F. No.T.11014/01/2020-HR
Government of India
Ministry of Health & Family Welfare
Department of Health Research

2nd Floor, IRCS Building
New Delhi- 110001
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Public Opinion

I would like to apprise you that the Government of India, is in the process of formulating the National Health Research Policy (NHRP), to provide a strategic framework for strengthening and guiding India's health research ecosystem over the coming years.

2. The draft NHRP (copy enclosed/attached) has been prepared through extensive deliberations and inputs from various stakeholders, incorporating their suggestions and recommendations. The Policy seeks to foster a trusted, adaptive, inclusive, self-reliant, and impact-oriented health research ecosystem that is responsive to the health needs of the people of India. It aims to promote high-quality, ethical, and innovative research; strengthen research capacity, infrastructure, and enabling systems; support the translation of research into policies, programmes, practices, and products; and address national and emerging health priorities to improve health outcomes and equity.

3. I would request you to kindly provide your suggestions on various aspects of the draft NHRP so that it may be finalized as a comprehensive and forward-looking policy document for the health research sector in the country. Since this is a time-bound exercise, I shall be grateful if you could provide your comments and suggestions by 27-07-2026 on email id nhrp-dhr@gov.in.

6/7/26

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Ministry of Health and Family Welfare
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National Health Research Policy
2026

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India's health security, social well-being, and economic progress will depend increasingly on the strength of its health research ecosystem. As India advances toward the national commitment of Viksit Bharat 2047, health research must become a strategic national capability: able to generate evidence for Indian conditions, develop and validate indigenous solutions, strengthen health systems, prepare for emerging threats, and contribute knowledge of value to the world.

India has built substantial scientific and public health capacity over successive decades, anchored by the Indian Council of Medical Research as the principal national agency for biomedical and health research. The ecosystem now includes public institutions, universities, medical colleges, not-for-profit research organisations, field platforms, hospitals, industry, startups, professional bodies, and health systems. The next stage of national development requires this ecosystem to become more coherent, inclusive, self-reliant, and accountable for impact.

The need is clear. Research capacity remains concentrated in a limited number of institutions and regions. Priorities are not always aligned with India's most pressing health needs, health-system challenges, equity concerns, preparedness requirements, and areas of strategic national importance. Administrative, financial, and regulatory processes can delay funded research. Translation from evidence to policy, programmes, clinical practice, products, and public benefit remains uneven. Assessment systems still rely heavily on conventional academic metrics and do not fully capture the wider value of research for health systems, technologies, institutions, communities, and society.

The National Health Research Policy 2026 addresses these challenges by treating health research not as a collection of isolated studies, grants, publications, or technologies, but as a national problem-solving system. Such a system must identify the right questions, support the right capabilities, protect public trust, generate and validate solutions, translate evidence into action, and assess whether research improves health and strengthens the country.

For the purposes of this Policy, health research includes the systematic generation, synthesis, application, and assessment of knowledge to understand health and disease, improve health care and public health systems, develop and evaluate technologies and interventions, and advance the health and well-being of populations. The Policy applies across basic science, epidemiology, clinical research, public health, health systems, implementation research, health technology development, behavioural and social research, digital health, preparedness-related research, and emerging domains relevant to health.

The vision of the Policy is to build a national health research ecosystem that is capable, inclusive, self-reliant, and responsive to changing health needs; one that establishes India among the leading nations in health research and innovation and contributes knowledge and solutions of value to the world.

What the Policy Changes

The Policy moves India's health research ecosystem from fragmentation toward architecture, from output alone toward impact, and from isolated capability toward coordinated national strength.

It establishes clearer stewardship without centralising control. Health research cuts across departments, disciplines, sectors, institutions, and levels of government. The Policy creates a governance architecture that supports coordination, alignment, and accountability while respecting existing mandates and institutional autonomy.

It creates a National Health Research Agenda to align research effort and investment with national health needs, health-system priorities, equity, preparedness, scientific opportunity, indigenous innovation, and strategic national importance. The Agenda will be transparent, periodically reviewed, and informed by States, Union Territories, communities, patients, frontline workers, implementers, researchers, and institutions.

It strengthens the systems that allow research to succeed: infrastructure, shared platforms, workforce development, funding, institutional capability, research administration, data systems, partnerships, innovation pathways, and a research culture grounded in rigour, integrity, mentorship, collaboration, and public purpose.

It places trust at the centre of the research ecosystem. Ethics, integrity, quality, responsible data governance, proportional oversight, conflict-of-interest management, and community participation are essential conditions for credible and useful research.

It makes translation a core function of the research system. Evidence and innovation must travel the full distance to policy, programmes, clinical practice, public health action, regulation, procurement, health technology assessment, indigenous technology adoption, and last-mile delivery.

It broadens how research value is assessed. Publications, grants, patents, and rankings remain important, but they are incomplete measures. The Policy also values clinical translation, policy influence, indigenous technologies, institutional strengthening, mentorship, capacity-building, community benefit, equity, and societal impact.

Core Commitments

The Policy commits India to a health research ecosystem guided by population need and judged by public impact.

Research priorities shall be driven by disease burden, health-system challenges, equity, preparedness, and strategic national importance. India shall invest in a research workforce of depth and reach, trained to high standards across disciplines, institutions, career stages, and geographies. Public investment in health research shall rise progressively and be complemented by responsible private, philanthropic, and non-governmental investment aligned with national priorities.

Shared research infrastructure shall be strengthened as a national asset. Administrative, financial, and regulatory processes shall be made efficient and proportionate so that funded research is not delayed by avoidable barriers. The ecosystem shall become more inclusive across public, private, not-for-profit, and academic institutions. International collaboration shall be built on equality and shall strengthen Indian capability.

India shall advance self-reliance in health evidence and indigenous technologies while contributing knowledge, innovations, and implementation learning to the world. Evidence and innovation shall reach routine care, programmes, and policy through sustained linkages with State health systems. The ecosystem shall be assessed on the evidence, technologies, capacity, translation, institutional development, and health outcomes it produces.

These commitments are guided by public purpose and equity, scientific integrity, proportionality, transparency and openness, community participation, public trust, accountability, and adaptiveness. Health research shall serve the health, dignity, security, and well-being of the people of India. Equity shall extend beyond the selection of research priorities to shape the distribution of research capacity, funding, infrastructure, participation, data access, translation, and assessment of impact.

Architecture of the Policy

The full Policy develops this framework through seven chapters and eight annexures. Together, they move from vision and governance to agenda-setting, enabling systems, standards, translation, assessment, and implementation support.

Chapter 1 sets out the purpose, vision, mission, commitments, principles, strategic directions, targets, and scope of the Policy.

Chapter 2 establishes the governance architecture for the national health research ecosystem at three levels: national stewardship, national oversight and standards, and institutional governance. The National Health Research Stewardship Committee will provide high-level alignment and coordination. The Department of Health Research will serve as the nodal department. The Indian Council of Medical Research will provide scientific and technical leadership. States and Union Territories will support alignment with local health needs and translation into programmes, service delivery, and public health action.

Chapter 3 establishes the National Health Research Agenda as the central instrument for aligning research effort and investment. The Agenda will support a balanced national portfolio: understanding India's health problems, discovering new knowledge, developing and evaluating solutions, and ensuring that proven interventions reach people effectively, equitably, and at scale. It will address persistent health challenges, emerging and frontier areas, under-attended domains, One Health, pandemic preparedness, biosecurity, integrative health, missions, and priority projects.

Chapter 4 addresses the enabling systems required for research to produce public benefit: infrastructure, shared platforms, workforce development, funding, institutional support, partnerships, collaboration, innovation pathways, and enabling conditions for translation. Publicly funded research infrastructure is recognised as a national resource requiring wider access, shared use, and more balanced distribution.

Chapter 5 sets out standards for ethics, integrity, quality, and data governance. It covers scientific and social value, ethical review, participant protection, community engagement, research integrity, conflict of interest, research quality, responsible reporting, data access, data sharing, cybersecurity, artificial intelligence, genomic data, sensitive data, and dual-use risks.

Chapter 6 addresses translation, application, and public benefit. It establishes pathways through which evidence shall inform policy, programmes, clinical practice, health technology assessment, procurement, regulation, public health action, indigenous technology adoption, implementation learning, de-implementation of ineffective practices, adaptation, scale, and last-mile relevance.

Chapter 7 establishes the framework for assessment, impact, and review. The ICMR Impact of Research and Innovation Scale will serve as a national reference framework for multidimensional assessment, alongside other qualitative and quantitative assessments. The Policy itself will be reviewed periodically and renewed in response to evidence, experience, and emerging needs.

The annexures provide operational support. They set out the national target framework; map the roles of departments, councils, institutions, platforms, and standing functions; provide a framework for State health research stewardship; define the scope and functions of Research Administration and Finance Units; guide National Health Research Missions and Priority Projects; identify workforce development instruments; describe ICMR-IRIS; and set out an adaptive implementation architecture.

Goals, Measurement, and Review

The Policy establishes long-term national targets to guide India's health research development over a generational horizon. These targets cover health research investment as a share of GDP, Medical Science PhDs per million population, health research publications per million population, life sciences patents per million population, approved indigenous health technologies per million population, and composite global standing in health sciences research.

These indicators track investment, workforce, output, innovation, and global standing. The Policy recognises, however, that such indicators capture only part of the value of health research. India will therefore also use multidimensional assessment to recognise translation into clinical practice and public health, policy influence, indigenous technologies, institutional strengthening, mentorship, capacity-building, community benefit, and societal impact.

Implementation shall proceed through phased and adaptive action rather than rigid timelines. The Department of Health Research shall serve as the nodal department for implementation. The National Health Research Stewardship Committee shall provide strategic coordination and review without assuming executive authority or altering existing mandates. Actions within the mandates of departments, councils, regulators, funding agencies, and institutions shall remain the responsibility of those bodies.

The implementation architecture is intended to guide sequencing, coordination, and review. It shall be adapted to institutional readiness, resource availability, statutory and regulatory requirements, and decisions of competent authorities. This approach preserves autonomy while enabling alignment, accountability, and system learning.

Conclusion

The National Health Research Policy 2026 is a framework for building a trusted, adaptive, inclusive, self-reliant, and impact-oriented health research ecosystem for India. It recognises that research must begin with the health needs of the people of India, proceed with scientific rigour and ethical integrity, be supported by strong institutions and enabling systems, and travel the full pathway to policy, practice, products, programmes, and public benefit.

The measure of this Policy will be whether India builds an ecosystem capable of generating the evidence, technologies, implementation learning, and health solutions its people need, and of sharing them responsibly with the world.

Chapter 1

Vision, Mission and Strategic Direction

1.1 Purpose of the Policy

1.1.1 India's future health security, social well-being, and economic progress will depend significantly on the strength of its health research ecosystem. Health research is a strategic national capability that enables the country to understand its health challenges, develop solutions suited to its conditions, improve the performance of health systems, and contribute to the global public good. It will help raise healthy life expectancy, a key goal of the National Health Policy.

1.1.2 India has demonstrated significant scientific and public health capability, anchored by the Indian Council of Medical Research (ICMR) as the principal national agency for biomedical and health research, and the health research ecosystem has grown substantially over successive decades. Capacity, however, remains concentrated in a limited number of institutions and regions, research priorities are not always aligned with the country's most pressing health needs, and the links between research, policy, programmes, and practice require further strengthening so that research findings improve the health of the people of India.

1.1.3 The National Health Policy, 2017, recognised health research as integral to national health development and committed to strengthening publicly funded research institutions, expanding extramural funding, promoting innovation in health technologies, and building research capacity across the country. This Policy carries that commitment forward. It provides a coherent national framework through which health research in India may be governed, strengthened, aligned with national priorities, and translated more effectively into public benefit.

1.2 What This Policy Adds

1.2.1 This Policy provides a distinct national framework for health research by bringing together, within a single policy architecture, the full pathway from research priority-setting to evidence generation, innovation, translation, implementation, and assessment of impact.

It positions health research as central to health security, self-reliance, public welfare, and India's long-term development.

1.2.2 The Policy establishes clearer national stewardship, with the Indian Council of Medical Research as the principal national agency for biomedical and health research under the Department of Health Research, aligns research priorities with population health need, strengthens enabling systems for researchers and institutions, promotes equitable collaboration across sectors and geographies, and creates explicit pathways from research to policy, practice, and measurable outcomes.

1.2.3 It places ease of doing research, ethical and scientific integrity, indigenous capability, community participation, and accountability for real-world impact at the centre of national health research development. The Policy is also designed to evolve, with its priorities, standards, and mechanisms subject to periodic review and adaptation so that it remains relevant as health needs, science, and technology change. The Policy is therefore a practical framework for building a trusted, adaptive, and impact-oriented health research ecosystem for India.

1.3 Vision for National Health Research

1.3.1 India's vision, consistent with Viksit Bharat 2047, is to build a national health research ecosystem that is capable, inclusive, self-reliant, and responsive to changing health needs, one that establishes India among the leading nations in health research and innovation and contributes knowledge and solutions of value to the world.

1.4 Mission and Core National Commitments

1.4.1 This Policy aims to strengthen the governance, priorities, enabling conditions, and standards for a strong, inclusive, and self-reliant national health research ecosystem. The Policy commits to the following:

1. **Research priorities driven by population health need.** Priorities shall be guided by disease burden, health-system challenges, equity considerations, preparedness needs, and areas of strategic national importance.
2. **A research workforce of depth and reach.** India shall invest in the full spectrum of research talent, trained to global standards of competence and rigour, across institutions and geographies.
3. **Sustained investment and shared research platforms.** Public investment shall rise progressively, complemented by responsible private, philanthropic, and non-governmental investment aligned with national health research priorities. Infrastructure that no single institution can build alone shall be maintained as shared national assets.
4. **Ease of doing research.** Administrative, financial, and regulatory processes shall be efficient and proportionate. Barriers that delay funded research shall be identified and reduced.
5. **An inclusive research ecosystem across sectors.** Research shall be a shared endeavour across public, private, not-for-profit, and academic institutions, with barriers to equitable collaboration actively reduced.
6. **Global partnerships built on equality.** International collaboration shall strengthen Indian capability through equal partnerships. India shall share its health solutions with other countries, particularly low- and middle-income countries.
7. **Self-reliance in health evidence and technologies.** India shall strengthen its capacity to generate evidence relevant to its populations, health systems, and contexts, and to develop indigenous health technologies and solutions. This shall advance national self-reliance while enabling India to contribute knowledge, innovations, and implementation learning to the world.
8. **Translation through health system linkages.** Evidence and innovation shall reach routine care, programmes, and policy through sustained linkages with State health systems.

9. **Preparedness for pandemics, health emergencies, and biosecurity threats.** India shall maintain a standing capability to detect health threats and mount a rapid research response, through a One Health orientation.
10. **Accountability for real-world outcomes.** The ecosystem shall be assessed on the evidence, technologies, capacity, and health outcomes it produces. Performance shall inform resource allocation and strategic direction.

1.5 Guiding Principles

1.5.1 The implementation of this Policy shall be guided by the following principles.

1. **Public purpose and equity.** Health research shall serve the health, dignity, security, and well-being of the people of India, with priority to needs of greatest public importance and deliberate attention to underserved populations, regions, institutions, and voices. Equity shall extend beyond the selection of research priorities to shape the distribution of research capacity, funding, infrastructure, participation, data access, translation, and the assessment of impact.
2. **Scientific integrity.** All health research shall be grounded in scientific rigour, ethical conduct, transparency, and respect for research participants and communities.
3. **Proportionality.** Governance, oversight, and regulatory requirements shall be calibrated to the nature, scale, and risk of the research.
4. **Transparency and openness.** Decisions about research priorities, funding, and governance shall be transparent. Research methods, data, and findings shall be shared as widely as the nature of the research permits.
5. **Community participation and public trust.** Communities affected by research shall be engaged as partners in the identification of priorities, the design of studies, the interpretation of findings, and the application of results. Such participation strengthens public trust in research.
6. **Accountability.** The outcomes and impact of health research shall be assessed at individual, institutional, and system levels.

7. **Adaptiveness.** The research ecosystem and this Policy shall evolve in response to evidence, experience, and emerging needs.

1.6 Strategic Directions

1.6.1 The following strategic directions organise the commitments and principles set out in Sections 1.4 and 1.5 into the action structure through which this Policy is implemented.

1. **Strengthen governance, oversight, and the enabling conditions for research.** Build clear stewardship, credible oversight, efficient administration, and institutional conditions that support high-quality research. (see Chapter 2)
2. **Align research priorities and investment with national health need.** Direct the research agenda toward population need and ensure sustained public investment in research capability and shared platforms. (see Chapter 3)
3. **Build the enabling systems and capabilities required for a strong national health research ecosystem.** Strengthen India's research workforce, infrastructure, funding architecture, institutional capability, data systems, and preparedness capacity. Promote collaboration across sectors and institutions, support domestic and international partnerships, and advance India's capacity to generate its own evidence, technologies, and health solutions. (see Chapter 4)
4. **Uphold integrity, ethics, and quality in health research.** Safeguard scientific integrity, ethical conduct, research quality, and responsible data governance, and sustain public trust in research. (see Chapter 5)
5. **Translate evidence into policy, practice, and population benefit.** Strengthen pathways from research to routine care, programmes, and health system improvement. (see Chapter 6)
6. **Assess outcomes, review, and renew.** Assess the ecosystem on what it produces and the difference it makes, and use the findings to review priorities, strengthen the ecosystem, and renew the Policy. (see Chapter 7)

1.7 National Goals and Targets for Health Research

1.7.1 The national commitments require measurable long-term goals to enable tracking, deliberate capability-building, and accountability.

1.7.2 The following targets reflect national ambition across a generational horizon aligned with Viksit Bharat 2047, intended to guide long-term direction without constraining annual planning. These headline indicators track research investment, workforce, output, innovation, and composite global standing. Additional indicators covering the enabling conditions for research, collaboration, translation, and preparedness shall be set out in Annexure I and tracked through the governance mechanisms in Chapter 2.

1.7.3 The baselines, definitions, data sources, and methods for measuring these indicators shall be specified in Annexure I and periodically reviewed to ensure validity, comparability, and continued relevance.

1.7.4 These headline indicators rely on conventional measures, including bibliometric output, that permit international comparison, and capture only part of the value of health research. India will therefore also assess research impact through the ICMR Impact of Research and Innovation Scale (ICMR-IRIS), an indigenous multidimensional framework that extends assessment beyond publications and citations to clinical translation, policy influence, innovation, capacity-building, and societal benefit, as set out in Chapter 7 and Annexure VII.

Indicator	Baseline	Target by 2037	Target by 2047
Health research investment, % of GDP	0.024 (2026-27)	0.072	0.15
Medical Science PhDs per million population	1.5 (2021-22)	4.5	15
Health research publications per million population	39 (2022)	120	360
Life Sciences patents per million population	2.5 (2023)	5.0	25
Approved indigenous health technologies per million population	0.01 (2023)	0.03	0.1

Indicator	Baseline	Target by 2037	Target by 2047
Composite global standing in health sciences research	18th	Top 5	Top 3

1.8 Scope of the Policy

1.8.1 For the purposes of this Policy, health research includes the systematic generation, synthesis, application, and assessment of knowledge to understand health and disease, improve health care and public health systems, develop and evaluate technologies and interventions, and advance the health and well-being of populations.

1.8.2 This Policy provides a national framework for health research across the full pathway, from understanding health problems to generating knowledge, developing solutions, translating evidence into use, and learning from outcomes. It is intended to guide the strategy, plans, investments, and activities of the Department of Health Research, and of other Government Departments and public and private institutions and organisations working on health research.

1.8.3 It applies across the health research ecosystem: the institutions that produce research, the systems that use it, the communities that participate in it, the industry and startups that translate it to health technologies, and the bodies that govern, fund, and regulate it.

1.8.4 Its scope covers basic science, epidemiology, clinical research, public health, health systems, implementation research, and health technology development, as well as behavioural, social, digital, and preparedness-related domains.

1.8.5 It does not replace the mandates or statutory responsibilities of existing authorities and institutions, but provides a shared framework to strengthen coherence, collaboration, and long-term direction.

Chapter 2

Governance of the National Health Research Ecosystem

India's health research ambition will be realised only when scientific excellence is matched by systems that can direct, enable, protect, and connect it to public purpose.

Governance is the means through which this alignment is achieved. It gives direction without centralising control, provides oversight without avoidable delay, and enables institutions to support researchers in doing their best work with responsibility and purpose. It must align effort across departments and States, reduce fragmentation and duplication, enable collaboration, safeguard public trust, and ensure that research moves more reliably from ideas to evidence, innovation, policy, practice, and public benefit.

This chapter sets out the governance architecture required for that purpose. It recognises the full range of participants whose decisions, capacities, and contributions shape health research: researchers, institutions, regulators, funders, policymakers, industry, not-for-profit organisations, health systems, and the communities that are involved in and benefit from research. The chapter is organised around three levels of governance: (1) national stewardship; (2) national oversight and standards; and (3) institutional governance.

