

INNOVATION HUB STRATEGY FOR MADHYA PRADESH (2023 – 2026)



THE ORIGIN

The Innovation Hub, the implementing structure for India Health Action Trust (IHAT) works in Madhya Pradesh, initiated in the year 2019 through a Memorandum of Understanding (MoU) between the National Health Mission, Government of Madhya Pradesh (GoMP) and IHAT. The Institute for Global Public Health (IGPH), University of Manitoba (UoM), Canada is IHAT's technical partner. The MoU was renewed in 2022 for a period of three years. This document describes the IHAT-IGPH strategy for MP. The overarching purpose of IHAT's work is to catalyse the state's response to reduce inequity in access to and utilization of critical interventions that impact population-level health outcomes, with a primary focus on health systems strengthening, reproductive maternal newborn and child health (RMNCH) and Tuberculosis.



IHAT VISION

Meaningfully impact the lives of vulnerable and marginalised people by addressing health and social inequities.

IHAT MISSION

To use a program science approach to optimize and scale public health programs.

Figure 1: Madhya Pradesh - A Snapshot

GEOGRAPHY

- 7 divisions
- 52 districts
- 412 tehsils
- 313 blocks
- 364 statutory towns
- 112 census towns
- 54,903 villages

DEMOGRAPHY

- 72+ million accounting for 6% of total Population of India.
- 73% of state population is Rural
- 21% of state population is Tribal (Indigenous)

Source: Census 2011



337

Estimated TB prevalence per Lakh (National TB Prevalence Survey in India, Reference year 2019-21)

173

MMR per 100,000 live births (SRS: Reference Year 2018-20) 10 % of India's Maternal Death

214

TB Case Notification Rate 2022, per lakh (India TB Report: Reference Year 2023) 8% of India's burden

31

NMR per 1000 live births (SRS: Reference Year 2020)

77%

Proportion of those with TB symptoms who did not seek care (National TB prevalence survey 2019-21)

43

IMR per 1000 live births (SRS: Reference Year 2020)

PRIMARY OBJECTIVES

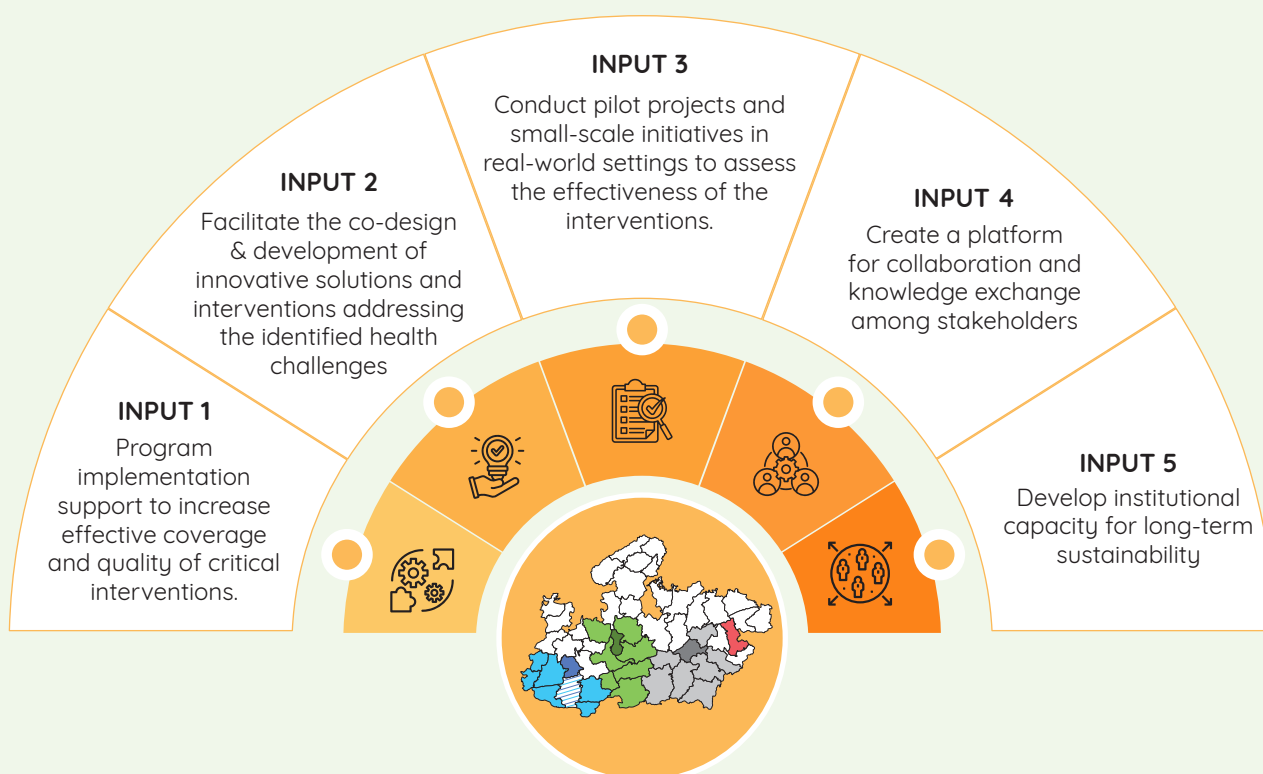
THE MoU LAID DOWN PRIMARY ACTIONABLE OBJECTIVES FOR IHAT'S WORK IN MP. THESE ARE REPRODUCED BELOW:

