



Strengthening Maternal and Child Health through PPPs: Assessment of MCH Wings in Eastern Uttar Pradesh



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HMIS	Health Management Information System	
HRP	High Risk Pregnancy	
IEC	Information, Education, and Communication	
IMR	Infant Mortality Rate	
IPD	In Patient Unit	
IPHS	Indian Public Health Standards	
JSY	Janani Suraksha Yojana	
KPI	Key Performance Indicators	
LSHTM	London School of Hygiene & Tropical Medicine	
MoHFW	Ministry of Health and Family Welfare	
MoU	Memorandum of Understanding	
MTR	Mid-Term Review	
NFHS	National Family Health Survey	
NHM	National Health Mission	
NQAS	National Quality Assurance Standards	
OOPE	Out of Pocket Expenditure	
OPD	Out Patient Unit	
PNC	Post Natal Care	
PPP	Public-Private Partnership	
QPR	Quarterly Progress Report	
SBA	Skilled Birth Attendant	
SNCU	Special Newborn Care Unit	
USG	Ultrasonography	
WHO	World Health Organization	

List of Abbreviations

Acknowledgement

The assessment was undertaken to evaluate the performance, quality of services, and operational challenges of four Public–Private Partnership (PPP)–run Maternal and Child Health (MCH) wings in Varanasi, Mirzapur, Sonbhadra, and Chandauli, Uttar Pradesh. Following recommendations from the Mid-Term Review (MTR) meeting held under the chairpersonship of AS&MD (NHM), MoHFW, the assessment aimed to validate service delivery outcomes, identify best practices, and inform the scale-up of the PPP model for maternal and newborn health.

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Strengthening Maternal and Child Health through PPPs: Assessment of MCH Wings in Eastern Uttar Pradesh

1. Executive Summary

The Government of Uttar Pradesh (GoUP), under the National Health Mission (NHM), adopted a Public-Private Partnership (PPP) model to strengthen Maternal and Child Health (MCH) services in five districts, viz. Chandauli, Sonbhadra, Varanasi, Mirzapur, and Sant Ravidas Nagar (Bhadohi). These partnerships aimed to bridge persistent infrastructure and service delivery gaps in high-priority districts by leveraging private sector efficiency while maintaining public oversight and free service access. The private partner was engaged to manage clinical operations, deploy human resources, and ensure availability of diagnostics and drugs, while the government provided infrastructure and regulatory supervision.

Following preliminary analysis of HMIS data and district-wise NFHS-5 findings, and in response to observations during the NHM Mid-Term Review (February 2025), an onsite assessment was conducted in April 2025 across the four operational PPP MCH wings. The Bhadohi MCH wing is currently non-operational. The facility is expected to be handed over to the private partner and become operational by 2026, as the construction was recently completed, as per the State. The objective was to validate functionality, examine service quality, identify bottlenecks, and generate evidence for improvement or replication.

The assessment methodology included facility walkthroughs, patient and staff interviews, review of service records (ANC, delivery, PNC), infrastructure validation, and mapping against the Indian Public Health Standards (IPHS 2022). District-level NFHS-5 data were also analysed to triangulate reported performance with actual population coverage and outcomes. In addition, the evaluation reviewed compliance with **Key Performance Indicators (KPIS) outlined in the contractual Memorandum of Understanding (MoU)** between the Department of Health and the private partner, covering areas such as diagnostics, HR deployment, clinical documentation, and grievance redress mechanisms.

Key findings include:

- 1. **High institutional delivery loads** with over 80% bed occupancy across all sites, indicating positive public uptake.
- 2. Extremely high C-section rates (70-90%), largely elective and often without clinical justification or audit protocols.
- 3. Weak continuum of maternal care: ANC registration and HRP tracking were inconsistent; PNC coverage and newborn immunisation follow-up were poor in Sonbhadra and Mirzapur.
- 4. **Diagnostic services were limited**, with no facility offering Level II ultrasonography. This led to external referrals and out-of-pocket expenditure (₹2000–2500 per patient).
- 5. **Human resource availability** was broadly as per contractual norms, but 12-hour shift rotations, lack of nursing supervision, and insufficient staff rest areas affected service quality and staff morale.
- 6. **The infrastructure was adequate,** but some facilities lacked patient amenities like toilets, IEC materials, and safe electrical fittings.

- 7. No facility had undergone NQAS or LaQshya certification, despite this being specified in the MoU. Quarterly monitoring of PPP-run MCH wings is conducted by SIFPSA, and funding is released based on their reports. However, the absence of certification highlights gaps in tracking contractual KPIs.
- 8. In districts like Varanasi and Sonbhadra, PPP-based MCH wings are co-located with fully functional District Women Hospitals and Medical Colleges, resulting in overlapping infrastructure and service duplication.

The assessment findings reflect similar challenges reported in earlier PPP evaluations from Gujarat, Karnataka, and UP, (*Published in Economic and Political Weekly, 2011*). While service volume has increased, quality of care, clinical appropriateness, and continuity remain key gaps. Evidence from previous voucher-based PPPs (e.g., Sambhav in Agra) and emergency transport PPPs (e.g., Dial 102/108) in UP demonstrates better outcomes when partnerships are designed to fill targeted gaps, supported by community linkage and monitoring systems.

Based on the assessment, three policy options are proposed:

Option 1: Improve and Scale - Strengthen diagnostics, cap elective C-sections, institute audit mechanisms, link payments to quality, and mandate certification under NQAS or LaQshya within a year.

Option 2: Restructure and Integrate-Recast MCH wings as First Referral Units (FRUs), manage them as triage centres for District Hospitals or Medical Colleges, and focus on HRP/emergency management.

Option 3: Discontinue and Repurpose - In districts with parallel functional DHs or newly operational medical colleges, convert MCH wings into recovery units, adolescent health clinics, or public health training centres.