2.1 National Stewardship

2.1.1 National Health Research Stewardship Committee

2.1.1.1 At the national level, the ecosystem shall be stewarded through a National Health Research Stewardship Committee (NHRSC). The NHRSC is an inter-ministerial forum for high-level deliberation on the country's health research status, vision, strategic direction, and priorities.

2.1.1.2 The Department of Health Research (DHR) is the nodal department for health research and shall convene the NHRSC. The NHRSC shall be chaired by the Principal Scientific Adviser (PSA) to the Government of India.

2.1.1.3 Its composition shall include NITI Aayog, relevant scientific departments, councils and institutions, representation from academia, industry, not-for-profit research organisations, and health system practitioners from national and State levels, and such other members as may be necessary to discharge its mandate. Its membership shall include early-career, mid-career, and senior researchers, and representation from frontline, emerging, and academic research institutions.

2.1.1.4 The NHRSC shall perform the following functions:

1. **Strategic direction and agenda alignment.** Facilitate and align a coherent national health research agenda across departments, consistent with health needs, national priorities, the National One Health Mission, and the long-term goals of Viksit Bharat 2047.
2. **Enabling conditions for research.** Facilitate improvements in governance and conduct of research, reduce procedural bottlenecks, promote ease of doing research, and expand and pool research infrastructure.
3. **Capable workforce.** Support expansion of the skilled workforce for health research through engagement with curriculum-framing, accreditation, and training bodies.
4. **Investment.** Advocate for and plan for increased investment in health research from governmental and non-governmental sources.
5. **Collaboration, innovation, and indigenous capability.** Promote collaborative and interdisciplinary research, support enabling policies for partnerships and technology transfer, and facilitate the development and deployment of indigenous products and solutions backed by evidence.
6. **Data sharing and translation into policy, practice, and public benefit.** Enable the pooling, sharing, and responsible reuse of health-related data for research, and facilitate the translation of research into clinical practice, public health practice, programmes, and policy through coordination with relevant agencies and institutions.

2.1.1.5 Health research intersects with multiple sectors, including health, science and technology, biotechnology, higher education, pharmaceuticals, devices, digital systems, environment, agriculture, One Health, and industrial policy. The NHRSC shall promote policy coherence across these sectors and coordination among the relevant departments and agencies.

2.1.1.6 In doing so, the NHRSC shall align health research with broader national priorities and missions, including Viksit Bharat 2047 and One Health.

2.1.1.7 The NHRSC shall promote cross-sector convergence while maintaining clear roles, scientific standards, and public purpose.

2.1.1.8 The NHRSC shall provide stewardship and alignment without centralising authority, respecting the autonomy and mandates of institutions and avoiding duplication of their roles.

2.1.1.9 The Indian Council of Medical Research shall provide scientific and technical support to the NHRSC and to the Department of Health Research in developing and operationalising the national health research agenda, drawing on its intramural institutes, extramural research programme, and scientific expertise.

2.1.1.10 The governance architecture, including the NHRSC and institutional review processes, shall adapt in response to evidence, experience, and emerging needs, and shall itself be subject to periodic assessment.

2.1.2 Roles of National Departments in Health Research

2.1.2.1 Health research in India is supported by national departments, each working through its councils, autonomous bodies, and institutes. Within their domains, they are expected to provide leadership and set the research agenda, fund research intramurally and through extramural grants, build research capacity, and develop and maintain research infrastructure, in alignment with the National Health Research Agenda.

2.1.2.2 Department of Health Research and Indian Council of Medical Research. DHR, in the Ministry of Health and Family Welfare, is the nodal department for health research, and the Indian Council of Medical Research (ICMR), the principal national agency for biomedical and health research, functions under it. Through ICMR and its institutes, they support the setting and implementation of the National Health Research Agenda, fund intramural and extramural research, set scientific and ethical standards, build capacity and shared infrastructure, and strengthen translation into policy and practice. DHR and ICMR shall conduct periodic reviews and coordinate across departments to align health research with national priorities.

2.1.2.3 Department of Biotechnology. DBT advances biotechnology and biomedical research relevant to health, such as immunology, genomics, vaccines, and cell and gene therapy, through its autonomous institutes, and supports extramural and industry-partnered research, including through the Biotechnology Industry Research Assistance Council (BIRAC).

2.1.2.4 Council of Scientific and Industrial Research. CSIR contributes through its laboratories engaged in drug discovery, genomics, molecular medicine, diagnostics, and microbial sciences, supporting both intramural research and translational work with industry and academia.

2.1.2.5 Department of Science and Technology. DST strengthens the scientific and technological base for health research, including through the Sree Chitra Tirunal Institute for Medical Sciences and Technology (SCTIMST), an Institute of National Importance in biomedical technology and tertiary care, and through cross-cutting research capability and infrastructure.

2.1.2.6 Department of Atomic Energy. DAE contributes to oncology and nuclear medicine, principally through the Tata Memorial Centre for cancer care, research, and education, and the development of radiopharmaceuticals and radiation technologies. The Atomic Energy Regulatory Board (AERB) regulates radiation safety in health facilities and in research involving ionising radiation, including radiation-emitting equipment and radiopharmaceuticals.

2.1.2.7 Department of Agricultural Research and Education. DARE, through the Indian Council of Agricultural Research (ICAR), contributes at the interface of agriculture, nutrition, and health, including food and nutrition security, food safety, antimicrobial resistance, and zoonotic disease and One Health research.

2.1.2.8 Recognising the complementary roles of public and private institutions, not-for-profit organisations, professional societies, and academic bodies, their participation shall be enabled consistent with public purpose, national priorities, scientific standards, and appropriate safeguards. An indicative mapping of the principal national departments and bodies with roles relevant to health research is provided in Annexure II.

2.1.3 Roles of States and Union Territories in Health Research

2.1.3.1 Within their jurisdictions, States and Union Territories are expected to align research with local health needs, enable and support State research institutions, and strengthen the translation of evidence into local programmes, service delivery, and public health action.

2.1.3.2 States and Union Territories should establish or designate arrangements for stewarding health research, aligning with national priorities while remaining responsive to State needs and capacities. Such arrangements may build on existing State health research councils where these are in place, be established as dedicated State Health Research Stewardship Committees, or be convened within existing State Science and Technology Councils, with support from the Department of Health Research.

2.1.3.3 Their role may include enabling State institutions to participate in national research programmes, missions, and priority projects, and aligning State-level priorities with the national health research agenda. A framework for State health research stewardship is provided in Annexure III.

2.2 National Oversight and Standards

National functions for oversight, integrity, and assurance shall protect scientific quality, ethical conduct, and public trust by setting standards, providing guidance, and reducing ambiguity and delay in how requirements are interpreted and applied.

2.2.1 Ethical Conduct of Research

2.2.1.1 Biomedical and health research shall be conducted in accordance with the national ethical guidelines issued by the Indian Council of Medical Research and applicable legal and regulatory requirements. Every institution undertaking biomedical or health research must establish an ethics committee or ensure access to an appropriate ethics review mechanism. Individual researchers without institutional attachment should have access to independent ethics review.

2.2.1.2 Ethics committees shall be duly constituted and registered in compliance with national regulations, and function in accordance with national guidelines. Those reviewing clinical trials for drug approval or marketing in India shall satisfy any additional requirements laid down by the relevant national authority.

2.2.1.3 All forms of biomedical and health research requiring ethics review shall be reviewed and approved by an ethics committee before initiation. This includes clinical, basic science, policy, implementation, epidemiological, behavioural, and public health research. Ethics review systems shall aim to be timely, proportionate, facilitative, and protective of participants.

2.2.1.4 For multicentre research, ethics review processes shall be designed to avoid unnecessary duplication across participating sites while ensuring that local ethical considerations, contextual safeguards, and site-specific requirements are adequately addressed. This shall include enabling a single ethics review, the approval of which is accepted across all participating sites, where appropriate.

2.2.1.5 Institutions and national bodies shall establish clear protocols for the identification, disclosure, and management of conflicts of interest in research, review, and funding decisions.

2.2.1.6 Guidance on the ethical use of artificial intelligence in biomedical and health research shall be maintained and updated regularly to keep pace with evolving technologies and applications.

2.2.2 Research Integrity

2.2.2.1 Health research shall be conducted with honesty, transparency, accountability, and adherence to appropriate standards of responsible conduct. To strengthen transparency and public accountability, research should be undertaken in accordance with appropriately documented protocols and, where applicable, registered in publicly accessible and searchable databases in line with relevant norms and regulations.

2.2.2.2 For forms of research where mandatory registration applies, including clinical trials requiring regulatory oversight, registration shall take place before enrolment or initiation in accordance with applicable regulations. Registration shall include relevant information on study design, investigators, sites, interventions, ethics approvals, protocol changes, deviations, and outcomes, as required.

2.2.2.3 The Clinical Trials Registry, India (CTRI) shall serve as the national registry for clinical trial registration, as designated and updated from time to time.

2.2.2.4 DHR may establish a National Research Integrity Office (NRIO) within or under its aegis as an advisory and strategic body. Its purpose shall be to promote responsible conduct of research and support institutions in maintaining high standards of research integrity.

2.2.2.5 Its functions shall include:

1. Developing guidance and standard operating approaches for reporting and addressing research misconduct within institutions.
2. Providing support during inquiries into misconduct allegations, and suggesting pathways where matters are complex or unresolved. Where an institution's own process has been completed or has demonstrably failed, and there are substantiated concerns that it lacked the capacity or independence to investigate, the NRIO may advise on an appropriate independent process. The NRIO shall not act as a forum of first instance, and may decline matters that are clearly frivolous, unsubstantiated, already adjudicated, or outside its advisory remit, while ensuring that good-faith concerns and protected disclosures are not discouraged.

3. Supporting education and training on the responsible conduct of research.
4. Supporting the fair, confidential, and proportionate handling of concerns relating to research misconduct.
5. Publishing periodic reports or summaries on systemic issues in research integrity across the ecosystem, including patterns of concern, systemic gaps, and areas for improvement, in a manner that supports institutional learning without compromising the confidentiality of individual cases.

2.2.2.6 Oversight functions shall be proportionate and clear, identifying recurring gaps and informing the improvement of standards and guidance.

2.2.3 Regulatory and Safety Compliance

2.2.3.1 **Drugs, devices, diagnostics, and vaccines.** Clinical trials and related research for the approval of new drugs, investigational new drugs, devices, diagnostics, or vaccines shall comply with the standards and regulations laid down by the Central Drugs Standard Control Organisation (CDSCO) and relevant State authorities, including State drug controllers where applicable.

2.2.3.2 Medical devices, diagnostics, vaccines, and related products used in research shall be subject to applicable regulatory requirements for safety, efficacy, and quality.

2.2.3.3 **Animal research.** Animal research shall be conducted in accordance with national and accepted scientific standards, with due attention to the prevention of unnecessary pain or suffering and the ethical treatment of animals before, during, and after research. Proposed animal experiments shall be reviewed and approved by duly constituted Institutional Animal Ethics Committees (IAECs) or equivalent mechanisms, as applicable.

2.2.3.4 **Biosafety and related safeguards.** Research involving genetic manipulation, recombinant organisms, hazardous biological agents, radiation, or other potentially hazardous materials or processes shall be subject to appropriate safety oversight, accreditation, and safeguards.

2.2.3.5 Research involving genetic manipulation and recombinant organisms shall comply with applicable national biosafety regulations, including those administered through the Department of Biotechnology (DBT) and the Review Committee on Genetic Manipulation (RCGM) where applicable. Institutions undertaking such research shall establish Institutional Biosafety Committees (IBSCs) in accordance with applicable regulations.

2.2.3.6 Specific guidelines shall be developed to facilitate academic and investigator-initiated clinical trials, recognising their non-commercial nature and public-health value, while maintaining participant safety and scientific rigour.

2.2.4 International Collaboration in Health Research

2.2.4.1 International collaboration in health research, including research involving foreign investigators, foreign funding, cross-border transfer of biological materials, or cross-border data-related arrangements, shall be undertaken in accordance with applicable national regulations and clearance processes.

2.2.4.2 Such arrangements may require review or clearance through the Health Ministry's Screening Committee (HMSC), the Screening Committee for Research Proposals (SCRP), the relevant DBT Screening Committee, or other competent authorities, as applicable to the institution, funding source, collaboration type, and materials or data involved.

2.2.4.3 Such arrangements shall be considered in light of national priorities, ethical norms, biosafety, data security, intellectual property protection, and other relevant safeguards, including national security considerations where applicable.

2.2.4.4 International collaboration arrangements shall ensure that Indian investigators and institutions receive appropriate recognition of intellectual contribution, co-authorship rights, access to data generated in India, and decision-making authority commensurate with their contribution.

2.3 Institutional Governance

The national architecture in Sections 2.1 and 2.2 requires corresponding capacity at institutional level. Research institutions are the primary governance-bearing units of the ecosystem.

Each institution engaged in health research should bear responsibility for ensuring that research is conducted, supported, reviewed, and governed in a manner consistent with scientific quality, ethics, integrity, transparency, and accountability.

2.3.1 Governance, Leadership and Accountability

2.3.1.1 Institutional leadership should establish the systems, committees, and support structures required for high-quality research. Governance should be rigorous in standards yet feasible to work within.

2.3.1.2 Research institutions should ensure that their research activities are aligned with applicable national standards and regulatory requirements. They should support researchers through clear processes, timely decisions, adequate infrastructure, and responsible administrative and financial management.

2.3.1.3 Institutional accountability should include responsibility for integrity of research, ethical conduct, scientific review, financial stewardship, transparency, monitoring of ongoing projects where required, and the appropriate handling of adverse events and misconduct complaints.

2.3.1.4 Institutional leadership should foster a research culture that values scientific rigour, responsible conduct, mentorship, and fairness, with broader participation across career stages, disciplines, genders, and institutional settings.

2.3.1.5 Core standards of ethics, integrity, and accountability apply to all institutions engaged in health research. The institutional machinery to deliver these standards should be proportionate to the scale and intensity of research undertaken. A research-intensive institution will require more elaborate systems than a medical college or district hospital conducting a small number of studies.

2.3.1.6 DHR and ICMR, in coordination with relevant funding agencies and competent authorities, shall conduct periodic reviews of institutions and programmes supported under DHR/ICMR mechanisms or participating in national health research programmes to assess research output, capacity development, governance effectiveness, and contribution to the national health research ecosystem. DHR and ICMR, with relevant funding agencies, shall use review findings to inform institutional support, resource allocation, and strategic direction. Reviews shall be conducted against published, objective criteria, with an opportunity for institutions to respond, and findings shall be used proportionately and transparently.

2.3.2 Institutional Oversight Bodies

2.3.2.1 Institutional oversight bodies safeguard research quality, transparency, and public trust. These may include Institutional Ethics Committees (IECs), Institutional Animal Ethics Committees (IAECs), Institutional Biosafety Committees (IBSCs), Data and Safety Monitoring Boards (DSMBs), and scientific review mechanisms.

2.3.2.2 Research integrity is grounded in institutional culture. Institutions should foster it through mentorship, training in responsible conduct, and clear norms for authorship and data stewardship.

2.3.3 Scientific Review Mechanisms

2.3.3.1 Institutions involved in biomedical and health research should establish a Scientific Review Committee (SRC) or equivalent mechanism to undertake scientific review of research proposals, whether funded or not. Scientific review should precede ethics review where applicable and should assess proposals for scientific robustness, feasibility, significance, and likely contribution.

2.3.3.2 Scientific review mechanisms should also support the monitoring of ongoing research where appropriate and, on completion of research, help guide the dissemination, translation, and sharing of findings.

2.3.3.3 Advisory and review mechanisms at national and institutional levels shall work in a complementary manner, with appropriate coordination and role clarity.

2.3.4 Research Administration and Support Systems

2.3.4.1 Institutions engaged in biomedical and health research, including medical colleges where applicable, shall establish a dedicated Research Administration and Finance Unit, or equivalent structure, to support researchers across the research lifecycle. The scope and functions of such units are detailed in Annexure IV. Funding for these units shall be met from the institutional overheads of research projects, supplemented by the institution's own resources as necessary.

2.3.4.2 Research administration will reduce the procedural burden on researchers while strengthening compliance and coordination, with appropriate action at every level of the system.

2.3.4.3 Research institutions shall review their internal administrative processes and simplify them to the extent permitted under existing rules. This includes ethics committee scheduling and turnaround times, procurement approval procedures, delegation of financial and hiring authority, and the number of clearances required for routine research operations. Institutions often possess greater flexibility than they exercise; institutional leadership shall ensure that available delegations are fully used.

2.3.4.4 Funding agencies shall review their grant administration processes and set published benchmarks for turnaround at each stage, from application to award through instalment release, utilisation certificate review, and project closure.

2.3.4.5 Differentiated administrative, financial, and procurement norms shall be developed for research institutions, recognising that research requires flexibility in hiring, procurement, fund utilisation, and import clearances. Progress shall be reviewed as part of the periodic review of this Policy.

2.3.4.6 Such units may be responsible for:

1. Financial management of research grants and programmes, including record-keeping, audits, and reporting.
2. Regulatory compliance, resource allocation, and support for research infrastructure and quality requirements.
3. Administrative support for inter-institutional collaborations, sponsor agreements, clinical trial agreements, and legal or regulatory permissions.
4. Grant management and support to researchers in identifying suitable extramural funding opportunities.
5. Technical and compliance guidance, including support for budgeting, submissions, sponsor requirements, and project administration.
6. Coordination with scientific review committees and other institutional mechanisms to support efficient research management.
7. Support for inclusive and gender-friendly research environments, including enabling infrastructure, childcare support, and measures to reduce bias in participation, promotion, and research credit.
8. Management of intellectual property and related rights associated with research outputs, including support for patents, copyrights, licensing, and technology transfer in an ethical and equitable manner.

2.3.4.7 Research institutions should also establish mechanisms to support responsible and timely access to and use of research data, in accordance with applicable legal, ethical, and institutional requirements.

2.3.4.8 Any transfer, licensing, or shared ownership arrangements, including those relating to research data, shall be governed through prior written and appropriately reviewed agreements.

The governance architecture established in this chapter provides the institutional basis for setting, stewarding, and implementing the National Health Research Agenda.

Chapter 3

The National Health Research Agenda

A national health research agenda is a statement of choice: the health problems India will confront, the capabilities it will build, the technologies it will develop and use responsibly, and the public benefits it will pursue through research. In a country of India's scale and diversity, priorities cannot be left to institutional habit, scattered opportunity, or the momentum of the past. They must be guided by population need, equity, scientific promise, strategic national importance, and the lived realities of States, health systems, communities, patients, and frontline workers.

The Agenda is therefore more than a list of research topics. It is a national instrument for directing research effort, guiding investment, reducing fragmentation, encouraging collaboration, and moving the research enterprise from documenting problems to generating solutions. It must hold together India's urgent health burdens and its future scientific frontiers; local needs and national ambition; investigator creativity and public purpose; discovery, development, delivery, and impact.

This chapter sets out the principles, process, and organisation of the National Health Research Agenda. The Agenda shall serve as a shared reference for Government of India scientific departments, health research institutions, States, and Union Territories in formulating their own research priorities, taking into account local context, disease burden, health system realities, institutional capability, and India's long-term vision under Viksit Bharat 2047. The Department of Health Research shall serve as the nodal department for the preparation, coordination, publication, and periodic revision of the Agenda, under the strategic guidance of the National Health Research Stewardship Committee.

3.1 Principles for Setting the National Health Research Agenda

3.1.1 The guiding principles in Section 1.5 apply to the Agenda. The following additional principles shall guide the identification and organisation of national research priorities.

1. **Alignment with national health goals and changing priorities.** The Agenda shall align with national health goals and strategic priorities. It shall evolve with changing health needs, policies, and national circumstances.

2. **Future health needs, frontier technologies, and high-risk research.** The Agenda shall anticipate India's future health needs and national ambitions, and prioritise frontier and emerging technologies in which India should build capability to stand among the world's leading nations. These include frontier areas such as gene and cell therapy, artificial intelligence technologies for health, xenotransplantation, and robotics. The Agenda shall encourage frontier, high-risk, and high-reward research and the responsible use of emerging technologies, and support work on difficult, resistant, or neglected health problems.
3. **Public health need, equity, and vulnerable populations.** The Agenda shall give priority to diseases, conditions, and health system problems that impose major burden on the population, with particular attention to vulnerable and underserved populations and geographies.
4. **Prevention of disease and health systems strengthening.** The Agenda shall prioritise research that advances disease prevention, strengthens health equity, and improves population well-being, including research on environmental and climatic determinants of health. It shall support research that informs public health interventions and strengthens health systems.
5. **Preparedness, rapid response, and resilience.** The Agenda shall remain responsive to emerging health threats. It shall support preparedness, rapid response, and resilience against pandemics and other public health emergencies.
6. **Scientific merit and decision-usefulness.** Priority shall be given to research questions likely to generate credible, decision-useful evidence. Scientific rigour and methodological soundness shall remain central to the selection of priorities.
7. **Indigenous innovation, capability, and accessibility.** The Agenda shall support indigenous, affordable, and accessible health technologies. It shall strengthen national scientific, technological, institutional, and translational capability in areas of strategic importance.

