Changes to application processes to reduce likelihood of bias in outcomes: An NIHR case study

Introduction

Funding organisations are increasingly working to address inequalities in the grant life cycle. However, until recently, less attention has been paid to inequalities at the pre-award stage – which includes announcing opportunities, and preparing, submitting, and reviewing applications. A 2022-23 project on this topic, led by the Elizabeth Blackwell Institute at the University of Bristol with support from MoreBrains Cooperative, resulted in 11 concrete recommendations for how funders and institutions could help improve equality, diversity, inclusion, and transparency in the process of applying for research funding. Subsequent work with the Declaration on Research Assessment (DORA) funder discussion group identified three priority recommendations for funding organisations. This case study has been developed as part of a follow-up University of Bristol-funded project focusing specifically on how funders can implement some of these recommendations.

The National Institute for Health and Care Research (NIHR) responded to a call by DORA for examples of work currently being carried out by funding organisations on changes to their application processes designed to reduce likelihood of bias in outcomes. This high-level case study focuses on some of NIHR's work in this area as part of their Research Inclusion Strategy.

This case study is based on information provided by NIHR by email and via a 30-minute interview with Alejandra Recio-Saucedo, Senior Research Fellow, who has also reviewed it for accuracy.

About NIHR

NIHR is funded by the Department of Health and Social Care to improve the health and wealth of the UK through research. It works with the National Health Service (NHS), universities, local government, other research funders, patients, and the public via a range of activities, including funding and supporting the delivery of world-leading health and social care research. NIHR supports health research in low- and middle-income countries.

The NIHR Research Inclusion strategy

The NIHR Research Inclusion strategy represents a formal commitment to promote equality and diversity within the health and social care research landscape. It aims to foster inclusivity across all levels of the organisation, from its workforce to research participants and the public. By tackling inequalities associated with a broad range of characteristics, the strategy seeks to improve the relevance and quality of research, ultimately enhancing the health and well-being of the nation. NIHR is dedicated to leading by example, embedding inclusion in all its operations, and driving positive change within the wider research community. One of the organisation's first steps in delivering the strategy was to understand stakeholders' demographics: who was applying for funding, who was serving on their committees, who was being awarded funding, and more. Since 2020, diversity data are reported, and learnings from this are embedded in all strands of the Research Inclusion strategy, with the aim of progressing NIHR's vision of being an inclusive funder that delivers the best research for everyone, while simultaneously widening access and participation.

The context

Underpinning the strategy are a Theory of Change and results framework, with established feedback loops against which change is tracked and impact can be evaluated. The strategy is built on four core objectives and supported by a comprehensive set of interventions. Key ongoing interventions are grouped under four pillars, and geared towards delivering the strategy and generating significant short- and mid-term impact:

- **Implementation of Equality Impact Assessments** to enhance access, gather evidence to demonstrate NIHR's commitment to eliminating discrimination, and fostering equal opportunities to interact and contribute to the organisation.

- **Development and implementation of an NIHR Disability Framework** aimed at unlocking the full potential of disabled researchers, research participants, and NIHR colleagues. It promotes person-centred approaches, celebrates diverse experiences, and empowers disabled individuals to contribute to improved health through research.

- **Funding applications will be required to track research participants' sex and gender characteristics** in order to understand participation level and ensure that research findings are relevant across groups.

- **Embedding evidence-led diversity and inclusion** by deriving actions from the broader NIHR diversity data strategy.

An example

One way that NIHR is supporting access to funding opportunities is through the introduction of narrative CVs for applicants. However, the organisation is aware of unintended consequences of this initiative, for instance, in terms of additional burden in writing and reviewing. To understand factors relevant to implementing this initiative, as part of a wider programme of work the organisation conducted an investigation, consulting with cross-stakeholder focus groups and engaging with the Royal Society. In terms of the time and skills required for producing narrative CVs, feedback was mixed. For example, researchers, especially early career researchers, were encouraging, but reviewers were concerned about reviewing multiple narrative CVs, particularly for research teams, and were unsure how that information could be used for decision-making. As a result of the wider programme of work on the use of the narrative CV, NIHR decided to start rolling the programme out for fellowships (as they are individual awards), while continuing to conduct pilots for more complex funding calls (which involve teams, making narrative CVs more challenging). In this way, the organisation hopes to support change at a rate that stakeholders can adapt to.

Tracking and measuring progress

Establishing the initial data diversity baseline was fundamental to understanding the makeup of the various groups of award-holders, applicants, and committees. Once this was accomplished, NIHR started making changes to its application process, for instance, making inclusion in applications a condition for funding. Tracking the effect of the activity in the research inclusion strategy will ensure that the goals surrounding inclusion in the organisation are met. The expectation is that progress will be evidenced as participation patterns in research (such as the structure of teams) reveal changes as measured against the baseline. Tracking these changes in the makeup of participation and teams itself requires changes to systems. NIHR has therefore instigated a programme to change its digital systems, as well as changing guidelines for applicants and rethinking the support applicants will need as they navigate new processes. Findings from this report will feed NIHR high-level indicators — a diversity indicator and an inclusion indicator to track change.

Evaluations ensure continuous learning and improvement. The first inclusion survey was run early in 2024 with the employee stakeholder group, and it will be rolled out across other groups and repeated over time, so there will be further understanding of inclusion culture in the organisation and adjustments in the future.

Conclusions

The research ecosystem is intricately interconnected. Changes can have domino effects, and NIHR recognises the need to pace its approach in order to reduce the likelihood of unintended consequences. The organisation is therefore treading a careful path, with ambitions for three and five years' time, while prioritising the most urgent issues. These include avoiding increasing bureaucracy; ensuring that requesting more data does not result in current forms becoming more complex; embedding requests in a way that maintains workload at or below current levels; and making inclusion a part of "business as usual" rather than an additional requirement.