Key recommendations:

- 1. Introduce second opinion and peer-review audits for all C-sections.
- 2. Operationalise Level II USG and biophysical profile scan (these are the two most important scans during pregnancy) and improve the availability of blood transfusion and lab services.
- 3. Institutionalise ANC-PNC tracking using HMIS and ASHA support.
- 4. Appoint Nursing Superintendents and enforce 8-hour shifts.
- 5. Repair and upgrade critical infrastructure, including toilets and cooling systems, to provide basic patient comfort infrastructure.
- 6. Operationalise HDU/ICU beds and develop licensed blood storage facilities.
- 7. Introduce structured in-service training on SBA, FBNC, and obstetric complication management in coordination with district training sites and medical colleges
- 8. Redesign PPP contracts to include measurable quality indicators and enforceable KPIs and strengthened oversight mechanisms.
- 9. Commission an external review by March 2026 before any scale-up or contract renewal.

In conclusion, while the PPP-based MCH model has improved access to institutional deliveries, it risks compromising quality and clinical ethics without urgent governance, audit, and service redesign. The findings provide a timely opportunity for mid-course correction and structured decision-making on the future of such partnerships in maternal and child healthcare. This evidence base enables Uttar Pradesh to redesign its PPPs into clinically governed, cost-efficient, and patient-centred models aligned with national public health goals.

2. Introduction

Maternal and child health (MCH) remains a critical public health priority for Uttar Pradesh. Despite progress under the National Health Mission (NHM), many districts in the state's eastern region continue to face challenges such as limited access to obstetric specialists, high maternal and neonatal mortality, and overburdened District Hospitals [1].

To address these persistent service gaps, the Government of Uttar Pradesh (GoUP) initiated a Public-Private Partnership (PPP) model between 2020 and 2022, with MoUs signed by respective CMOs and the private partner, to strengthen maternal and newborn services. Under this initiative, new 100-bedded Maternal and Child Health wings were established in five high-priority districts, viz. Chandaulii, Sonbhadra, Varanasi, Mirzapur, and Sant Ravidas Nagar (Bhadohi)- through a collaborative model. The infrastructure was developed with public investment, while a private medical college hospital (Heritage Institute of Medical Sciences, Varanasi) was contracted to manage operations, deploy human resources, ensure drug and diagnostic availability, and deliver free maternal and child healthcare services [2].

The partnership was designed with the intent to:

- Decongest existing District Hospitals,
- Improve specialist availability,
- Reduce maternal and neonatal morbidity and mortality, and
- Ensure round-the-clock quality obstetric and neonatal care.

The PPP MCH model operates under a service contract between the Department of Health and Family Welfare, GoUP, and the private partner. While services are meant to remain free to all beneficiaries, the private partner is responsible for staffing, diagnostics, consumables, reporting, and adherence to Indian Public Health Standards (IPHS 2022) [3].

Clinical services delivered under this model are expected to comply with national maternal and child health protocols issued by the Ministry of Health and Family Welfare (MoHFW). These protocols cover antenatal care (ANC), labour room management, safe delivery practices, postnatal care (PNC), essential newborn care, and integrated service delivery frameworks such as LaQshya and NQAS [4].

During the Mid-Term Review (MTR) of NHM held in February 2025, the state proposed expanding the PPP-based MCH wing model to additional districts. However, early desk reviews and NFHS-5 data raised concerns regarding service quality, high caesarean section rates, postnatal care gaps, and absence of structured clinical governance.

In response, an onsite assessment was carried out across four operational MCH wings—Chandauli, Sonbhadra, Varanasi, and Mirzapur—while Bhadohi was excluded as it was not yet functional. The objective was to generate evidence on the performance of the PPP model, identify implementation challenges and good practices, and support the Government of Uttar Pradesh in making an informed decision on whether to scale, restructure, or repurpose these facilities. The assessment benchmarked service delivery against the Indian Public Health Standards (IPHS 2022) and the Key Performance Indicators

(KPIs) defined in the Memorandum of Understanding (MoU) between GoUP and the private partner. It also drew on lessons from national and state-level PPP experiences in maternal health—including the Chiranjeevi Yojana, Sambhav Voucher Scheme, and Matrika initiative—which emphasise the critical role of quality-linked contracts, community engagement, and strong public sector stewardship.

3. Objectives of the Assessment

3.1 General Objective

To assess the functionality, quality, and effectiveness of the PPP-based Maternal and Child Health (MCH) wings operational in Uttar Pradesh, with a focus on identifying strengths, gaps, and areas for improvement to inform policy decisions regarding continuation, scale-up, or restructuring of the model.

3.2 Specific Objectives

- 1. To assess the availability, adequacy, and functionality of physical infrastructure, human resources, diagnostics, drugs, and equipment in line with Indian Public Health Standards (IPHS 2022) for 100-bedded MCH facilities [1].
- 2. To evaluate the quality and continuum of maternal and newborn care services, including antenatal care (ANC), intrapartum care (including caesarean sections), postnatal care (PNC), immunisation, and early newborn management, as per MoHFW clinical protocols and LaQshya, NQAS quality benchmarks [2].
- 3. **To examine utilisation patterns and service delivery performance** (e.g., institutional deliveries, bed occupancy rates, emergency referrals), including analysis of trends in C-section rates and follow-up of high-risk pregnancies (HRPs).
- 4. To assess data quality, HMIS reporting fidelity, and clinical documentation practices, including service registers, partographs, and patient consent forms.
- 5. **To assess patient and provider experiences**, satisfaction levels, and community perceptions of the services delivered under the PPP model
- 6. **To evaluate the effectiveness of governance and accountability mechanisms**, including contract monitoring, key performance indicators (KPIs), grievance redressal processes, and coordination between the private partner and public health authorities.
- 7. To identify systemic challenges, replicable innovations, and actionable recommendations for improving the PPP framework and informing future MCH service delivery models.