8. **Lived experience, participation, and people-centredness.** Priority-setting shall be informed by epidemiological and health system evidence together with the lived experiences of communities, patients, and frontline implementers. The process shall promote people-centred approaches and broad participation in agenda-setting.
9. **Convergence and collaboration.** Particular attention shall be given to priorities that require work across departments, sectors, disciplines, or systems of care. Collaboration across institutions and stakeholders shall be encouraged where it strengthens the quality, relevance, or uptake of research.
10. **Explicit criteria and stewardship of investment.** Priority-setting shall be based on explicit criteria and documented methods. The Agenda shall also serve as a roadmap for guiding research investments.

3.2 Process of Setting the National Health Research Agenda

3.2.1 The process of setting the Agenda shall be scientific, transparent, and inclusive. It shall draw on assessments of health needs, disease burden, scientific opportunity, and national capability, and shall use explicit methods for identifying and selecting priorities. It shall consider local and regional context, with particular attention to reducing health inequities affecting vulnerable and underserved groups.

3.2.2 Priority-setting is fundamentally a choice about how scarce resources and potential benefits are distributed. Methods shall be documented, publicly justified, and attentive to whose needs are being served.

3.2.3 The following steps shall apply:

1. **Assessment of need, evidence, and gaps.** Health needs, disease burden, implementation challenges, and emerging threats shall be assessed alongside the existing research landscape to identify major gaps, opportunities, and areas of duplication. The assessment shall also be aligned with the Viksit Bharat vision and national health goals and commitments.

2. **Identification and appraisal of candidate priorities.** Candidate priorities and research questions shall be identified through consultation with relevant stakeholders, including researchers, clinicians, programme managers, implementers, States and Union Territories, communities, and patients, on the basis of public health need, scientific opportunity, strategic importance, and the need to strengthen capability, innovation, and translation into use, and shall be appraised against explicit criteria.
3. **Prioritisation and portfolio design.** Selected priorities shall be organised as a national research portfolio, balancing immediate national needs with longer-term capability, innovation, preparedness, and public impact. The portfolio shall maintain an appropriate distribution across descriptive, discovery, development, and delivery research as defined in Section 3.3.2.
4. **Adoption, publication, and review.** The final set of priorities shall be adopted by the Department of Health Research on the recommendation of the NHRSC. The Agenda shall be published, made publicly accessible, linked to funding and implementation mechanisms, and reviewed at defined intervals or earlier where required.

3.2.4 Candidate priorities shall be appraised against explicit criteria, including originality or added value; answerability in an ethical manner; likelihood of efficacy and effectiveness; deliverability; maximum potential impact; likely impact on equity; and cost of research relative to potential impact.

3.2.5 The Department of Health Research shall establish structured mechanisms for public and patient participation in research priority-setting. These may include public consultations, patient and community advisory panels, and open submission processes through which individuals, community organisations, and other stakeholders can propose research questions and contribute to agenda development. Such mechanisms shall complement expert and institutional input, ensuring that the Agenda reflects scientific opportunity and strategic importance as well as the priorities of those whom research is intended to serve. State-level research priorities, community inputs, and frontline health-system experience shall be formally considered during each cycle of the National Health Research Agenda.

3.2.6 The Indian Council of Medical Research, as the principal national agency for biomedical and health research, shall support the development, coordination, and operationalisation of the Agenda, including the design and management of national missions and priority projects, providing scientific and technical leadership under the stewardship of the Department of Health Research and the NHRSC.

3.3 Organisation of the National Health Research Agenda

The Agenda shall be organised through three complementary dimensions. Domains of research define the substantive areas in which national priorities are set. Types of research specify the broad forms of research activity required. Strategic cross-cutting areas address themes requiring convergence across sectors or systems. The Agenda shall also inform missions and priority projects as instruments for focused, time-bound action on priorities of major national importance.

3.3.1 Domains of Research

3.3.1.1 Domains of research shall reflect the country's major health burdens, population needs, health system challenges, and strategic national concerns. They may evolve over time as India's health needs, scientific opportunities, and institutional capabilities change. The Agenda shall organise domains across three categories, as briefly discussed below.

3.3.1.2 First, research shall be deepened on persistent health challenges that continue to impose major burden on the population. These include tuberculosis, vector-borne diseases, antimicrobial resistance, mental health, metabolic and other non-communicable diseases, cancer, anaemia, child malnutrition, women's health, maternal and neonatal mortality, primary health care, and emergency care.

3.3.1.3 Second, the Agenda shall expand research on new, emerging, and frontier areas that require greater focus in light of India's changing disease profile, technological landscape, and strategic needs. These include digital health, artificial intelligence and data science in health, cell and gene therapy, obesity, climate change and health, and other frontier areas relevant to health.

3.3.1.4 Third, the Agenda shall strengthen research in domains that have received insufficient attention relative to their public health significance. These include ageing and healthy longevity, occupational and environmental health, oro-dental health, nursing and allied health care, disability and rehabilitation, health systems and service delivery, and socio-behavioural interventions.

3.3.1.5 Across these domains, the full spectrum from prevention and early detection to treatment, rehabilitation, and long-term care shall be addressed.

3.3.2 Types of Research

3.3.2.1 The Agenda shall maintain an appropriate balance across the major types of research required for a strong national portfolio:

3.3.2.2 Descriptive research focuses on understanding disease burden, distribution, determinants, causes, risk factors, trends, and patterns of need.

3.3.2.3 Discovery research generates new knowledge and advances understanding of health and disease through basic and fundamental inquiry.

3.3.2.4 Development research evaluates interventions and solutions, including drugs, vaccines, diagnostics, devices, digital tools, socio-behavioural interventions, and health systems innovations.

3.3.2.5 Delivery research addresses how to achieve effective implementation, adoption, adaptation, scale, quality, and sustained use of interventions, programmes, and services in real-world settings. This includes implementation research, health technology assessment, evidence synthesis, translational research, and related forms of inquiry concerned with ensuring that evidence and innovation reach populations.

3.3.2.6 India's health research portfolio has historically been weighted toward descriptive studies. A deliberate and sustained shift toward development, delivery, and discovery research has begun, and further efforts in this direction are required for the ecosystem to move from documenting health problems to generating solutions. The national research portfolio shall reflect a periodically reviewed distribution across these four types.

3.3.3 Strategic Cross-Cutting Areas

3.3.3.1 Strategic cross-cutting areas are themes where national health research priorities require convergence across disciplines, departments, sectors, or systems of care, and where coordinated work across multiple research types and institutional mandates is required. Two such themes, One Health and Integrative Health, are discussed below as examples.

3.3.3.2 **One Health, Pandemic Preparedness, and Biosecurity.** Health challenges at the interface of human, animal, wildlife, and environmental health require integrated research approaches that no single sector can address alone. Zoonotic disease emergence, antimicrobial resistance, climate-sensitive disease ecology, food systems safety, vector-borne disease dynamics under environmental change, and pandemic preparedness are among the most consequential health threats India faces.

3.3.3.3 India has established the National One Health Mission (NOHM), steered by the Office of the Principal Scientific Adviser, bringing together multiple ministries and departments. Health research shall draw on NOHM's institutional infrastructure, including its national network of intersectoral Biosafety Level 3 (BSL-3) laboratories and National Joint Outbreak Response Teams (NJORTs). Under NOHM, a structured State Engagement Policy has been developed to promote institutionalisation of One Health mechanisms at the State and district levels. Research shall align with the Mission's broader objectives across human health, animal health, agriculture, environment, and biosecurity. This research also aligns with international commitments, including the International Health Regulations (2005) and the Quadripartite One Health Joint Plan of Action (WHO, FAO, WOAH, UNEP).

3.3.3.4 Research priorities under One Health shall include:

1. Surveillance and early detection of emerging zoonotic threats, including at animal-human-wildlife-environment interfaces, and the development of integrated, cross-sectoral surveillance platforms that enable real-time data sharing across human, animal, wildlife, and environmental health systems.
2. Antimicrobial resistance across human, animal, and environmental systems.
3. Development of medical countermeasures including vaccines, diagnostics, and therapeutics for emerging and re-emerging pathogens.
4. Climate-sensitive disease modelling and health impact assessment, including projections of how temperature, precipitation, and extreme weather shift vector-borne, water-borne, and zoonotic disease distribution, and integrated environment-health early warning systems linking climate data, Earth observation, and real-time surveillance.
5. Food safety and food systems research, including foodborne hazard surveillance across the value chain, antimicrobial resistance transmission via livestock, aquaculture, and environmental pathways, and climate impacts on foodborne pathogen prevalence and food system safety.
6. Preparedness research, including rapid research mobilisation during health emergencies, health system resilience, and the maintenance of standing research platforms that can be activated in times of crisis.
7. Biosecurity and biosafety research, encompassing pathogen security, dual-use research oversight, and biosafety approaches within One Health laboratories and field settings.
8. Social, behavioural, and community engagement research to understand and improve adoption of One Health practices, risk perception, and health-seeking behaviour at human-animal-environment interfaces.
9. One Health governance, institutional coordination, and sustainable financing research, including mechanisms for joint cross-ministerial budgeting and economic analysis of the return on investment for One Health interventions.

10. Workforce development and transdisciplinary training across human, animal, wildlife, and environmental health sectors, including the integration of One Health competencies into higher education and professional development programmes.

3.3.3.5 **Integrative Health.** India's health care landscape encompasses multiple systems of medicine, including AYUSH systems (Ayurveda, Yoga and Naturopathy, Unani, Siddha, Sowa Rigpa, and Homoeopathy) alongside modern medicine. Research that integrates approaches across these systems can generate evidence for solutions that are effective, affordable, and suited to Indian conditions. The same standards of scientific rigour apply to research across all systems of medicine.

3.3.3.6 Research priorities under Integrative Health shall include:

1. Methodological innovation for evaluating complex, multi-component, and whole-system interventions that do not fit conventional single-intervention trial designs.
2. Evidence-based integration across India's systems of medicine, including joint research design and shared evaluation frameworks.
3. Collaborative models of integrative care drawing on multiple systems.
4. Safety and pharmacovigilance for patients receiving therapies from more than one system of medicine.
5. Translation of integrative evidence into clinical guidance, public health programmes, and treatment protocols.

3.3.3.7 Research in Integrative Health shall be conducted in accordance with the governance, conduct standards, and translation pathways set out in this Policy. Where research spans multiple systems of medicine, regulatory pathways for research approval, safety monitoring, and evidence evaluation shall be coherent across the relevant regulatory and institutional frameworks. Where the cross-system nature of integrative research requires specific provisions for collaborative infrastructure, research methods, training, or translation, these shall be addressed through the relevant provisions of Chapters 4, 5, and 6.

3.3.3.8 These cross-cutting areas are indicative and may evolve as India's health challenges, institutional capabilities, and strategic priorities change. Additional cross-cutting areas may be identified through the periodic review of the Agenda.

3.3.4 Missions and National Health Research Priority Projects

3.3.4.1 The Agenda shall inform mission-mode programmes and priority projects in areas of major national importance. Such instruments may be established through the national coordination mechanisms set out in Chapter 2.

3.3.4.2 National Health Research Missions may be established for major health challenges that require convergence across departments or sectors and a clear pathway from research to population impact. Each Mission shall have a defined scope, duration, governance structure, and sunset provisions (pre-defined criteria and timelines for discontinuation). Missions shall, where appropriate, align with national frameworks and engage relevant national research bodies.

3.3.4.3 National Health Research Priority Projects may be established for large-scale, multi-site, implementation-oriented work on national priorities within a domain of research. These shall generate evidence to strengthen policy, improve programmes, and extend the reach of effective interventions at scale. Priority Projects may operate within or outside a Mission framework, depending on the nature of the priority and the degree of convergence required. Each Priority Project shall have a defined scope, duration, governance arrangements, and closure or transition provisions.

3.3.4.4 Missions and Priority Projects shall advance one or more of the strategic directions set out in Section 1.6, and may require coordinated work across multiple research types, depending on the nature of the priority and the pathway to impact. Operational guidance on the establishment, governance, and review of Missions and Priority Projects is provided in Annexure V.

3.4 Dissemination, Uptake, and Alignment

3.4.1 Public funding for health research shall progressively align with the priorities adopted under the Agenda.

3.4.2 The Agenda shall be made publicly accessible through official government websites, online research portals, and other appropriate channels. Relevant departments and agencies shall periodically assess the alignment of their research portfolios with the adopted priorities, and ensure that it informs funding calls, mission-mode programmes, institutional research agendas, and other implementation mechanisms across the ecosystem.

3.5 Review and Revision

3.5.1 The Agenda shall be reviewed and revised at intervals not exceeding five years, and earlier where required by emergencies, epidemiological change, technological developments, or emerging national needs.

3.5.2 The review shall assess the continued relevance of priorities, their uptake across funding and programmes, and the extent to which they are contributing to public impact.

3.5.3 Priorities no longer justified by evidence of need or strategic relevance shall be replaced or discontinued. Findings from translation, implementation, and research assessment shall inform each revision of the Agenda.

The Agenda can guide national effort only when supported by the enabling systems of infrastructure, workforce, funding, institutions, partnerships, and innovation addressed in the next chapter.

Chapter 4

Enabling Systems for Health Research

The ambition set out in this Policy depends on capability as much as on purpose. A research agenda can define what the country must pursue, but it is the enabling ecosystem that determines whether priorities become studies, whether studies become evidence and innovation, and whether evidence and innovation reach people.

This chapter addresses the enabling systems required for that purpose: research infrastructure and shared platforms; a skilled, motivated, and diverse workforce; adequate and well-directed funding; a culture that values research; partnerships that extend institutional reach; and innovation pathways that support indigenous health technologies. These systems must have sufficient depth, breadth, and resilience to serve India's population needs, scientific ambitions, preparedness requirements, and long-term national goals.

India possesses substantial research assets, built over successive decades across public institutions, universities, medical colleges, not-for-profit research organisations, and industry. The next task is to connect, expand, and strengthen these assets so that they function as a national ecosystem. Infrastructure must become more accessible and better distributed. The workforce must grow in number, diversity, and disciplinary range. Funding must match national ambition. Institutions must enable researchers rather than burden them. Partnerships must accelerate translation while protecting public purpose. This chapter sets out the enabling conditions through which India's health research ecosystem can move from potential to performance, and from performance to public benefit.

4.1 Research Infrastructure and Shared Platforms

Health research depends on physical and digital infrastructure: laboratories, clinical research facilities, community-based research facilities, equipment, bio-repositories, disease registries, data systems, and access to scientific literature. DHR, relevant scientific departments, and research institutions shall expand, modernise, and make this infrastructure accessible in line with scientific progress, national health priorities, and the full spectrum of descriptive, discovery, development, and delivery research.

Publicly funded research infrastructure is a vital national resource. Concentration and scarcity shall be addressed through policy solutions for pooling and shared use, including the sharing of equipment, personnel, facilities, and machine time. Institutions receiving public funding for research infrastructure shall create mechanisms to allow wider researcher access to those resources, including through centralised portals or registries where appropriate. Governance arrangements for shared infrastructure shall define access criteria, usage protocols, cost-sharing, and maintenance responsibilities so that shared use is sustainable and equitable.

4.1.1 The National Research Infrastructure Landscape

4.1.1.1 India's health research infrastructure is distributed across five broad categories of institutions, each with distinct capabilities and needs.

4.1.1.2 First, national research institutes and laboratories under the major research councils and scientific departments, foremost among them the network of ICMR institutes, constitute the core of the country's research infrastructure. These institutions shall be equipped with advanced and continuously updated research capabilities and shall serve as anchors for collaborative research across the ecosystem. They shall also maintain high standards of biosafety and biosecurity in their laboratories to prevent accidental release, misuse, or other biosafety and biosecurity risks.

4.1.1.3 Second, institutes of national importance and leading research universities combine research with clinical care and advanced training. They are therefore well placed to contribute both to research aligned with the National Health Research Agenda and to investigator-initiated and collaborative research. Their research infrastructure shall be strengthened to support research at the highest levels.

4.1.1.4 Third, medical colleges, both government and private, dental colleges, nursing colleges, and allied health institutions represent the most geographically distributed component of the research infrastructure. Research capacity in these institutions remains generally weak. Mechanisms such as Multidisciplinary Research Units (MRUs), Viral

Research and Diagnostic Laboratories (VRDLs), and similar platforms established within these institutions shall be continued and expanded to strengthen research capability across this distributed institutional base. Such laboratories shall progressively expand their scope from virology to the broader spectrum of infectious diseases, encompassing bacteriology, mycology, and parasitology, through their evolution into Infectious Diseases Research and Diagnostic Laboratories (IRDLs).

4.1.1.5 Fourth, not-for-profit research institutions, including independent research organisations, field research stations, demographic and health surveillance sites, and community-based research platforms, contribute significantly to health research, particularly in implementation research, epidemiological surveillance, and community-engaged studies. The research infrastructure of such institutions shall be recognised and strengthened as part of the national research ecosystem.

4.1.1.6 Fifth, private sector research and development, including pharmaceutical, biotechnology, medical device, and digital health enterprises, private hospitals, startups, and incubators, contributes significantly to health technology development and clinical research. The enabling conditions for industry participation in health research shall be strengthened in ways consistent with public purpose, national priorities, and appropriate safeguards.

4.1.1.7 Long-running population cohorts and field sites, including Model Rural Health Research Units (MRHRUs), whether hosted by public institutions, not-for-profit organisations, or academic departments, represent irreplaceable research assets that require sustained institutional and financial support. Their continuity shall be safeguarded through dedicated long-term funding and governance arrangements.

4.1.1.8 Clinical trial sites, both hospital-based and community-based, and networks for multi-centre research studies constitute essential infrastructure for generating high-quality clinical and population-level evidence, and shall be developed, networked, and sustained.

4.1.1.9 Across all categories, infrastructure planning shall aim for a more balanced distribution across sectors, disciplines, and geographies, with particular attention to underserved regions and institutions.

4.1.2 Laboratories, Facilities, and Data Systems

4.1.2.1 Research laboratories should be maintained and upgraded to support the full range of health research, from basic science and pre-clinical work to clinical investigation and population-based studies. Institutions engaged in research shall have access to laboratories equipped to handle biological materials in accordance with appropriate biosafety standards.

4.1.2.2 ICMR, in coordination with DHR and relevant scientific departments, shall establish and strengthen bio-repositories, disease registries, and data repositories for the storage of biological materials, biospecimens, and clinically relevant data. These shall be designed as shared national resources, including the ICMR Health Research Data Repository and similar platforms, accessible to researchers across institutions, subject to appropriate governance, consent, and data protection arrangements.

4.1.2.3 Health research institutions should have adequate infrastructure to safely archive, manage, and analyse research data. DHR and ICMR shall establish data platforms to enable the responsible sharing and reuse of datasets, publications, and other outputs arising from publicly funded research, under fair and non-discriminatory terms. Research data systems shall be designed to support findability, accessibility, interoperability, and reusability, in accordance with internationally recognised principles of responsible data stewardship. Access pathways to national health data systems, including electronic health records, surveillance platforms, and administrative health data, shall be progressively developed for research use through appropriate legal, ethical, technical, and governance frameworks.

4.1.2.4 Research libraries shall be strengthened as central access points for scholarly literature in print and digital form, and supported to provide broad access to scholars and students.

4.1.2.5 Adequate infrastructure for health research shall also be available in academic institutions that train biomedical, clinical, and public health professionals. Such infrastructure shall support the conduct of research, hands-on training, capability-building, and a culture of inquiry in health professions education.

4.1.2.6 Dedicated core grants shall be available to establish, strengthen, and sustain research infrastructure within institutions, including laboratories, data centres, and shared research platforms such as Multidisciplinary Research Units in medical colleges.

4.2 Health Research Workforce

The health research ecosystem depends on a diverse, skilled, and motivated workforce. India requires researchers capable of applying rigorous methods, generating original research ideas, and conducting research with excellence across diverse settings. This workforce includes physicians, biomedical scientists, nurses, allied health professionals, social scientists, data scientists, biostatisticians, and other specialists essential to a complete research enterprise. Workforce development shall be oriented toward the sustained production of research that advances knowledge, informs policy, and improves health outcomes.

Capacity-building shall be based on thorough and periodic assessments of skill requirements, gaps, and evolving methods, and shall inform the design of training, fellowship, and institutional support programmes. Scientific departments of the Union Government, coordinated through the NHRSC, shall align their training strategies and capacity-building activities to expand the researcher pool, equip researchers with appropriate technical competencies, and attract talent from diverse disciplines and backgrounds.

