ANNUAL REPORT
FY 2024

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HSTP
Health Systems
Transformation Platform

Enabling Health Systems Transformation in India

BUILDING A LEGACY - EMBRACING THE FUTURE

In India's ever-evolving healthcare landscape, the pursuit of equitable access to quality services remains paramount. Despite significant strides, the nation grapples with persistent challenges ranging from coverage gaps to inequities in service delivery. The dichotomy between disease-specific mandates and holistic healthcare provision underscores the need for evidence-based initiatives in health system design and implementation.

The Health Systems Transformation Platform (HSTP) was set up to generate evidence for policy-making and planning and to build the capacity to generate and use such evidence. HSTP's strategic blueprint prioritizes a holistic approach, focusing on the health system building blocks including health financing including health insurance, primary healthcare delivery, human resources for health, quality assurance, One Health including Anti-Microbial Resistance, and digital health. Anticipated outcomes include the emergence of knowledge products, vibrant networks, empowered stakeholders, and localized interventions tailored to address regional disparities.

HOW WE STIMULATE CHANGE..

At the heart of our organization's ethos lies evidence-based redesign of the system's architecture and function, innovation, reengineering of health interventions, and the development of enhanced capacities of all stakeholders. Since 2016, we have been committed to the following action points:

Planning Long-Term Strategic Approach	Articulate a mid to long-term strategy to address systemic challenges rather than quick fixes.
Focusing on Comprehensive Health System Components	Prioritize health systems components - financing, primary healthcare delivery, integrated service delivery, quality, human resources, digital health, governance, and regulation.
Strengthening Primary Care	Address the weak primary care system, lack of focus on preventive-promotive health, and the disproportionate focus on tertiary care by both government and private sectors.
Addressing the Burden of Tertiary Care	Mitigate the system's push of treatment burden to the secondary or tertiary care level, leading to inflated costs and poor outcomes.
Building Capacity Building for Health Systems Research	Systematically build individual and institutional capacities for health systems research, systems design, policy, and strategy.
Collaborating with Stakeholders for Health Systems Thinking	Collaborate with institutions, experts, government, and practitioners to create a platform for discourse on health systems thinking and use it to solve health systems challenges.
Promoting Policy Dialogue and Knowledge Sharing	Foster a safe space for policy dialogue, knowledge sharing, and learning among stakeholders.
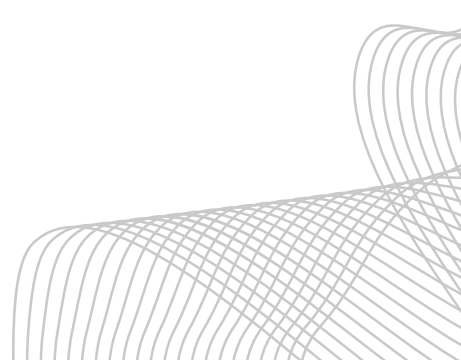
KEY HIGHLIGHTS OF OUR WORK IN 2023-24

- We are implementing the Infosys Foundation Samagra Urban Mother and Child Project in collaboration with the Department of Health & Family Welfare, GoK, and Karnataka Health Promotion Trust (KHPT) to improve RMNCH+A outcomes in Mysuru. The project encompasses four Urban Primary Health Centres (UPHCs), serving around 2.1 lakh population across 24% of Mysuru's wards.

- We have formulated guidelines for BSKY Empanelment and De-empanelment to improve hospital networking and operational efficiency within the BSKY framework.

- We have partnered with BSKY officials to present a poster on Gender Equity in BSKY at the Prince Mahidol Award Conference 2024 in Bangkok, Thailand. Additionally, we organized an exposure visit to Bangkok for BSKY officials to learn from Thailand's successful Universal Health Coverage (UHC) schemes.

- To commemorate Universal Health Coverage Day 2023, we hosted a webinar titled "Health for All: Time for Action" on December 11, 2023, in collaboration with the Karnataka Association of Community Health and the Government of Karnataka. The event featured experts from the World Health Organization and the World Bank Group, along with officials from UHC schemes in Kerala and Odisha.

- We released a policy brief titled "Charting the Course: Analysis of India's State-Level Policies to Counter Antimicrobial Resistance (AMR)." This document evaluates national policies and includes expert interviews to identify factors limiting state-level adoption.

- Through our advocacy efforts, the Chhattisgarh Health Department selected eleven district hospitals to enhance Emergency and Trauma Care, nominating key personnel as Champions of Change. In collaboration with WHO, we facilitated a five-day training program for 44 Champions at the WHO Collaborating Centre for Trauma Care, AIIMS, New Delhi.

- We have submitted a comprehensive report on geospatial mapping and analysis of Chhattisgarh's emergency care infrastructure. This report compiled geospatial data on health facilities, ambulance services, and accident-prone areas, utilizing tools like QGIS and Open Series Map (OSM) to generate road network shapefiles per the Survey of India's standards.

- In FY 2023-24, the Memorandum of Understanding (MoU) between Tata Trusts and the Ministry of Health and Family Welfare (MoHFW) was extended for two more years (October 2023-October 2025) to support the National Non-Communicable Disease (NCD) Portal. Himachal Pradesh and Telangana have adopted the portal, with Himachal Pradesh showing promising results in its use.

- The 75by25 initiative for hypertension and diabetes, along with other health campaigns like the Aspirational Block Program and Ayushman Bhava, emphasizes the importance of NCD screening and management. Tata Trusts plays a key role in supporting states with monitoring, supervision, and capacity building for the adoption of the National NCD Portal, particularly in 45 districts across seven states.
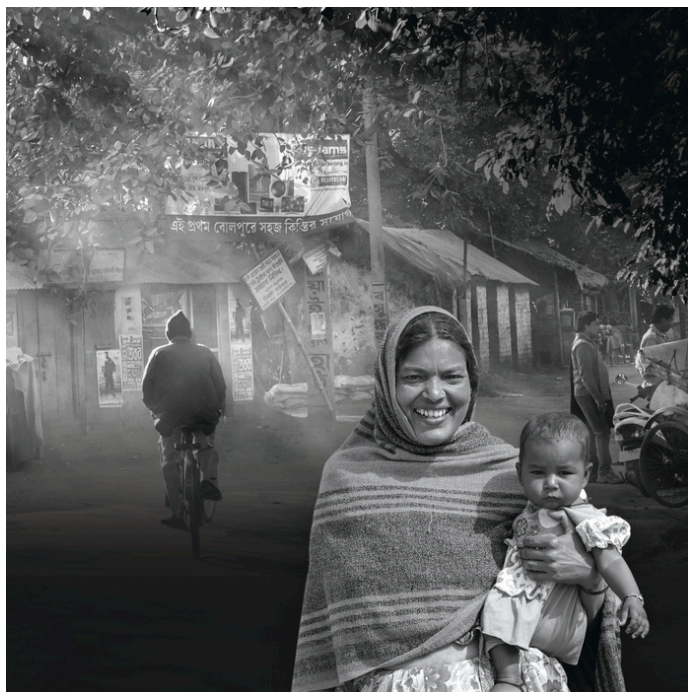
CONTENT

ODISHA HEALTH SYSTEMS STRENGTHENING

GLOBAL INSIGHTS, LOCAL IMPACTS:

SUPPORTING BSKY, FORGING SUSTAINABLE HEALTH SYSTEMS IN ODISHA

Since November 2018, HSTP has supported the Biju Swasthya Kalyan Yojana (BSKY) in Odisha, focusing on enhancing the scheme's efficiency and impact. Our initiatives included evidence-based program improvements, developing knowledge products, and building the capacity of the staff. Our experts reviewed the BSKY program, recommending enhancements to claims processing, fraud detection, and control measures. These recommendations were accepted for development in collaboration with the IT department, reflecting a joint effort to tackle systemic challenges.

