

Toward Equitable Innovation in Health and Medicine: A Framework

An Action Agenda for Stakeholders

The National Academies of Sciences, Engineering, and Medicine and National Academy of Medicine’s 2023 consensus study report, *Toward Equitable Innovation in Health and Medicine: A Framework*, outlines six recommendations for reorienting the current system of emerging science, technology, and innovation in

health and medicine to one that is more equitable and responsive and capable of recognizing and addressing inequities as they arise. The report table below provides a high-level summary of needed actions and desired outcomes for major stakeholders.

Table 5-2 An Action Agenda for Stakeholders

Actors	Actions	Desired Outcomes
White House Office of Science and Technology Policy (OSTP) and Equity in Biomedical Innovation Task Force	<p>Identify priorities for aligning emerging biomedical science, technology, and innovation with the report’s governance framework for equity.</p> <p>Work with department and agency equity teams and White House Steering Committee on Equity to translate these priorities into goals to be accomplished over the next decade.</p> <p>Partner with biomedical innovation stakeholders to engage proactively with underserved communities.</p>	<p>An innovation system that catalyzes the discovery, translation, and use of emerging science and technology in health and medicine and leads to innovation aligned with ethical principles, including equity.</p> <p>Federal and multistakeholder leadership to advance equitable innovation.</p>
Funders of emerging science, technology, and innovation	<p>Mandate ethics training that incorporates an understanding of equity.</p> <p>Support efforts that broaden views of who is part of the innovation workforce and where innovation occurs, including by supporting underserved communities to enhance their ability to participate in innovation.</p> <p>Where appropriate, require applicants to address types of equity associated with proposed work, including community engagement plans, and/or to reassess a technology’s alignment with equity periodically.</p> <p>Include diverse perspectives on funding panels and periodically undertake portfolio analyses for alignment with equity aims, to inform decision making.</p> <p>Support the development of equity science and enhanced equity measures and benchmarks usable at multiple points throughout the technology life cycle.</p>	<p>Expanded methods, metrics, and benchmarks for assessing alignment with equity to inform decision making by stakeholders throughout the innovation system.</p> <p>Policies that recognize the importance of alignment with equity and evaluation criteria for undertaking assessments.</p> <p>Integration of ethical concerns, including stakeholder needs and values, into the formulation, funding, and conduct of research.</p>

<p>Researchers and organizations, from academia and industry, that conduct research and development</p>	<p>Demonstrate organizational commitment to equity in biomedical innovation, including in training programs and technology assessments.</p> <p>Develop guidance and standards for academic and professional training incorporating equity.</p> <p>Use best practices for codesigning research with affected communities, and implement designs that mitigate biases and consider the full range of anticipated users.</p> <p>Include diverse perspectives on review panels, and consider whether research designs are likely to benefit or burden particular groups unfairly.</p>	<p>Integration of ethical and equity concerns, including stakeholder needs and values, into the formulation and conduct of research and development.</p> <p>Policies that recognize the importance of alignment with equity and evaluation criteria for undertaking assessments.</p> <p>Substantive partnerships, synergies, and collaborations that address needs and opportunities.</p>
<p>U.S. Patent and Trademark Office, technology transfer and licensing offices, law firms, and venture capital and other investors</p>	<p>Expand engagement with research and social science experts to understand ethical and equity considerations associated with new intellectual property.</p> <p>Incorporate ethics and equity assessment more fully into licensing and technology transfer practices, including developing and making use of enhanced equity provisions in licensing and start-up agreements.</p> <p>Make use of models and practices for recognizing the contributions of research participants to resulting intellectual property.</p> <p>Require patent descriptions to be transparent about the data, populations, and algorithms on which they are based.</p> <p>Periodically undertake portfolio analyses for alignment with equity aims, to inform decision making.</p>	<p>Enhanced use of provisions in IP identification, management, licensing, and startup agreements that facilitate public benefit and equity.</p>
<p>Affected communities, including those that are historically marginalized and underrepresented</p>	<p>Identify questions and research areas that would address areas of community interest and need.</p> <p>Participate in developing a shared vision for engagement for a given research project.</p> <p>Participate in developing equity science.</p>	<p>Sustained, bidirectional participation and engagement in the innovation system.</p> <p>Expanded methods, metrics, and benchmarks for assessing alignment with equity.</p>
<p>Regulatory stakeholders</p>	<p>Require testing and analyses that meaningfully reflect the full range of intended users and contexts.</p> <p>Incorporate mechanisms for engaging with affected communities, considering input received, and explaining how the information will be used in decision making.</p> <p>When relevant, require postmarket analyses to identify whether inequities have arisen, and take action to address them.</p>	<p>Policies that recognize the importance of alignment with equity and evaluation criteria for undertaking assessments.</p> <p>Governance that is responsive to changes in equity impacts.</p>

<p>Health care payers and delivery stakeholders</p>	<p>Include equity science metrics and analysis in purchasing, use, and coverage decisions.</p> <p>Use postmarket analyses to identify whether inequities have arisen, and take action to address them.</p> <p>Periodically conduct or require portfolio analyses for alignment with equity aims, to inform decision making.</p>	<p>More equitable access to new technologies and more equitable health outcomes.</p>
<p>All stakeholders</p>	<p>Promulgate a culture of emerging science, technology, and innovation that includes awareness of equity as a normative principle.</p> <p>Consider how information learned from the development and use of a technology provides new conceptual understanding or new problem formulations or identifies future research needs.</p> <p>Consider whether a fuller understanding of the technology’s impacts through the life cycle reveals a need for governance changes (to oversight mechanisms, incentives, or other actions).</p> <p>Support and take part in the development and dissemination of context-specific equity playbooks.</p>	<p>A learning system that fosters equitable innovation in health and medicine.</p> <p>Context-specific guidance on equity tools and strategies targeted to particular fields, roles in the innovation life cycle, or equity considerations.</p>

To read the full report, please visit
<http://www.nationalacademies.org/ESTI-study>

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