4.2.1 Early Research Exposure and Training

4.2.1.1 Foundational exposure to scientific inquiry, evidence-based reasoning, and the principles of research should begin at the school level, through age-appropriate integration into science curricula. Formal research training shall begin during undergraduate and postgraduate education in medical and other health-related disciplines, such as oro-dental health and nursing. Students should acquire familiarity with relevant research methods and basic skills in data collection, analysis, and evidence-informed decision-making. Training in research methods shall aim to equip researchers with competencies that meet high international standards across quantitative, qualitative, mixed-methods, and computational approaches. Curriculum-framing bodies shall make research-related training available across health-related disciplines, including through accredited modules, research projects, observerships, and structured internships that give students direct experience of research environments.

4.2.2 Doctoral Training and Clinician-Scientist Pathways

4.2.2.1 A strong national research ecosystem requires a substantially larger pool of doctoral researchers across the health sciences. Biomedical PhDs and MD-PhD programmes, for developing physician-scientists, shall be expanded as a national priority. These programmes shall produce researchers who combine scientific depth with the ability to work across the research-to-practice continuum. Clinician-scientist pipelines are characteristically long, with high attrition at every transition from training through to independent research careers. Programme design should anticipate attrition at each stage and compress the interval between completion of clinical training and establishment of an independent research programme.

4.2.2.2 Paid doctoral fellowships of adequate duration and financial support shall be available through relevant national agencies. Stipend levels shall be periodically reviewed to ensure they are sufficient to attract and retain talent. Institutions should establish clear criteria for the qualification and competence of doctoral research advisors, and mechanisms to ensure that effective guidance is provided.

4.2.2.3 Research institutions and medical colleges should initiate and strengthen clinician-scientist programmes and in-service doctoral pathways to encourage medical faculty, dental faculty, practitioners, and other health professionals to enter research. These pathways should include provisions for dedicated research time and reduced clinical or service load during active research phases, which may be timebound and project-specific, along with dedicated funding.

4.2.3 Fellowships and Postdoctoral Pathways

4.2.3.1 Fellowship programmes, both national and international, shall be developed to support pre-doctoral, doctoral, and postdoctoral researchers across the health sciences, with dedicated streams for clinical research, implementation research, and translational science.

4.2.3.2 India shall also learn from and, where appropriate, develop fellowship models comparable to those that have demonstrated impact internationally, such as career-development fellowships that combine protected research time, mentorship, and institutional support over a sustained period.

4.2.3.3 Special effort shall be made to support women, persons returning from career breaks or from overseas, including non-resident Indians, persons of Indian origin, and overseas citizens of India, as well as researchers from underserved or vulnerable groups.

4.2.4 Professional Development, Exchange, and Mentorship

4.2.4.1 Researchers at all career stages shall have access to accredited courses in research methods and technical competencies, with credit recognised in career assessment. Industry exposure shall be incorporated into doctoral training where appropriate.

4.2.4.2 Structured exchange programmes shall be promoted, including adjunct or visiting positions for research personnel, practitioner-in-residence programmes, and research sabbaticals at national and international centres of excellence.

4.2.4.3 Early-career researchers shall have access to mentorship networks that support technical, professional, and leadership development. Mentoring shall be acknowledged and rewarded within systems of professional recognition and career advancement. Research institutions should develop structured career progression pathways that enable researchers to advance into positions of scientific leadership, with criteria that recognise research excellence, mentorship, and contribution to the national research enterprise.

4.2.4.4 The effective conduct of research also depends on skilled research management and administration. Institutions should invest in building professional capacity for grant management, regulatory compliance, data management, and research coordination.

4.2.4.5 The research enterprise also depends on a skilled support workforce, including laboratory technicians, data managers, field coordinators, biostatisticians, and research assistants. Accredited skill development modules shall be developed for these roles, with competency standards that are periodically reviewed and updated. Mechanisms to enable a standing pool of trained research support personnel, accessible to institutions across the ecosystem, should be explored.

4.2.4.6 Research administration, project management, ethics review, and research appraisal are substantive professional activities essential to the research enterprise. Career progression frameworks across the ecosystem should recognise contributions in these areas, and not restrict advancement solely to metrics of individual research output.

4.2.4.7 Specific targets for research engagement across student and faculty groups may be set and periodically reviewed through the implementation framework. In particular, improving the quality of postgraduate and doctoral theses in medical and other health-related disciplines will be prioritised. A summary of instruments for health research workforce development is provided in Annexure VI.

4.3 Research Funding and Investment

Research funding is the primary instrument through which national health research priorities are converted into research activity. Funding may come from governmental, private, philanthropic, and non-governmental sources.

4.3.1 Public Investment

4.3.1.1 Public funding for health research from the Union budget shall increase in a sustained and predictable manner, in support of the long-term national investment targets set out in Section 1.7. India's public investment in health research remains well below that of comparably ambitious nations, and below the level required to achieve the goals of this Policy. Sustained domestic investment in health research is a condition of self-reliance. Dependence on externally generated evidence limits national control over which problems receive attention and on what terms solutions become available.

4.3.1.2 State governments shall be encouraged to invest in health research aligned with State-level priorities and the National Health Research Agenda. States may develop dedicated research financing mechanisms to support research conducted in State institutions, address State-specific health challenges, and co-fund national research programmes. The Department of Health Research shall provide technical guidance to States in developing such frameworks. The combined trajectory of Union and State investment shall be tracked as part of the periodic review of the Policy.

4.3.2 Funding Architecture

4.3.2.1 The national funding architecture for health research shall maintain a healthy balance between investigator-initiated research and institutional, organisational, and national research programmes. The Indian Council of Medical Research, as the principal national agency for biomedical and health research, shall anchor the national extramural research system for health, working alongside other national funding agencies.

4.3.2.2 Investigator-initiated grants shall remain the foundation of the extramural research system, enabling individual researchers and research teams to pursue original ideas, test hypotheses, and generate new knowledge. Within the investigator-initiated modality, research may address any scientific question of merit within the health domain, and shall not be restricted to priorities identified through the National Health Research Agenda. These grants shall be awarded through competitive, peer-reviewed processes with clear evaluation criteria, transparent decisions, and timely disbursement.

4.3.2.3 Institutional and organisational grants shall support sustained, multi-year research programmes within institutions and research centres that build long-term capability in areas of national importance.

4.3.2.4 Large-scale, multi-site, intervention development, and implementation-oriented research programmes, as defined in Section 3.3.4, shall support priorities identified through the National Health Research Agenda.

4.3.2.5 Funding agencies shall ensure that grant processes are effective, inclusive, transparent, competitive, and free of conflict of interest.

4.3.2.6 Research institutions and funding agencies shall have sufficient financial authority and administrative flexibility to manage multi-year research commitments effectively, including the ability to carry forward funds across fiscal years where necessary to protect ongoing research.

4.3.3 Private, Philanthropic, CSR, and Non-Governmental Investment

4.3.3.1 Public investment shall remain the foundation of national health research financing. Private investment is essential to the scale, speed, and reach of national health research, and to the translation of discovery into products, services, and solutions that reach people. In India, the private sector's share of national research investment has been modest relative to countries where business enterprise finances the larger part of research and development. Raising private investment in health research, and strengthening its alignment with national health priorities, is a central aim of this Policy and a foundation for self-reliant innovation in health.

4.3.3.2 Different forms of non-public participation, including industry, private hospitals, philanthropic funders, corporate social responsibility resources, and not-for-profit research organisations, shall be governed according to their role, interest, risk profile, and contribution to public purpose.

4.3.3.3 Public funding may be used strategically, where justified by public health value, to attract private and non-governmental investment into priority areas, subject to transparent governance, risk-sharing arrangements, and safeguards for affordability, equitable access, and public purpose. The Indian Council of Medical Research, working with the Department of Health Research and other national agencies, shall strengthen collaboration between industry and academia, drawing as appropriate on national instruments such as the Anusandhan National Research Foundation (ANRF) to mobilise private and non-governmental investment.

4.3.3.4 Dedicated financing instruments shall support private research, development, and innovation, particularly at the stages of translation, scaling, and commercialisation, where conventional funding is often scarce. Such instruments may provide longer-term, patient capital through an appropriate mix of grants, debt, and equity, and shall be designed to share risk between public and private partners while safeguarding public purpose.

4.3.3.5 Demand-side mechanisms shall be used to draw private investment towards health technologies of high public value, particularly where commercial markets alone provide insufficient incentive, such as for neglected diseases, antimicrobial resistance, and affordable products for underserved populations. These may include advance market commitments, milestone-based and challenge awards, innovation prizes, and public procurement that establishes the State as an assured early purchaser of proven innovations.

4.3.3.6 Corporate social responsibility resources shall be channelled towards health research in accordance with the relevant provisions of the Companies Act, as amended from time to time, including contributions to incubators and to research and development projects in science, technology, engineering, and medicine within eligible public institutions. The Department of Health Research and the Indian Council of Medical Research shall facilitate mechanisms through which such resources can be directed to national health research priorities.

4.3.3.7 Fiscal and procedural incentives, including support for research and development expenditure, simplified partnership mechanisms, and clear and predictable frameworks for intellectual property and technology transfer, shall be strengthened to encourage sustained private investment in health research. The Indian Council of Medical Research and other national agencies shall develop transparent models for public-private partnership, contract research, and co-development that protect scientific integrity, ethical standards, and equitable access to the resulting health technologies.

4.3.3.8 Mobilisation of private and philanthropic resources shall be actively encouraged in support of national health research priorities, including through partnerships with foundations, charitable trusts, and not-for-profit research organisations, under transparent governance arrangements that safeguard scientific independence.

4.3.3.9 Any foreign or international funding for health research shall comply with applicable law, including foreign-contribution regulations and the clearance requirements of the Health Ministry's Screening Committee (HMSC) and related mechanisms set out in Section 2.2.4, and shall align with national priorities, public purpose, and the national interest.

4.3.4 Equity, Access, and Emerging Priorities

4.3.4.1 ICMR and other funding agencies, including DBT, and drawing on broader national funders such as ANRF, shall create dedicated channels to support research focused on underserved populations and neglected conditions. Funding shall also extend across a broad range of scientific, social science, and humanities disciplines with relevance to health.

4.3.4.2 Institutions should develop intramural funding mechanisms targeted at trainees and early-career researchers, including seed grants and start-up grants. Funding agencies shall systematically track gender and regional equity in the distribution of health research funding and shall develop strategies to promote balanced representation.

4.3.4.3 Funding shall remain responsive to changing health priorities and emerging public health challenges. Mechanisms shall also be created to enable institutions to manage research grants effectively and ensure that funds are used in a timely, accountable, and efficient manner. Funding agencies shall publish periodic reports on the national health research funding portfolio, including the distribution of funding across modalities, disciplines, institutions, and geographies, to enable transparency and informed planning.

4.4 Research Culture, Motivation, and Recognition

Attracting and retaining talent requires an environment in which researchers experience their work as worthwhile and connected to national need, have the autonomy and support to pursue it effectively, and belong to a professional community that recognises meaningful contribution. These conditions shape the research culture on which the ecosystem depends.

4.4.1 Purposeful and Impactful Research

4.4.1.1 Researchers are most effective when they can see the connection between their work and the health challenges it addresses. Institutions and funding agencies should make clear how research connects to the National Health Research Agenda and to the broader goals of the health system. The pathways through which research findings reach policy, clinical practice, and public benefit shall be made more visible within the research system.

4.4.1.2 Research findings that translate into products, policies, or programme improvements shall be disseminated widely. Government health policies and programmes shall, where appropriate, give priority to the utilisation of indigenous research and innovations. Research conferences, institutional platforms, and other scientific forums shall include opportunities to showcase how Indian research has informed national and global health practice.

4.4.1.3 Institutions should create opportunities for researchers to engage directly with the communities, practitioners, and health systems that their work is intended to serve.

4.4.2 Autonomy, Competence, and Institutional Support

4.4.2.1 Researchers shall have the freedom to define research questions and choose appropriate methods, within the boundaries of ethical approval, institutional mandate, and scientific rigour. Leadership of health institutions should foster a research culture in which scientific inquiry is valued alongside clinical care, teaching, and administration.

4.4.2.2 Research institutions in India operate largely under administrative, financial, and procurement frameworks designed for routine government functions. These frameworks do not account for the conditions that distinguish research: unpredictable timelines, specialised procurement, time-sensitive experiments, multi-year funding cycles, and dependence on international supply chains for reagents and equipment. This mismatch is among the most significant barriers to research productivity in the country. Delays accumulate sequentially across ethics review, fund release, procurement, import clearance, and staff recruitment, and can absorb a substantial share of funded project time before research begins.

4.4.2.3 Administrative, procurement, and reporting requirements for research shall be proportionate to the scientific purpose they serve. Institutions and funding agencies shall each, within their authority, identify, measure, and reduce administrative barriers to research. The primary test of a well-functioning research environment is whether researchers can focus their time and effort on the research itself.

4.4.2.4 Researchers shall have access to structured opportunities for developing competence in research methods, technical skills, and emerging approaches throughout their careers. Research methods and processes should be valued alongside outputs in assessment, mentoring, and institutional support systems. Institutions should ensure that the teaching, clinical, and administrative demands placed on researchers leave adequate time for research itself.

4.4.2.5 ICMR and other national funding agencies shall develop dedicated funding mechanisms to support high-risk, high-reward research, enabling researchers to pursue unconventional lines of inquiry without disproportionate career risk.

4.4.2.6 Research institutions should maintain working environments that are safe, respectful, and free from harassment, bullying, and discrimination. Institutions should establish accessible and effective mechanisms for addressing complaints. These mechanisms should protect those who raise concerns in good faith from retaliation, ensure fairness and due process for all parties, guard against misuse, and foster a culture of mutual respect.

4.4.3 Recognition, Belonging, and Career Advancement

4.4.3.1 Research-related performance shall be recognised in systems of assessment and career progression. Recognition shall extend beyond publications to include the full range of contributions on which the research enterprise depends: mentorship, peer review, data curation, research management, public communication of science, and contributions to collaborative and multidisciplinary projects. Innovations and patents shall be acknowledged as meritorious contributions.

4.4.3.2 Institutions should cultivate a sense of professional belonging among researchers through peer networks, communities of practice, and collaborative forums. Researchers, particularly those in geographically or institutionally isolated settings, shall have access to professional communities that provide intellectual exchange, mutual support, and a shared sense of identity as members of the national research enterprise.

4.4.3.3 Outstanding contributions to national health priorities, whether through publications, patents, policy influence, programme improvement, or innovation, shall be recognised through honours, fellowships, career advancement, and other forms of institutional support, consistent with transparent criteria.

4.4.3.4 Research shall be supported as a recognised career path in its own right. Medical and other health institutions should establish dedicated scientist positions, alongside clinical and teaching faculty, so that those who lead research have defined roles, progression, and recognition. Sustained research contribution shall count towards career advancement for faculty across clinical, teaching, and research responsibilities.

4.5 Partnerships and Collaboration

Research partnerships shall be equitable, strategically aligned, and mutually strengthening. They shall be built on shared purpose, mutual respect, and recognition of complementary strengths. Roles and responsibilities during and after research shall be clearly defined.

4.5.1 Domestic Collaboration

4.5.1.1 Government funding agencies shall coordinate and consolidate support for national health research priorities, including through the NHRSC. Inter-institutional mechanisms shall be developed so that funding agencies complement each other in coherence with their mandates. Administrative requirements shall be harmonised where possible, and digital platforms may be developed to simplify processes and reduce duplication. Funding agencies shall also jointly publish details of funded research to reduce redundancy.

4.5.1.2 Interdisciplinary and multisectoral collaborations shall be promoted among government agencies, academic institutions, non-governmental organisations, and other relevant partners.

4.5.2 Public-Private Partnerships

4.5.2.1 Public-private partnerships shall be encouraged in areas aligned with national health priorities, particularly where collaboration can help translate research outcomes into accessible, affordable, and context-specific health care solutions.

4.5.2.2 Public-private partnership agreements shall include clear provisions related to intellectual property, publication and dissemination, technology transfer, and knowledge-sharing, while remaining aligned with public purpose and national interests. Appropriate incentive structures, including revenue-sharing or related mechanisms, may be developed where appropriate.

4.5.2.3 Dedicated institutional structures, including special purpose vehicles, may be established to govern and manage public-private partnerships where the scale, duration, or complexity of collaboration so requires, with clear arrangements for governance, accountability, and the protection of public purpose.

4.5.3 International Collaboration

4.5.3.1 International research partnerships shall be co-developed with Indian researchers as equal partners. They shall prioritise domains in which capabilities, techniques, or methods are not yet fully available in the country, while helping to strengthen local research capacity, institutional development, and knowledge exchange.

4.5.3.2 India shall also position itself as a trusted provider of health research solutions to other countries, particularly in the Global South. Indigenous diagnostics, therapeutics, vaccines, health technologies, validated tools, evidence-based guidelines, and implementation models developed through the Indian research ecosystem shall be made available for adaptation and use in other low- and middle-income settings. The research ecosystem shall support technology transfer, capacity-building partnerships, and collaborative research with institutions in other developing countries, consistent with India's role as a responsible contributor to global health.

4.5.3.3 The use of biological samples and data in international partnerships shall respect national sovereignty and be governed by prior agreements and applicable regulatory approvals concerning access, use, transfer, and protection. International collaboration agreements shall be designed to ensure appropriate recognition, co-authorship rights, data access, and decision-making authority for Indian investigators and institutions, consistent with the provisions set out in Section 2.2.4.

4.6 Innovation Ecosystem and Indigenous Health Technologies

The development, evaluation, and scaling of health technologies and solutions requires effective linkages among academic institutions, startups, industry, funders, regulators, and public systems, supported by enabling frameworks for financing, regulation, evaluation, and commercialisation. Consistent with the commitment to self-reliance set out in Section 1.4, the innovation ecosystem shall prioritise indigenous, affordable, and accessible health technologies suited to Indian conditions, while reducing avoidable dependence on externally developed solutions.

4.6.1 Development and Incubation

4.6.1.1 The accelerated development of indigenous health technologies, including frontier technologies identified through the National Health Research Agenda, shall be supported through multiple strategies. These shall include research coalitions with industry from the stage of project formulation, inter-ministerial support systems to improve ease of doing innovation, and structured support to address technical, regulatory, financial, and administrative challenges.

4.6.1.2 Innovation development shall involve health system practitioners and programme managers from the design stage onward, so that products and solutions are shaped by the conditions under which they will ultimately be delivered.

4.6.1.3 DHR and ICMR, in coordination with DBT, DPIIT, and relevant scientific departments, shall establish or strengthen a network of incubators to facilitate proof-of-concept studies, prototype development, and early-stage innovation support. DHR and participating departments shall create mechanisms to secure industry support for test batches, manufacturing development, and scale-up where appropriate.

4.6.2 Regulatory Science and Intellectual Property

4.6.2.1 Innovation support shall aim to facilitate the development of regulation-compliant products of high quality and robust clinical evidence. National capacity in regulatory science shall be strengthened so that researchers, innovators, and institutions can meet regulatory requirements effectively and contribute to evidence-based regulatory standards.

4.6.2.2 Support systems shall be created or strengthened to facilitate intellectual property protection, technology transfer, and regulatory guidance. Intellectual property frameworks for publicly funded research shall balance incentives for innovation with safeguards to ensure that resulting technologies remain accessible, affordable, and aligned with public health objectives.

4.6.3 Financing and De-risking

4.6.3.1 Funding and resources shall be made available for the development, production, introduction, and scaling of proven solutions. Mechanisms to de-risk industry and startup participation in the development of new technologies may include risk capital, grants, soft loans, and facilitation of assured procurement where appropriate.

4.6.3.2 DHR and ICMR, in coordination with DBT and DPIIT, and drawing on national research and innovation funders such as ANRF, shall develop dedicated financing mechanisms to bridge the gap between proof-of-concept and market entry, where promising technologies are most vulnerable to failure for want of resources rather than scientific merit.

4.6.3.3 Where public funds have contributed to the development of health technologies, appropriate conditions shall be attached to ensure affordability and equitable access in the resulting products and services.

4.6.4 Technology Validation

4.6.4.1 The research ecosystem shall maintain a standing capability for the independent validation of health technologies developed by research institutions, industry, and innovators. In particular, developing methods for the validation of artificial intelligence-based tools is of critical importance. Validation centres with standardised protocols, trained personnel, and quality-assured facilities shall be established or strengthened across diverse settings. Technology validation shall be recognised as a valued research function and included in performance assessment frameworks. Validation findings shall be made publicly available to inform procurement, regulatory decisions, and programme inclusion.

4.6.5 Identification of Technology Gaps

4.6.5.1 There shall be a systematic effort to identify gaps in the availability or accessibility of health technologies, to improve diagnostic and therapeutic methods and develop new solutions. The research ecosystem shall support indigenous provision of useful technologies and reduce avoidable reliance on imports, consistent with national goals of strengthening domestic capability. Where indigenous technologies demonstrate comparable or superior performance at lower cost, their adoption shall be actively facilitated through health technology assessment and programme inclusion.