4. Methodology

The assessment was undertaken in April 2025 across four operational PPP-based MCH wings in Uttar Pradesh: Chandauli, Sonbhadra, Varanasi, and Mirzapur. The fifth site, Sant Ravidas Nagar (Bhadohi), was excluded as it was not operational at the time of assessment.

4.1 Approach and Framework

The evaluation adopted a **mixed-methods approach**, combining structured facility assessments with qualitative interviews and service data analysis. All tools were adapted from national frameworks, including:

- Indian Public Health Standards (IPHS 2022) for 100-bedded MCH facilities [1]
- MoHFW's Protocols for maternal and newborn care (ANC, delivery, PNC, immunization) [2]
- NHM facility monitoring checklists and supervisory guidelines



Figure 1: Research methodology

4.2 Data Collection Methods

The team used the following tools and techniques:

- **Facility walkthroughs** using IPHS-aligned checklists to assess infrastructure, diagnostics, infection control, labor rooms, SNCUs, and patient amenities
- **HMIS data review** (April 2023 to March 2025) covering ANC registration, delivery types, JSY claims, immunization, and referrals

- Service record analysis including delivery registers, C-section logs, partographs, and OPD/IPD summaries
- **Patient and ASHA interviews** (5–8 per facility) to understand user experience, follow-up, and perceived service quality
- Key Informant Interviews with facility in-charges, medical officers, nurses, and administrative coordinators
- **Photo documentation** of facility infrastructure and visual cues for infection control, signage, and patient care zones

4.3 Triangulation with Secondary Data

The findings from the onsite assessment were triangulated with:

- District-wise NFHS-5 data to benchmark coverage of ANC, PNC, and institutional deliveries
- Quarterly Progress Reports (QPRs) of NHM UP for 2023–2024
- Available reports and annexures from the private partner and District Health Societies

4.4 Assessment Timeline and Team

- The field assessment was conducted between **8 and 10 April 2025** by a multidisciplinary team comprising public health professionals, maternal health specialists, and NHM consultants.
- Each facility visit lasted approximately 6–8 hours, allowing for comprehensive observation, documentation, and stakeholder engagement.
- All interviews with patients and staff were conducted with verbal consent, and responses were anonymised to maintain confidentiality. No personally identifiable information was recorded

4.5 Limitations

- Facility-level service utilization data was not disaggregated by high-risk pregnancy status.
- Patient satisfaction data were based on rapid interviews and may not reflect longitudinal experience.
- The Bhadohi MCH wing could not be included as it was non-functional.
- PCPNDT compliance and sex ratio trends were outside the scope of this assessment and should be reviewed separately.

4.6 Contractual Benchmarking

In addition to assessing performance against the Indian Public Health Standards (IPHS 2022) and MoHFW service protocols, this evaluation also reviewed the alignment of service delivery with the specific **Key Performance Indicators (KPIs)** outlined in the contractual agreement (Memorandum of Understanding) between the Government of Uttar Pradesh and the private service provider.

These KPIs, embedded in the original MoU, cover a wide range of operational domains, including:

• Human resource availability and duty rosters

- Availability of essential diagnostics and equipment
- Proper documentation of referrals and caesarean sections
- Maintenance of records for high-risk pregnancies
- Patient grievance redressal mechanisms
- Compliance with clinical protocols and infection control
- Stock-out avoidance for essential drugs and consumables
- Facility maintenance and biomedical waste management
- Coordination with district authorities and participation in monthly reviews

The field assessment found that **while infrastructure and human resources were generally available**, performance on many contractual KPIs was **partial or absent**, particularly in clinical documentation, grievance redressal, and regular monitoring.

Annexure II provides a facility-wise summary of KPI compliance. This helps determine whether the PPP model is being implemented as originally envisioned and whether contract enforcement contributes to improved service quality and accountability.

5. Key Findings

This section synthesizes the findings from the onsite assessment across four operational PPP-based MCH wings in Chandauli, Sonbhadra, Varanasi, and Mirzapur. It draws from facility records, stakeholder interviews, patient feedback, HMIS data, and direct observations. It is structured around six core thematic areas consistent with IPHS 2022 guidelines and NHM service delivery priorities.

5.1 Service utilization and Institutional Load

- All four MCH wings demonstrated **an increased service utilization**, with institutional deliveries exceeding 200–300 per month and **bed occupancy rates regularly surpassing 80–85%**, suggesting strong community acceptance and facility preference.
- In **Chandauli** and **Varanasi**, MCH wings are handling higher monthly delivery loads than adjacent District Hospitals, effectively functioning as the primary birthing hubs for the district.
- **Outpatient antenatal and postnatal care services** were available across sites, but showed significant variation in caseloads, documentation practices, and linkage to continuity of care.

5.2 Clinical Quality and Caesarean Section Practices

- The assessment observed alarmingly high rates of C-sections in all sites, ranging from 76% in Chandauli to 90% in Sonbhadra, with Varanasi and Mirzapur averaging above 80%. These are far beyond the WHO-recommended thresholds of 10-15% [3], and higher than the private-sector average in NFHS-5 for UP (47.5%).
- A majority of C-sections were found to be elective and pre-scheduled, with little or no documentation of obstetric indications, risk classification, or second opinion.
- No evidence of adherence to Robson Classification, standard operating procedures (SOPs), or peer-review audit mechanisms for caesarean decisions was available in any facility.
- **Birth preparedness plans** were inadequately formulated (Chandauli).
- **Patient counselling before and after C-sections** was inadequate. Families were not informed about surgical risks or alternatives in most elective cases.
- While PMJAY covers institutional deliveries, there was no evidence of claim generation or empanelment for PPP MCH wings under AB-PMJAY

5.3 Continuum of Care – ANC, PNC, and Immunization

- Low early ANC registration: most women presented in the third trimester or during labor.
- **PNC follow-up** was even weaker, with early discharges, poor documentation, and minimal counselling observed across all sites. HRP tracking systems were absent or underutilized, and JSY-linked records were inconsistently maintained.
- **ASHA referral linkages and JSY documentation** were incomplete, and coordination with field-level FLWs (frontline workers) was irregular.
- Zero-dose vaccinations (Hepatitis B, BCG, OPV) were administered at all facilities. Cold chain logs and reconciliation of immunization data with delivery records were inconsistent.

