

NIRAMAY

Building Scalable Digital Public Infrastructure
for Rural Health System Transformation

A District Saturation Model in
Darrang, Assam

An initiative by Cisco CSR



Corporate Social
CISCO Responsibility



A model for strengthening
public health delivery

Transforming Rural Health.

Together.
Digitally.
Sustainably.





Foreword: Reimagining Health Equity Through Innovation

The Niramay Program is a shared commitment to ensure that quality healthcare reaches communities, regardless of where they live. For communities in rural Assam, achieving this requires more than expanding individual services or introducing new technologies. It requires a health system that can function as a connected whole, linking households, frontline workers, health facilities and decision-makers around the needs of every individual.

Anchored in Darrang, Niramay is demonstrating what this transformation looks like in practice. The program strengthens the continuum of care, from early identification and timely referral to treatment and follow-up, while enabling health workers and public-health leaders to act on timely information. Its significance lies not simply in digitising processes, but in reducing fragmentation and helping the different parts of the health system work together more effectively.

The initiative demonstrates the power of visionary public-private-philanthropic collaboration. By pairing the technical expertise and social commitment of Cisco with Piramal Swasthya Management and Research Institute's grassroots implementation and the stewardship of the National Health Mission (NHM) Assam, Niramay has moved beyond pilot experimentation to achieve full digital saturation across an entire Aspirational District. This report reflects our shared belief that Digital Public Infrastructure (DPI), when anchored in frontline worker empowerment and data-driven governance, can deliver equitable, accessible, and high-quality healthcare to the last mile.

The journey in Darrang offers an important demonstration of a connected, locally grounded approach to health-system strengthening. Its learnings can help inform stronger, more responsive and more equitable public-health systems in Assam and beyond.

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Message from Mission Director (MD) National Health Mission, Assam

“National Health Mission, Assam is committed to leveraging modern digital technologies to strengthen primary healthcare delivery. The Niramay - District Saturation Program in Darrang showcases how aligning state priorities with innovative digital job aids (Utprerona) for frontline health workers, facility digitisation, and indicators-based analytics center (District Swasthya Sameeksha Kendra - DSSK), drive better healthcare operations and outcomes. The Government of Assam is proud to scale Utprerona as the state's frontline digital platform, ensuring that the lessons and best practices developed in Darrang serve as a foundation for statewide expansion.”

Dr. Lakshmanan S,

Mission Director (MD) of the National Health Mission, Assam.



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Executive Summary

India's public health system serves more than 1.4 billion people, most of whom live in rural areas. In these settings, primary healthcare is rapidly transforming from traditional paper-based workflows toward integrated Digital Public Infrastructure (DPI). Frontline workers are being empowered to transition from administrative register maintenance to high-touch community healthcare, while health administrators are gaining real-time data to drive responsive, evidence-based decision making.

Assam, and particularly Darrang district, presents an ideal environment to demonstrate systemic healthcare transformation. With a population of ~10 lakh agrarian residents, Darrang was intentionally selected as an Aspirational District to prove how full saturation — digitising 100% of public health facilities and equipping over 1,000 community health workers (ASHAs) — can accelerate progress toward Sustainable Development Goal (SDG) 3.1. In 2022, the National Health Mission in Assam and Piramal Swasthya Management and Research Institute, with support from Cisco, launched Niramay to demonstrate how digital health solutions can strengthen the public system. The early phase proved that basic digital tools, point-of-care tests, and remote consultations can work reliably in low-resource settings. The current phase focuses on applying these solutions across the entire district.

Today, the Niramay District Saturation Program has digitised 159 public health facilities in Darrang. Community health workers use the Utprerona (Frontline Worker) mobile application to register households, create digital health identities, screen for risk conditions, and track referrals.

The district hospital and key centres use an electronic hospital system to capture outpatient visits, admissions, tests and referrals as part of a continuous digital record. More than 1,000 community health workers now use Utprerona, nearly 1.9 lakh couples have been registered and screened, and digital health identities are generated directly at the doorstep. Combined with point-of-care diagnostics and remote specialist consultations, these workflows help ensure that people are identified early, referred correctly, and followed through to care — outcomes brought to life in the frontline case studies later in this report.