4.6.6 Oversight

4.6.6.1 The innovation ecosystem shall include appropriate and graded oversight to ensure continuous attention to biosafety, ethical standards, regulatory compliance, and the potential misuse of emerging technologies. Early-stage research shall be subject to ethics and biosafety review under the standards set out in Chapter 5. Technologies approaching programme inclusion shall be subject to the assessment processes defined in Chapter 6.

4.7 Enabling Conditions for Translation

4.7.1 The enabling conditions described in this chapter, including research infrastructure, workforce, funding, culture, partnerships, and innovation support, shall be designed to support the full arc from research to application. Health research translates through multiple channels: into products and technologies, into policy and programme design, into clinical practice, and into public health action. Where enabling conditions serve the production of research but not its movement into practice, policy, or products, those gaps shall be identified and addressed. The specific frameworks through which these enabling conditions support translation are set out in Chapter 6.

Chapter 5

Ethics, Integrity and Quality Standards for Health Research

Trust is the foundation of health research. India's ambition to generate evidence, develop technologies, and shape health solutions for itself and the world must rest on standards that protect people, uphold integrity, assure quality, and make research worthy of public confidence.

Ethics, integrity, and quality are therefore not procedural requirements alone. They are the conditions that make research scientifically credible, socially legitimate, and fit for use in policy, practice, products, and public health action. They ensure that research is valuable before it is undertaken, respectful in the way it involves participants and communities, honest in the way it is conducted and reported, rigorous in its methods, responsible in its use of data, and accountable in its translation to public benefit.

Chapter 2 establishes the governance architecture through which ethics, integrity, quality, and data-related oversight are organised. This chapter sets out the substantive standards that shall operate across that architecture. Where an issue is discussed in both chapters, the division is deliberate: Chapter 2 addresses who is responsible for oversight; this chapter addresses what the standards require.

India has made substantial progress in ethics infrastructure, including national ethical guidelines and the registration of ethics committees. The next stage requires greater consistency in how conduct standards are applied, stronger integration between ethics review, research integrity, quality assurance, and data governance, and more systematic mechanisms to identify and address gaps. As the ecosystem expands in scale and complexity, increasingly involving digital, computational, genomic, cross-border, and dual-use dimensions, these standards must keep pace.

The standards that follow, consistent with the principles set out in Section 1.5, apply across all forms of health research, institutional settings, and sources of funding. For each domain, the chapter sets out the national standard, the responsibilities of institutions, and the responsibilities of investigators. Across all domains, institutions shall implement the national policies and standards set by the Department of Health Research and the Indian

Council of Medical Research, adapting them to their context while upholding the common expectations of trustworthy, ethical, rigorous, and accountable research.

5.1 Scientific and Social Value

5.1.1 Health research shall be justified by its potential to generate knowledge of scientific or social value. Assessments of value shall take into account the extent to which research responds to important health needs, contributes meaningfully to knowledge or practice, and addresses the needs of underserved or vulnerable populations. Research that imposes burdens on participants, communities, or public resources is justified only to the extent that it offers a reasonable prospect of generating findings of value.

5.1.2 Institutions and funding agencies should assess research proposals for scientific merit and social relevance before approval. Scientific review mechanisms established under Section 2.3.3 shall evaluate whether proposed research addresses genuine knowledge gaps and offers credible prospects of benefit.

5.1.3 Investigators should design research that is responsive to identified health needs and should engage communities at appropriate stages, including problem identification, study design, implementation, and dissemination. Such engagement is of particular importance in research involving vulnerable or marginalised populations, indigenous communities, and settings where historical experience may affect participation and trust.

5.2 Ethical Conduct of Research

5.2.1 Ethical conduct of research requires respect for the rights, dignity, and welfare of participants.

National standards

5.2.2 Research shall be conducted in accordance with the national ethical guidelines issued by the Department of Health Research and the Indian Council of Medical Research, as revised from time to time, and the ethics review requirements set out in Section 2.2.1. Ethics review systems shall be strengthened in their capacity, training, and resourcing.

5.2.3 During public health emergencies, research may proceed under expedited ethics review where justified by urgency and the prospect of public health benefit. Where prospective informed consent is not feasible, research may proceed with appropriate consent adaptations, including deferred consent, waiver of consent, or other measures, as determined by the ethics committee in accordance with national ethical guidelines.

5.2.4 Research resulting in proven effective interventions shall include provisions for post-trial access by participants and communities, through mechanisms agreed before research begins. Research that collects data or biological materials from communities shall include provisions for the return of findings and the sharing of benefits in forms that are meaningful to those communities.

5.2.5 For multicentre research, mechanisms for single ethics review or mutual recognition of ethics review shall be enabled where appropriate, to avoid duplication, reduce delays, and maintain consistent ethical standards. National guidance shall also be developed for the conduct of non-regulatory studies and trials.

Institutional responsibilities

5.2.6 Ethics committees established under Sections 2.2.1 and 2.3.2 shall ensure the following:

1. That all research involving human participants, their data, or their biological materials is reviewed and approved before initiation.
2. That conflict of interest protocols required under Section 2.2.1 are implemented.
3. That clear policies govern the handling of data following participant withdrawal, distinguishing between data already incorporated into published findings and identifiable data in active use.

4. That competent recognition, care, referral, support, and compensation are provided where injury or harm is found to be related to research.
5. That additional safeguards are in place for persons in situations of vulnerability, including children, pregnant women, persons with cognitive or intellectual disabilities, prisoners and persons in detention, economically disadvantaged populations, indigenous and tribal communities, communities with limited access to health care, and populations in emergency or disaster settings.

Investigator responsibilities

5.2.7 Investigators shall abide by applicable national ethical guidelines and policies. Research should minimise risks and discomforts while maximising benefits to individuals and communities.

5.2.8 Participants shall have the autonomy to decide whether to participate and whether to withdraw at any stage. Informed consent shall be sought in a manner, form, and language that is simple, clear, and free from undue influence. Consent processes shall be adapted to the nature of the research, the context of the population, and the vulnerability of participants. Where research involves data reuse, biobanking, or longitudinal follow-up, consent frameworks shall clearly communicate future uses and provide for participant re-engagement where appropriate. Where research involves communities or populations, appropriate forms of community engagement, consultation, or permission shall be employed alongside individual consent, as relevant to the context.

5.2.9 Participants shall be treated with dignity and respect, and their privacy and confidential information shall be safeguarded.

5.2.10 No specific group or community shall bear an unfair share of risk or harm. The benefits and risks of research shall be equitably distributed. Research shall be inclusive and non-discriminatory.

5.3 Research Integrity

5.3.1 Research integrity requires honest reporting, rigorous methods, fair attribution, and transparent handling of data, materials, and conflicts of interest. Institutions and researchers share this responsibility.

National standards

5.3.2 Credible allegations of research misconduct, including fabrication, falsification, and plagiarism, shall be assessed and, where a prima facie case is established, investigated through a fair, confidential, and time-bound process, with proportionate action where misconduct is substantiated, informed by the research integrity standards established by the Indian Council of Medical Research. Allegations shall be made in good faith; knowingly false, malicious, or vexatious allegations shall themselves be treated as a breach of research integrity. Questionable research practices shall be addressed through guidance and training, distinct from formal misconduct proceedings. The National Research Integrity Office established under Section 2.2.2 shall discharge its functions in accordance with the standards set out in this chapter.

Institutional responsibilities

5.3.3 Institutions should foster a research environment that prioritises integrity as a core professional value. Institutional responsibilities include:

1. Promoting responsible conduct of research, conflict of interest disclosure and management, authorship, data stewardship, and research record-keeping.
2. Promoting standards set by DHR and ICMR for the integrity of peer review processes, including management of reviewer conflicts of interest and confidentiality of review.
3. Providing researchers with guidance, training, and support for compliance with research integrity standards, treating integrity as a matter of professional formation.

Investigator responsibilities

5.3.4 Investigators are accountable across the full research lifecycle, from conception and design to data collection, management, interpretation, publication, dissemination, and post-publication activities. They shall comply with applicable legal, ethical, and regulatory requirements and maintain records demonstrating such compliance.

5.3.5 Research shall be conducted in accordance with an approved protocol and appropriate standard operating procedures. Deviations shall be documented, acknowledged, and justified. Research materials, including biological specimens and research records, shall be handled responsibly and archived to appropriate standards.

5.3.6 Investigators should present findings accurately and completely, with measures to prevent misrepresentation, selective reporting, and misleading interpretation, in accordance with applicable reporting standards.

5.3.7 Investigators and all personnel involved in research shall disclose financial, professional, and other conflicts of interest that could influence research design, conduct, review, or publication.

5.3.8 Authorship shall reflect genuine intellectual contribution. All persons who meet accepted criteria for authorship, such as the criteria of the International Committee of Medical Journal Editors (ICMJE), shall be credited, and no person who does not meet those criteria shall be listed as an author. Contributor roles shall be documented. The contributions of all team members, including those in technical, field, data management, community partnership, and support roles, shall be appropriately acknowledged.

5.3.9 The responsible use of artificial intelligence in research shall be expected of all researchers. Where artificial intelligence tools are used in the design, conduct, analysis, or writing of research, their use shall be disclosed, and researchers shall remain accountable for the integrity, accuracy, and originality of the work.

5.4 Research Quality

5.4.1 Research quality depends on the validity of methods, the accuracy of measurement, the rigour of conduct, and the reproducibility of findings. These qualities underpin the credibility of individual studies and the integrity of the evidence base on which the National Health Research Agenda and its translation into policy and practice depend.

National standards

5.4.2 Research shall be designed, conducted, and reported according to recognised good-practice frameworks and discipline-specific reporting guidelines. Negative, null, and inconclusive findings shall be reported alongside positive results, so that the evidence base reflects the full range of research outcomes. Selective reporting and publication bias undermine the integrity of the evidence base and shall be actively discouraged through institutional, editorial, and funding policies.

5.4.3 Reproducibility and replicability shall be promoted through transparent reporting of methods, data, and analytical procedures, in accordance with the data governance standards set out in Section 5.5. Pre-registration of study protocols and analysis plans shall be encouraged, particularly for confirmatory research.

Institutional responsibilities

5.4.4 Institutions should implement the policies and standards for quality assurance set by the Department of Health Research and the Indian Council of Medical Research, disseminate these to researchers, and provide training on quality management. Institutional responsibilities include:

1. Integrating quality control procedures into study design to minimise errors and improve precision.
2. Applying quality assurance measures proportionate to the scale, complexity, and risks of the study, including internal or external quality reviews, audits, and data verification.

3. Including measures to identify and address bias in study design, measurement, analysis, and reporting.

5.4.5 Funding agencies shall communicate expectations clearly, embed quality criteria in grant evaluation, and monitor adherence in the conduct and reporting of research.

Investigator responsibilities

5.4.6 Investigators should adhere to recognised reporting standards and guidelines applicable to their discipline and study type. Research findings should be made available through publication or other appropriate means of dissemination.

5.4.7 Where research involves computational or algorithmic methods, the code, parameters, and data used shall be documented and, where appropriate and absent legal or proprietary constraints, made available for verification.

5.4.8 Investigators should ensure that data fidelity is maintained throughout collection, storage, and analysis, and should cooperate with reasonable and proportionate quality assurance and audit processes established by their institution.

5.5 Data Access and Governance

5.5.1 Data access and reuse are important for advancing science, reducing duplication, and strengthening public benefit. Chapter 4 sets out the enabling infrastructure for data storage, repositories, and digital platforms. This section addresses the standards that shall guide responsible access, reuse, security, and governance of health research data.

National standards

5.5.2 Data access and governance shall follow the data governance guidelines and standards laid down by the Department of Health Research and the Indian Council of Medical Research. These shall be clearly defined and kept current, and shall guide institutions and investigators in the access, sharing, storage, and reuse of health research data.

5.5.3 Data sharing shall be the expected norm for publicly funded research. Documented exceptions may be justified where participant consent explicitly restricts sharing, where indigenous knowledge rights require protection, where national security considerations apply, or where a limited-duration exclusivity period is approved by the funding agency.

5.5.4 Health research data shall be collected using common data standards where available, consistent with the principles of findability, accessibility, interoperability, and reusability set out in Section 4.1.

5.5.5 Sharing of health research data shall comply with applicable national data protection legislation, including the Digital Personal Data Protection Act, 2023 and rules made thereunder, as amended from time to time, and provisions governing restricted categories of personal data. International data-sharing agreements shall include safeguards for lawful transfer, restrictions on re-transfer and secondary use, and assurances of adequate data protection by the receiving party.

5.5.6 Data systems shall be protected through appropriate cybersecurity measures and governed by applicable national data protection laws and regulatory frameworks.

5.5.7 Data platforms, tools, standards, and interoperability frameworks developed with public funding for health research should be designed and maintained as digital public goods, with open access, transparent governance, and provisions for community contribution and reuse.

Institutional responsibilities

5.5.8 Institutions engaged in health research shall follow the data governance standards laid down by the Department of Health Research and the Indian Council of Medical Research, read with applicable national data protection law, for the access, sharing, storage, and reuse of health research data. Where such standards exist, institutions shall implement them; where they do not yet exist, they shall be developed and revised from time to time. These standards shall address matters such as the terms and conditions of data access, the distinct handling of personal and de-identified data, risk-based access arrangements, secure storage, regulated repositories, and the training of researchers and support staff.

Investigator responsibilities

5.5.9 Investigators should develop and follow standard operating procedures for data collection, storage, and access to improve data quality and minimise errors. All shared data should be accompanied by comprehensive metadata describing origin, scope, limitations, and intended use. Investigators who use shared data should acknowledge the source in publications, reports, and other outputs.

5.5.10 The data governance standards set out in this section support both research integrity and the translation of evidence into policy, practice, and public benefit, as set out in Chapter 6.

5.6 Emerging and Cross-Cutting Considerations

5.6.1 The standards set out in this chapter apply to all forms of health research, including those involving emerging technologies, methods, and data types. As the research ecosystem evolves, new challenges will require these standards to be interpreted, adapted, and extended.

5.6.2 The use of health research data to develop artificial intelligence and other computational and data-intensive tools shall be governed by applicable national guidelines and regulatory frameworks, and held to the same standards of transparency, consent, equity, and accountability as other health research. Consent processes shall clearly communicate anticipated uses, including algorithm development and model training, and provide for participant choice.

5.6.3 Research involving such tools should consider the full development lifecycle, with attention to bias, validation across diverse population groups, explainability of outputs used in decision-making, data provenance, and the potential for harm. Oversight shall be proportionate to risk and intended use, protecting participants without impeding beneficial innovation.

5.6.4 Research involving human genomic data, large-scale biological databases, and other sensitive data types shall be subject to specific governance arrangements. These shall address consent for specific and secondary uses, re-identification risk, cross-border data flows, and the rights of individuals and communities from whom data are derived. Where such data derive from indigenous communities, research shall respect community data governance principles and include benefit-sharing provisions.

5.6.5 Research with dual-use potential, where findings or technologies could be misused to cause harm, shall be subject to appropriate oversight. Institutions and funding agencies should develop mechanisms to identify, assess, and manage dual-use risks proportionate to the nature of the research.

These standards provide the trust and credibility on which the translation of research into policy, practice, products, and public benefit must rest.

Chapter 6

Translation, Application and Public Benefit

Health research fulfils its public purpose only when knowledge travels the full distance to use. Evidence that remains confined to journals, reports, laboratories, or pilots cannot deliver the promise of a national health research ecosystem. India's ambition must therefore extend beyond generating high-quality research to ensuring that research informs decisions, strengthens programmes, improves clinical practice, supports indigenous technologies, and reaches the people and communities who need it most.

Translation is not an automatic consequence of discovery. It requires deliberate pathways through which evidence is assessed, synthesised, adapted, communicated, adopted, scaled, and reviewed. It also requires a health system that actively demands and uses evidence in policy formulation, programme design, procurement, regulation, clinical guidance, and public health action. The task is to make research-to-action a routine capability of the system rather than an exceptional achievement. Because health is largely a State subject, this depends in particular on research findings reaching State governments and health systems, where much of health care is planned and delivered.

India has notable examples of research-to-policy and research-to-practice translation. The next stage is to make translation systematic, timely, equitable, and accountable. This requires standing functions for evidence synthesis, guideline development, health technology assessment, implementation learning, de-implementation of ineffective practices, and last-mile adaptation. It also requires feedback loops through which experience from States, programmes, health workers, communities, and patients informs future research priorities and implementation choices.

Chapters 3 and 4 establish the research agenda and the enabling conditions for its pursuit. Chapter 5 sets out the standards by which research shall be conducted. This chapter addresses the pathways through which research evidence shall be translated into policy, programmes, clinical practice, products, and public benefit. Consistent with Commitments 7 and 8 set out in Section 1.4, it establishes the framework through which India's health research ecosystem can move from evidence to action, and from action to measurable improvement in health, health care, and health systems.

For the purposes of this chapter, standing functions refer to permanent institutional capabilities established through policy mandate and sustained through governance arrangements, dedicated capacity, and regular performance review.

6.1 From Research to Action

6.1.1 Research findings shall be systematically translated through their incorporation into policy formulation, public health planning, programme implementation, technological development, and clinical practice.

6.1.2 Translation requires deliberate processes through which evidence is assessed, synthesised, adapted, communicated, and used in forms that are relevant to decision-makers, practitioners, and communities. It shall be guided by relevance to public health need, feasibility of use, equity implications, and the potential to strengthen quality, access, affordability, and outcomes.

6.1.3 Health research reaches use through multiple channels: products and technologies, policy and programme design, clinical practice, and public health action. The requirements for each channel are distinct. The research ecosystem shall be configured to support all of them, from the production of evidence through to its movement into routine use. The innovation ecosystem and indigenous health technology provisions that support the products and technologies channel are set out in Section 4.6.

6.1.4 This is a two-sided process. The supply of evidence through synthesis, guidelines, and assessment is required. The health system, including the Department of Health and Family Welfare, State health departments, and national health programmes, shall also develop structured mechanisms through which policy, programme, regulatory, and clinical decision-making actively draws on available evidence. Translation succeeds when the health system demands and uses evidence as a routine part of its decision-making.

6.2 Evidence Synthesis and Guidelines

6.2.1 Research evidence shall be systematically collated, analysed, and synthesised using recognised methods and frameworks to inform clinical practice, health policy, and programme implementation.

National standards

6.2.2 The research ecosystem shall maintain a standing capability for evidence synthesis and clinical and public health guidelines development, consistent with the governance architecture set out in Chapter 2. Evidence synthesis provides transparent, reproducible summaries of what is known about a health question. Guideline development formulates recommendations incorporating considerations of values, feasibility, equity, and resource requirements. The research ecosystem shall maintain institutional capacity for both functions.

6.2.3 This capability shall support the production of outputs that make research usable in real-world decision-making, including standard treatment guidelines, clinical protocols, policy briefs, decision aids, and recommendations for programme design and delivery.

6.2.4 Evidence-based guidelines and recommendations for clinical care and public health programmes shall be developed through transparent, systematic processes that assess the quality of evidence, consider the balance of benefits and harms, account for values and preferences, and evaluate feasibility and resource implications. They shall be reviewed at intervals of three to five years, or earlier where significant new evidence emerges. The responsible guideline body shall monitor the evidence base and document the rationale for any decision to update or reaffirm existing recommendations.

6.2.5 Evidence synthesis shall also support recommendations on the composition of health benefit packages, disease surveillance priorities, preparedness requirements, and updates to the National Health Research Agenda. Where evidence syntheses or guideline processes reveal gaps in the current research agenda or identify emerging health priorities, these findings shall be formally communicated to the agenda-setting process set out in Chapter 3.

Institutional responsibilities

6.2.6 Institutions that produce or commission evidence synthesis should ensure that their methods are systematic, transparent, and reproducible. Institutions responsible for clinical or public health guidelines shall establish standing committees or mechanisms for developing, reviewing, and updating guidelines. These mechanisms shall include appropriate expertise; implement formal processes for the declaration, assessment, and management of conflicts of interest; and operate with independence from commercial influence.

6.2.7 Health system institutions, including those responsible for national programmes, benefit packages, procurement, and regulation, shall establish formal processes for incorporating available evidence and guideline recommendations into their decision-making, consistent with the governance responsibilities set out in Chapter 2.

Demand-side mechanisms: health system evidence needs

6.2.8 National programmes, States, regulatory bodies, and public health institutions shall formally identify their evidence and guideline needs at intervals aligned to their decision cycles. These needs shall be communicated to the research ecosystem so that evidence synthesis and research prioritisation can respond to the demands of the health system. The NHRSC shall provide guidance on how such demand-side mechanisms are established and coordinated across the ecosystem. The research ecosystem shall prioritise synthesis and guideline development that aligns with these institutional decision cycles.