1. To work with Government of Madhya Pradesh to continually identify critical public health challenges under specific thematic areas, which include Tuberculosis, RMNCH-A, HIV & AIDS, Non-Communicable Diseases, and Health Systems.
2. To undertake collaborative research for epidemiologic assessments and program evaluation in relation to identified priorities.
3. To design evidence-based, innovative solutions to identified priorities and challenges within select public health areas.
4. To pilot solutions and create a demonstration site in the state.
5. To coordinate and harmonize implementation and scale-up efforts of different stakeholders in the state within the objectives of the Innovation Hub.
6. To facilitate knowledge translation through ensuring cross-learning and exchange between government and other stakeholders within the objectives of the Innovation Hub.
7. To document and disseminate results and lessons to influence public health programs within India and other low and middle-income countries.
8. To develop institutional capacity within the GoMP for sustaining the objectives of the Innovation Hub.

STRATEGY FRAMEWORK DESCRIPTION

The strategy framework is a dynamic model with potential overlaps between its components. It emphasizes that input areas intersect, creating a continuous program cycle rather than distinct vertical silos.

Figure 2: Epidemiological Assessments, Research, Monitoring, Evaluation and Learning



The MPIH is dedicated to improving the **delivery and quality of essential healthcare services**. Focused on implementation support across three platforms: healthcare facilities, communities, and the health system, the MPIH will work towards a) improving RMNCH and other public health priority outcomes among Tribal Communities, b) enhancing the quality of Comprehensive Emergency Obstetric and Newborn Care (CEmONC) and other infectious disease services within District Hospitals, First Referral Units and primary care facilities c) reducing gaps in availability of Human Resources for Health in the public sector. Adaptation and learning will be promoted through versatile knowledge products.

Additionally, the MPIH encourages the **co-design and development of innovative solutions** to address healthcare challenges. It leverages global and national experiences and collaborates with diverse stakeholders to implement innovations at scale, to improve health related behaviours among communities and service providers. It optimizes data systems for public health planning and policy development to increase access to quality healthcare and reduce morbidity and mortality.

Pilot projects in real-world settings help assess the process, efficiency and effectiveness of interventions. Often programs need contextualisation to the community in which they are implemented (ex. Tribal communities are the most disadvantaged group for health outcomes in MP). Lessons learned are documented and shared through knowledge exchange platforms, including the website and other social media. In partnership with IGPH, lessons learned and experience gained can be adapted for use at national and global levels.

The GoMP and a number of organisations work within small geographies to implement innovative interventions to improve the quality of health services and health outcomes. Often these innovations are not adopted for implementation at scale and, therefore miss the opportunity for population level impact. MPIH aims to promote **collaboration and learning**, foster a culture of innovation, and in partnership with GoMP, will evaluate interventions and provide technical assistance jointly with other partners for their adoption and implementation at scale.