To facilitate these improvements, a detailed implementation roadmap was created, ensuring an organized approach to managing the recommended changes. Additionally, our experts partnered with the State Health Agency Services (SHAS) to discuss strategic enhancements to pre- and post-hospitalization benefits under BSKY. These discussions aimed to strengthen financial protection for beneficiaries while aligning the program with broader health system goals. We helped BSKY revise its health benefits packages and rates, enabling the empanelment of more private hospitals. This expansion significantly improved healthcare access for beneficiaries, addressing critical healthcare needs across the state.

Policy and Guideline Development

We have significantly contributed to policy and guideline development within the BSKY framework in the following ways:

- Claim Adjudication Manual: This manual has been published and disseminated across the state to standardize the claims processing procedures.
- Anti-fraud Guidelines and State Anti-Fraud Unit (SAFU): We have developed anti-fraud guidelines and assisted in establishing the SAFU, reinforcing measures to detect and prevent fraud within BSKY.
- Empanelment and De-empanelment Guidelines: Formulated to enhance the efficiency of hospital networking and operations within BSKY, ensuring optimal service delivery.

International Exposure to State Officials

We facilitated BSKY officials' participation in the Prince Mahidol Award Conference 2024 in Bangkok, Thailand. This included presenting a poster on Gender Equity in BSKY and an exposure visit to learn from Thailand's Universal Health Coverage schemes. Such international engagements provided valuable insights into best practices and contributed to policy innovation.

Integration of ICD-11 Tool and Training Initiatives

We facilitated the integration of the ICD-11 tool into the BSKY portal, enhancing the documentation of patient diagnoses. Additionally, a refresher training workshop on Claim Adjudication, Medical Audit, and ICD-11, which was attended by over 150 medical doctors, further strengthened BSKY operations by improving medical coding accuracy and claims processing efficiency.

Our multifaceted support to BSKY highlights our commitment to strengthening health systems and improving health outcomes. By addressing program challenges, refining policy frameworks, and fostering collaboration, we have significantly enhanced the efficiency, transparency, and accessibility of healthcare services. Continued evaluation and stakeholder engagement will be vital for sustaining these improvements and achieving long-term health goals in Odisha.

STRENGTHENING URBAN PRIMARY HEALTHCARE: ADDRESSING GAPS AND BUILDING RESILIENT HEALTH SYSTEMS

While there have been significant improvements in health promotion, disease prevention, and service outreach across India due to increased investments in primary healthcare, urban areas still face major challenges, with primary healthcare remaining inadequate, fragmented, and associated with high out-of-pocket costs. The complexities of patient health-seeking behavior and the organization of urban healthcare systems contribute to these disparities. HSTP has been engaged in examining the factors behind the underperformance of primary health systems in urban settings. As India's urban population grows rapidly, with projections indicating that 40% of the population will live in cities by 2030, the demand for healthcare services will continue to rise. Urbanization brings unique challenges, including air pollution, inadequate housing, poor sanitation, and a surge in lifestyle-related diseases, which further strain healthcare infrastructure.

To address these challenges, HSTP is currently implementing the Samagra Urban Mother and Child Project in Mysuru, Karnataka, supported by the Infosys Foundation, in collaboration with the Department of Health & Family Welfare, Government of Karnataka and Karnataka Health Promotion Trust (KHPT). The project aims to build resilient community healthcare structures, expand access to quality-assured reproductive, maternal, newborn, child, and adolescent health (RMNCH+A) services, and promote stakeholder convergence for improved healthcare delivery. Implemented across four Urban Primary Health Centres (UPHCs) in Mysuru—Bannimantapa, Lashkar Mohalla, Gandhinagar, Kumbarkoppalu, and J.P. Nagar—this initiative covers 24% of the city's wards, serving a population of about 2.1 lakh.

The project has achieved significant milestones, including the distribution of 34,000 PMJAY cards, the management of 818 healthcare cases, and the engagement of 350 Self-Help Groups (SHGs) in Bannimantapa. Community outreach efforts have provided valuable demographic insights and success stories from beneficiaries, effectively highlighting the project's positive impact.

Going forward, our focus will be on improving healthcare tracking systems and strengthening maternal and child health initiatives. Through continued collaboration and targeted interventions, we aim to develop a sustainable, replicable urban healthcare model that enhances RMNCH+A outcomes, setting a blueprint for wider implementation across India.

ENHANCING HEALTHCARE ACCESS: HSTP'S SUPPORT TO STATE HEALTH AGENCY, MEGHALAYA

HSTP provides technical support to the State Health Agency (SHA) in Meghalaya to enhance the Megha Health Insurance Scheme (MHIS), focusing on improving healthcare access for vulnerable populations. We have developed a proposal advocating for the integration of the employees' medical reimbursement scheme into MHIS, which has been well received by SHA, emphasizing potential synergies for expanded coverage. Additionally, we drafted a comprehensive transition roadmap to shift from the current insurance mode to an assurance mode, aligning with Meghalaya's health insurance objectives for more sustainable healthcare financing.

As we drive health equity in Meghalaya, through our collaborative efforts with SHA we are actively promoting access and efficiency in healthcare delivery. The strategic roadmap endorsed by SHA is crucial in facilitating this transition, optimizing resource allocation, and enhancing the quality of services provided under MHIS. Consequently, Meghalaya is experiencing improved health outcomes, reduced financial burdens on patients, and better healthcare delivery across the state.

TECHNICAL SUPPORT TO GOVERNMENT ON HEALTH INSURANCE

HSTP has provided technical support to various government bodies, catalyzing transformative changes in health insurance schemes across India.

- **Shaping Future Healthcare Pathways: NITI Aayog Collaboration:** As a trusted advisor to the NITI Aayog, we have provided invaluable insights since 2019 to bridge coverage gaps for the missing middle in India's healthcare ecosystem. Leveraging our partnership with the NHA, our technical inputs are instrumental in shaping inclusive healthcare frameworks that prioritize equitable access and quality care delivery.

- **Strengthening Chiranjeevi Yojana Implementation in Rajasthan through Consultation and Evaluation:** HSTP provided technical assistance for evaluating Rajasthan's Universal Health Coverage scheme in collaboration with CRISP. Our experts reviewed initial findings from the Chiranjeevi Scheme assessment, offering valuable insights for the report.

- **Developing State-specific Health Packages: HSTP's support to Chhattisgarh State Nodal Agency:** HSTP provided technical assistance to Chhattisgarhi to develop state-specific health protection packages while ensuring their standardized and judicious use to minimize misuse risks. Additionally, we have drafted a framework and guidelines for Cochlear Implantation and Rehabilitation services, which was submitted to the state government for implementation.

- **Digital Health Solutions for Suvarna Arogya Suraksha Trust (SAST), Karnataka:** HSTP provided technical support to the Suvarna Arogya Suraksha Scheme in Karnataka to integrate ICD-11 coding into the SAST Transaction Management System in collaboration with WHO. Partnering with the Heidelberg Institute of Global Health, we are documenting SAST's digital financing technologies, particularly online referral systems.