6.2.9 Institutions should document how available evidence informed their decisions and, where evidence was not followed, the rationale for departure. This documentation should be maintained for review through appropriate institutional or programme mechanisms.

6.2.10 Evidence synthesis and guideline development shall be linked to operational decision cycles, including benefit-package revision, procurement planning, programme review, and regulatory assessment, so that evidence is produced and updated when the system needs it.

6.3 Health Technology Assessment

6.3.1 Health technologies, including diagnostics, therapeutics, vaccines, devices, digital tools, and delivery models, shall be subjected to systematic assessment before wider inclusion in clinical practice or public programmes.

National standards

6.3.2 The research ecosystem shall maintain a standing health technology assessment function within the national health research governance architecture established in Chapter 2. Health technology assessment is distinguished from evidence synthesis and clinical guidelines by its focus on the comparative clinical effectiveness, cost-effectiveness, affordability, feasibility, and equity implications of health technologies, to inform procurement, pricing, and benefit-package decisions.

6.3.3 Health technology assessment shall be conducted using transparent, reproducible methods. Assessments shall draw on the best available evidence, including Indian data on costs, utilisation, and health outcomes. Health system institutions responsible for programme delivery, procurement, and regulation shall prioritise the generation and sharing of standardised data on technology utilisation, costs, and outcomes to support timely assessment. Where Indian evidence is insufficient, the health technology assessment function shall support primary research to fill gaps.

6.3.4 The health technology assessment function shall be supported by a network of regional and institutional resource centres with the capacity to conduct assessments across diverse settings and health domains. A national coordinating mechanism shall maintain standards, support capacity-building, and coordinate priority-setting across the network.

Institutional responsibilities

6.3.5 Institutions responsible for public health programmes, insurance schemes, procurement, and regulation shall use health technology assessment evidence in decisions on the inclusion, pricing, and scaling of health technologies. Health technology assessment recommendations shall be formally integrated into the decision-making processes of these institutions. Where recommendations are not adopted, the decision-making institution shall document the rationale.

6.3.6 Institutions conducting health technology assessment shall build and maintain capacity in health economics, cost-effectiveness analysis, and evidence synthesis, and shall support training and capability-building across the ecosystem.

Translation into action

6.3.7 Health technology assessment shall support the evaluation of new technologies and the periodic review of technologies already in use. Reassessment shall occur when new comparative evidence emerges, price or cost structures change, implementation data indicate suboptimal outcomes, or superior alternatives are identified. The health technology assessment function shall maintain a schedule of technologies due for periodic reassessment.

6.3.8 Health technology assessment shall inform the innovation and indigenous technology pathways set out in Section 4.6, providing evidence on the comparative performance and cost-effectiveness of domestically developed solutions. Assessment intensity shall be proportionate to evidence maturity: supportive and advisory during early development, systematic and rigorous before programme inclusion or scaling.

6.4 Learning from Implementation

6.4.1 Translation into practice requires attention to how, where, for whom, and under what conditions interventions can be delivered effectively. Implementation learning is a standing function of the research ecosystem.

National standards

6.4.2 Implementation research, which generates rigorous evidence on implementation strategies through controlled comparative studies, and implementation learning, which provides routine real-time feedback from programme delivery, serve distinct but complementary functions. Both shall be supported. Implementation learning shall operate continuously within programme management systems, in parallel with longer-term implementation research.

6.4.3 Programme evaluation shall be supported as a systematic source of evidence on the implementation, effectiveness, and impact of health programmes. Findings from programme evaluation shall be fed back into policy, programme design, guidelines, and the National Health Research Agenda, so that the health system learns continuously from its own performance.

6.4.4 Research shall be used to identify barriers, bottlenecks, feasibility gaps, adaptations required for local use, and the system conditions necessary for effective delivery at scale. Such learning shall improve the delivery of clinical and preventive interventions, strengthen health system performance, and ensure that appropriate treatment and services reach the largest population at high quality and reasonable cost.

6.4.5 Health workers, programme managers, and communities shall be recognised as knowledge generators whose experience with delivery in local conditions informs programme adaptation, priority revision, and research agenda updates. Feedback loops shall be structured so that frontline observations on barriers, acceptability, and feasibility shape subsequent research and implementation cycles.

Institutional responsibilities

6.4.6 States, through their health departments and public health delivery systems, and other institutions responsible for programme delivery, shall establish mechanisms for systematic documentation of implementation experience, including routine data on coverage, quality, uptake, barriers, and adaptation. Such documentation shall be made available to the research ecosystem.

6.4.7 Research institutions should support implementation learning through embedded research partnerships with health system institutions, generating evidence on delivery, adaptation, and scale in real-world conditions.

De-implementation

6.4.8 Health systems shall systematically identify, evaluate, and discontinue practices that evidence shows to be ineffective, harmful, or costly relative to available alternatives. De-implementation (the systematic discontinuation of practices no longer supported by evidence) shall be subject to the same rigorous processes as the adoption of new evidence-based practices. Institutions responsible for clinical care and programme delivery shall periodically review existing practices against current evidence and establish processes for safe discontinuation where warranted.

Adoption, adaptation, and scale

6.4.9 Research evidence shall support the adoption, adaptation, and scaling of effective interventions, technologies, and service-delivery approaches. Funding and de-risking mechanisms for scaling proven solutions are set out in Section 4.6.3.

6.4.10 Adaptation to local conditions, resources, and health system structures is often necessary for feasibility and acceptability. Adaptation shall preserve the core components through which interventions achieve their effect, while permitting modification of delivery modality, setting, and staffing to suit local conditions.

6.4.11 Adoption at scale shall be supported by evidence of effectiveness, feasibility, acceptability, affordability, and sustainability. Translation pathways shall remain adaptive. Interventions effective in one context may require modification for use in another, and systems shall support appropriate adaptation without undermining scientific validity or public purpose.

6.4.12 Findings from implementation learning shall be formally reviewed to inform updates to the National Health Research Agenda (Chapter 3), identification of gaps in the enabling ecosystem (Chapter 4), and revisions to research standards (Chapter 5), as well as improvements to policy and programmes.

6.5 Equity, Inclusion and Last-Mile Relevance (Reaching the Most Underserved)

6.5.1 The translation of research evidence shall be guided by equity and inclusion. Research shall not be regarded as fully translated unless its benefits reach underserved populations, underserved geographies, and groups at elevated risk of exclusion or harm.

6.5.2 Translation efforts shall be attentive to socio-cultural context, local values and preferences, and the structural barriers to implementation in underserved settings, including health workforce availability and sustainability, supply chain integrity, infrastructure for diagnostics, monitoring, and quality assurance, and geospatial accessibility. Translation assessments shall identify how these barriers affect delivery in difficult settings and what system-level changes are prerequisites for equitable reach.

6.5.3 Evidence translation shall include explicit analysis of who benefits, who is left behind, what adaptations are needed for difficult settings, and what additional measures are required for last-mile relevance. The periodic review of translation pathways set out in Section 6.6 shall assess whether translation efforts are narrowing or widening equity gaps.

6.6 Translation Support and Periodic Review

6.6.1 The research ecosystem shall support the systematic movement of evidence into use through the standing functions set out in Sections 6.2 through 6.5.

6.6.2 Consistent with the enabling ecosystem provisions set out in Chapter 4, there shall be systematic efforts to identify gaps in the availability or accessibility of technologies, to strengthen indigenous provision of useful solutions, and to reduce avoidable barriers to their wider adoption and use.

6.6.3 Translation support shall include mechanisms that connect researchers, clinicians, programme managers, industry, public systems, and policymakers so that evidence moves effectively from research settings into routine use. Institutional incentives, career pathways, and recognition systems shall value translational contributions alongside research productivity.

6.6.4 The Department of Health Research, with the Indian Council of Medical Research, shall review translation pathways at intervals of three to five years, or in alignment with the review cycle of the National Health Research Agenda. The review shall draw on the translation-support mechanisms set out in this chapter and shall assess demand-side linkages, the reach of translated evidence to underserved populations, progress in addressing identified barriers, and alignment with national priorities and system needs. Where barriers to translation are systemic, including procurement delays, regulatory lag, budget cycle misalignment, or competing programme priorities, the review shall identify these and recommend institutional remedies.

6.6.5 Findings from translation reviews shall inform the updating of the National Health Research Agenda, the strengthening of enabling ecosystem functions, and the assessment and review processes set out in Chapter 7.

Chapter 7

Assessment, Impact and Review

A national health research policy must ultimately be judged by what it changes. It is not enough to count studies completed, papers published, grants awarded, or technologies developed. The deeper test is whether research strengthens scientific capability, informs policy and practice, builds institutions and people, reaches underserved populations, improves health systems, and contributes to better health for India and the world.

Assessment is therefore not a peripheral function of the research ecosystem. It is one of the instruments through which the ecosystem learns, improves, and renews itself. What is assessed shapes what is valued; what is valued shapes behaviour, investment, and institutional culture. If assessment captures only publications and journal-based metrics, it rewards only a fraction of what India's health research ecosystem needs. A mature assessment system must recognise the full range of contribution: discovery, development, delivery, translation, innovation, capacity-building, mentorship, public engagement, equity, and societal impact.

India has already begun this shift through the development of the ICMR Impact of Research and Innovation Scale (ICMR-IRIS), which provides a broader framework for assessing research impact. The task now is to embed multidimensional assessment into decisions at individual, institutional, portfolio, and system levels, while ensuring that assessment remains fair, transparent, contextual, and alert to unintended incentives.

The research agenda set out in Chapter 3, the enabling ecosystem in Chapter 4, the standards in Chapter 5, and the translation pathways in Chapter 6 all require systems of assessment and review through which progress can be examined, gaps identified, and improvement made. Consistent with the principles of scientific rigour, integrity, accountability, equity, and public trust set out in Chapter 1, this chapter establishes the framework through which outputs, outcomes, and impact shall be assessed, and through which the Policy itself shall be periodically reviewed and renewed.

7.1 Assessment Framework and Parameters

7.1.1 Research productivity and contribution shall be assessed through a multidimensional framework that captures the full spectrum from scholarly output to societal impact.

Domains of assessment

7.1.2 Assessment shall be organised across defined domains that together reflect the breadth of research contribution. These domains include: scholarly output and scientific quality; clinical and public health translation; policy influence; innovation and product development, including invention, validation, commercialisation, and scaling; capacity-building and mentorship; community and public benefit; and research integrity and responsible conduct, including adherence to the standards set out in Chapter 5. The domains are not exhaustive and shall be reviewed as the research ecosystem evolves. Equity considerations shall be embedded across all domains, consistent with the provisions set out in Section 6.5.

Common assessment framework

7.1.3 Assessment shall move beyond publication counts as the primary measure of research contribution. Assessment systems shall apply a common approach to valuing different types of research contribution, reflecting the principle that contributions later in the pathway from discovery through translation to adoption represent progressively greater institutional and societal benefit. Such an approach shall enable comparison and aggregation across researchers, institutions, and portfolios while preserving the distinctions between types of contribution. The principle of differentiated valuation (assigning different weights to different types of contribution), the domains covered, and the rationale for relative weighting shall be transparent and publicly documented. The Indian Council of Medical Research shall steward the development and refinement of the national assessment framework, applying the ICMR Impact of Research and Innovation Scale set out in Section 7.5.

Methodology

7.1.4 Assessment shall integrate quantitative and qualitative indicators. Quantitative indicators provide measures of volume, reach, and impact. Qualitative assessment captures significance, rigour, and contextual value that quantitative indicators do not. Assessment methods shall be transparent, reproducible, and equitable, ensuring fairness across disciplines, career stages, and institutional contexts.

7.1.5 Contextualisation shall include recognition of discipline-specific norms, career-stage differences, institutional context (including research intensity and resource availability), and linguistic and geographic diversity. Metrics shall not be used in isolation. No single indicator shall serve as the sole basis for assessment at any level. Assessment frameworks shall be aligned, where appropriate, with nationally recognised benchmarking systems.

7.1.6 Assessment frameworks for portfolio management (examining whether national research investment aligns with the Agenda) shall be distinct from frameworks used for individual researcher progression or institutional funding decisions. Portfolio-level assessment informs strategic direction; individual-level assessment informs incentives. Both inform learning but serve different governance functions.

Alignment with national priorities

7.1.7 Assessment shall examine whether research investment and performance remain aligned with the National Health Research Agenda set out in Chapter 3, and whether the balance across descriptive, discovery, development, and delivery research is appropriate. Assessment should reflect research that contributes to the creation, validation, application, and affordability of health technologies and solutions, consistent with the innovation ecosystem provisions set out in Section 4.6.

Periodic refinement

7.1.8 Assessment systems shall be monitored to identify and correct unintended incentives. Institutions and national bodies shall periodically review their assessment frameworks to ensure they reward the breadth and depth of contribution the ecosystem needs, balancing discovery, development, translation, and equity. Where assessment is driving unintended or counterproductive incentives, including incentives that privilege visibility over relevance, novelty over implementation, or volume over quality, corrective adjustments shall be made.

7.2 Individual-Level Assessment

7.2.1 Assessment at the individual level shall capture both direct scholarly outputs and indirect contributions, while remaining sensitive to disciplinary norms and career stages.

Scholarly output

7.2.2 Scholarly output shall be assessed by the volume, diversity, quality, and utility of contributions, including peer-reviewed publications, guidelines, standards, policy briefs, datasets, and related knowledge products. Quality indicators may include citation-based and other recognised measures of influence and use. Assessment shall not rely on journal-level metrics as a proxy for individual article quality.

Funding and collaboration

7.2.3 Researchers shall be assessed on their role in securing competitive research funding and their participation in interdisciplinary, national, and international research collaborations. Collaborative contributions, including participation in multi-site studies and research networks, shall be recognised.

Innovation and technology

7.2.4 Innovation and intellectual contributions shall be assessed through patents filed or granted, proof of concept or prototype development, field testing or validation in real-world conditions, adoption or implementation in health programmes or by industry, and evidence of benefit from scaled use. Contributions to the indigenous technology pathways set out in Section 4.6 shall be recognised. Assessment shall distinguish between contribution to invention, validation, and adoption, as these represent different research capabilities.

Capacity-building and mentorship

7.2.5 Contributions to student supervision, peer review, capacity-building, and the strengthening of institutional research culture shall be recognised as core components of individual assessment. These contributions are essential to the sustainability of the research ecosystem and shall be valued alongside research productivity.

Societal contribution

7.2.6 Individual assessment shall recognise contributions to evidence synthesis, guideline development, health technology assessment, and implementation learning as set out in Chapter 6, as well as contributions to public engagement and the communication of research to non-specialist audiences.

7.3 Institutional-Level Assessment

7.3.1 Chapter 2 establishes the governance architecture through which institutional accountability operates. This section sets out the substantive dimensions along which institutional research performance shall be assessed within that architecture.

Research capacity and enabling systems

7.3.2 Institutions shall be assessed on the presence and quality of structures that support high-quality research, mentorship, interdisciplinary collaboration, responsible conduct, and a culture of research excellence. The effective management of grants and timely completion of deliverables shall be reviewed, along with the responsible use of research funds and the number and quality of outputs arising from funded research.

Sponsored research and collaborative strength

7.3.3 Institutional assessment shall examine the volume, diversity, and competitiveness of sponsored research, the institution's ability to attract competitive funding, and the strength of its national and international research partnerships. Indicators may include grant success rates, portfolio diversity, and the breadth and depth of collaborative networks.

Aggregate output and quality

7.3.4 Institutional assessment shall examine overall scholarly contributions, including publications, patents, guidelines, standards, policy briefs, datasets, and related outputs. Quality indicators shall reflect visibility, citation impact, and contributions to evidence-informed policy and practice.

Capacity-building and talent development

7.3.5 Institutions shall be assessed on their commitment to training and mentoring researchers, fostering early-career scientists, and providing professional development and leadership opportunities. Indicators may include doctoral completions, mentorship programmes, and leadership in research training.

Standards, integrity, and translation

7.3.6 Institutional assessment shall also reflect adherence to the standards set out in Chapter 5 and the extent of translation into use under Chapter 6.

7.4 Societal-Level Assessment

7.4.1 Assessment shall extend to the broader and longer-term influence of health research on public health systems, policy development, clinical practice, and community well-being.

Clinical and public health, policy and programme impact

7.4.2 Societal impact shall be assessed by the extent to which research aligns with national priorities and promotes equitable health outcomes. Relevant indicators include the degree to which research findings inform legislation, health policies, and regulatory frameworks, are reflected in policy documents and adopted guidelines, and contribute to evidence-based decision-making and systemic improvement.

Health system outcomes

7.4.3 Assessment shall capture whether research translates into measurable health system strengthening, including changes in service delivery capacity, quality measures, and population-level health outcomes. Understanding the time lag between research and system adoption shall inform the assessment of translation pathways and the identification of systemic bottlenecks.

Equity and inclusion

7.4.4 Societal assessment shall examine whether research benefits reach specific populations, including underserved communities and groups at elevated risk of exclusion, consistent with the equity provisions set out in Section 6.5. Research that narrows disparities in access, quality, and outcomes shall be recognised.

Community engagement

7.4.5 Assessment at the societal level shall capture the extent to which research reflects an understanding of the diverse experiences of people and communities, includes meaningful pathways through which communities shape or influence stages of research, and demonstrates potential to improve health or social welfare.

Global contribution

7.4.6 Societal assessment shall recognise India's contribution to global health research, including the development and sharing of health technologies, evidence-based guidelines, and implementation models with other countries, particularly low- and middle-income countries. Research that strengthens India's standing as a responsible provider of health solutions to the developing world shall be valued as a dimension of national research impact.

7.5 ICMR Impact of Research and Innovation Scale (ICMR-IRIS)

7.5.1 The ICMR Impact of Research and Innovation Scale (ICMR-IRIS) shall serve as the national reference framework for the balanced and multidimensional assessment of research impact. The framework shall be maintained through the governance architecture established in Chapter 2, and shall continue to evolve in light of experience, emerging good practice, and the changing priorities of the research ecosystem.

Scope

7.5.2 ICMR-IRIS shall apply the domains and common assessment framework set out in Section 7.1 to provide a structured system for assessing research impact. Research integrity and responsible conduct shall be assessed through the institutional accountability mechanisms set out in Sections 7.3 and 2.3 rather than through the publication-equivalent approach (a standardised unit that converts diverse research contributions into comparable scores). The operational detail of the framework, including domain descriptions and scoring methodology, is set out in Annexure VII.

Application

7.5.3 ICMR-IRIS shall serve as a reference for assessment at individual, institutional, and portfolio levels. It shall serve as one reference, alongside other qualitative and quantitative assessments, for decisions on research funding, institutional evaluation, career progression, and the allocation of resources within the research ecosystem.

Governance and review

7.5.4 The domains, weighting, and methodology of ICMR-IRIS shall be periodically reviewed and updated, consistent with the periodic refinement obligations set out in Section 7.1. Such adjustments shall be documented and communicated to all research institutions. Review shall also consider emerging research modalities, including collaborative research conducted across institutional boundaries, open-science practices, and research that generates public goods with delayed or difficult-to-measure impact. The framework shall adapt to capture the value of such contributions.

7.6 Policy Review and System Renewal

7.6.1 Assessment systems shall support feedback, reflection, and improvement at individual, institutional, portfolio, and system levels.

Learning from assessment

7.6.2 Review processes shall identify strengths and gaps and inform corrective action. Review shall address whether research is reaching intended populations, whether communities and end-users are meaningfully influencing the research process, and whether evidence is shaping policy, programmes, practice, and public systems in the ways intended.

7.6.3 Findings from assessment shall formally inform the updating of the National Health Research Agenda (Chapter 3), the strengthening of enabling ecosystem functions (Chapter 4), revisions to research standards (Chapter 5), and improvements to translation pathways (Chapter 6). Where assessment data reveal sustained misalignment between research portfolio performance and the priorities of the Agenda, such findings shall trigger formal review of the Agenda through the processes set out in Chapter 3.

Periodic review of the Policy

7.6.4 The national governance architecture established in Chapter 2 shall initiate periodic review of the Policy at intervals of no more than five years, and earlier where required by major scientific, epidemiological, technological, or system developments. Such review shall take into account the review cycle of the National Health Research Agenda set out in Chapter 3, so that policy direction, priority-setting, and implementation remain aligned. The implementation architecture set out in Annexure VIII shall be reviewed as part of this process.

System renewal

7.6.5 Review shall assess whether the research ecosystem is becoming stronger, more equitable, more productive, and more effective in translating evidence into policy, practice, and public benefit. It shall also assess whether the governance ecosystem, enabling ecosystem, conduct standards, and translation pathways established in earlier chapters remain fit for purpose. Where they do not, the review shall identify what needs to change and through what mechanisms.

7.6.6 The commitments set out in Section 1.4, the principles set out in Section 1.5, and the national targets set out in Section 1.7 shall serve as the enduring reference points against which the health of the research ecosystem is judged. The measure of this Policy will be whether India builds an ecosystem that enabled generation of the evidence, technologies, implementation learning, and health solutions its people need, and of sharing them responsibly with the world.