Patient and Provider Voices

"I was admitted at 10 PM and operated on early morning. The staff were quick, but I was not told why the operation was needed. My mother-in-law said all women here get surgery. We just wanted a normal delivery."

— Patient, 22 years, Varanasi MCH wing

"There was no scan in the hospital. I had to go outside for a Level II ultrasound. We spent ₹2300. ASHA was not aware this wasn't included."

- Mother, 2nd trimester, Sonbhadra

"We don't have referral forms. If the baby is low birth weight or the mother is unwell, we call the ambulance and send them to DH. We don't know what happens after that."

— Nurse, Mirzapur MCH wing

5.4 Diagnostics, Drugs, and Referral Services

- All four MCH wings provided only **provided basic diagnostic services** (e.g., blood group, hemoglobin, urine routine). **Diagnostic services** were below IPHS norms.
- Only Level I scan are conducted on-site, lacked Level II ultrasonography and BPP scans, despite some facilities having USG machines and trained radiologists. This led to referrals to private diagnostic centres, with patients incurring out-of-pocket expenditures of ₹2000-2500, particularly in Sonbhadra and Varanasi. This undermines the NHM principle of free comprehensive maternity care.
- **Essential drug lists (EDL)** were partially implemented. Stockouts of iron, calcium, misoprostol, and antibiotics were reported in Chandauli and Mirzapur, especially for OPD patients.
- Emergency referral protocols (e.g., for blood transfusion, eclampsia management, newborn ventilation) were not documented. None of the facilities-maintained referral registers or back-referral summaries.
- Ambulance availability was adequate, but there was no formal link between MCH wings and 102/108 emergency services.

5.5 Human Resources, Clinical Supervision and Infrastructure

- Across all four districts, **clinical HR availability was broadly compliant** with MoU norms. Each MCH wing had 2–3 obstetricians, anaesthetists, paediatricians, and general physicians. Nursing deployment was numerically sufficient. The OT, Labour room and SNCU were functional.
- However, without rotation or breaks, 12-hour shift patterns for doctors were universal. This led to staff fatigue, low morale, and increased scope for burnout.
- None of the facilities reported structured in-service training or orientation on SBA protocols, newborn resuscitation, or infection control, further affecting the quality of care
- Critically, **no facility had a designated Nursing Superintendent**, resulting in the absence of task delegation, clinical supervision, or infection control audits.

- Staff gaps noted in Sonbhadra and Varanasi are consistent with Q3 HRMIS data (Feb 2025), showing 20–30% nursing vacancy.
- The facility premises were generally **clean and well-maintained**; however, patient toilets at Sonbhadra were non-functional due to a pipeline issue, a concern echoed by attendants.
- In Mirzapur, the ANC wards lacked adequate air conditioning. The hybrid Obstetric HDU+ICU at Sonbhadra had **no functional beds. Cradles were missing** in postnatal wards (Mirzapur).
- Across all facilities, there was a noticeable **absence of IEC materials**, with walls left bare and devoid of informative displays for patients.
- Additionally, the power supply areas at Sonbhadra were found unsecured. While fire alarms and extinguishers were in place, **no mock drills** had been conducted, and the last recorded equipment check was in October 2024.
- **Support services** like cleaning, linen handling, and biomedical waste disposal were outsourced but poorly monitored.
- **Dietary services**, state-sponsored food was provided to the admitted beneficiaries and patients only in Varanasi and Chandauli. Thus, the State should ensure provision of nutritionally adequate and culturally appropriate meals tailored to maternal and child dietary needs in all the MCHs.
- No in-house blood banks, facilities rely on nearby District Hospitals (within 500 meters).

5.6 Governance, Contract Oversight and Quality Assurance

- Despite being over three years into operation, none of the facilities had initiated LaQshya or NQAS certification processes, as mandated under NHM for high-delivery-load maternity units [4].
- **District Monitoring Committees** (DPMU/CMO) had not conducted structured PPP performance reviews or audits. There were no logbooks or minutes of review meetings between the private partner and DHS.
- Contract clauses such as **key performance indicators (KPIs)**, community feedback, and clinical outcome tracking were not being monitored or reported.
- Grievance redressal mechanisms, such as feedback boxes or patient response surveys, were present in all facilities.

Facility-level compliance with contractual KPIs, as outlined in the MoU, is summarised in *Annexure III*

6. Comparative District Summary and Analysis

The following table presents key comparative indicators drawn from HMIS service records, NFHS-5 district-level data, and findings from field observations across the four operational PPP-based MCH wings.

These thematic insights provide the basis for a facility-level comparative review presented in the following section:

Indicator	Chandauli	Sonbhadra	Varanasi	Mirzapur
Avg. Monthly Deliveries	~280	~240	~300	~210
C-section Rate (%)	76%	90%	82%	79%
NFHS-5 C-section (Private) (%)	54.3%	42.1%	59.8%	40.6%
No. of Maternal Deaths	2	1	1	0
No. of Still Births	37	101	6	53
No. of Neonatal deaths	8	14	2	0
No. of Maternal Near Miss	0	5	0	0
No. of cases referred	572	320	390	451
No. of LAMA cases	1018	581	788	545
Bed Occupancy Rate (%)	85%	83%	88%	82%
Availability of Level II USG	No	No	No	No
HRP Tracking Register Maintained	No	No	Partial	No
PNC Follow-up System Functional	Moderate	Poor	Poor	Poor
JSY/ANC Record Linkage	Partial	Weak	Weak	Poor
Functional SNCU	Yes	Yes	Yes	Yes
Nursing Supervision Posted	No	No	No	No
NQAS/LaQshya Certification Initiated	No	No	No	No
Patient Amenities (Toilets, IEC, Beds)	Adequate	Poor	Moderate	Poor
Grievance Redressal Systems Present	No	No	No	No

Table 1: Comparative Snapshot of MCH Wing Performance (2023–2025)

Interpretive Summary

Chandauli

- Among the four, Chandauli performed relatively better in record-keeping, staffing consistency, and patient amenities.
- C-section rate, though high (76%), was marginally lower than other sites, and some documentation practices were in place.
- ANC/PNC tracking was more structured, with ASHAs better integrated into referral flows.