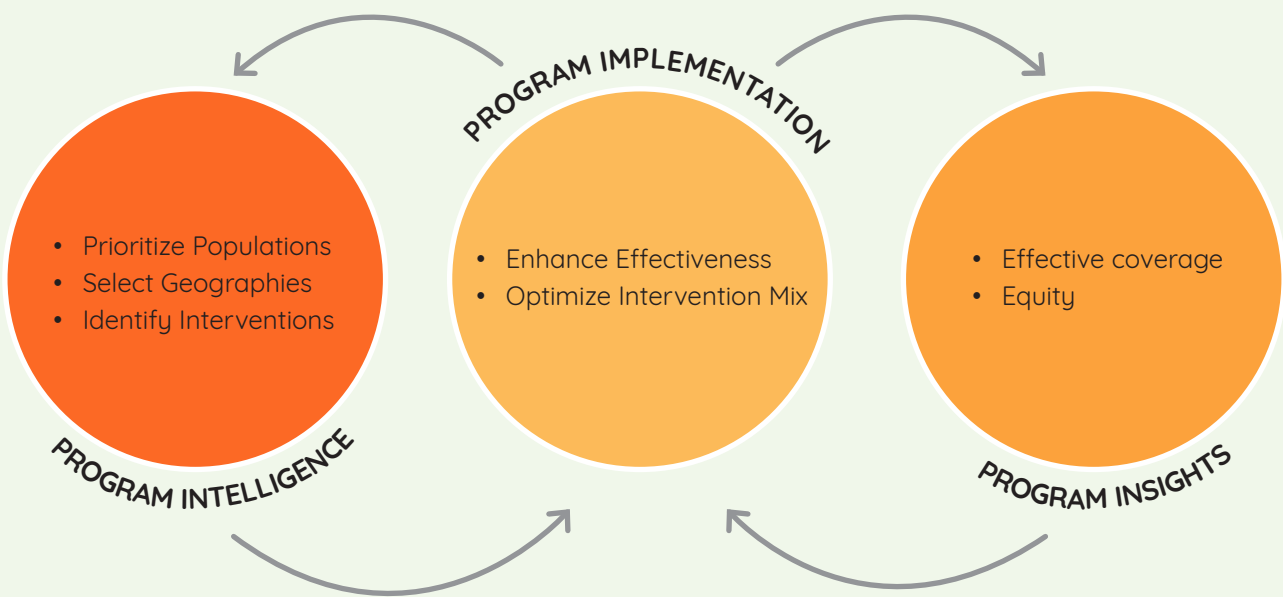
Long-term sustainability is enabled by building institutional capacity and community resilience by strengthening community structures, building ownership at the village level, enhancing gender equality, improving nutrition status, strengthening basic building blocks of health systems, enhancing public-private partnerships, and ensuring convergence between health, nutrition and development initiatives, to predict and adequately counter unforeseen public health challenges.



APPROACH

The MPIH adopts a Program Science^{ii,iii,iv} approach to improve population health outcomes and reduce inequity. Program Science is used to optimize the 'Effective Coverage' of public health programs at the population level. Defined as the “systematic application of theoretical and empirical scientific knowledge to improve the design, implementation, and evaluation of public health programs”, Program Science focuses on using adaptive responses that enable public health programs to a) continuously and systematically examine program intelligence, implementation, and generate insights, b) explore areas that require in-depth understanding, c) demonstrate and evaluate new interventions and d) use the knowledge gained to improve further and expand refine programs and policy. Adopting this approach, MPIH aspires to become a hub for healthcare public health program innovation, where novel solutions are designed, developed, demonstrated, and scaled to improve the lives of marginalized and vulnerable populations.

