other resources.

### *HM Treasury’s Review of Public Sector Productivity*

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<sup>3</sup> Atkinson Review: Final report. Measurement of Government Output and Productivity for the National Accounts. Palgrave Macmillan; 2005.

<https://webarchive.nationalarchives.gov.uk/ukgwa/20160105160709/http://www.ons.gov.uk/ons/guide-method/method-quality/specific/public-sector-methodology/articles/atkinson-review-final-report.pdf>

This commission coincides with HM Treasury's (HMT) launch of a review of public sector productivity measurement.<sup>4</sup> Given that health care represents the largest share of public sector spending, the HMT review will include a significant focus on health care. It will look specifically at enhancing current health care productivity measurements published by the ONS and the University of York. As such, it primarily aims to improve the coverage of output and input measures, but may also cover issues such as the value of spare capacity or a shift from inpatients to outpatients, which are relevant to our work programme. We have engaged with the ONS to discuss the objectives of their commission, and we will take this into account as our work programme on productivity evolves.

## Rationale for the project

The Health Foundation's REAL Centre (research and economic analysis for the long term) provides independent research and analysis to support better long-term decision making in health and social care. This includes the production of funding and workforce projections, where assumptions about productivity are pivotal. An understanding of what different productivity measures encompass, and eventually an improved metric, will allow for reasoned and transparent decisions about those assumptions.

Beyond projections, a measure that can assess the drivers of productivity could help with understanding the feasibility of productivity targets and the actions that would be needed for these to be met. Government plans, such as the *NHS Long Term Workforce Plan*, often set forward-looking productivity targets. Yet, there is currently no systematic approach to determining where those productivity gains (or losses) could come from. From a policy perspective, a more relevant measure or measures of productivity would allow us to understand what the key drivers are, and the opportunities for where a change in policy focus could make the biggest difference in unlocking potential productivity gains.

The need to improve productivity is particularly important in the context of an ageing population and associated increase in demand for health care. Understanding how/when productivity gains can slow the fiscal impact of increasing demand for health care is a key policy question that a new metric could help inform.

Finally, the REAL Centre recognises that the value of the health care system extends beyond measures of costs and activity. For example, patient experience, staff wellbeing and creating spare capacity/limiting waste is crucial from the policy maker's perspective. Many of these factors are hard to quantify in financial terms. However, ignoring them can provide a misleading picture of productivity and risks poorer decision-making as a consequence.

Given this rationale, we are seeking a partner who will adopt a broader approach to productivity and look beyond measures of health care activity. The work should include examining the ratio between (cost and/or quality-weighted) outputs and inputs as the ONS<sup>5</sup>

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<sup>4</sup> Improved methods for total public service productivity: total, UK, 2021. Public Service Productivity Review; 2024.

<https://www.ons.gov.uk/economy/economicoutputandproductivity/publicservicesproductivity/methodologies/improvedmethodsfortotalpublicserviceproductivitytotaluk2021>

<sup>5</sup> Public service productivity, UK: 1997 to 2022. Office for National Statistics; 2023.

<https://www.ons.gov.uk/economy/economicoutputandproductivity/publicservicesproductivity/articles/publicserviceproductivityuk/1997to2022>

and University of York<sup>6</sup> measures have done. However, it should also consider other concepts such as health outcomes, patient experience and system resilience, using methods such as the production possibility frontier, cost functions, capital investment (capital deepening), efficiency and any other perspective which gives a sense of how productive the NHS is.

The commission will also form part of a broader three-to-five-year programme of work on efficiency and productivity in the Health Foundation's REAL Centre.

## Details of the work

**We are seeking a supplier to identify, classify and compare a range of potential approaches for measuring NHS productivity.**

The work should include both existing methodologies used within health care, potential modifications or enhancements to those approaches, and alternative methods not currently in widespread use in a health care setting. Examples of these types of methods could be constructing periodic measures of the NHS's productivity possibility frontier, cost functions, qualitative approaches (such as the socio-technical allocation of resource), or methods used in other sectors that could be explored to measure NHS productivity. This is not an exhaustive list, and the chosen supplier would be expected to engage with a wide range of stakeholders to come up with a comprehensive set of methods or approaches.

For each of these methods or approaches, we expect the chosen supplier to provide the following details and judgements;

1. **Description:** the concept of productivity (eg, labour productivity, total factor productivity, capital deepening) and how inputs and outputs are measured or would be measured.
2. **Use:** the questions the method/metrics can or could be used to answer, including the unit or level considered (eg, total NHS, specialty, setting, procedure).
3. **Limitations:** the questions the methods/metrics could not answer and any other limitations.
4. **Added value:** where the approach is new, or a modification of existing methods, how the approach can add value relative to the existing ONS/University of York methodologies.
5. **Feasibility:** how easy it is to get an analytically useful measure in practice, including whether the required data exist and are robust.
6. **Resilience:** does it incorporate the value of spare capacity or resilience?
7. **Operational decision making:** how could the potential approach help to guide operational decision making in practice?
8. **Frequency:** how often the measure is, could or should be updated.