Annexures

Annexure I: National Health Research Target Framework

A. Purpose and Scope

This Annexure sets out the detailed target framework referenced in Section 1.7 of the Policy. It provides baselines, targets, indicative milestones, and measurement guidance for each of the long-horizon national targets through which the Strategic Directions shall be assessed.

These targets are intended to guide national effort, inform investment decisions, and provide a basis for periodic review. They are not ceilings. Individual institutions, departments, and States may set more ambitious targets within their own contexts.

B. Target Period

The present target framework covers the period from the adoption of this Policy to 2047, with 2037 serving as the first major milestone for review and course correction. Targets shall be reviewed and, where necessary, revised at the time of each periodic review of the Policy, and at intervals not exceeding ten years.

C. Targets

Target 1: Health Research Investment as a Share of GDP

Dimension	Detail
Indicator	Total national expenditure on health research as a percentage of GDP
Baseline (2026-27)	0.024% of GDP
Target (2037)	0.072% of GDP
Indicative milestone (2031)	0.045% of GDP
Scope	Baseline reflects allocations from three major Government of India departments (DHR, DBT, DSIR). Aspiration is to broaden measurement progressively to include State expenditure, private sector R&D, and philanthropic investment in health research
Measurement	To be assessed through allocations in the Union Budget, supplemented by periodic surveys of R&D expenditure from all other sources

Dimension	Detail
Data source	Department of Science and Technology, Research and Development Statistics at a Glance; and Department of Health Research budget allocations.
Strategic Direction	Supports Strategic Direction 1 (governance and enabling conditions), Strategic Direction 2 (priorities and investment), and Strategic Direction 3 (workforce, infrastructure, and capability)
Notes	The 0.072% target represents a threefold increase from baseline. Sustained annual increases in Union budget allocation for health research will be the principal driver. State-level investment and private sector R&D should be tracked separately to understand the composition of growth.

Target 2: Medical Science PhDs per Million Population

Dimension	Detail
Indicator	Number of Medical Science PhD degrees awarded annually per million population
Baseline (2021-22)	1.5 per million population
Target (2037)	4.5 per million population
Indicative milestone (2031)	2.8 per million population
Scope	Includes PhDs awarded in the Medical Science category as per the All India Survey of Higher Education (AISHE)
Measurement	Assessed through the All India Survey of Higher Education (AISHE), conducted annually by the Ministry of Education
Data source	All India Survey on Higher Education (AISHE), Ministry of Education; population from Census of India and UN World Population Prospects.
Strategic Direction	Supports Strategic Direction 3 (workforce, infrastructure, and capability)
Notes	Growth requires expansion of doctoral training capacity, paid fellowships, clinician-scientist pathways, and institutional mentorship infrastructure. The target should be disaggregated by gender, geography, and institutional type to track equity.

Target 3: Health Research Publications per Million Population

Dimension	Detail
Indicator	Number of Biological & Biomedical Sciences and Health Sciences publications per million population per year
Baseline (2022)	39 per million population
Target (2037)	120 per million population

Dimension	Detail
Indicative milestone (2031)	72 per million population
Scope	Includes articles in Biological & Biomedical Sciences and Health Sciences. Articles refer to publications from a selection of conference proceedings and peer-reviewed journals in science and engineering fields from Scopus. Articles are classified by year of publication and assigned to a country on the basis of institutional addresses of the authors. Articles are credited on a fractional-count basis
Measurement	To be assessed through bibliometric analysis, coordinated by DHR or a designated national body. International comparison data currently compiled by the National Science Foundation (most recent: 2022)
Data source	Scopus and SCImago Journal & Country Rank (Health Sciences).
Strategic Direction	Supports Strategic Direction 3 (workforce, infrastructure, and capability)
Notes	Volume growth must be accompanied by quality improvement. Publication targets should be read alongside quality and integrity standards and the multidimensional assessment framework. The target should not create incentives for volume without quality.

Target 4: Life Sciences Patents per Million Population

Dimension	Detail
Indicator	Number of Life Sciences patents granted per million population per year
Baseline (2023)	2.5 per million population
Target (2037)	5.0 per million population
Indicative milestone (2031)	3.5 per million population
Scope	Includes patents granted within the fields of medical technology, biotechnology, and pharmaceuticals by filing office, by individuals or entities registered in India. Source: World Intellectual Property Organization (WIPO)
Measurement	To be assessed through data from the Office of the Controller General of Patents, Designs and Trade Marks, supplemented by institutional reporting
Data source	Office of the Controller General of Patents, Designs and Trade Marks, Annual Report; and WIPO IP statistics.
Strategic Direction	Supports Strategic Direction 3 (workforce, infrastructure, and capability) and Strategic Direction 4 (collaboration, self-reliance, and India's contribution)
Notes	Granted patents are a proxy for innovation output. They should be tracked alongside translation outcomes and the innovation ecosystem provisions of this Policy. Patents that proceed to product development, regulatory approval, and public use should be separately identified.

Target 5: Approved Indigenous Health Technologies per Million Population

Dimension	Detail
Indicator	Number of indigenous health technologies receiving regulatory approval for use in India per million population per year
Baseline (2023)	0.01 per million population (approximate)
Target (2037)	0.03 per million population
Indicative milestone (2031)	0.02 per million population
Scope	Includes drugs, vaccines, diagnostics, medical devices, and digital health tools developed through Indian research and approved by CDSCO or other relevant regulatory authorities
Measurement	To be assessed through regulatory approval data from CDSCO, supplemented by data from the Department of Biotechnology, CSIR, and ICMR
Data source	Central Drugs Standard Control Organisation (CDSCO) approval data.
Strategic Direction	Supports Strategic Direction 4 (collaboration, self-reliance, and India's contribution) and Strategic Direction 5 (translation and accountability for outcomes)
Notes	This is among the most consequential targets in the framework: it measures whether research is producing technologies that reach patients. Approved technologies should be further tracked for actual adoption, procurement, and use in public programmes. The baseline is an approximate figure. There is at present no single compiled national data source for approved indigenous health technologies, and it has been estimated from multiple datasets with manual screening. The figure shall be refined as the measurement architecture and Measurement Manual (Annexure VIII) are established.

D. Cross-Cutting Provisions

All targets shall be disaggregated, where feasible, by gender, geography (State and Union Territory), institutional type (public, private, not-for-profit), and discipline, to track equity and inform corrective action.

Progress against targets shall be assessed as part of the periodic review of the Policy and the review of the National Health Research Agenda under Section 3.5. The Department of Health Research shall publish periodic progress reports against the target framework.

Targets may be revised upward or downward at the time of each periodic review, based on evidence of progress, changing national circumstances, and evolving scientific opportunity.

Note on Global Standing Indicator. The indicator "global standing in health sciences research" referenced in Section 1.7 is a composite measure of India's position in international health research and innovation rather than a standalone metric with a separate data source. It shall be assessed periodically against recognised international references, which may include research-output and citation indices (such as the Nature Index and SCImago/Scopus-based country rankings) and innovation indices (such as the Global Innovation Index), considered together with progress across the five targets above. The specific indices, indicators, and method of composition shall be specified by the Department of Health Research and periodically reviewed to ensure validity, comparability, and continued relevance.

Annexure II: Roles of National Departments, Councils, and Institutions in the Health Research Ecosystem

The following table sets out principal national departments, councils, institutions, platforms, and standing functions with roles relevant to health research, and their primary contributions to the national health research ecosystem. The list is indicative and not exhaustive. The order of listing is functional and does not imply precedence, hierarchy, or alteration of existing mandates. Roles may evolve over time in accordance with government decisions, institutional mandates, and the governance mechanisms established under this Policy.

Department / Body	Parent Ministry / Affiliation	Primary Role in Health Research Ecosystem
A. Stewardship and National Policy Alignment		
National Health Research Stewardship Committee (NHRSC)	Chaired by PSA; convened by DHR	Inter-ministerial coordination forum. Functions as set out in Section 2.1.1.
Department of Health Research (DHR)	Ministry of Health and Family Welfare	Nodal department for health research. Stewardship, policy direction, coordination, and convergence across the ecosystem. Convenes the NHRSC. Provides administrative oversight or coordination, as applicable, for ICMR, MRUs, MRHRUs, VRDLs, HTAIn,

Department / Body	Parent Ministry / Affiliation	Primary Role in Health Research Ecosystem
		CTRI, and relevant regulatory and oversight functions.
Indian Council of Medical Research (ICMR)	Under DHR	Principal national agency for biomedical and health research. Operates intramural institutes and the extramural research programme. Functions include research generation, funding, standard-setting, capacity-building, technology development, and translation.
Office of the Principal Scientific Adviser (PSA)	Government of India	High-level science advisory function. Chairs the NHRSC. Cross-departmental coordination on science, technology, and innovation policy.
NITI Aayog	Government of India	Policy advisory role, cross-sector convergence, and strategic frameworks relevant to health research, innovation, and Viksit Bharat 2047.
B. Health Systems, Programmes, Regulation, and Digital Health		
Department of Health and Family Welfare	Ministry of Health and Family Welfare	National health programmes, public health systems, service delivery, disease control programmes, and State health-system linkages through which research evidence is translated into policy, programmes, and public health action.
Directorate General of Health Services (DGHS)	MoHFW	Public health programmes, disease surveillance, and linkage between research evidence and health service delivery.
Central Drugs Standard Control Organisation (CDSCO)	Directorate General of Health Services, MoHFW	Regulatory approval of drugs, devices, diagnostics, vaccines, and clinical trials. Standard-setting for safety, efficacy, and quality of regulated health products.
National Health Authority (NHA)	MoHFW	Implementation of Ayushman Bharat and the Ayushman Bharat Digital Mission. Digital health infrastructure, health data systems, and interoperability frameworks relevant to research data linkages and population-level evidence.
Relevant screening and clearance mechanisms for international collaboration, including HMSC/SCRP, as applicable	MoHFW / DBT / competent authorities, as applicable	Review and clearance of international collaborative research involving foreign investigators, foreign funding, biological materials, or data-related arrangements, in accordance with applicable rules and procedures.

Department / Body	**Parent Ministry / Affiliation**	**Primary Role in Health Research Ecosystem**
C. Science, Technology, Funding, and Research Capability		
Department of Biotechnology (DBT)	Ministry of Science and Technology	Biotechnology research and development, including genomics, biologicals, biosafety regulation (RCGM, IBSC oversight), biosimilars, cell and gene therapy, and related frontier areas. Supports industry-partnered research, including through BIRAC.
Department of Science and Technology (DST)	Ministry of Science and Technology	Science and technology policy, research infrastructure, INSPIRE fellowships, and cross-cutting scientific capability-building relevant to health research.
Anusandhan National Research Foundation (ANRF)	Department of Science and Technology	National research funding, seeding research capacity in universities and colleges, and promoting research culture across institutions, including in health sciences.
Council of Scientific and Industrial Research (CSIR)	Department of Scientific and Industrial Research, Ministry of Science and Technology	Laboratory network contributing to drug discovery, genomics, traditional medicine validation, and health-related industrial research.
Department of Atomic Energy (DAE)	Government of India	Nuclear medicine, radiation biology, cancer research, and related health applications; radiation safety in health facilities and research regulated through the Atomic Energy Regulatory Board (AERB).
Ministry of Electronics and Information Technology (MeitY)	Government of India	Digital health technologies, artificial intelligence, health informatics, and data governance frameworks relevant to health research.
Department for Promotion of Industry and Internal Trade (DPIIT)	Ministry of Commerce and Industry	Intellectual property policy, patent systems, and innovation ecosystem support relevant to health technology commercialisation.
Department of Pharmaceuticals	Ministry of Chemicals and Fertilizers	Pharmaceutical policy, production, and pricing relevant to indigenous health technology development and affordability.
D. Health Professions Education and Workforce		
National Medical Commission (NMC)	MoHFW	Medical education standards, curriculum, and accreditation relevant

Department / Body	Parent Ministry / Affiliation	Primary Role in Health Research Ecosystem
		to building research capacity in medical colleges and institutions.
University Grants Commission (UGC)	Ministry of Education	Higher education standards, research fellowships, and doctoral programmes relevant to health sciences research training.
E. One Health, Environment, Food Systems, and Animal Health		
Department of Agricultural Research and Education / Indian Council of Agricultural Research (DARE/ICAR)	Ministry of Agriculture and Farmers' Welfare	Agricultural research relevant to nutrition, food safety, antimicrobial resistance, zoonotic disease, and One Health.
Department of Animal Husbandry and Dairying	Ministry of Fisheries, Animal Husbandry and Dairying	Veterinary research, zoonotic disease surveillance, and One Health.
Ministry of Environment, Forest and Climate Change (MoEFCC)	Government of India	Environmental health, climate-sensitive disease research, biodiversity, and One Health.
National One Health Mission	Multi-ministerial	Coordination across human, animal, and environmental health research and surveillance, involving multiple departments and ministries.
F. Integrative Health		
Ministry of Ayush	Government of India	Research in AYUSH systems, including through its research councils (CCRAS, CCRH, CCRUM, CCRS, CCRYN), and collaboration with ICMR on evidence generation, safety, clinical evaluation, and integrative health research.
G. Strategic Technology and Security-Linked Capabilities		
Defence Research and Development Organisation (DRDO)	Ministry of Defence	Defence-related biomedical research, biosecurity-relevant technologies, health protection, and selected health technology development.
Indian Space Research Organisation (ISRO)	Department of Space	Space-based applications relevant to health, including telemedicine, remote sensing for disease ecology, environmental monitoring, disaster response, and health systems in remote and difficult areas.
H. National Platforms and Standing Functions		
Health Technology Assessment in India (HTAIn)	Under DHR	Health technology assessment for informing procurement, pricing, benefit-package decisions, and evidence-based health policy. Standing

Department / Body	Parent Ministry / Affiliation	Primary Role in Health Research Ecosystem
		function within the national health research governance architecture.
Clinical Trials Registry – India (CTRI)	Under DHR / ICMR	National registry for clinical trial registration. Supports transparency, public accountability, and regulatory compliance for clinical research.

Note: Private institutions, not-for-profit research organisations, professional bodies, and academic institutions also contribute significantly to the national health research ecosystem. Their roles are recognised and enabled through the governance framework established under this Policy, in ways consistent with public purpose, national priorities, and scientific standards.

Annexure III: Framework for State Health Research Stewardship

A. Purpose

This Annexure provides guidance on the establishment and functioning of State Health Research Stewardship Committees or equivalent mechanisms as referenced in Section 2.1.3 of the Policy.

B. Rationale

States and Union Territories are essential partners in the national health research ecosystem. Many States host significant research institutions, medical colleges, and public health systems. Health is a State subject under the Constitution, and much of the translation of research into programme delivery and service improvement occurs at State level. Effective coordination at State level strengthens the connection between national priorities and local needs.

C. Institutional Pathway

States may adopt a phased approach to building health research coordination capacity, progressing through the following stages as institutional readiness permits. Where a State already has a health research council or equivalent body in place, it may serve as the stewardship mechanism without a new structure being created. The stages are:

Phase 1: Designated coordination function within State Health Department. In States beginning to develop research coordination, the function may be assigned to a designated unit or officer within the State Health Department, supported by advisory input from State academic and research institutions. This is the minimum recommended starting point.

Phase 2: Sub-committee of existing State Science and Technology Council. As capacity grows, and where a State Science and Technology Council or equivalent body exists, a health research sub-committee may be constituted within it, with appropriate terms of reference. This draws on existing institutional infrastructure while building dedicated health research focus.

Phase 3: Standalone State Health Research Stewardship Committee. In States with mature research ecosystems, a dedicated committee may be constituted by the State government, with representation from State health departments, medical education, research institutions, universities, and relevant stakeholders.

D. Functions

State Health Research Stewardship Committees or equivalent mechanisms may undertake the functions set out in Section 2.1.3 and, in addition:

- Identifying State-specific research needs and gaps, including those related to local disease patterns, service delivery challenges, and population health priorities
- Supporting the development of State-level research infrastructure, capacity, and partnerships

- Contributing State-level perspectives, priorities, and evidence to the formulation and periodic review of the National Health Research Agenda
- Facilitating inputs from district health systems, public health institutions, medical colleges, frontline workers, communities, and programme managers so that State research priorities reflect implementation realities.

E. Relationship with National Framework

State coordination mechanisms should maintain regular communication with the Department of Health Research and the NHRSC Secretariat. They should participate in national consultations on the National Health Research Agenda, periodic policy review, and other relevant national processes.

The national framework shall provide guidance and support to States in establishing and strengthening their coordination mechanisms, while respecting State autonomy in determining the form and scope of their engagement.

Annexure IV: Scope and Functions of Research Administration and Finance Units

A. Purpose

This Annexure sets out the detailed scope and functions of Research Administration and Finance Units (or equivalent structures) within research institutions, as referenced in Section 2.3.4 of the Policy.

B. Institutional Requirement

Research institutions engaged in biomedical and health research shall establish, or designate, a Research Administration and Finance Unit or equivalent structure proportionate to the scale and intensity of research undertaken, to support researchers and institutions across the research lifecycle. The unit should be adequately staffed and empowered to discharge the functions set out below.

C. Functions

1. Financial Management

Management of research grants and programmes, including budgeting, disbursement, record-keeping, audits, utilisation certificates, and financial reporting to sponsors and funding agencies. This includes ensuring that funds are used in a timely, accountable, and efficient manner.

2. Regulatory Compliance and Resource Allocation

Support for compliance with applicable regulatory requirements, including ethics approvals, biosafety clearances, trial registrations, and data-related obligations. Coordination with institutional committees and national authorities. Support for resource allocation and optimisation of research infrastructure and facilities.

3. Collaboration and Agreement Support

Administrative support for inter-institutional collaborations, sponsor agreements, clinical trial agreements, material transfer agreements, data-sharing arrangements, and related legal or regulatory permissions. Facilitation of partnership formalities so that scientific collaboration is not delayed by administrative process.

4. Grant Management and Funding Support

Support to researchers in identifying suitable extramural funding opportunities. Assistance with proposal preparation, budget development, submission logistics, and post-award management. Maintenance of an institutional database of ongoing and completed grants.

5. Technical and Compliance Guidance

Guidance on regulatory, ethical, and sponsor requirements, including support for budgeting, submissions, protocol amendments, reporting obligations, and project administration. Training of researchers on administrative and compliance requirements.

6. Coordination with Institutional Mechanisms

Coordination with scientific review committees, ethics committees, data and safety monitoring boards, and other institutional oversight mechanisms to support effective research management and timely decisions.

7. Inclusive and Gender-Friendly Research Environments

Support for inclusive and gender-friendly research environments, including enabling infrastructure, childcare support, flexible working arrangements where feasible, and measures to reduce bias in participation, promotion, and research credit. Implementation of institutional policies on harassment prevention, equal opportunity, and safe working conditions for researchers.

8. Intellectual Property Management

Management of intellectual property and related rights associated with research outputs, including support for patent applications, copyrights, licensing, technology transfer, and commercialisation in an ethical and equitable manner. Facilitation of institutional IP policies and their communication to researchers.

9. Administrative Bottleneck Tracking and Reporting

Systematic identification, measurement, and reporting of administrative delays and procedural bottlenecks that affect the conduct of research. The unit should maintain records of the time taken for key administrative processes, including but not limited to: ethics committee approvals, fund disbursement from award to receipt, procurement of equipment and consumables, import clearances for research materials, recruitment and onboarding of project staff, and regulatory clearances for collaborations and clinical trials. This data shall be reported periodically to institutional leadership, and aggregated data shall be made available to DHR to inform national efforts to improve the ease of doing research. Such reporting shall be used to identify systemic bottlenecks and improve ease of doing research, rather than for punitive comparison of institutions without contextual assessment.

Annexure V: Guidance on National Health Research Missions and Priority Projects

A. Purpose

This Annexure provides operational guidance on the establishment, governance, and review of National Health Research Missions and National Health Research Priority Projects as referenced in Section 3.3.4 of the Policy.

B. National Health Research Missions

Establishment

A National Health Research Mission may be proposed by the Department of Health Research, the Indian Council of Medical Research, a scientific department, or recommended through the NHRSC where a major health challenge requires convergence across departments, sectors, or research types and a clear pathway from research to population impact.

Proposal Requirements

Each Mission proposal shall include:

- A clear statement of the health challenge being addressed, including its burden, distribution, and current evidence gaps
- The strategic direction(s) under Section 1.6 that the Mission advances
- The research types required (descriptive, discovery, development, delivery, or a combination)
- The departments, institutions, and sectors whose participation is required
- The proposed governance structure, including a lead department or institution, a steering committee or equivalent, and a technical secretariat
- The proposed duration, with defined milestones and review points

- The estimated resource requirement and proposed funding sources
- Sunset and transition provisions, including criteria for closure, extension, or transition to other mechanisms
- The State, district, health-system, community, and patient inputs considered in framing the Mission.
- The equity and last-mile relevance considerations, including the populations and geographies expected to benefit.
- The proposed pathway from research to policy, programme, practice, product, or public benefit.
- The data governance, ethics, and research integrity arrangements required for the Mission.