Sonbhadra

- Showed critical gaps in infrastructure maintenance, shift patterns, and record-keeping.
- With a 90% C-section rate, it recorded the highest over-medicalization. HRP tracking and immunization data were nearly absent.

• The facility had one of the most visibly fatigued nursing teams and poorly maintained staff amenities.

Varanasi

- Although it had the highest delivery load and strong public utilization, the MCH wing appeared overwhelmed.
- C-section overuse, weak follow-up mechanisms, and missing referral logs were key gaps.
- Patient feedback highlighted long waiting hours and lack of postnatal counselling.

Mirzapur

- The facility was functional but underperforming in terms of record quality and continuity of care.
- Immunization was sporadic, discharge protocols were hurried, and toilets and signage were lacking.
- No linkages to 102/108 transport systems were documented.

This comparative analysis confirms the trend of **service expansion without corresponding gains in clinical quality or system efficiency**. It also highlights the **absence of differentiated planning**-despite district-level variations in population profile and existing health infrastructure.

6.1 Facility Duplication and Load Mapping

One critical question in evaluating the sustainability of the PPP-based MCH wings is whether these facilities serve distinct catchment areas or duplicate services already available through District Hospitals (DHs) and District Women's Hospitals (DWHs) in the same geography.

The assessment team reviewed monthly delivery loads for DHs, DWHs, and the PPP MCH wings using facility records and HMIS data (2023–2024). The comparative data is summarized below:

District	District Hospital (DH)	District Women Hospital (DWH)	PPP MCH Wing	Comment on Overlap
Varanasi	~764	~520	~300	Significant overlap with DWH and DH.
Sonbhadra	~187	NA	~184	DH and MCH wing serve same urban block; redundancy noted
Chandauli	~424	NA	~200	MCH wing functioning as main maternity facility
Mirzapur	NA	NA	~180	Limited duplication; MsCH wing fills gap

Table 2: Average Monthly Deliveries across Co-located Facilities (2023–24)

Interpretive Summary:

- In Varanasi, the MCH wing is located within a 5 km radius of the District Women's Hospital and SSPG Medical College, all of which have active obstetric units. This raises questions on cost duplication and clinical workload redistribution.
- In **Sonbhadra**, the MCH wing and DH cater to overlapping urban populations without clear referral boundaries, leading to **inefficiencies in HR deployment** and parallel procurement of drugs and consumables.
- In Chandauli, the PPP MCH wing has emerged as the primary delivery facility, suggesting a clearer use case.
- In Mirzapur, both the DH and MCH wings operate at moderate volumes, indicating complementary coverage, especially for remote blocks.

Recommendation:

A detailed facility mapping, and referral rationalisation plan should be undertaken in districts with functional DHS and medical colleges. Where overlap is significant (e.g., Varanasi, Sonbhadra), Any such repurposing should be guided by caseload analysis, cost-efficiency studies, and alignment with district health infrastructure plans.

6.2. Gaps in Governance, Oversight, and Accountability

Despite the strategic intent of leveraging private sector efficiency through contractual partnerships, the PPPbased MCH wings in Uttar Pradesh suffered from **serious governance and oversight deficiencies** that compromised clinical quality, financial transparency, and contractual enforcement.

Key observations:

- **District Monitoring Committees** were not found to be actively reviewing PPP MCH performance. In none of the four districts assessed was there documented evidence of monthly joint review meetings between the DHS and the private partner.
- Grievance redressal mechanisms- Patient feedback forms, suggestion boxes, and complaint registers were available.
- Key Performance Indicators (KPIs) outlined in the service agreement—such as HRP tracking, infection control compliance, and ANC–PNC continuity—were not being tracked or reported. There were no visual dashboards, digital records, or monthly summaries available at any facility.
- No third-party monitoring or audit systems had been introduced. Unlike other NHM programs (e.g., Kayakalp, LaQshya), there is no external validation or peer-review mechanism built into the PPP model.
- Facility in-charges often reported **unclear roles in contract enforcement**, with CMOs and district programme officers stating they had no access to the original MoU or monitoring templates.
- Follow up of patients ; extremely high C Sec rate.....

Implications:

These governance gaps create an environment where:

- Patient safety and service quality are left unchecked,
- Malpractice C Sec rate as one user mentioned all are operated upon here
- No feedback loop exists for continuous improvement or beneficiary accountability.

Recommendation: It is strongly recommended that GoUP:

- Activate district-level PPP monitoring cells linked to DPMUs and CMOs, with quarterly performance review mandates.
- Introduce structured dashboards for each MCH wing tracking key service indicators.
- Mandate **quarterly review meetings with recorded minutes**, and flag facilities failing to meet KPIs for potential de-empanelment or contract revision.
- Review this approach and strengthen the public health system

7. Alignment with Broader Evidence and National Experience

The findings of this assessment closely reflect broader national and international experiences with Public-Private Partnership (PPP) models in maternal and child health (MCH). Across multiple evaluations, a common theme has emerged: **PPPs can enhance service availability and improve access**, **but without embedded quality assurance, accountability mechanisms, and community linkage, they do not necessarily translate into better health outcomes or equity**.