The above sets out the minimum elements we would expect from the work, but we would encourage applicants to incorporate additional elements that they see as being relevant in collaboration with us. The chosen supplier may find it useful to arrange the different measures through a classification system or typology.

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<sup>6</sup> Productivity of the English National Health Service: 2019/20 update. Centre for Health Economics, University of York; 2022. <https://www.york.ac.uk/che/news/news-2022/che-research-paper-185/#:~:text=NHS%20productivity%20growth%20is%20measured,care%20provided%20to%20those%20patients>

By understanding that various methods exist, from macroeconomic quantitative approaches to qualitative data-based approaches, the goal is to gain a comprehensive understanding of potential approaches to measuring NHS productivity to guide subsequent phases of this workstream.

### *Methodology or delivery mechanism*

We would anticipate that the research will be primarily desk-based, involving a review of previous approaches that have been used and outlined, an analysis of how existing data could be used to understand how productive the NHS is, or repurposing existing methods for the purpose of measuring productivity in the healthcare system. We will work with the successful bidder to optimize the approach.

A key component of this commission should involve engagement with a wide range of stakeholders that provide distinct and different approaches to the question. This could include stakeholders who work on related issues within and outside of healthcare, in addition to stakeholders who may end up using the outcome of the productivity programme, such as policymakers and staff on the ground.

## Ways of working

The work will be managed by a project team involving a Research Manager and Research Officer in the Health Foundation's Research team, with strategic and content input provided by Economists from the REAL Centre.

We will want to engage regularly and collaborate with the supplier on this project, but we will agree on the nature of updates with the provider at the inception meeting. We anticipate the supplier will provide updates throughout the duration of the study and we will work together once appointed to co-design the ways of working.

We expect the supplier to ensure that the work plan is delivered and to steward an iterative approach. The supplier will make reasonable allowances for the time required to fulfil these obligations and will flag early to the Health Foundation team if too much resource is being used or resource is not aligned to the agreed work plan, which might risk us not achieving our desired outcome on time and on budget.

A Privacy Impact Assessment will be submitted by the Health Foundation to the data protection team. If the supplier has not worked with the Health Foundation before they will be required to complete a data protection assessment.

## Deliverables and requirements

Specific deliverables are to include:

Deliverables	Date
<b>A briefing for policymakers and a technical report</b> that identifies, describes, classifies and compares wide range of possible analytical approaches that could inform the development of a new measure of productivity. This would include considerations such as quantitative vs. qualitative methods; best use of the potential measure; limitations; added	January 2025

value relative to existing measures; feasibility; frequency of updates; etc. We would hope this could be used to develop a publishable peer-reviewed paper.	
<b>Recommendations</b> for follow-on projects (Phases 2 and 3) to produce more in-depth analysis, and to highlight where further in-depth work would be of most value.	January 2025
<b>Interim project meeting updates</b> from the supplier with the Health Foundation project team throughout the project (depending on methodological milestones and when decisions need to be made between the supplier and the Health Foundation to progress the project)	As agreed at the inception meeting

### Audiences for this work

In commissioning any piece of research, we ensure that an outline communications plan accompanies the research plans from the start, and this is fully developed through to completion.

There will be a range of audiences for this work which will include:

- The Health Foundation's REAL Centre team
- External stakeholders in policy, practice, and academia in the UK and elsewhere.

We are keen to ensure that the development process of this work supports our wider stakeholder engagement work.

Our aim in terms of dissemination is to provide outputs that are useable by those in policy and politics who are research literate but time poor. We may therefore produce Health Foundation outputs based on the provider's research report. In such an instance, we may expect our provider to work with us to provide insight into the key findings and feedback on early drafts of the output.

We expect our provider to join us for up to two roundtable meetings with key stakeholders that may be necessary, to add to the debate about the findings and/or test and validate the findings. Please ensure that your proposal makes reasonable allowance for the time required to fulfil these obligations surrounding dissemination.

### Costs

Based on previous similar work commissioned by the Health Foundation, the budget is a maximum of £60,000 including attending up to two round tables (or equivalent events), VAT and expenses. Tenders above this amount will be considered if the proposal represents exceptional value for money.