HEALTH BUDGET ANALYSIS

The Health Financing and Planning Team at HSTP conducted a comprehensive trend analysis of health budgets in Meghalaya. This analysis aimed to understand budget priorities, spending inefficiencies, and existing gaps in resource allocation. Based on these observations, detailed recommendations were submitted to the state Health and Family Welfare Department to rationalize and reprioritize the health budget for better financial approval.

- **Performance-Based Financing Assessment:** We conducted an external assessment of the state-wide rollout of the Internal Performance Agreement/Performance Based Financing for Health, reviewing healthcare facility performance and sharing findings with District Quality Assurance Associates. Based on insights, we have provided support to the DHS in revising assessment indicators with state officials to enhance continuous improvement and accountability in Meghalaya's health system.

- **District Hospital Strengthening:** Need for a gap assessment of secondary health facilities to operationalize essential specialty services, aligning with IPHS 2022 standards, focusing on infrastructure, equipment, human resources for health (HRH), drugs, and diagnostics to address identified deficiencies. HSTP supports the planning and proposing of resource requirements in the PIP, followed by capacity strengthening. A digital checklist based on IPHS 2022, developed with Chhattisgarh state officials, aids facility gap analyses. HSTP conducted training and ongoing support for hospital managers and facilitated intensive data collection processes, now in the final stages of review before submission to the state.

HUMAN RESOURCES FOR HEALTH

HSTP has supported states in drafting policies for both the specialist and public health cadres. This was done by preparing an initial draft based on an analysis of current practices in different states and then adapted to local conditions based on the state's needs.

ECS: Geospatial Mapping and Analysis of Emergency Care Infrastructure
The Background Work in 10!
- We have submitted a comprehensive report on the geospatial mapping and analysis of Chhattisgarh's emergency care infrastructure.
- The data collection process involved compiling geospatial data from multiple sources, including district hospitals, CHCs, and private clinical establishments.
- Data on 108 ambulance services were obtained from the Department of Health & Family Welfare and National Health Mission, Chhattisgarh.
- Geo-coordinates for 118 accident-prone areas were extracted using Google Maps.
- Shapefiles depicting road networks (national highways, state highways, major district roads) were generated using QGIS and OSM tools.
- The shapefiles were aligned with the Survey of India's shapefiles on district and administrative boundaries.
- QGIS version 3.34.3 was utilized for geospatial data visualization, overlay analysis, and network evaluation.
- The assessment mapped the distribution and proximity of public health facilities, private clinical establishments, and ambulance services along national highways.
- It evaluated the accessibility of accident-prone areas from 108 Ambulances and their proximity to district hospitals and CHCs.
- The report measured the total emergency response time from accident scenes to the nearest health facility, factoring in ambulance travel time.

Impact
- Optimized Resource Allocation
- Improved Emergency Response Times
- Enhanced Road Safety Initiatives
- Data-Driven Decision Making
- Policy Development

On the Ground: HSTP's Geo-Quest for Safer Roads
A comprehensive road safety plan was prepared by HSTP for the Chhattisgarh Health Department. This plan outlined strategies to optimize emergency response times, improve ambulance accessibility, and enhance the overall emergency care infrastructure. By leveraging geospatial mapping and analysis, we aimed to ensure timely and effective emergency medical services, potentially reducing mortality and improving health outcomes across Chhattisgarh.

PAN INDIA NCD PROGRAM

Globally, 74% of all deaths are attributed to non-communicable diseases (NCDs), such as cardiovascular diseases, cancer, diabetes, and chronic respiratory conditions, making NCDs the leading cause of mortality worldwide (Non-communicable Disease Monitor 2022). In 2015, countries worldwide pledged to achieve the Sustainable Development Goal of reducing premature NCD-related deaths by one-third by 2030 (target 3.4.1). NCDs account for over three-quarters of deaths across all nations, including low- and middle-income countries, posing a significant public health challenge globally.

The Government of India launched the National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS) Programme in 2010, merging the National Cancer Control Programme with the NPCDCS Programme to focus on strengthening healthcare infrastructure, building the capacity of human resources, promoting health, early diagnosis of NCDs in individuals by opportunistic screening, management of diagnosed NCD and referral of NCD cases requiring specialized medical interventions.

The program expanded from 100 districts in 21 states in 2010 to a nationwide scale, integrating into the National Health Mission (NHM) in 2013 and broadening its scope to include chronic respiratory and kidney diseases. Significant advancements include setting up NCD District Cells, clinics, Cardiac Care Units, and Cancer Day Care Centres across the country.

Responding to WHO's "Global Action Plan for NCDs (2013-2020)," India adopted a National Action Plan with targets to reduce premature NCD deaths by 25% by 2025. In May 2023, the program was renamed the National Program for Prevention and Control of Non-Communicable Diseases (NP-NCD).
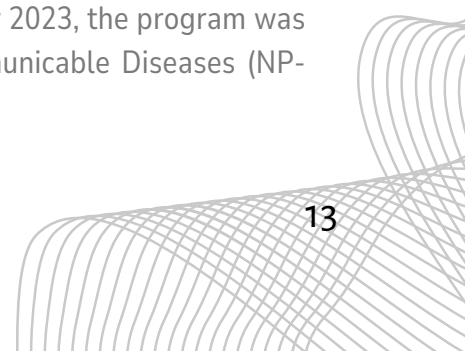
Collaboration and Technological Support

Since 2018, Tata Trusts and DELL Technologies have supported the Ministry of Health & Family Welfare (MOHFW), Government of India by implementing the National NCD Portal. This IT system supports population-based NCD screening and management, catering to data needs across the healthcare system. A unique health record is created for each individual, enabling secure access and updates for healthcare providers. The system facilitates referrals, follow-ups, and work plan preparation for health personnel, ensuring seamless management of hypertension, diabetes, and three common cancers.

Key Achievements in 2023-24

Entering the sixth year of collaboration, Tata Trusts extended its MoU with MOHFW until October 2025. Himachal Pradesh and Telangana adopted the National NCD Portal, with Himachal Pradesh achieving remarkable outcomes. The Government of India launched several initiatives, including the Aspirational Block Program, Ayushman Bhava, PM-Jan Man, and the "75by25" campaign aimed at hypertension and diabetes control. These programs have improved NCD screening, treatment adherence, and lifestyle modification, especially in remote and underserved communities.

Capacity Building and Training (FY 2023-24)

The IT-Technical Support Unit (TSU) manages troubleshooting, monitoring, and maintenance of the NCD infrastructure. A three-member L1 support team provides training and documentation, while an L2 team handles database management and escalated issues. IT-TSU supports application updates and user training nationwide, enhancing digital adoption.