These lessons underscore the need for Uttar Pradesh's PPP initiative to move beyond volume-based contracting toward an outcome-driven, equity-sensitive, and clinically governed model. The following section outlines three strategic options for course correction."

7.1 Lessons from National Evaluations of PPPs in MCH

Contracting Out Clinical Services – The Gujarat and Karnataka Experience

Two of India's most prominent PPP models in maternal health were Gujarat's *Chiranjeevi Yojana* and Karnataka's *Thayi Bhagya Yojana*. Both involved **contracting private obstetricians to provide free deliveries to poor women**, with government reimbursement.

Initial reports showed encouraging service uptake. However, rigorous evaluations later revealed that:

- There was no statistically significant increase in institutional delivery rates attributable to the schemes once background trends were accounted for. [1].
- There was **no measurable reduction in maternal or neonatal mortality** compared to control areas [1].
- Out-of-pocket expenditure (OOPE) persisted, and **many high-risk cases were referred out** to public hospitals due to limited incentive for private partners to handle complications [2].

These studies concluded that **contracting models focusing purely on volume, without quality-linked payments or proper risk-sharing mechanisms, tend to plateau in impact**. Our finding of high-volume but largely elective C-sections in the UP MCH wings, with poor documentation and no outcome audits, echoes this trend.

Demand-Side Financing – The Sambhav Voucher Scheme in Agra

Unlike supply-driven models, the *Sambhav* voucher scheme in Agra empowered poor pregnant women to choose accredited private or NGO facilities using service-linked vouchers. Evaluations showed that:

- Institutional delivery rates improved, especially among the poorest segments [3].
- **Patient satisfaction and service uptake increased** when frontline workers (CHVs, ASHAS) were engaged in mobilisation.
- Quality was sustained due to **regular audits and feedback loops**, and a pre-defined service package prevented unnecessary procedures.

This approach **prioritised patient agency, targeted financial risk protection**, and embedded community trust mechanisms—areas currently missing in the UP PPP MCH model, where patient awareness of the PPP nature is low, and no feedback mechanisms exist.

Social Franchising – Merrygold and Matrika Projects in UP

In Uttar Pradesh, the *Merrygold Health Network* and *Matrika Project* used a social franchising model to create branded networks of private clinics delivering standardised MCH services. However, the **Matrika impact evaluation by LSHTM found no significant improvement in facility deliveries, ANC quality, or postnatal coverage** compared to matched control areas. [4].

Reasons included:

- Limited scale of operations, making population-level impact difficult.
- Lack of consistent demand generation, resulting in under-utilisation of franchised clinics.
- **Mismatch between incentives and desired outcomes**, especially when providers were paid per delivery rather than based on adherence to quality benchmarks.

These results support our finding that **incentive structures must be carefully aligned with quality-ofcare goals**—a clear lesson for UP's PPP contracts, which currently do not link payment to performance metrics like ANC/PNC coverage, complication handling, or C-section audits.

Emergency Transport and Ancillary PPPs

Evidence from states like Andhra Pradesh, Tamil Nadu, and Uttar Pradesh shows that **PPP-based ambulance services like 102 and 108** have significantly improved maternal referral coverage and reduced first-delay barriers. These services succeeded because:

- They filled a clear gap in the public system (emergency transport).
- Performance was monitored centrally and linked to response times.
- Community awareness was high, and ASHAs played a major role in activation.

This contrasts with the current MCH wing model in UP, where **referral linkages and transport integration (102/108) are poorly documented**, and **ASHAs are not adequately engaged** in ANC referrals or PNC follow-up. This weakens the continuity of care. While emergency transport PPPs addressed a defined service gap, MCH PPPs often suffer when core services like diagnostics and surgical risk management are not clearly defined, leading to inefficiencies and patient burden

7.2 Evidence from Literature on What Makes PPPs Effective

Reviews from India and global LMICs show that successful PPPs in health share several enabling features:

- Clear contract design, with enforceable KPIs and outcome tracking.
- Strong public sector stewardship, including monitoring, grievance redressal, and course correction.

- **Community engagement mechanisms**, including IEC, FLW involvement, and public feedback channels.
- Flexible financial models that reward quality and penalise negligence or inefficiency.
- Equity-driven design, ensuring that poor, tribal, or remote populations are reached and prioritised.

The **UP PPP MCH wings fall short on many of these dimensions**. Although they have improved institutional access, the overuse of C-sections, inadequate HRP tracking, and lack of audits or feedback platforms suggest that the current design is **provider-convenient but not patient-centred**.

7.3 Reflections in Light of IPHS and NHM Guidelines

As per IPHS 2022 and MoHFW protocols:

- All 100-bedded MCH wings are expected to provide Level II diagnostics, emergency obstetric care, standard infection control, and 24x7 comprehensive maternal services [5].
- Guidelines under LaQshya and NQAS mandate periodic internal assessments, client satisfaction audits, and external certification.

Our assessment found that none of the MCH wings complied with these quality frameworks. This undermines NHM's clinical governance ethos and the PPP's intended efficiency gains.

Evidence Source	Key Finding	Match with Current Study
Gujarat/Karnataka PPPs	Contracting doesn't ensure outcomes	Yes; High C-section, low ANC & PNC
Agra Voucher Scheme	Targeted incentives + outreach work	No; No ASHA linkage, OOPE high
Matrika Social Franchise	Volume-based payments underperform	Yes; High delivery, low quality
Emergency Transport PPPs	PPP works when filling clear gaps	Partial; Referral system weak
IPHS/NHM Protocols	Call for comprehensive diagnostics and audits	No; Non-compliant, no NQAS started

7.4 Summary of Alignment

7.5 Implications for Uttar Pradesh

The experience from other PPP models indicates that volume alone does not guarantee value, and that public health objectives must guide private engagement, not the reverse. Without serious corrective actions, the current model risks reinforcing over medicalization and unnecessary surgeries without meaningful maternal or newborn health gains.