We will commission this study by issuing a contract for services and, as such, we expect VAT is likely to be payable on all aspects of the work. **Please consult your contracting team and/or finance team to ensure that VAT has been included appropriately before submitting your proposal and budget.**

### Selection criteria

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**The following criteria will be used to assess the applications and inform the shortlisting process:**

- How the approach and proposed methods meet the needs of the Health Foundation and the aims of this project.
- Skills and expertise in relevant research approaches and analytical techniques.
- Strong understanding of productivity in healthcare. Experience of conducting other work in this area would be desirable.
- Appropriate project management, risk management and quality assurance plans.
- Capacity to deliver on time and budget.
- Ability to work collaboratively with a range of stakeholders.
- Value for money.

## Submitting your tender and selection process

### How to apply

Please **complete your application** by **12:00 (midday) on 3 June 2024**. We will not accept proposals submitted after this time.

You will need to log in/register a new account on our portal, then select the relevant opportunity. We use a standard online form for all tender responses and there is opportunity to upload relevant documents.

Suppliers will need to submit their completed application form via **our applicant portal**, referring to our **guidance**.

We welcome applicants to submit any questions to **research.mailbox@health.org.uk** by **5pm, 15 May 2024**.

Questions and responses will then be provided anonymously on the Health Foundation's webpage.

### Assessment and selection

Assessment of applications will take place during early to mid-June 2024. Applications will be assessed by representatives from the Health Foundation and external advisers.

We plan to inform applicants whether your proposal has been shortlisted in the week commencing **17 June 2024**.

We intend to interview shortlisted bidders in the week commencing **24 June 2024** to explore proposals in more depth. Please ensure you have availability on those days.

Proposals will be assessed using the criteria noted above.

It is important to the Health Foundation that the chosen provider is able to demonstrate that the right calibre of staff will be assigned to the project; therefore, the project leader who will be responsible for the project should be present during the panel interviews if you are shortlisted.

## **Instructions for tender responses**

The Foundation reserves the right to adjust or change the selection criteria at its discretion. The Foundation also reserves the right to accept or reject any and all responses at its discretion and to negotiate the terms of any subsequent agreement.

This work specification is not an offer to enter into an agreement with the Foundation, it is a request to receive proposals from third parties interested in providing the deliverables outlined. Such proposals will be considered and treated by the Foundation as offers to enter into an agreement. The Foundation may reject all proposals, in whole or in part, and/or enter into negotiations with any other party to provide such services whether it responds to this specification and request for response or not.

The Foundation will not be responsible for any costs incurred by you in responding to this specification and will not be under any obligation to you with regard to the subject matter of this specification.

The Foundation is not obliged to disclose anything about the successful bidders but will endeavour to provide feedback, if possible, to unsuccessful bidders.

Your bid is to remain open for a minimum of 180 days from the proposal response date.

You may, without prejudice to yourself, modify your proposal by written request, provided the request is received by the Foundation prior to the proposal response date. Following withdrawal of your proposal, you may submit a new proposal, provided delivery is affected prior to the established proposal response date.

Please note that any proposals received which fail to meet the specified criteria contained in it will not be considered for this project.

## **Confidentiality**

By reading/responding to this document you accept that your organisation and staff will treat information as confidential and will not disclose to any third party without prior written permission being obtained from the Foundation.

Providers may be requested to complete a non-disclosure agreement.

## **Conflicts of interest**

The Foundation's conflicts of interest policy describes how it will deal with any conflicts which arise as a result of the work which the charity undertakes. All external applicants intending to submit tenders to the Foundation should familiarise themselves with the contents of the conflicts of interest policy as part of the tendering process and declare any interests that are relevant to the nature of the work they are bidding for. The policy can be found and downloaded from the Foundation's website at the following location:

<https://www.health.org.uk/COI>

## **Timetable**

April 2024

Item	Date
<p><b>Questions to be submitted to <a href="mailto:research.mailbox@health.org.uk">research.mailbox@health.org.uk</a></b></p> <p>A summary of questions and responses will be provided anonymously on the Health Foundation's ITT webpage for this project</p>	<b>By 15 May 2024 (5pm)</b>
Closing date for applications	<b>3 June 2024 (midday)</b>
Review of applications and shortlisting	<b>Early June 2024</b>
Confirmation of shortlisted applicants	<b>w/c 17 June 2024</b>
Interviews to be held	<b>w/c 24 June 2024</b>
Successful bidder notified	<b>w/c 24 June 2024</b>
Inception meeting	<b>w/c 1 July 2024</b>

### Questions

If you have any queries relating to the tendering process or the nature of the service required, please email [research.mailbox@health.org.uk](mailto:research.mailbox@health.org.uk) by **15 May 2024**. We will aim to reply to queries within five working days.

### Contract arrangements

The Health Foundation's standard contract for delivery of services is attached to this ITT. Please ensure that you have read our sample contract and agree to the terms. Any queries about the contract terms should be detailed in your application.