Activities and Contributions to CPHC-NCD App and Portal Development

The IT-TSU is responsible for daily monitoring and maintenance of the entire NCD infrastructure, including production and staging deployments. This involves overseeing application performance, addressing issues reported from the field, and responding to incidents through various channels such as Redmine, emails, WhatsApp, and direct phone calls. *(Major updates in Annexure-1)*

Project Impact (2023-24)

- Enrolment: 95.3 million individuals enrolled, including 65.9 million in the target age group (30+ years). Rajasthan, Bihar, and Maharashtra led in digitization efforts.
- Screening: Over 105.6 million screenings, with 83.7 million first-time and 21.9 million re-screenings. Gujarat, Madhya Pradesh, and Bihar showed the highest first-time screenings.
- Referrals: 8.36 million individuals referred for further NCD management, with Gujarat, Madhya Pradesh, and Maharashtra leading in referral numbers.
- Diagnosis17.1 million examinations were recorded, with Gujarat, Maharashtra, and Karnataka excelling in diagnosis entries.
- Treatment: 10.7 million patients received treatment for at least one NCD, with Gujarat, Karnataka, and Maharashtra reporting the most cases.

Going Ahead

- Support widespread adoption and scaling of the NCD Portal in interested districts/states.
- Achieve full implementation of applications across all levels for comprehensive care.
- Provide ongoing capacity-building and training, including master trainer programs.
- Empower State and District NCD Cells to sustain the program and meet targets.

CASE STUDY:

TRANSFORMING URBAN HEALTH FACILITIES IN CHHATTISGARH: A COMMITMENT TO ACCOUNTABILITY AND PROGRESS

During the FY 2023-2024, our initiatives have focused on revitalizing urban health facilities in Chhattisgarh. Analysis of previous years indicated a low utilization of these facilities, despite the availability of adequate staffing, largely attributed to insufficient accountability among healthcare personnel. To address this issue, 14 Urban Health and Wellness Centers across the districts of Raipur, Durg, and Bastar were identified for targeted interventions. These centers were selected to establish them as benchmarks for best practices and enhance the utilization of the NCD app. Key strategies included:

1.Strengthening the capacity of staff at the center and district levels.
2.Conducting supportive visits to the centers twice a month.
3.Establishing screening targets for each center.
4.Organizing monthly monitoring and review meetings.

By the second quarter of the FY 2023-2024, an assessment of the 14 centers was conducted, utilizing data from September as the baseline. At that stage, the average screening achievement was a mere 15%. Following the implementation of the targeted strategies, this figure increased significantly to 61% by March 2024, indicating a notable improvement of 45% over the last two quarters. A key challenge identified during this period was the insufficient accountability among healthcare workers, which necessitated continuous monitoring and support to facilitate progress.
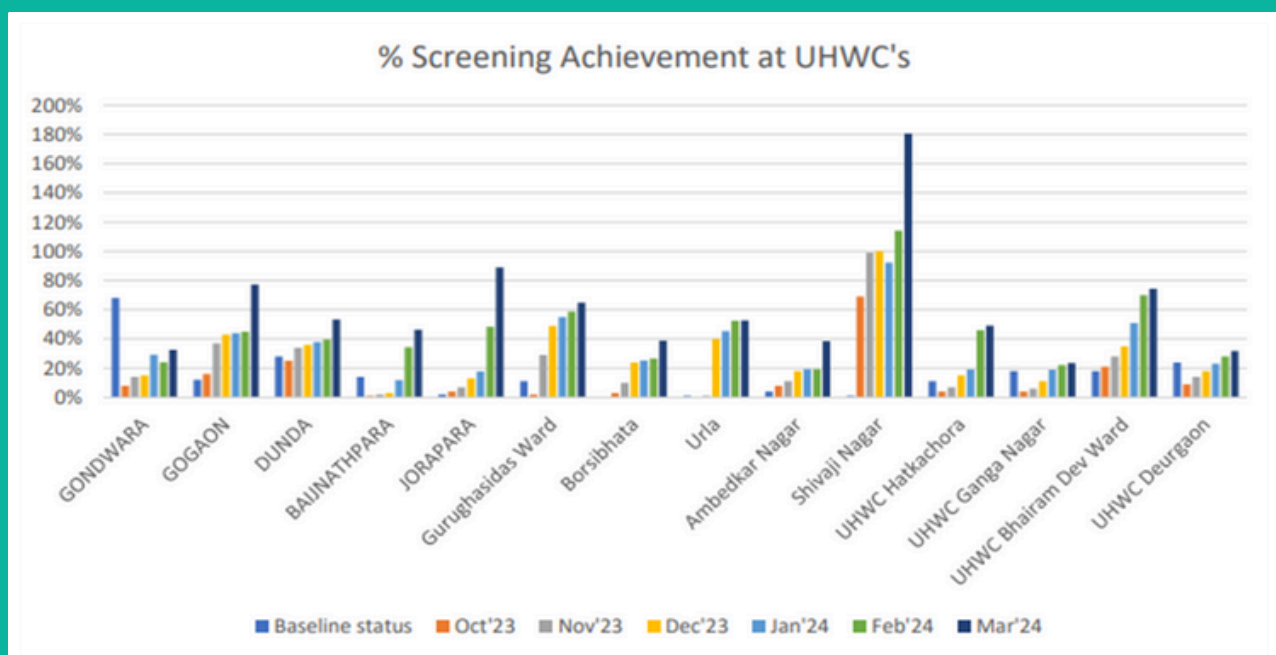
STANDARDS FOR HOME HEALTHCARE: SETTING THE STAGE FOR ENHANCED SERVICE DELIVERY

The Health Systems Governance team at HSTP has spearheaded an initiative to establish standards for home healthcare in India. During the last quarter, stakeholder consultations were conducted to identify priority areas for standard development. Draft standards were developed and shared with experts for their critical input. This ongoing effort aims to elevate the quality and accessibility of home healthcare services nationwide.

From Consultation to Transformation: Bhopal's Journey towards a Healthy City

Since 2021, HSTP and Swasti have been actively collaborating on the Healthy City Program in Madhya Pradesh. Following the inaugural meeting with the District Taskforce committee in December 2022, a plan was devised, tailored to gather insights from technical experts through thematic consultations. These consultations, focusing on Health, Water, Food/Nutrition, and Environment and Sanitation, yielded a preliminary report shared with the NHM, laying the foundation for data gathering and indicator finalization.

With a comprehensive set of 60 indicators now in place, key officials convened in July to finalize them, paving the way for state-level consultations in August, orchestrated by the Mission Director, NHM, Madhya Pradesh, involving five departments and relevant stakeholders associated with these departments. These efforts were bolstered by media outreach, including interviews (including a Big FM interview featuring Bhopal's Chief Medical Health Officer, Dr. Prabhakar Tiwari, discussing BHCP's transformative mission for the city) and podcasts, spotlighting Bhopal's transformative journey towards becoming a healthy city. With the indicators and implementation plan in hand, the final report for Healthy City Bhopal has been submitted, marking a significant milestone in the quest for urban wellness.

EMPOWERING HEALTH RESEARCHERS: HSTP'S CAPACITY BUILDING INITIATIVES

HSTP has engaged in improving the skill sets various category of professionals involved with the health sector. Collaborating with Indian and international experts, we provide hands-on learning experiences that cover a wide range of research topics, empowering participants to drive impactful healthcare improvements.

The India Health Policy and Systems Research (HPSR) Fellowship Program
In partnership with institutions like the Institute of Public Health Bengaluru, Institute of Tropical Medicine Antwerp, Nossal Institute of Global Health, WHO Alliance, Sri Chitra Tirunal Institute of Medical Sciences and Technology, The George Institute of Global Health India, and Christian Medical College Vellore, the program has been recognized as a signature programme in LMICs in the field.