A district-level command and control centre in Darrang now brings together data from villages and facilities into simple dashboards for state, district and block teams. This centre allows leaders to track health performance across 170+ indicators, dynamically reallocate resources, and proactively resolve service bottlenecks within 48 hours. The Niramay program offers a practical model for strengthening rural public health by combining frontline digital tools, facility-level systems and data-driven governance, and provides a clear blueprint for partners in Assam and Cisco to replicate in other high-need districts across India.

Key Proof Points from Darrang



159

public health facilities
digitised in Darrang



1,000+

community health
workers (ASHAs) using Utprerona



1.9 lakh

couples registered
and screened



Digital health
identities generated
directly at the doorstep



170+

indicators tracked
at the district-level
command and control centre



48 hours

to proactively resolve
service bottlenecks



Landscape for Transformation: Strategic Health Priorities & Opportunities in Assam & Darrang

Assam, the largest northeastern state by population (projected to reach 35.6 million by 2026), is predominantly rural (84%), with its development shaped by a complex interplay of environmental, educational, economic, and social opportunities. These geographic and community dynamics provide a compelling proving ground for a tailored, equity-focused digital public health strategy designed in close collaboration with the state health administration.

Assam presents four strategic priority areas where digital innovation and public health convergence create transformative impact:



Building Climate-Resilient Health Delivery

Digital Public Infrastructure (DPI), real-time DSSK tracking, and proactive doorstep surveillance maintain unbroken continuity of maternal and childcare even during seasonal monsoon and flood events across the Brahmaputra and Barak river basins (where 4.3 million citizens were affected in 2024).



Empowering Rural Communities & Families

Vernacular digital job aids and door-to-door ASHA engagement to bridge educational disparities, fostering community health awareness, and ensuring proactive antenatal care uptake directly at the household level.



Strengthening Last-Mile Health Equity

Remote riverine char areas, tea garden worker communities, and tribal habitations through mobile point-of-care diagnostics and frontline saturation, guaranteeing that quality health entitlements reach every citizen.



Accelerating Maternal & Child Survival

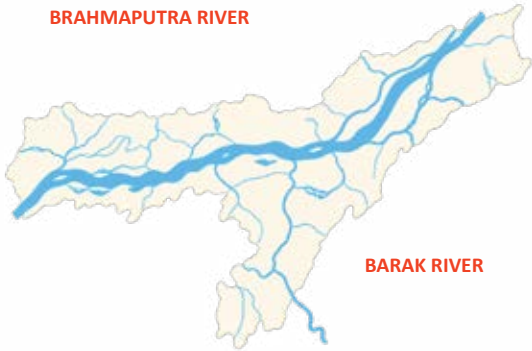
Detection through doorstep antenatal screening, automated high-risk pregnancy stratification, and seamless facility referral loops, directly accelerating Assam's progress toward SDG 3.1 targets.



5 MATERNAL DEATHS
every hour in India

ASSAM

BRAHMAPUTRA RIVER



BARAK RIVER



4.3 Million
people

affected by floods in 2024

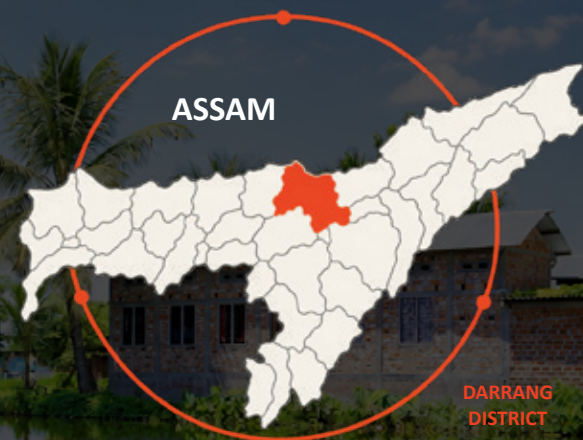


Reference: NFHS (National Family Health Survey) (2019-21), CAG (Comptroller and Auditor General of India) Report on Flood Management in Assam (2024), UDSE+ (Unified District Information System for Education Plus) 2022-23, NITI (National Institution for Transforming India) Aayog Aspirational Districts Dashboard.