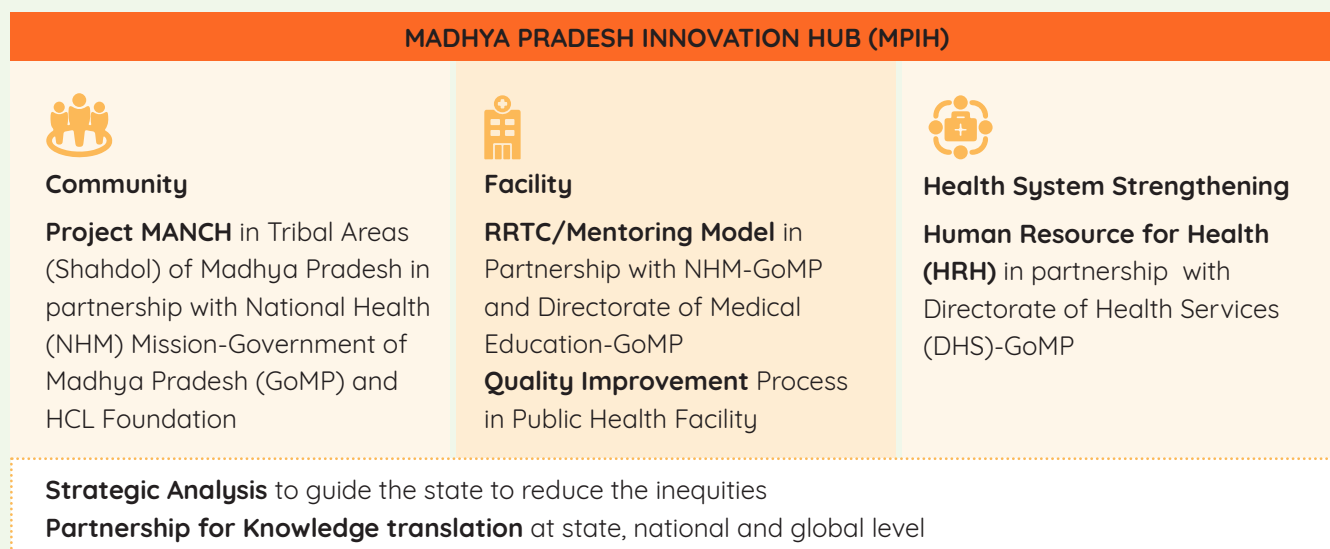
Figure 3: The Program Science Framework



CURRENT ONGOING INITIATIVES

The Madhya Pradesh Innovation Hub (MPIH) is currently configured to collectively design, implement, monitor, evaluate, and derive knowledge across three intervention platforms; Community, Facility, and Health Systems (Figure 4).

Figure 4: The Program Platforms for the MPIH



Community Platform - Target areas with higher concentrations of tribal populations. This was chosen because of poor health indicators in this area. The MANCH project, executed in Shahdol district in collaboration with NHM-MP and the HCL Foundation, presents an opportunity for IGPH and IHAT to enhance tribal population health outcomes. MANCH focuses on improving antenatal and post-natal care coverage, enhancing identification and tracking of high-risk pregnancies and newborns, intervening in home deliveries, and strengthening the capacity of frontline workers (ASHA, Anganwadi worker, ANM, and Nursing Officer). Through a comprehensive analysis of root causes, including social, structural, and environmental factors, and engaging with stakeholders, we aim to understand local contexts, address tribal community needs, and share insights for state and national scale-up.



Facility Platform - MPIH employs a unique approach to mentoring where a network of three medical colleges come together to train and mentor healthcare teams in District Hospitals and First Referral Units across three divisions in MP; Indore, Jabalpur, and Bhopal. The three divisions (Figure 4) have been chosen to represent three diverse typologies; one with a higher proportion of live births than neonatal deaths (Indore), one with a higher proportion of neonatal deaths than live births (Jabalpur) and one where both are almost equal (Bhopal). Together, they account for approximately 32% and 40% of live births and newborn death respectively in MP. This platform enhances the integration of medical education and public health, fosters teamwork between nurses and doctors through mentoring, and improves referral systems between FRUs and medical colleges and will demonstrate an innovative model to enhance maternal and newborn health outcomes.

Figure 5a: Distribution of Neonatal deaths and Institutional Deliveries by Facility Type (Source: NFHS 5 2019-2021)

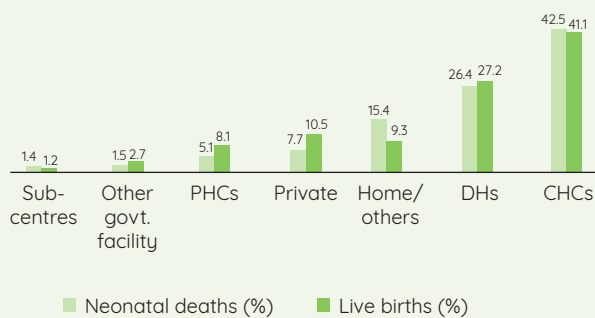
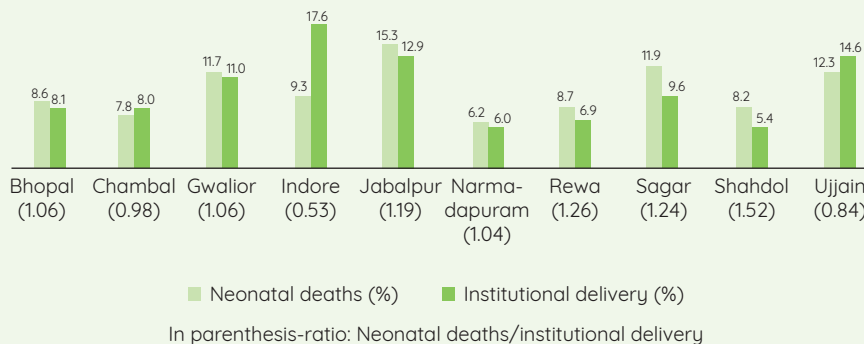