- Cohort 1 (2021) has concluded with 14 fellows completing their HPSR studies, and their comprehensive reports are now accessible on the HPSR website.
- Cohort 2 (2022) fellows have also completed their program, with 12 of them submitting detailed research reports.
- Cohort 3 (2023) progressed well through their online modules, with jury presentations scheduled for early 2024, marking a significant milestone in their fellowship journey.

Orientation to Health Systems in India for Young Professionals
We held a three-day orientation and training program for 12 young development professionals from PRADAN, focusing on India's health systems. The program aimed to empower participants to collaborate effectively with health officials and enhance public access to services in rural tribal regions.

Training on Sexual Harassment Prevention
In December 2023, we conducted a training session on the "Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013" for its staff. Led by Ms. Veenu Kapoor Kakkar, the session oriented 25 participants with the Act's key provisions and emphasized creating a safe working environment at HSTP.

HSTP Health Journalism Fellowship
We organized a one-day orientation for the second batch of HSTP Health Journalism Fellows, focusing on India's health system and culminating in their story presentations.

Our initiatives, from exploratory research studies to capacity building and policy advocacy, underscore HSTP's commitment to advancing healthcare in India. By collaborating with stakeholders, conducting research, and developing policies, HSTP is strengthening health systems, improving healthcare access, and fostering innovation in the healthcare sector. These efforts are crucial in addressing health disparities and enhancing public health outcomes across the country.

SCALING UP & STRENGTHENING SYSTEMS CHANGE

1. Partnership with the Odisha Government

Since 2019, we have collaborated with the State Government of Odisha to strengthen public health systems. Our efforts involved partnerships with AHI and local institutions in Bhubaneswar, including the Indian Institute of Public Health, the Asian Institute of Public Health, and the Kalinga School of Public Health.

Outputs from the collaboration
Research Study on Essential Medicines Availability:
- Identified factors affecting the availability of essential medicines at public health facilities in Odisha.
- Submitted the completed study report to the Directorate of Health Services, Odisha, and OSMCL in July 2023.

Streamlining Indenting Procedures of Medical Colleges:
- Provided support to OSMCL in streamlining the indenting procedures of Medical Colleges in Odisha.
- Consulted with Medical Corporations of Kerala and Tamil Nadu to gather best practices.

The Result: Developed and submitted a concise report outlining adaptable procedures to the MD, OSMCL, to optimize the procurement and supply chain management of medical supplies and equipment.

Building Competencies of Primary Healthcare Providers

Healthcare Provider	Collaboration/Partnership	Initiative/Activity
Pharmacists	HSTP, in collaboration with the Indian Pharmaceutical Association and SCB Medical College, Cuttack	We developed a Competency-based Training Manual for in-Service Pharmacists.
Medical Laboratory Technologists	HSTP, in partnership with the Indian Confederation of Medical Laboratory Science and All India Institute of Medical Science, Bhubaneswar	We formulated a Competency-based Training Manual for in-service Medical Laboratory Technologists in primary healthcare settings.
Medical Officers	HSTP	We have completed preliminary work in developing competency assessment tools; further development is planned within the next six months.
Community Health Officers	HSTP, in collaboration with Satyabhama Institute of Nursing, SIST Chennai, and the Directorate of Nursing Officials, Government of Odisha	Co-creation of project activities; organized virtual expert consultation to validate literature-based CHO competencies.

Transforming Leadership in Odisha's Health Department
In collaboration with Athulya Performance Facilitators, we embarked on an empowering journey to enhance the leadership skills of medical officers of Odisha's State Health Department. Our Leadership Development Program, partially funded by the state government, aimed to elevate the capabilities of health department officials across the state.

Building the Foundation
The initiative started with an inaugural cohort of 28 medical officers from Khurda, Koraput, and Sundargarh districts. They received comprehensive training, including workshops, personalized mentoring, and a valedictory ceremony. Notably, two of our experts, Dr. Sudha Chandrashekhar - Advisor, HSTP, and Dr. Gulfam Ahmed Hashmi. Deputy Director- Human Resources for Health and Health Service Delivery also completed the programme. This program was carefully designed to align with the officers' performance targets, empowering them to address the evolving healthcare needs of their communities effectively.

Expansion and Impact
Following the success of the inaugural cohort, the second Leadership Development Programme launched in November 2023, concluding in March 2024. Open to all 30 districts of Odisha, 22 participants engaged in a four-day residential workshop to clarify roles and enhance leadership skills.

Assessing Progress and Learning from Others
In March 2024, a three-day midterm workshop was held in Shillong to assess the progress of the second CIP leadership training cohort. Led by Dr. Sandipana Pati (Government of Odisha), with Dr. Gulfam Ahmed Hashmi (HSTP) and Prof. Balaji (Athulya), the workshop offered learning opportunities and included an exposure visit to Tirot Singh Memorial Hospital, Meghalaya. This visits enriched participants' understanding of healthcare systems beyond their state, enhancing the program's impact.

Looking Ahead
The Leadership Development Program continues to evolve, driven by a commitment to cultivate effective leaders who can drive positive change within Odisha's healthcare landscape. Through ongoing coaching and mentorship, the program aims to ensure sustained improvements in healthcare delivery across the state. This success story underscores the power of collaboration, innovation, and targeted leadership development in transforming healthcare delivery and improving health outcomes in Odisha.

Digital Health Support to the State Health Department
In Odisha, we collaborated with CDAC to assist in the deployment of a Hospital Information System at public hospitals at the tertiary level to integrate various health services delivered, as part of Digital Health support.

2. Driving Healthcare Excellence in Meghalaya

We collaborated with Meghalaya's Department of Health & Family Welfare as part of the State Technical Working Group on HRH policies. Together, we developed evidence-based policies to ensure quality healthcare professionals' availability and accessibility. Recently, we provided technical inputs at a writing workshop to finalize policies for Specialist, Public Health, and Teaching Sub-Cadres under the Meghalaya Health Service.

Key Areas of Focus: Major input areas included
- Restructuring of the Directorates to accommodate the sub-cadres
- Proposed terms for public health cadres, teaching cadres, and specialist cadres
- Movement between the sub-cadres
- Lateral Entry and Allowances

This initiative was led by senior health officials from the state, including the Principal Secretary, Commissioner & Secretary, Secretary-cum Mission Director, National Health Mission, and officials from the Directorate of Health Services (DHS), Government of Meghalaya, and Health & Family Welfare Department.

Secondary Care Services Enhancement

At the Secretary of Health's request, we have assisted in improving secondary care services in Meghalaya. However, despite detailed discussions with DHS officials and hospital superintendents to identify necessary specialties, the review of existing facility data revealed gaps in crucial information. To address this, we developed tools and templates for further data collection from district hospitals.

DEEP DIVE INTO INDIA'S HEALTH SYSTEMS THROUGH EXPLORATORY RESEARCH STUDIES

In pursuit of a deeper understanding of the Indian healthcare system and to address crucial knowledge gaps, we actively conduct exploratory research studies. These efforts are aimed at uncovering insights into the foundational building blocks of health systems, engaging stakeholders, and advancing the field of health policy and systems research.