At the same time, these facilities are functional, utilized, and located in underserved regions, offering an opportunity to realign the PPP design with **performance-based governance**, **patient-centered care**, **and clinical ethics**.

This alignment section strongly supports the need for either **Option 1: Improve and Scale with Safeguards** or **Option 2: Restructure and Integrate**, while cautioning against any expansion without reform as discussed in the next section.

8. Policy Options for Government Consideration

Based on the field assessment, performance trends, and alignment with broader evidence, three strategic options are available to the Government of Uttar Pradesh regarding the future of PPP-based Maternal and Child Health (MCH) wings. These options reflect different levels of commitment, investment, and risk appetite, and are framed to guide medium-term planning and contract realignment.

Option 1: Improve and Scale (with Safeguards)

Description:

Retain the current PPP model but strengthen it with robust quality control, community linkage, diagnostics expansion, and performance-linked financial structures before considering scale-up to other districts.

Key Actions Required:

- Cap elective C-sections and introduce peer-review/second-opinion protocols.
- Operationalise diagnostics (especially USG) and essential laboratory services.
- Mandate certification of facilities like NQAS/LaQshya within 6 months, as per MoU.
- Revise PPP contracts to include measurable KPIs, client satisfaction audits, and penalties for underperformance.
- Activate district monitoring committees and third-party review systems.
- Align with public health functions linkages with ASHAs, etc.

Pros:

- Leverages existing functional infrastructure and staff.
- Restores accountability without dismantling current services.
- Allows course correction and builds evidence for replication.

Cons:

- May increase short-term costs due to audit systems, HR upskilling, and diagnostics investment
- Requires significant administrative bandwidth to revise contracts and enforce protocols.
- Risk of implementation delay or pushback from partners if financial incentives are reduced.

Prerequisites:

- Policy notification mandating performance-linked payments.
- Monthly review mechanism chaired by the CMO or district collector.
- Technical support for clinical audit design and IT-enabled tracking.

Option 2: Restructure and Integrate

Description:

Reconfigure the MCH wings into secondary care hubs or First Referral Units (FRUs) within the government

system, retaining private support only for targeted services such as diagnostics, HR supplementation, or emergency response.

Key Actions Required:

- Convert PPP wings into DH extensions or referral FRUs under government management.
- Retain private engagement selectively (e.g., diagnostics, anaesthesia pool).
- Realign service package to focus on HRP handling, postpartum complications, or referrals from sub-centres and CHCs.

Pros:

- Reduces long-term PPP dependence and strengthens state system ownership.
- Aligns services with IPHS and NHM FRU mandates.
- Enables streamlined integration with CHC-DH-MCH networks.
- Time-bound decision framework (within 6–12 months) to prevent service disruption.

Cons:

- May trigger service disruption or HR attrition during transition.
- Loss of existing private management capacity unless phased.
- May reduce medium-term PPP dependence and bring operational costs under government control

Prerequisites:

- Clear GoUP directive for model restructuring.
- One-year transition plan with continued government and private co-management.
- Assessment of readiness of DHs and Medical Colleges for absorption.
- Time-bound decision framework (within 6–12 months) to prevent service disruption.

Option 3: Discontinue and Repurpose

Description:

Discontinue the PPP model in districts where functional District Hospitals or Medical Colleges already exist and redirect MCH wing assets to other public health priorities (e.g., adolescent health, training, long-stay recovery, DNB hostels).

Key Actions Required:

- Phase out current PPP arrangements with due legal closure.
- Repurpose infrastructure with state health planning input.
- Reinvest PPP resources in frontline facility strengthening or CHC upgrades.

Pros:

- Stops fiscal leakage where duplication exists.
- Enables rational deployment of infrastructure and HR.
- Aligns with long-term government stewardship models.

Cons:

- Risk of service gap during the exit period.
- Political or contractual friction if exit clauses are unclear.
- One-time transition costs may be high, and potential for public backlash if not well-communicated

Prerequisites:

- Conduct a technical and financial audit to justify repurposing.
- Political consensus and stakeholder communication.
- Time-bound transition roadmap with mitigation for patient load displacement.

9. Final Recommendations

The following eight recommendations are proposed based on assessing four operational PPP-based MCH wings in Uttar Pradesh and reflecting lessons from prior PPP models in India. These apply irrespective of the policy option selected (improve, restructure, or discontinue) and are necessary to realign the initiative with quality, equity, and accountability goals.



Figure 2: Summary of actionable recommendations

9.1. Introduce Clinical Audit and Peer-Review for All Caesarean Sections

- Institutionalize a second-opinion protocol for elective C-sections.
- Adopt Robson Classification for case auditing and monthly C-section justification review.
- Link C-section rates and outcomes to performance reviews.

9. 2. Scale-up Diagnostic Services

- Ensure **in-house ultrasonography** is functional and include anomaly scans in the maternity package.
- Expand basic lab tests to IPHS standards for 100-bedded hospitals.
- Eliminate patient referrals to private labs for routine pregnancy-related diagnostics.

9.3. Strengthen ANC and PNC Continuum Using HMIS and ASHA Networks

- Formalise high-risk pregnancy (HRP) tracking systems with register-based follow-up.
- Integrate facility records with ASHA referrals and JSY tracking.
- Ensure a minimum of **two PNC visits** and post-discharge counselling for all mothers and neonates.

9.4. Appoint Dedicated Clinical Nursing Supervisors

- Post Nursing Superintendents to oversee clinical supervision, infection control, and mentoring.
- Establish nurse duty rotation schedules to prevent fatigue and burnout.
- Include nurse feedback in quarterly review meetings.

9.5. Strengthen Capacity-Building and In-Service Training

- Implement structured quarterly training on SBA, FBNC, emergency obstetric care, and infection prevention.
- Partner with district training centres, medical colleges, and DNB institutions for mentoring and supportive supervision. Introduce digital tracking of skill-building for all cadres.