Governance

Each Mission shall have a defined governance structure that provides strategic direction, coordinates participating institutions, monitors progress, and ensures accountability. The governance structure shall report to the NHRSC or to the relevant national coordination mechanism.

Review

Each Mission shall be subject to mid-term review and end-of-term evaluation. Reviews shall assess scientific progress, translation outcomes, governance effectiveness, and alignment with the National Health Research Agenda. Review findings shall inform decisions on continuation, revision, or closure.

C. National Health Research Priority Projects

Establishment

A National Health Research Priority Project may be proposed by the Department of Health Research, ICMR, or another relevant body for large-scale, multi-site, implementation-oriented research on a national priority within a specific domain.

Proposal Requirements

Each Priority Project proposal shall include:

- The research question or set of questions being addressed
- The domain of research and the type(s) of research involved
- The sites, institutions, and populations involved
- The proposed governance arrangements, including a coordinating centre and site-level management
- The proposed duration, with defined deliverables and review points
- The estimated budget and funding source
- Closure or transition provisions
- The implementation pathway through which findings may inform policy, programmes, service delivery, or scale-up.
- The equity considerations and the underserved populations or geographies relevant to the project.
- The data management, data sharing, and ethics arrangements.

Governance

Each Priority Project shall have a defined governance arrangement that ensures scientific quality, coordination across sites, data management, and timely reporting. Large multi-site projects should have a data and safety monitoring mechanism where appropriate.

Review

Each Priority Project shall be subject to annual progress review and end-of-project evaluation. Site-level performance, data quality, protocol adherence, and contribution to national priorities shall be assessed. Findings shall inform decisions on continuation, scale-up, or closure.

Annexure VI: Instruments for Health Research Workforce Development

A. Purpose

This Annexure sets out the detailed instruments through which the workforce development provisions of Section 4.2 may be operationalised. It covers specific fellowship, exchange, training, and career-development modalities. Section 4.2 establishes the policy framework; this Annexure provides instrument-level guidance.

B. Early Research Exposure

Research exposure should begin during undergraduate and postgraduate training in health-related disciplines. Instruments include:

Accredited research modules. Short research methodology modules integrated into undergraduate and postgraduate curricula in medicine, nursing, pharmacy, public health, and allied health sciences. These should cover study design, data collection, basic analysis, evidence appraisal, and research ethics. Curriculum-framing bodies should support their accreditation and recognition.

Research observerships. Structured observership programmes enabling students to spend defined periods in active research environments, observing the research process, attending research meetings, and participating in appropriate research activities under supervision.

Student research projects. Supervised research projects as part of degree requirements, designed to give students hands-on experience in formulating research questions, collecting and analysing data, and interpreting findings.

Summer and short-term research internships. Paid or supported internship programmes of defined duration enabling students and early trainees to work in research laboratories, field sites, or data analysis units under mentorship.

Research training should also be available to students and trainees in dental sciences, social sciences, data science, health economics, implementation science, and other disciplines relevant to health research.

C. Doctoral Training and Support

Paid doctoral fellowships. Fellowships of adequate duration and financial support to enable full-time doctoral research. Stipend levels should be periodically reviewed to ensure they are sufficient to attract and retain talent. Fellowships should be available through ICMR, DBT, DST, CSIR, UGC, and other relevant agencies.

Institutional mentorship standards. Institutions should establish clear criteria for the qualification and competence of doctoral research advisors. Mechanisms should be in place to monitor the quality of guidance, ensure timely progress reviews, and address concerns about supervisory quality.

Research resources and infrastructure access. Doctoral students shall have access to institutional research infrastructure, including laboratories, data systems, libraries, and computational resources, on terms that support the timely completion of their research.

D. Clinician-Scientist, Nurse-Scientist, and In-Service Pathways

Clinician-scientist and health-professional-scientist programmes. Research institutions, medical colleges, and other health-professional institutions, including nursing, dental, AYUSH, pharmacy, and allied-health institutions, should establish structured pathways enabling clinical and other health-professional faculty and practitioners to pursue doctoral or post-doctoral research while maintaining service responsibilities. These may include provisions for dedicated research time and reduced clinical load during active research phases, which may be timebound and project-specific, along with dedicated funding.

In-service doctoral pathways. Pathways enabling health professionals, programme managers, and public health practitioners currently in service to pursue doctoral research on topics relevant to their professional domain, with institutional and financial support.

E. Career-Long Professional Development

Accredited continuing education in research methods. Researchers at all career stages should have access to accredited courses in research methods, technical competencies, and emerging methodologies appropriate to their level of seniority and expertise. Credit should be awarded for successful completion and recognised in career assessment.

Industry exposure. Relevant industry exposure may be incorporated into doctoral training where appropriate, with safeguards for scientific independence, conflict of interest, and public purpose, including through internships, exchange programmes, or related arrangements that strengthen practical understanding and translational capability.

Intramural and extramural training support. Policies should provide administrative and financial support for training at national and international centres of excellence, including short courses, workshops, and specialised training programmes.

F. Exchange and Mobility Programmes

Adjunct and visiting positions. Research personnel should have opportunities for adjunct or visiting appointments at other institutions, including academic institutions, clinical settings, government agencies, and international centres, to gain exposure to different research environments and approaches.

Practitioner-in-residence programmes. Programmes enabling clinical practitioners, programme managers, and policymakers to spend defined periods embedded in research institutions, contributing practical perspective while gaining research experience.

Research sabbaticals. Sabbatical opportunities enabling mid-career and senior researchers to spend defined periods at other institutions for focused research, writing, or collaboration.

G. Mentorship

Mentorship networks. Early-career researchers should have access to structured mentorship networks that foster technical, professional, and leadership development. Mentorship should be acknowledged and rewarded within systems of professional recognition and career advancement.

Senior mentorship recognition. Institutions should recognise mentorship as a valued professional contribution. Effective mentorship should be considered in assessment, promotion, and award decisions.

H. Inclusion and Diversity

Special effort should be made to support women, persons returning from career breaks or from overseas, including non-resident Indians (NRIs), persons of Indian origin (PIOs), and overseas citizens of India (OCIs), as well as researchers from underserved or vulnerable groups. Fellowship and training programmes should include provisions for childcare, flexible scheduling, and re-entry support where needed.

I. Research Support Workforce

Structured training and career pathways should be developed for data managers, biostatisticians, research coordinators, laboratory and field staff, and research administrators, whose skills are essential to high-quality research.

J. Targets

Specific targets for research engagement across student and faculty groups may be set and periodically reviewed through the implementation roadmap and periodic review mechanisms. These may include targets for the number of students undertaking research projects, the number of active doctoral researchers, the proportion of clinical faculty engaged in research, the gender and geographic composition of the researcher pool, and other indicators relevant to workforce development.

Annexure VII: ICMR Impact of Research and Innovation Scale (ICMR-IRIS)

A. Purpose

This Annexure provides a description of the ICMR Impact of Research and Innovation Scale (ICMR-IRIS).

B. Rationale

Traditional research assessment has relied heavily on publication-based metrics such as journal impact factor and citation counts. While these have value, they do not adequately capture the full range of contributions that health research makes to practice, policy, innovation, technology development, and public benefit. A broader assessment framework is needed that brings diverse domains of research impact into a comparable and usable structure.

C. Framework Description

ICMR-IRIS is a multidimensional framework for assessing research impact across diverse domains through a common measure. It uses a Publication-Equivalent or comparable contribution approach to enable comparison of contributions across domains that are traditionally difficult to compare, including scholarly output, clinical translation, policy influence, product development, guideline contribution, innovation, capacity-building, and community benefit.

The framework assigns Publication-Equivalent scores to contributions in each domain, allowing institutions and funding agencies to assess and compare the breadth and depth of research impact beyond conventional bibliometric indicators.

ICMR-IRIS shall not be used as the sole basis for assessment. Its application shall be contextual, combining quantitative scores with qualitative judgement, peer review, discipline-specific norms, career stage, institutional context, and evidence of public value.

D. Domains and Scoring

ICMR-IRIS assesses contributions across the domains set out in Section 7.1. For each domain, the framework assigns Publication-Equivalent scores that capture the type and stage of contribution. Indicative scoring considerations for each domain are as follows:

Scholarly output. Quality, reach, and influence of publications and citations within the scientific community.

Clinical and public health translation. Contribution to clinical guidelines, standard treatment protocols, programme design, and public health practice adoption.

Policy influence. Evidence of having informed or shaped health policy at national, State, or institutional level.

Innovation and product development. Progress through the pathway from invention to regulatory approval, manufacturing, or market deployment.

Capacity-building. Scale and effectiveness of researcher training, mentorship, and institutional development contributions.

Community and public benefit. Demonstrable improvement in health outcomes, access, equity, or community well-being.

E. Application

ICMR-IRIS shall serve as a reference framework for balanced and multidimensional assessment of research contributions across the ecosystem. Its application may include:

- Institutional performance assessment, alongside other qualitative and quantitative indicators
- Funding agency assessment of research portfolios and grant outcomes
- Individual researcher assessment, where appropriate, as a complement to conventional academic metrics
- System-level review of whether the national research ecosystem is producing contributions across all domains of impact

F. Evolution

The ICMR-IRIS framework is designed to evolve and be strengthened over time as experience with its application grows. The Department of Health Research shall support periodic review and refinement of the framework, including validation of the Publication-Equivalent scoring methodology, stakeholder consultation, and assessment of its effects on research incentives and behaviour.

Before use in high-stakes decisions, the scoring methodology should be piloted, validated, and reviewed for unintended incentives, including incentives toward inflated claims of impact, inequitable comparisons across disciplines, or the undervaluation of long-term foundational research.

Annexure VIII: Implementation Architecture

A. Purpose

This Annexure sets out the phasing logic, accountability structure, foundational deliverables, and review obligations for implementation. It distinguishes between foundational actions that DHR can initiate immediately and the full implementation roadmap that shall be developed once the NHRSC is constituted and baseline evidence is available. The implementation architecture is intended to guide sequencing, coordination, and review. It does not create rigid timelines or alter the autonomy, mandate, or statutory responsibilities of existing departments, institutions, regulators, or funding agencies. Implementation shall proceed in phases, with timing adapted to institutional readiness, resource availability, statutory and regulatory requirements, and decisions of the competent authorities.

B. Phasing Logic

Implementation shall proceed in three phases.

Phase 1: Foundational actions. Formal adoption and notification of the Policy. Constitution of the NHRSC. Commissioning of baseline evidence. Establishment of the measurement and tracking architecture. Initiation of governance actions within DHR's existing authority.

Phase 2: Institutionalisation and capacity-building. Development by DHR and endorsement by the NHRSC of the first medium-term implementation roadmap, with named responsible bodies, resource requirements, and accountable milestones. Establishment of coordination mechanisms and enabling systems requiring cross-departmental action. Commissioning of the first National Health Research Agenda.

Phase 3: Consolidation, review, and renewal. Operation of the full governance, enabling, conduct, translation, and assessment architecture. First cycle of institutional review. First periodic review of the Policy and the National Health Research Agenda. Assessment of progress against the national targets in Annexure I.

These phases are indicative, and shall be adapted to institutional readiness, resource availability, statutory requirements, and decisions of the competent authorities. The NHRSC may revise phase boundaries and milestones through the implementation roadmap.

C. Accountability

DHR shall serve as the nodal department for implementation throughout all three phases. It shall prepare the ground for NHRSC constitution, commission baseline evidence, develop the implementation roadmap, and drive execution of provisions within its administrative authority. The Indian Council of Medical Research, as the principal national agency for biomedical and health research, shall support implementation throughout, including scientific guidance, research integrity, ethics, and impact assessment.

The NHRSC shall provide strategic coordination, endorse roadmap milestones, and review implementation progress. It shall not assume executive authority or displace the operational responsibilities of DHR or other departments, councils, and institutions.

Actions within the mandate of individual departments, councils, or institutions shall be the responsibility of those bodies. DHR shall track progress and bring matters requiring cross-departmental coordination to the NHRSC.

D. Foundational Deliverables (Phase 1)

In the foundational phase, DHR shall initiate the following deliverables:

1. **Policy notification.** Adopt and notify the Policy.
2. **NHRSC constitution.** Constitute and notify the NHRSC with terms of reference, composition, and permanent secretariat within DHR (Section 2.1.1).
3. **Baseline evidence programme.** Commission baseline surveys on: (a) research governance and administration practices; (b) ethics committee functioning and compliance with the National Ethical Guidelines for Biomedical and Health Research Involving Human Participants; (c) research infrastructure distribution, capacity, and gaps; (d) workforce size, composition, and training pipeline; (e) the funding portfolio by source, modality, discipline, and geography.
4. **Target measurement architecture.** Develop and publish, as appropriate, a Measurement Manual for the national target framework, including the five primary indicators and the composite global standing indicator (Annexure I), fixing indicator definitions, data sources, disaggregation variables, baseline methodology, and responsible agencies. Establish the annual tracking function within DHR.
5. **National Research Integrity Office.** Initiate steps toward establishing or designating the NRIO function, including clarification of mandate, institutional location, operating procedures, and a phased workplan (Section 2.2.2).
6. **Institutional guidance.** Issue guidance on research integrity functions and scientific review mechanisms proportionate to institutional scale (Sections 2.3.2 and 2.3.3).
7. **State coordination advisory.** Communicate the State health research stewardship framework (Annexure III) to all States and Union Territories, with technical assistance for Phase 1 States.

8. **Reporting standards and data sharing.** Publish recognised reporting standards and initiate a national data sharing policy for publicly funded health research (Sections 5.4 and 5.5).
9. **Regulatory compliance reference.** Issue a consolidated reference guide to statutory, regulatory, and safety compliance obligations for health research (Section 2.2.3).
10. **ICMR-IRIS adoption.** Adopt ICMR-IRIS as a national reference framework for research impact assessment and initiate its piloting, validation, refinement, and phased use, as appropriate (Section 7.5 and Annexure VII).

E. Implementation Roadmap

Within twelve months of the constitution of the NHRSC, DHR shall develop and present to the NHRSC for endorsement the first medium-term implementation roadmap covering a defined medium-term horizon. The roadmap shall:

- Translate each chapter into specific actions with named responsible bodies
- Establish sequencing and dependencies, informed by baseline evidence gathered under Phase 1
- Set intermediate milestones for the five national targets and the principal governance, enabling, and translation provisions
- Identify resource requirements and financing pathways, including Union budget proposals, State-level investment, and responsible private, philanthropic, and non-governmental engagement
- Establish progress-tracking and reporting, including annual reporting by DHR to the NHRSC and periodic public reporting

The roadmap shall cover all seven chapters and all Annexures, with particular attention to provisions requiring cross-departmental coordination, capacity-building, or statutory, regulatory, administrative, or financing action, where required. DHR shall update the roadmap periodically and present revisions to the NHRSC.

F. Review

The implementation architecture shall be reviewed as part of each periodic review of the Policy under Section 7.6.

Progress against the foundational deliverables in Section D shall be reported by DHR to the NHRSC at its first meeting. Progress against the implementation roadmap shall be reported annually to the NHRSC and included in periodic public reporting.

References

The legislation, rules, and guidelines cited below are listed as in force at the time of drafting. They shall be read as including subsequent amendments, revisions, and successor instruments, in keeping with the evolving legal and regulatory environment.

1. Anusandhan National Research Foundation Act, 2023
2. Atomic Energy Act, 1962
3. Bahl, R. (2025). Publication-Equivalent as the new single currency of research impact: The ICMR-Impact of Research and Innovation Scale (ICMR-IRIS). Indian Journal of Medical Research
4. Breeding of and Experiments on Animals (Control and Supervision) Rules, 1998 (amended 2001 and 2006)
5. Department of Pharmaceuticals, Ministry of Chemicals and Fertilizers. National Medical Device Policy, 2023
6. Digital Personal Data Protection Act, 2023
7. Digital Personal Data Protection Rules, 2025
8. Drugs and Cosmetics Act, 1940
9. Ethical Requirements for Research in Integrative Medicine – an Addendum to ICMR National Ethical Guidelines for Biomedical and Health Research Involving Human Participants, 2017. ICMR, March 2025
10. ICMR. 2024. ICMR-Research Infrastructure Sharing Ecosystem (I-RISE). Department of Health Research, Ministry of Health and Family Welfare, Government of India
11. ICMR. ICMR Policy on Research Integrity and Publication Ethics (RIPE). 2019
12. ICMR, Ethical guidelines for application of Artificial Intelligence in Biomedical Research and Healthcare, 2023
13. ICMR National Ethical Guidelines for Biomedical and Health Research Involving Human Participants, 2017

14. International Committee of Medical Journal Editors. Recommendations for the Conduct, Reporting, Editing and Publication of Scholarly Work in Medical Journals
15. International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use (ICH). (2025). ICH Harmonised Guideline: Guideline for Good Clinical Practice E6(R3). Final version adopted on January 6, 2025
16. Medical Devices Rules, 2017
17. National Health Policy, 2017. Ministry of Health and Family Welfare, Government of India
18. National Institutional Ranking Framework. Methodology for ranking academic institutions in India
19. NITI Aayog. 2019. Output-Outcome Monitoring Framework (OOMF): Meeting of CEO, NITI Aayog with Planning Secretaries. Development Monitoring and Evaluation Office, Government of India
20. Prevention of Cruelty to Animals Act, 1960
21. The New Drugs and Clinical Trials Rules, 2019
22. Viksit Bharat @2047 Framework, Government of India

List of Abbreviations

Abbreviation	Full Form
AERB	Atomic Energy Regulatory Board
AISHE	All India Survey of Higher Education
ANRF	Anusandhan National Research Foundation
ART	Assisted Reproductive Technology
AYUSH	Ayurveda, Yoga and Naturopathy, Unani, Siddha, Sowa Rigpa, and Homoeopathy
BIRAC	Biotechnology Industry Research Assistance Council
BSL-3	Biosafety Level 3
CCRAS	Central Council for Research in Ayurvedic Sciences
CCRH	Central Council for Research in Homoeopathy
CCRS	Central Council for Research in Siddha
CCRUM	Central Council for Research in Unani Medicine
CCRYN	Central Council for Research in Yoga and Naturopathy
CDSCO	Central Drugs Standard Control Organisation
CSIR	Council of Scientific and Industrial Research
CTRI	Clinical Trials Registry – India
DAE	Department of Atomic Energy
DARE	Department of Agricultural Research and Education
DBT	Department of Biotechnology
DGHS	Directorate General of Health Services
DHR	Department of Health Research
DPIIT	Department for Promotion of Industry and Internal Trade
DRDO	Defence Research and Development Organisation
DSIR	Department of Scientific and Industrial Research
DSMB	Data and Safety Monitoring Board
DST	Department of Science and Technology
FAO	Food and Agriculture Organization of the United Nations
GDP	Gross Domestic Product
HMSC	Health Ministry's Screening Committee
HTA	Health Technology Assessment
HTAIn	Health Technology Assessment in India
IAEC	Institutional Animal Ethics Committee
IBSC	Institutional Biosafety Committee
ICAR	Indian Council of Agricultural Research
ICMJE	International Committee of Medical Journal Editors

Abbreviation	**Full Form**
ICMR	Indian Council of Medical Research
ICMR-IRIS	ICMR Impact of Research and Innovation Scale
IEC	Institutional Ethics Committee
IHR	International Health Regulations
INSPIRE	Innovation in Science Pursuit for Inspired Research
IP	Intellectual Property
IRDL	Infectious Diseases Research and Diagnostic Laboratory
ISRO	Indian Space Research Organisation
MeitY	Ministry of Electronics and Information Technology
MoEFCC	Ministry of Environment, Forest and Climate Change
MoHFW	Ministry of Health and Family Welfare
MRHRU	Model Rural Health Research Unit
MRU	Multidisciplinary Research Unit
NHA	National Health Authority
NHRSC	National Health Research Stewardship Committee
NJORT	National Joint Outbreak Response Team
NMC	National Medical Commission
NOHM	National One Health Mission
NRI	Non-Resident Indian
NRIO	National Research Integrity Office
OCI	Overseas Citizen of India
PIO	Person of Indian Origin
PSA	Principal Scientific Adviser
R&D	Research and Development
RCGM	Review Committee on Genetic Manipulation
SCRP	Screening Committee for Research Proposals
SCTIMST	Sree Chitra Tirunal Institute for Medical Sciences and Technology
SRC	Scientific Review Committee
UGC	University Grants Commission
UNEP	United Nations Environment Programme
VRDL	Viral Research and Diagnostic Laboratory
WHO	World Health Organization
WIPO	World Intellectual Property Organization
WOAH	World Organisation for Animal Health