Improving Methods for Estimating Out-of-Pocket Expenditures for Health (OOPE) in India	We conducted exploratory research to enhance the estimation of Out-of-Pocket Expenditure (OOPE) for health in India, including a literature review and analysis of NSSO methodologies. We triangulated data, examined international methods, and finalized statistical analyses by December 2022. Our findings were submitted for journal publication in January 2023, improving health expenditure estimates' reliability.
Research Paper on Financial Implications of Multi-morbidity in India	We conducted comprehensive research on the financial implications of multimorbidity in India, focusing on the prevalence of multiple chronic conditions and their effects on healthcare utilization, out-of-pocket expenditures, and catastrophic health costs among individuals over 30. The finalized research paper has been submitted to a peer-reviewed journal to enhance understanding of health economics and policy.
Multisite Implementation Research on Health and Wellness Centres	The ICMR invited Expressions of Interest for multisite implementation research to enhance Health and Wellness Centres (HWCs) to provide CPHC. A collaborative proposal from RMRC Bhubaneswar and HSTP was shortlisted for participation in a proposal development workshop.
Advancing Primary Healthcare: Multisite Study Protocol Finalized and Submitted to ICMR	We collaborated with seven sites to develop a multisite study protocol for strengthening Health and Wellness Centres (HWCs) and improving healthcare delivery. We finalized and submitted the protocol and budget to the ICMR, advancing primary healthcare services in India.
Bridging Healthcare Gaps: Unveiling the Policy Brief on Home Healthcare	We released a policy brief, "Home Healthcare: A Timely Addition to Fill a Critical Gap in India's Healthcare System," highlighting the importance of home healthcare services and providing strategic recommendations for their integration into the national healthcare framework.

Award & Recognitions

- The India HPSR Fellowship programme was honoured with the 2023 Annual Melbourne School of Population & Global Health Teaching Excellence Award in the Engagement -Partnership Impact category.

Webinars

- To commemorate Universal Health Coverage Day 2023, HSTP organized a webinar 'Health for All: Time for Action' on 11 December 2023, in collaboration with the Karnataka Association of Community Health and the Government of Karnataka. Distinguished speakers included experts from the World Health Organization, and the World Bank Group, as well as officials representing the UHC schemes in Kerala and Odisha.
- Organized a webinar on UHC Day 2023, "Health for All: Time for Action", in collaboration with the Government of Karnataka, Karnataka Association of Community Health, and Access Health International.

Voices: Op-Eds and Publications

- Rajeev Sadanandan & Pranay Lal co-authored an Article in The Hindu dated 22 November 2023 titled "Recognising the impact of climate change on health"
- Rajeev Sadanandan co-authored the article "Policymakers' Perspective on Procedural Fairness in Health Financing Reforms" Published in the November Supplement of "Health Policy and Planning: Fairness in Health Financing for Universal Health Coverage"
- Gupta P, Randhawa S, Nandraj S. The Home Healthcare Boom: Opportunities and Obstacles in India's Changing Healthcare Landscape. Home Health Care Management & Practice. 2024;36(2):134-140. doi:10.1177/10848223231196301
- Gupta P. (2024). Home Healthcare: A timely addition to fill a critical gap in India's healthcare system (A Policy Brief). Health Systems Transformation Platform, New Delhi.
- Gupta, P., & Nandraj, S. (2023). Challenges and gaps in regulating medical laboratories in India. Medical Law International, 23(4), 351-367. https://doi.org/10.1177/09685332231194199
- Randhawa S and Nandraj S, Chapter 19, 'Ambulance Services in India – Are the Sirens Loud Enough! Edited by Mehta Pradeep S and Kumar Ujjwal (2023), Competition and Regulation in India, 2023, CUTS, Jaipur.
- Dr. Sudheer Kumar Shukla (2023) co-authored an article entitled 'Estimating funds required for UHC within Indian States' published in The Lancet Regional Health Southeast Asia. DOI: https://doi.org/10.1016/j.lansea.2023.100165
- Dr. Sudheer Kumar Shukla (2023) co-authored a chapter-article entitled 'Multiple Chronic Conditions as Predictors of Inequality in Access to and Use of Health Services Among the Elderly in India' in Handbook of Aging, Health, and Public Policy: Perspectives from Asia (pp. 1-29). Singapore: Springer Nature Singapore. DOI: https://doi.org/10.1007/978-981-16-1914-4_23-1
- Dr Veenapani Verma and Rajeev Sadanandan submitted a commentary titled, "Momentum for Change: A call for climate-resilient cities" for G-20 LiFE, Resilience and Values for Wellbeing Taskforce, which was accepted for publication on 13 March 2023. https://t20ind.org/research/momentum-for-change/
- Dr Veenapani Verma and Rajeev Sadanandan submitted an abstract titled "Unravelling Factors and Inequities Associated with Provider Preference for Management of NCD Care in Urban Areas: A Case Study of Mysuru City, India" for the International Health Economics Association Congress to be held at the Cape Town International Convention Centre, July 8-12, 2023, which was accepted for oral presentation.
- Dr Rahul Reddy co-authored the paper on improving OOPE estimation methods for India. https://preserve.jgu.edu.in/index.php/preserve/preprint/view/37/version/44
- Rajeev Sadanandan wrote an opinion piece "Equity in vaccination against COVID-19: Lessons from child immunization" in the Intergenerational Justice Review. https://https://igjr.org/ojs/index.php/igjr/issue/view/111
- Rajeev Sadanandan co-authored a chapter on Policy Framework for the Health of Senior Citizens in India in the Handbook of Aging, Health and Public Policy. https://link.springer.com/referenceworkentry/10.1007/978-981-16-1914-4_111-1

FINANCIALS

Depreciation and Amortization, 4%

Programme, 40%

Establishment, 56%
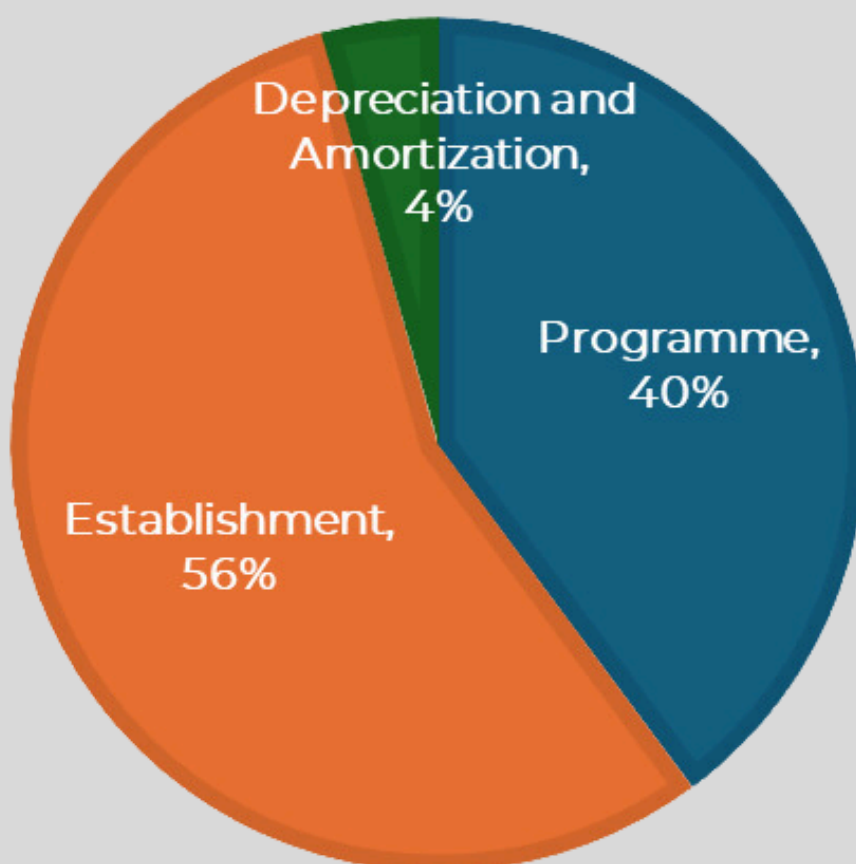
CONCLUSION

HSTP has been functioning and making a mark in the niche area of health policy and systems research. Our work has been recognised in this field. The India HPSR programme is recognised as a flag ship programme by the HPSR community, internationally. Our fellows have distinguished themselves in many areas and acknowledged the contribution of our training. Many state governments consider us as the go to institution for examining the problems they face in managing the health sector. HSTP executives are invited to international events to contribute their expertise. This has been possible due to the unstinted support of our donors, our board and the effort of our team. In the coming years too, we are committed to deepen and broaden our work to generate evidence to improve health system in India.