Why Darrang?

The Strategic Innovation & Saturation Proving Ground

Darrang, selected as an Aspirational District by NITI Aayog, represents a critical landscape for demonstrating full-scale digital saturation of public health services. It was chosen intentionally because a successful saturation model here proves that Digital Public Infrastructure (DPI) can drive rapid, high-impact improvements in reproductive, maternal, newborn, and child health in the most demanding operational environments.



Population

~10 Lakh

Predominantly rural and agrarian



Rural Population

~84%



Aspirational District

Identified by NITI Aayog for accelerated development

With a population of roughly 10 lakh citizens, predominantly rural and agrarian, Darrang exhibits several vulnerabilities that make it both a challenge and an opportunity for systemic transformation:



Pioneering Early Antenatal Engagement

Registration to 100% early doorstep registration within the first trimester (<12 weeks) and real-time High-Risk Pregnancy (HRP) identification to safeguard mothers and infants before complications.

Early doorstep registration within first trimester (<12 weeks)



Unlocking Frontline Capacity

With Utprerona, replacing 6 cumbersome physical registers with a single mobile workflow that saves 8 – 10 hours per week and redirects time to direct patient counselling.

1,037 ASHAs
6 physical registers → single mobile workflow
8 – 10 hours/week saved



Decentralized Diagnostics & Financial Protection

Deploying point-of-care diagnostic devices at Health and Wellness Centres (HWCs) to deliver free, immediate test results, saving rural families an estimated ₹450 – ₹800 per diagnostic battery in out-of-pocket costs.

₹450 – ₹800
estimated savings per diagnostic battery



“ These strategic foundations demonstrate that full district saturation — rather than fragmented pilot projects — creates an integrated, resilient health ecosystem capable of real-time adaptation, enabling timely risk identification, referral, coordinated follow-up and continuity of care, as illustrated in Case Study 3. ”

Niramay Program: Full-Stack Digital Health Ecosystem

Niramay was launched on 8 January 2022 by the National Health Mission in Assam and Piramal Swasthya Management and Research Institute, with anchor support from Cisco, as a flagship initiative to integrate digital health technologies into the state public healthcare delivery system. The program operationalizes Ayushman Bharat Digital Mission (ABDM) building blocks through four interconnected operational tiers:



Point-of-Care Diagnostics

Installed rapid diagnostic devices at rural facilities, completing 75,997 on-site tests and flagging 50,000+ suspected chronic cases early.

75,997
on-site tests

50,000+
suspected chronic cases early



Key Accomplishments & Impact to Date

Through total saturation across Darrang district, Niramay has achieved verified improvements across clinical, operational, and financial dimensions:



159

FACILITY SATURATION

159 Public Health Facilities

Completed digitisation across 115 HWCs, 6 PHCs, CHCs (Community Health Centre), and District Hospital.



1,037

FRONTLINE ADOPTION

1,037 Active ASHAs

Replaced 6 paper registers; unlocked 8 – 10 hours/week per ASHA for home counselling.



~1.9 lakh

HOUSEHOLD COVERAGE

~1.9 Lakh Eligible Couples Registered

Doorstep ABHA digital identity generation; 100% population enumerated digitally.



13.5%

HIGH-RISK PREGNANCY

13.5% Pregnant Women Flagged (HRP)

Identified 715+ high-risk mothers early and linked to specialist teleconsultations.



50,000+

CHRONIC DISEASE SCREENING

50,000+ Suspected NCDs Flagged

Doorstep CBAC screening connecting patients to HWC diagnostic clinics.



75,997

DIAGNOSTICS & OOPE (Out-of-Pocket Expenditure) SAVINGS

75,997 Point-of-Care Tests Conducted

Decentralized testing saving rural families ₹450 – ₹800 per diagnostic visit.



