

INFORM project summary

Improving pre-funding peer review to increase the informativeness of randomised trials (INFORM)

Randomised trials are central to healthcare decision making, but many are designed or conducted in ways that limit how useful their findings will be. Some estimates suggest that a large proportion of trials go ahead despite serious flaws, meaning that from the outset they are unlikely to provide meaningful evidence for patients, clinicians, researchers, or policy makers. This contributes to research waste and can weaken the evidence used to improve care.

The INFORM project aims to address this problem by improving pre-funding peer review, which is the stage where trial proposals are assessed before funding is awarded. This stage matters because it offers an opportunity to identify important weaknesses early enough for them to be addressed. If major problems are missed at this point, trials may still be funded and delivered despite being unlikely to produce informative results.

The project is informed by the framework developed by Zarin and colleagues, which sets out five conditions for a trial to be informative: Importance, Design, Feasibility, Integrity, and Reporting. INFORM will consider all five, but will focus mainly on Importance, Design, and Integrity, as weaknesses in these areas can fundamentally undermine a trial. A trial cannot recover from asking an unimportant question, using a flawed design, or being conducted and analysed in a scientifically weak way.

INFORM is a 20-month project with three main parts. First, the team will carry out a rapid review of the literature and analyse key guidance and policy documents to identify how pre-funding peer review could better support trial informativeness. It will also include qualitative interviews with a globally relevant sample of stakeholders, including investigators, sponsors, funders, regulators, and ethics representatives, across both academic and pharmaceutical settings. These interviews will explore how informativeness is understood, how it is currently assessed, what is being done to improve it, and why uninformative trials continue to persist.

Second, findings from this work will be mapped against current practice to identify what should be happening in pre-funding peer review, what is actually happening, what evidence supports existing approaches, and where important gaps remain. These findings will then be applied in practice by working with at least one funder to review and modify an existing pre-funding peer review process. This will include identifying changes that are feasible, testing them within a future funding call, and developing metrics to judge whether the modified process is an improvement.

Third, the project will produce practical outputs to support wider use of the findings. These will include scientific papers, policy recommendations, videos, and a training package for funders and others involved in trial review. The training package will be made available

through the Trial Forge website (<https://www.trialforge.org/inform/>) and will provide practical materials that can be used to strengthen peer review processes and support more informative trials.

Overall, INFORM is about improving the quality and usefulness of randomised trials by strengthening the point at which problems may still be prevented. By focusing on how trials are reviewed before funding is awarded, the project aims to reduce avoidable research waste and support the generation of evidence that is more relevant, robust, and useful.

The INFORM project is funded by the Gates Foundation, grant INV-067716. The findings and conclusions contained within are those of the authors and do not necessarily reflect positions or policies of the Gates Foundation.