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ANNEXURE 1:

ACTIVITIES & CONTRIBUTION TOWARDS CPHC-NCD APP & PORTAL DEVELOPMENT

Month	Activity	Description
Apr-23	ABDM M2 - 5.4.1 RELEASE is successfully deployed in production Redmine support portal is updated to the latest stable release HP metadata for all facilities is successfully uploaded to CPHC-NCD servers The L2 training schedule is published for the NHSRC IT Team SSL certificates for new Redmine are procured and successfully deployed in the NCD platform Updated NCD counts are pushed to the Prayas portal NIN integration is enabled in CPHC - NCD applications NCD public IPs got whitelisted in the NIN portal for seamless integration for Phase 1 of HWC integration with NCD L2 training for the NHSRC IT team is completed, and staging VPN access is provided for further hands-on	ABDM M2 - 5.4.1 RELEASE was successfully deployed in production The redmine support portal is updated to the latest stable release HP metadata for all facilities is successfully uploaded to CPHC-NCD servers The L2 training schedule is published for the NHSRC IT Team SSL certificates for new Redmine are procured and successfully deployed in the NCD platform Updated NCD counts are pushed to the Prayas portal NIN integration is enabled in CPHC - NCD applications NCD public IPs got whitelisted in the NIN portal for seamless integration for Phase 1 of HWC integration with NCD L2 training for the NHSRC IT team is completed, and staging VPN access is provided for further hands-on

May-23	Production release 5.4.3 is deployed having advanced search fix and ABDM M2 integration update, six new VMs are provisioned for addition in the basic pre-staging environment The Decryption error for all HP districts and a few Chhattisgarh districts is resolved, all sub-centers were processed manually, and entries are corrected, the widespread issue of users being unable to log in is resolved VM-specific production VPN access provisioned for the Telangana team and installation document shared for data push of Telangana state Population upload with internal IDs and LGD codes is shared with the DGHS team. Population as received from DGHS is uploaded in our NCD dashboard for all aspirational districts for integration with the NITI Aayog dashboard Medicine main list clean-up activity from the portal side is completed and duplication of multiple entries of the same medicines is removed from the main list Issue with MOHFW domain URL for staging is fixed after enabling due changes in DNS mapping for requested public IP Production release 5.4.4 having first-time sync optimization is pushed to production	The decryption error for all HP districts and a few Chhattisgarh districts is resolved, all sub-centers were processed manually entries are corrected, widespread issue of users being unable to log in is resolved VM-specific production VPN access provisioned for the Telangana team and installation document shared for data push of Telangana state Population upload with internal IDs and LGD codes is shared with the DGHS team. Population as received from DGHS is uploaded in our NCD dashboard for all aspirational districts for integration with the NITI Aayog dashboard Medicine main list clean-up activity from the portal side is completed and duplication of multiple entries of the same medicines is removed from the main list The issue with the MOHFW domain URL for staging is fixed after enabling due changes in DNS mapping for the requested public IP Production release 5.4.4 having first-time sync optimization is pushed to production

Jun-23	Production release 5.5 is deployed in pre-prod, prod, and staging environments Additional resources were provisioned after CHI approval, APM storage, pre-staging environment, and 3 production workers & DB machines resources enhanced for catering to additional load on servers Few problematic Kubernetes workers were reset at the OS level through the infra team and those workers were added back to k8s cluster Additional 3 TB storage was provisioned for the Greenplum cluster and cluster expansion activity started for the dashboard batch NCD infra sheet is revised and shared with the CHI team as per their requirements for RFP of central cloud	Production release 5.5 is deployed in pre-prod, prod, and staging environments. Additional resources were provisioned after CHI approval, APM storage, pre-staging environment, and 3 production workers & DB machines resources enhanced for catering to additional load on servers A few problematic Kubernetes workers were reset at the OS level through the infra team and those workers were added back to k8s cluster An additional 3 TB of storage was provisioned for the Greenplum cluster and cluster expansion activity started for the dashboard batch The NCD infra sheet is revised and shared with the CHI team as per their requirements for the RFP of central cloud
Jul-23	Telangana data porting is started to NP-NCD central servers Hot fix 5.6.1.1 for ABDM correct error messaging deployed in production Release 5.7 deployed in staging External Nginx logs are pushed to telemetry for both staging and production for better monitoring Kubernetes cluster is rebuilt and problematic VMs OS is reset and added back. RAM was updated in 5 workers and storage was added in Zone 2 DB servers. The production slowness issue is resolved Antivirus installation activity for left-out production VMs is coordinated with the vendor	Telangana data porting is started to NP-NCD central servers Hot fix 5.6.1.1 for ABDM correct error messaging deployed in production Release 5.7 deployed in staging External Nginx logs are pushed to telemetry for both staging and production for better monitoring The Kubernetes cluster is rebuilt and problematic VMs OS is reset and added back. RAM was updated in 5 workers and storage was added in Zone 2 DB servers The production slowness issue is resolved Antivirus installation activity for left-out production VMs is coordinated with the vendor

Aug-23	Production releases 5.6.1 for the dashboard and 5.7 for the portal and elastic changes are deployed NCD's current infra sheet is updated and shared with stakeholders for the RFP document Authorization token generated in staging and token along with other details are shared with NHSRC IT team for WB SDC setup process Storage provisioned for GP master nodes and RAM increased in all 3 Kafka cluster nodes sighting more load on the dashboard Activation of DR DB servers with restoration of all indexes for state-level access through VPN is initiated Co-ordinated MySQL8 upgrade activity and devised a plan for staging environment DB upgrade	Production releases 5.6.1 for the dashboard and 5.7 for the portal and elastic changes are deployed NCD current infra sheet is updated and shared with stakeholders for the RFP document Authorization token generated in staging and token along with other details are shared with NHSRC IT team for WB SDC setup process Storage provisioned for GP master nodes and RAM increased in all 3 Kafka cluster nodes sighting more load on the dashboard Activation of DR DB servers with restoration of all indexes for state-level access through VPN is initiated. Coordinated MySQL8 upgrade activity and devised a plan for staging environment DB upgrade
Sep-23	Storage provisioned for zone 2 due to Telangana data push. GP nodes in DR for reporting purposes are provisioned after POC from the vendor PG bouncer in GP is introduced and storage is increased in Kafka due to more load MySQL 8 testing with ProxySQL is done in coordination with the DB partner and application team for upgrading staging to MySQL8 LGD block cleanup activity completed and issues with village LGD mapping through UI are closed Village transfer KT done for NHSRC IT team and they have started doing live transfers for MP Supported and provided KT/documentation to the NHSRC team for setting up the WB data center New dedicated Dev Environment setup is started in staging	Storage provisioned for zone 2 due to Telangana data push. GP nodes in DR for reporting purposes are provisioned after POC from the vendor PG bouncer in GP is introduced and storage is increased in Kafka due to more load MySQL 8 testing with ProxySQL is done in coordination with the DB partner and application team for upgrading staging to MySQL LGD block cleanup activity completed and issues with village LGD mapping through UI are closed Village transfer KT done for NHSRC IT team and they have started doing live transfers for MP Supported and provided KT/documentation to NHSRC team for setting up WB data center. A new dedicated Dev Environment setup is started in staging