170+

GOVERNANCE CADENCE

170+ DSSK Indicators Monitored

Empowered 2 state-level, 9 district-level, and 15 block-level review committees.

Clinical Governance, Risk Stratification & Continuum of Care

To ensure that digital risk screening translates into timely clinical interventions, Niramay incorporates a standardized 3-Tier Clinical Risk Stratification Matrix with defined Standard Operating Procedures (SOPs):

3-Tier Clinical Risk Stratification Matrix

 <div>  <p>HIGH PRIORITY</p> <p>Immediate action, safer mothers</p> </div>	<p>Clinical Conditions & Screening Criteria</p> <ul style="list-style-type: none"> Severe Anaemia (Hb - Haemoglobin < 7.0 g/dL) PIH (Pregnancy-Induced Hypertension) / Pre-eclampsia (BP (Blood Pressure) ≥ 140/90 mmHg) Antepartum Haemorrhage (APH) Previous C-Section / Bad Obstetric History 	<p>Mandatory Escalation SLA (Service-Level Agreement) & Protocol</p> <ul style="list-style-type: none"> ASHA / ANM (Auxiliary Nurse Midwife) home follow-up within 24 Hours Immediate referral to CHC / District Hospital FRU Mandatory teleconsultation with Obstetrician Unresolved alerts escalated to BMO (Block Medical Officer) / CMO (Chief Medical Officer)
 <div>  <p>MODERATE PRIORITY</p> <p>Enhanced monitoring, healthy outcomes</p> </div>	<p>Clinical Conditions & Screening Criteria</p> <ul style="list-style-type: none"> Moderate Anaemia (Hb - Haemoglobin) 7.0 – 9.0 g/dL Teenage Pregnancy (< 19 years) Short Primigravida (Height < 145 cm) Twin / Multiple Pregnancy Uncontrolled Thyroid Disorder 	<p>Mandatory Escalation SLA (Service-Level Agreement) & Protocol</p> <ul style="list-style-type: none"> ASHA home follow-up within 48 Hours Nutrition supplementation & IFA (Iron Folic Acid) compliance Scheduled HWC clinical assessment within 7 days Bi-weekly monitoring on Utprerona dashboard
 <div>  <p>ROUTINE / LOW RISK</p> <p>Standard care for brighter tomorrows</p> </div>	<p>Clinical Conditions & Screening Criteria</p> <ul style="list-style-type: none"> Normal clinical parameters Mild Anaemia (Hb - Haemoglobin) > 9.0 g/dL Verified institutional birth plan 	<p>Mandatory Escalation SLA (Service-Level Agreement) & Protocol</p> <ul style="list-style-type: none"> Standard - ANC (Antenatal Care) visit schedule (Minimum 4 – 8 visits) Monthly nutrition counselling & immunisation Doorstep tracking via Utprerona

Maternal Death Surveillance & Response (MDSR)

Niramay supports a culture of learning and zero preventable deaths ('No Shame, No Blame'). When a maternal or infant adverse event occurs, Utprerona generates an immediate notification, triggering a 24-hour facility review, community verbal autopsy within 3 weeks, and a closed 30-day corrective action plan monitored by the District Health Society.

Continuum of Care Beyond Delivery

Maternal tracking seamlessly transitions into Home Based Newborn Care (HBNC), Sick Newborn Care Unit (SNCU) discharge follow-ups, routine childhood immunisation schedules, and Nutrition Rehabilitation Centre (NRC) linkages to address childhood stunting and wasting.



Pregnancy

Antenatal care & risk tracking



Delivery

Institutional delivery & skilled care



Newborn

HBNC & SNCU discharge follow-ups



Childhood

Immunisation & nutrition support



Assam State Best Practices: National Replication Blueprint & Toolkit

The Niramay model in Darrang establishes a validated, turnkey blueprint for digital rural health transformation that can be replicated in Aspirational and high-need districts across India. The replication toolkit comprises four foundational components:

A

The District Saturation Methodology (100% Saturation Model)

Rather than executing scattered pilots across several districts, saturating 100% of public health facilities (HWCs, PHCs, CHCs, DH (District Hospital)) within a single administrative district creates a closed loop where no patient falls through the referral cracks. This concentrated saturation establishes the network density required for verifiable epidemiological impact.



