VIEWPOINT

Responding to the Call to Meaningfully Assess Institutional Review Board Effectiveness

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Independent review and oversight have long been recognized as requirements for ethical research involving human participants, leading institutional review boards (IRBs) to become deeply entrenched in the research enterprise. Against this background, it would be reasonable to expect that there are clear, comprehensive, and reliable approaches to evaluate whether the IRB system, any individual IRB, or the Human Research Protection Programs (HRPPs), of which IRBs are often a part, are effective in protecting the rights and welfare of research participants. However, a 2023 Government Accountability Office (GAO) report1 is the latest in a long line of analyses to conclude that nearly 50 years after the requirement for IRB review of research was first codified in federal regulations, we still have no such measures.2 The task of meaningfully evaluating IRB effectiveness beyond mere regulatory compliance is a hard one, but recent progress is promising and could be even stronger with adequate resources.

The GAO Report

Most IRBs are affiliated with institutions conducting human research, such as universities, hospitals, or the government. However, a growing share of research is overseen by a small number of free-standing IRBs not affiliated with any research institution, sometimes referred to as “independent” or “commercial” IRBs. In 2019, concerned about the role of private equity in the growth and consolidation of the for-profit independent IRB market, Senators Warren, Sanders, and Brown asked the 2 largest private equity-owned IRBs, run by WCG Clinical and Advarra, to explain how they ensure the protection of research participants.3 Not satisfied with the companies’ responses, in June 2020, the senators requested that the GAO investigate “the operation of commercial IRBs,” including the adequacy of current standards of IRB quality, efficiency, and effectiveness.4

The GAO released its report in February 2023. Among other things, it found that despite comprising only 2% of the boards registered with the Department of Health and Human Services Office for Human Research Protections (OHRP), independent IRBs now review nearly half of clinical research conducted under US Food and Drug Administration (FDA) investigational new drug applications, overtaking university IRBs for the largest share of such reviews in 2021.5 Yet the report includes no findings regarding the impact of the for-profit model on IRB quality, nor any comparison of the effectiveness of various types of IRBs—an unsurprising outcome given the lack of established quality measures.

The report draws 2 primary conclusions. First, the GAO raises concerns that the OHRP and FDA, the 2 federal entities tasked with overseeing IRBs, are not adequately inspecting them due to reliance on inaccurate registry data, absence of a risk-based approach to selecting IRBs for inspection, and a small number of inspections overall. In response, the GAO recommends improvements to the registry data and that the OHRP and FDA undertake annual risk assessments to determine whether they are conducting an adequate number of inspections to optimize their use in overseeing IRBs and protecting research participants. Notably, the report does not call for additional funding to support these actions, despite noting that OHRP’s budget has remained flat, as well as the existence of prior reports raising similar concerns.1,5

Second, the report concludes that despite repeated calls over the past several decades for the OHRP and FDA to develop approaches to assess IRB effectiveness, they have not yet done so. This is a critical finding considering the GAO’s recommendations on IRB inspections: even if regulators do more of them, what exactly should such inspections be looking for? They can assess regulatory compliance, but the regulations themselves leave wide discretion for IRBs, such as whether risks and benefits are appropriately balanced or informed consent is adequate. The regulations also fail to address several important ethical issues relevant to participant protection, such as posttrial access to study interventions or compensation for research-related injury.6 Accordingly, inspecting for regulatory compliance alone won’t be a sufficient mechanism for evaluating IRB effectiveness. Some other approach is needed, leading to the GAO’s final recommendation: “OHRP and FDA should convene stakeholders to examine approaches for measuring IRB effectiveness in protecting human subjects.”7 Notably, the Consortium to Advance Effective Research Ethics Oversight (AEREO) is already doing exactly that.

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AEREO

Founded in 2018, AEREO’s mission is to use empirical study to define, evaluate, and improve the effectiveness of IRBs and HRPPs in both protecting participants and promoting ethical research. This is challenging because it requires further operationalization of those subjective and amorphous goals. Moreover, although it is easy to measure the costs and burdens associated with IRB oversight in terms of delay and expense, it is much harder to measure prevention of harm: if participants are protected, is it because of IRB review and oversight or something else? Stated in the other direction, given that “IRBs are only one part of the framework of stakeholders responsible for protecting human subjects”1 (in addition to sponsors, investigators, and others), if participants are harmed, is it the IRB’s fault? These challenges explain why the GAO found itself yet again calling for the development of effectiveness measures and why IRBs have so often fallen back on regulatory compliance, efficiency measures, and an overarching “audit culture.”2 They also explain why community interest in AEREO has been so strong, with more than 100 volunteer members from more than 80 institutions, including human research protection professionals from IRBs of all types, research ethics scholars, and other key stakeholders, all of whom are committed to collaboratively developing meaningful measures of IRB quality and effectiveness.

AEREO has made substantial advances in 5 years, but there is more work to be done.7 In examining existing quality assessment tools for IRBs and HRPPs, we found a common emphasis on procedural and structural elements, but little attention to outcomes in terms of how things go for research participants. Interviews with more than 80 stakeholders identified a need to recenter definitions of IRB effectiveness on participant protection (in addition to relationship-building with investigators and investigator satisfaction) and to move beyond quantitative metrics, such as compliance and efficiency, to more meaningful qualitative assessments. This has pushed AEREO’s work to focus on ensuring that IRBs have adequate expertise, independence, and diversity of perspective, as well as developing mechanisms for IRBs to learn from previous decisions to clarify ambiguous ethical principles through application to specific cases, akin to a type of “IRB precedent” similar to judicial common law. Additional high-priority endeavors include evaluating the quality of IRB deliberation, considering how best to incorporate participant experience and perspectives into IRB decision-making, and learning from investigators whether and how IRBs help them identify and address ethical challenges in research. Overall, AEREO’s work has emphasized ways to ensure that IRBs behave reasonably, even as it remains elusive to directly measure their impact on participant protection.

Conclusion

The federal entities that oversee IRBs have been repeatedly asked to develop standards to assess how well the IRB system protects the rights and welfare of research participants, but they have never been given the resources needed to do so. The 2023 GAO report represents an exciting opportunity to finally change that and harness work already being done to push forward a stakeholder-driven, evidence-based approach to assessing IRB effectiveness. This is an especially important endeavor at present in light of growing recognition of the need to improve the trustworthiness of the research enterprise. Groups like AEREO—in partnership with key consortium collaborators Public Responsibility in Medicine and Research and the Association for the Accreditation of Human Research Protection Programs—stand ready and eager to help.

REFERENCES


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