Oct-23	Cutover for MySQL8 upgrade in staging database is executed and reverted to MySQL 5.7 as proxy SQL was having few issues MySQL 8 testing with Proxysql in prestaging is completed and pre-staging DB is upgraded to MySQL8 WAF implementation testing with the Infra and application team is started Dev Environment setup is started in the staging subnet. 6 new machines with the required resources are provisioned for the same	Cutover for MySQL8 upgrade in staging database is executed and reverted to MySQL 5.7 as proxy SQL was having a few issues MySQL 8 testing with Proxysql in prestaging is completed and pre-staging DB is upgraded to MySQL8 WAF implementation testing with Infra and the application team is started Dev Environment setup is started in the staging subnet. 6 new machines with the required resources are provisioned for the same
Nov-23	NTP service validation done across environments, A Few VMs had different time zones, fixed for all staging and pre-staging machines Ansible server is set in production and updated inventory result set for timezones and time across VMs is shared with the application team Production release 5.8 major release deployment document schedule, owners with timelines is published, and deployment is done Mount server storage is extended and cleaned old log files for accommodating telemetry logs, discussed way forward with the vendor for implementing archiving telemetry logs	NTP service validation done across environments, A Few VMs had different time zones, fixed for all staging and pre-staging machines The Ansible server is set up in production and the updated inventory result set for timezones and time across VMs is shared with the application team Production release 5.8 major release deployment document schedule, owners with timelines is published, and deployment done. Mount server storage is extended and cleaned old log files for accommodating telemetry logs, discussed way forward with the vendor for implementing archiving telemetry logs

Dec-23	Worked with support team to remove all Telemetry logs beyond 1 year to avail storage space, after getting due approvals from the NHSRC team SSL certificate expiry issue reported to all stakeholders i.e. CHI, NHSRC, and worked with the support team to deploy openssl certificates for NCD repo Analysed production issues of bad gateway and K8s cluster getting stuck worked with the support team to rebuild the cluster and made production functional again Staging DB is upgraded to MySQL8 after doing DB level sanity count match and switching of VM Ips in coordination with our internal Team, Infra, and DB teams, basic sanity was done, and staging is working fine	Worked with the support team to remove all Telemetry logs beyond 1 year to avail storage space, after getting due approvals from the NHSRC team SSL certificate expiry issue reported to all stakeholders i.e. CHI, NHSRC, and worked with support team to deploy openssl certificates for NCD repo Analysed production issues of the bad gateway and K8s cluster getting stuck worked with the support team to rebuild the cluster and made production functional again Staging DB is upgraded to MySQL8 after doing DB level sanity count match and switching of VM Ips in coordination with our internal Team, Infra, and DB teams, basic sanity was done, and staging is working fine
Jan-24	Production data refreshed in mirror prod for load testing and validating NAD follow-ups, Rescreening fix from the backend is executed for all states, and validation of increment done for few test cases from the field Portal Release 5.8.2 is deployed in staging The issue with missing index in replica nodes was fixed and reported issues of ANR from GJ and RJ were resolved and validated Workplan and follow-up archival schedulers were executed for all states Technical UAT is done for release 5.8.2 in staging and test results are uploaded in shared directory Portal release 5.8.2 deployment is completed in production	Production data refreshed in mirror prod for load testing and validating NAD follow-ups, Rescreening fix from the backend is executed for all states, and validation of increment done for few test cases from the field Portal Release 5.8.2 is deployed in staging. The issue with missing index in replica nodes was fixed and reported issues of ANR from GJ and RJ were resolved and validated Work plans and follow-up archival schedulers were executed for all states Technical UAT is done for release 5.8.2 in staging and test results are uploaded in a shared directory Portal release 5.8.2 deployment is completed in production

Feb-24	CDSS utility in release 5.8.3 is successfully deployed in staging Worked on issue categorization and created master categories for major issues getting reported in the Redmine support portal. Admin portal release 5.8.3 successfully deployed in staging Detailed infra sheet is verified and allocation of extra resources explained to Nxtgen BSNL teams, added storage in pre-staging DB & worker nodes MySQL8 upgrade in pre-prod is initiated and a dedicated machine for proxySQL installation is set up, SSL certificates for both pre-staging and test/pre-prod environments are deployed. Dashboard cohort report hotfix 5.8.3 is deployed in staging, pre-production, and production Facilitated aggregated data push from the DD&DNH state to the NCD dashboard	CDSS utility in release 5.8.3 is successfully deployed in staging Worked on issue categorization and created master categories for major issues getting reported in the Redmine support portal. Admin portal release 5.8.3 successfully deployed in staging Detailed infra sheet is verified and allocation of extra resources explained to Nxtgen BSNL teams, added storage in pre-staging DB & worker nodes MySQL8 upgrade in pre-prod is initiated and a dedicated machine for proxySQL installation is set up, SSL certificates for both pre-staging and test/pre-prod environments are deployed. Dashboard cohort report hotfix 5.8.3 is deployed in staging, pre-production, and production Facilitated aggregated data push from DD&DNH state to NCD dashboard
Mar-24	Release 5.8.4 regarding incremental dashboard and other minor bug fixes is deployed in staging, pre-prod, and production. The sanity plan is published and incremental will be rolled out after due data validation HWC data is manually updated in the NCD system and a detailed report having HWC and NIN seeding details in the NCD system is shared with stakeholders, the process is set for future manual updates Pre-prod is updated to MySQL8 from the existing MySQL 5.7 version. Now staging, pre-staging and pre-prod are all on MySQL8. Release 5.8.5 regarding elastic dynamic update is deployed in staging Hotfix is deployed to remove political images on the landing page for staging and production. Issue with Green Plum cluster 2 is addressed, RAM increased, and cluster is restarted	Release 5.8.4 regarding incremental dashboard and other minor bug fixes is deployed in staging, pre-prod, and production. The sanity plan is published and incremental will be rolled out after due data validation. HWC data is manually updated in the NCD system and detailed reports having HWC and NIN seeding details in the NCD system are shared with stakeholders, the process is set for future manual updates Pre-prod is updated to MySQL8 from the existing MySQL 5.7 version. Now staging, pre-staging and pre-prod are all on MySQL8 Release 5.8.5 regarding elastic dynamic update is deployed in staging Hotfix is deployed to remove political images on the landing page for staging and production Issue with Green Plum cluster 2 is addressed, RAM increased, and cluster is restarted