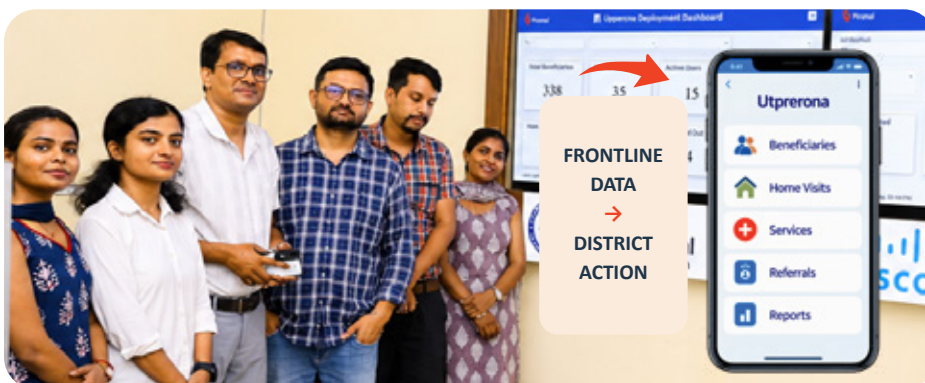
100%
SATURATION

ONE CONNECTED
DISTRICT

B

'Frontline App + Command Center' Dual Engine

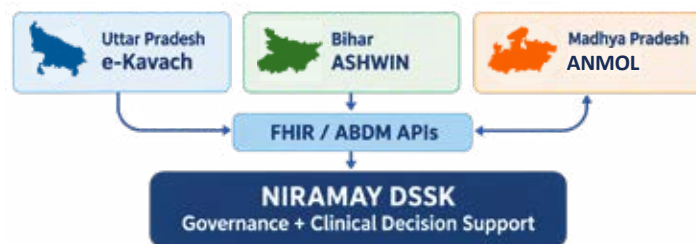
The power of Niramay lies in pairing a mobile execution tool (Utpreona) with an indicator-based governance nerve centre (DSSK). Frontline health workers capture granular household realities, while leadership uses aggregated analytics to identify and resolve systemic bottlenecks (such as flood-induced service disruptions) within 48 hours.



C

State Interoperability Adapters for National Platforms

Niramay is engineered as an open, ABDM-compliant architecture. For states with existing frontline applications (e.g., Uttar Pradesh with e-Kavach, Bihar with ASHWIN, Madhya Pradesh with ANMOL), the Niramay DSSK governance and clinical decision-support layers can be deployed as interoperable plug-ins via standard FHIR (Fast Healthcare Interoperability Resources) and ABDM APIs (Application Programming Interface) without replacing existing state applications.



D

The 'Champion ASHA' Change Management Playbook

Grassroots digital adoption relies on peer mentoring. Niramay's playbook trains high-performing 'Champion ASHAs' to mentor peers with limited smartphone experience, achieving 100% active digital adoption across 1,037 workers within 6 months.



Strategic Recommendations for Government & Ecosystem Partners



01

Establish a Unified State Digital Health & Information Systems PMU (Program Management Unit)

Consolidate existing ABDM and IT functions within NHM Assam into a single institutional mechanism to anchor all digitisation efforts across the state, lead digital-health



02

Enable a Phased Transition to Digital-First Reporting

Develop and implement a state roadmap to progressively eliminate paper registers and establish approved digital platforms as the primary source for routine data capture and reporting, thereby reducing the administrative burden.

03

Institutionalise Digital Health Financing within the NHM PIP (Program Implementation Plan)

Integrate recurrent operational expenditures for digital-health infrastructure — including cloud hosting, connectivity, device management and replacement, telecom connectivity, system maintenance, cybersecurity, server management and state health data-centre.