Figure 5b: Distribution of Neonatal deaths and Institutional Deliveries by Divisions (Source: NFHS 5 2019-2021)



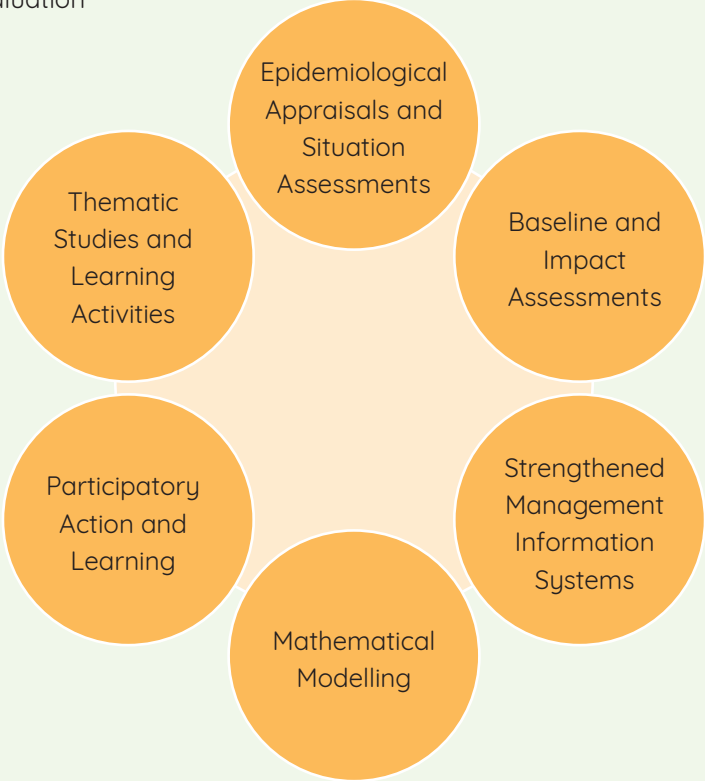
Health Systems Platform: The MPIH has been responsive to the State Government’s requests for strategic planning, recruitment, and deployment of human resources for health. The MPIH is actively involved in designing policies for cadre restructuring, in bench-marking of Human Resources compared with Indian Public Health Standards (IPHS) 2012/2022 and in facilitating quality standards and accreditation of health facilities. These efforts will continue to influence Public Health policy to strengthen health systems in MP. In addition, the Health Systems initiatives will collaborate with the State Health Mission to support the integration and alignment of Health Systems Information and Surveillance Systems with the Ayushman Bharat Digital Mission (ABDM) interventions.



MONITORING, EVALUATION, RESEARCH AND LEARNING

The MPIH conducts periodic epidemiological appraisals and situation assessments, continuously monitor and periodically evaluate processes, outcomes, and impact of its work. The Monitoring, Learning, and Evaluation Unit will function at multiple levels; National, State, District, and Village levels. The aim is to ensure learning, and improvement throughout the program lifecycle. The robust monitoring, evaluation, research and learning systems will encompass the following components:

Figure 6: Monitoring & Evaluation



This note outlines the current strategy, objectives, and activities designed for MPIH interventions, with the understanding that innovation is an ever-evolving and ongoing learning journey. The strategy is dynamic and will be periodically refined to adapt to changing contexts and frameworks.

Crockett M, Avery L, Blanchard J. Program science--a framework for improving global maternal, newborn, and child health. *JAMA pediatrics* 2015; 169(4): 305-6.
Aral SO, Blanchard JF. The Program Science initiative: improving the planning, implementation and evaluation of HIV/STI prevention programs. *Sex Transm Infect* 2012; 88(3): 157-9.
Becker M, Haworth-Brockman M, Keynan Y. The value of program science to optimize knowledge brokering on infectious diseases for public health. *BMC Public Health* 2018; 18(1): 567.
Becker M, Mishra S, Aral S, et al. The contributions and future direction of Program Science in HIV/STI prevention. *Emerg Themes Epidemiol* 2018; 15: 7.