04

Automate ASHA Incentive Disbursal via PFMS / Treasury Integration

Complete direct API integration between Utprerona and the Public Financial Management System (PFMS) / state treasury to enable real-time, automated incentive reconciliation.

05

Formalize Multi-Departmental Convergence Protocols

Establish structured coordination mechanisms between Health, Women & Child Development (ICDS / Anganwadi Workers), and Panchayati Raj to synchronize Village Health, Sanitation and Nutrition Days (VHSND) and joint beneficiary tracking.

Digital Solutions in Action

The five case studies below illustrate, at the level of individual frontline workers and beneficiaries, how the systems described in this report — Utprerona, AMRIT, the HWC application, e-Hospital and the DSSK — translate into changed working days and safer outcomes.



Utprerona



AMRIT



The HWC application



e-Hospital



The DSSK



From Six Registers to One Thumbprint

How Utprerona changed an ASHA's working day, not just her paperwork

Nayanmoni Deka covers a cluster of villages in Darrang as an ASHA, responsible for close to a thousand people across dozens of households. Before Niramay, her real workday did not end when her home visits did. Every evening she sat down with six separate paper registers, copying names, dates and screening notes by hand, often working past dark to keep her records from falling further behind. A missed entry meant a missed follow-up; a disputed register meant a delayed incentive payment she counted on.

With Utprerona, she now enumerates a household, screens for risk, and creates an ABHA ID in the same visit, on the same phone, at the doorstep. There is no backlog waiting for her at home. Her incentive-linked activities are logged automatically as she works, so for the first time she can see exactly what she has earned instead of waiting weeks for the block office to confirm it.

Her cluster is now fully covered in the digital record, every household enumerated, every eligible couple screened, every ABHA generated at the door rather than at a distant counter. The hours she used to spend transcribing by lamplight, she now spends on one more home visit, or with her own family.



“Give an ASHA one less register to carry, and she gives a village one more hour of care.”

1,000

People under her care across dozens of households

6

Paper registers replaced by one app

100%

Households in her cluster now digitally enumerated

The Case That Didn't Fall Through

Restoring Continuum of Care Through AMRIT and Dashboard-Driven Tracking

A tea garden worker in her fifties was diagnosed with hypertension during a community screening drive, before Niramay reached full saturation in her block. She collected one round of medicines but did not return for follow-up — the paper register that held her name had no way of drawing attention to the missed visit.

Under the new system, the silence was visible. A Community Health Officer at her local Health and Wellness Centre noticed her record sitting untouched on the AMRIT dashboard for months and flagged it during a routine review. Her ASHA was assigned to follow up, found her at home and helped her return to the facility before her blood pressure could turn into something worse.

Today she collects her medicines on schedule, and her file shows both the gap in follow-up and her recovery — a record that once would have simply gone silent. The case demonstrates how AMRIT, combined with ASHA outreach, makes missed follow-ups visible and supports coordinated action to restore continuum of care.



“One flagged name on a dashboard, one home visit, one patient reconnected to care.”

Missed follow-up identified → ASHA home visit → Return to treatment → Continued care

From ASHA Supervision to Timely Follow-up

How digital information strengthens supportive supervision in Darrang

In a block in Darrang, an ASHA Supervisor reviews the Utprerona dashboard before her routine meeting with ASHAs. She notices that one ASHA has several pregnant women recorded as requiring follow-up, including a high-risk pregnancy for which the next service visit has not yet been updated.

Rather than waiting for the next monthly review or checking multiple paper registers, the supervisor contacts the ASHA to understand the issue. The ASHA explains that the beneficiary had travelled to stay with relatives after heavy rains made local travel difficult. The supervisor helps the ASHA plan a follow-up call, coordinates with the ANM to confirm the beneficiary's next antenatal visit and ensures that the referral status is updated once care is received.

ASHA records a risk → Supervisor identifies the gap → ANM/facility team supports care
→ Implementation team strengthens capacity → Block team reviews progress



“A district that can see itself in real time is a district that can protect itself.”

Digital Empowerment of an ASHA Leading to Safe Motherhood

Kharupetia Block, Darrang District

In the remote villages of Kharupetia, an ASHA worker under the Niramay Program intervention demonstrated how digital empowerment and timely healthcare interventions can transform maternal health outcomes.

Initially, the ASHA had very limited exposure to smartphones and faced difficulty in operating digital applications. Simple tasks such as opening applications, entering beneficiary details, or checking service schedules seemed challenging for her. However, through continuous handholding support, onsite mentoring, and repeated practice sessions conducted under the intervention, she gradually became comfortable using the digital tool Utprerona.

During one of her routine household visits, she registered a pregnant woman in the Utprerona application. While entering the beneficiary's details and tracking her antenatal care status, the ASHA observed several high-risk indicators, including weakness, fatigue, dizziness, and poor nutritional status. The digital prompts and risk identification features within

Utprerona guided the ASHA to suspect possible anaemia and encouraged immediate referral to the nearby Health and Wellness Centre (HWC).

At the facility level, healthcare providers used the HWC application to record the beneficiary's investigation details and service uptake. Necessary tests, including haemoglobin examination, were conducted at the HWC, where the woman was diagnosed with severe anaemia.

Following the diagnosis, immediate management and follow-up mechanisms were initiated. The beneficiary was provided with Iron Folic Acid (IFA) tablets, counselling on consumption of iron-rich and nutritious food, and guidance regarding adherence to treatment. The ASHA played a critical role in ensuring regular follow-up visits, monitoring tablet consumption, counselling family members, and motivating the beneficiary to avail scheduled antenatal services.

Throughout the pregnancy period, both the ASHA and facility team received timely reminders and service alerts through



“This case highlights how digital tools like Utprerona and the HWC application not only strengthened service delivery and follow-up mechanisms but also empowered frontline workers with limited digital literacy to identify high-risk cases early and ensure timely care.”

Utprerona and the HWC application. These digital platforms helped them track due services, follow-up schedules, ANC visits, and treatment compliance effectively, enabling better coordination between community and facility-level healthcare providers so that no critical service was missed.

With regular monitoring, improved nutrition, timely supplementation, and continuous counselling, the health condition of the mother gradually improved. Eventually, she went on to deliver a healthy baby safely at the health facility.

Timely Identification of High-Risk Pregnancy Through Digital Tracking

Darrang District

In one of the intervention villages of Darrang District, an ASHA worker was responsible for tracking several pregnant women spread across geographically distant communities. Earlier, maintaining paper-based records, remembering due dates for antenatal care, and tracking service uptake were challenging tasks. Missed follow-ups and delayed referrals were common due to lack of real-time information and coordinated tracking.

With the introduction of the digital platform Utprerona, the ASHA began digitally registering beneficiaries and tracking their pregnancy journey systematically. The application provided automated reminders for antenatal check-ups, immunisation schedules, danger signs, and high-risk indicators, enabling the ASHA to plan household visits more efficiently.

During one such routine follow-up, the ASHA noticed through the Utprerona dashboard that a pregnant beneficiary had missed two consecutive antenatal care visits and had not undergone her scheduled blood pressure and weight monitoring. The digital alert generated by the application prompted the ASHA to immediately visit the beneficiary's home.

During the interaction, the pregnant woman complained of swelling in her feet, persistent headache, and blurred vision. Guided by the risk prompts available in the application, the ASHA identified the symptoms as possible warning signs of a high-risk pregnancy and immediately referred her to the nearby Health and Wellness Centre.

At the facility level, healthcare providers used the HWC application to record clinical observations and investigation reports. On examination, the beneficiary was diagnosed with Pregnancy-Induced Hypertension (PIH), a potentially dangerous condition for both mother and baby if left unmanaged.

The digital integration between the community and facility platforms enabled continuous monitoring of the beneficiary. The HWC application helped the ANM and medical team schedule follow-up visits, monitor blood pressure trends, and record medications provided. Simultaneously, Utprerona generated reminders for the ASHA regarding home visits, counselling sessions, and due service follow-ups.

The ASHA regularly counselled the beneficiary and her family on medication adherence, adequate rest, nutritional care, and institutional delivery preparedness. Because of timely referral, regular monitoring, and coordinated follow-up through the digital platforms, complications were controlled effectively throughout the pregnancy.

2 CONSECUTIVE ANC VISITS

Missed and identified through digital tracking

PIH IDENTIFIED

Through timely referral and clinical assessment

CONTINUOUS MONITORING

Across Utprerona and the HWC application

“ Eventually, the beneficiary safely delivered a healthy baby at the designated health facility without any major complications.



Source Data



NFHS-5: Assam State Factsheet



**Socio-economic and Nutritional
Impacts of Recurrent Floods
in Assam — Down To Earth**



Tribal Development Plan, Assam



**National Multidimensional
Poverty Index: A Progress
Review, 2023 — NITI Aayog**



**Sample Registration System:
Special Bulletin on Maternal
Mortality in India, 2018–20**



**Assam Health Dossier 2021 —
National Health Systems
Resource Centre**



**Health Workforce in India:
Where to Invest, How Much
and Why? — WHO (World Health
Organisation), 2022**



**Health Resources Constrained
in Assam's District Hospitals —
Times of India/World Bank**

Our Team

Behind the Niramay Program is a multidisciplinary team working together to strengthen rural health systems through technology, data and on-ground implementation.

Their collective efforts have helped translate the program's vision into meaningful change across Darrang.



Conclusion

Powering Scalable Rural Health Transformation

Niramay proves that full district saturation — uniting frontline digital empowerment, point-of-care diagnostics, and data-driven governance—creates a resilient, patient-centred public health ecosystem.

By transforming Darrang from a challenging landscape into a beacon of digital health innovation, the collaborative partnership between NHM Assam, Piramal Swasthya, and Cisco has delivered measurable health outcomes, unlocked frontline capacity, and safeguarded vulnerable mothers and newborns.

As Assam codifies these successes into a statewide architecture, Niramay stands as a proven, scalable blueprint for other Indian states — demonstrating how technology and public systems can join forces to accelerate SDG 3.1 and ensure equitable care for the last mile.



Abbreviations

ABHA: Ayushman Bharat Health Account

ABDM: Ayushman Bharat Digital Mission

AMRIT: Accessible Medical Records via Integrated Technologies

ANC: Antenatal Care

ANM: Auxiliary Nurse Midwife

APH: Antepartum Haemorrhage

API: Application Programming Interface

ASHA: Accredited Social Health Activist

BMO: Block Medical Officer

BP: Blood Pressure

CAG: Comptroller and Auditor General of India

CBAC: Community-Based Assessment Checklist

CHC: Community Health Centre

CMO: Chief Medical Officer

DH: District Hospital

DPI: Digital Public Infrastructure

DSSK: District Swasthya Sameeksha Kendra

FHIR: Fast Healthcare Interoperability Resources

Hb: Haemoglobin

HBNC: Home-Based Newborn Care

HRP: High-Risk Pregnancy

HWC: Health and Wellness Centre

ICDS: Integrated Child Development Services

IFA: Iron and Folic Acid

IT: Information Technology

MD: Mission Director

MDSR: Maternal Death Surveillance and Response

MoHFW: Ministry of Health and Family Welfare

NCD: Non-Communicable Disease

NFHS: National Family Health Survey

NHM: National Health Mission

NITI: National Institution for Transforming India

NRC: Nutrition Rehabilitation Centre

OOPE: Out-of-Pocket Expenditure

PFMS: Public Financial Management System

PHC: Primary Health Centre

PIH: Pregnancy-Induced Hypertension

PIP: Program Implementation Plan

PMU: Program Management Unit

SDG: Sustainable Development Goal

SLA: Service-Level Agreement

SNCU: Sick Newborn Care Unit

SOP: Standard Operating Procedure

UDSE+: Unified District Information System for Education Plus

VHSND: Village Health, Sanitation and Nutrition Day

WHO: World Health Organization