9.6. Initiate NQAS or LaQshya Certification Processes

- Ensure each MCH wing begins the certification process under LaQshya and NQAS within the next 6 months.
- Conduct gap assessments and submit quality improvement plans.
- Use results as eligibility criteria for PPP contract renewal.

9.7. Restructure PPP Contracts to Include Performance-Linked Indicators

- Redesign contracts to include **quantitative KPIs** (ANC coverage, PNC follow-up, complication management).
- Strengthen grievance redressal, community satisfaction surveys, and third-party verification.
- Explore **payment reforms** that combine base remuneration with quality bonuses and penalties for underperformance.

9.8. Activate District Monitoring Committees for Regular PPP Oversight

- Mandate **monthly review meetings** chaired by the CMO or District Magistrate.
- Use standardised formats to review C-section rates, referrals, diagnostics, HR status, and patient feedback.

• Ensure PPP review findings feed into QPR submissions and NHM PIP planning.

9.9. Commission Third-Party Evaluation by March 2026

- Acknowledge that the current phase of the PPP model has yielded useful insights but needs further scrutiny.
- Commission an independent evaluation of clinical outcomes, cost-effectiveness, and patient experience across all five districts.
- Use results to decide on scale-up, restructuring, or sunset of the model.

Key observations include:

- Although all four MCH wings are functional and recording high delivery volumes, the **unit cost per institutional delivery remains unclear**, as there is **no disaggregated financial reporting** from the private partner against patient outcomes or service indicators.
- Despite being a no-cost model for patients in theory, **patients incur ₹2000–2500 on average per case** for Level II diagnostics (e.g., anomaly scans), undermining financial protection objectives.
- **Duplication of services** has been observed in districts like Varanasi and Sonbhadra, where District Hospitals and Medical Colleges are already handling comparable or higher delivery volumes with similar human resources and infrastructure.
- Human resources deployed under PPPs are often not linked to in-service training or the **DNB teaching function**, making long-term health workforce investment suboptimal.

In contrast, public facilities operating under NHM guidelines (e.g., CHCs with FRU status or LaQshyacertified District Hospitals) offer similar services without contractual leakage, with greater transparency and performance benchmarking.

Recommendation:

While the current study provides insights into the programmatic and operational aspects, it did not examine the financial structure or its implications in detail. It is therefore recommended that a separate, in-depth study be undertaken to comprehensively explore the financial architecture, cost-effectiveness, and sustainability of the intervention.

Before expanding the model or renewing contracts, a structured **cost-effectiveness evaluation should be undertaken** comparing:

- Cost per delivery under PPP vs public DH/DWH
- Proportion of patients incurring OOPE
- Infrastructure utilization vs redundancy
- Clinical outcomes (HRP coverage, complications, audits)

This will help determine whether the PPP model offers **value-for-money** or whether equivalent or better results can be achieved through **strengthening the public system**.

These recommendations aim to help the Government of Uttar Pradesh move from **volume-based** contracting to value-based partnerships, ensuring that public investment in MCH yields quality, safety, and dignity in care, especially for the most underserved.

These recommendations can be implemented across all three policy options outlined earlier. While 'Improve and Scale' may require greater investment, 'Restructure and Integrate' can leverage these reforms to strengthen the public system. Even under 'Discontinue and Repurpose', transition planning must prioritise continuity of maternal care and staff integration

10. Conclusion

The PPP-based Maternal and Child Health (MCH) wing initiative in Uttar Pradesh was conceived to address critical service gaps in underserved districts by combining public infrastructure with private operational management. After 7 years of implementation across four functional sites, this assessment reveals that while the model has successfully expanded access to institutional delivery services, it falls short on several key fronts, particularly clinical appropriateness, quality assurance, follow-up care, and systemic accountability.

Alarmingly high caesarean section rates, inconsistent maternal and newborn follow-up, inadequate diagnostics, and the absence of performance monitoring reflect a drift away from the core goals of the National Health Mission. If left unaddressed, these gaps risk undermining public confidence, compromising patient safety, and creating inefficiencies in public financing.

Yet, the model's strengths—functionality, patient footfall, and infrastructure readiness—offer a window of opportunity. If restructured with clinical governance, diagnostic integration, and contract reforms, these facilities can evolve into centres of excellence for secondary maternity care. Conversely, the initiative may become fiscally and ethically unsustainable without urgent corrective action.

This report does not call for a binary verdict but recommends a calibrated response, grounded in field evidence, policy alignment, and phased implementation. The Government of Uttar Pradesh can use these insights to set a national precedent for outcome-driven, patient-centred maternal and child health PPPs.

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12. Annexures

Annexure I: Field visit notes and photos

Facility Visit Reports

Mother and Child Wing, Varanasi, Uttar Pradesh

Section A: Basic Facility Information

District Name: Varanasi	Facility Name: 100 Bedded MCH Wing Kabirchaura	
Date of Visit:	Total Facility Catchment Population:	
Name of Facility In-charge: Dr. R.N Vishwakarma	I. Facility Type: PPP Model	
Name of Assessor(s):	NIN no:	
Continu Delleman Decouvers		

Section B: Human Resources

Total number of healthcare workers in the facility: ...110.....

Specialist As per the service provider (Specialist: Bed=1:20 per shift) :	Observation (Yes/No) & Numbers
i) Obstetrician	05
ii) Anesthetist	04
iii) Pediatrician/Neonatologist	02
iv) Radiologist/Sonologist	01
v) Biochemist/Pathologist/Microbiologist	01
General (Doctor: Bed = 1:20) per shift:	
(1) Medical Officer Obstetrics - Female Only.	-
(2) Medical Officer Pediatrics & Anesthesia - Male / Female.	06
Nursing (Nurse: Bed =1:5) per shift	
a) Superintendent	01
b) Assistant Superintendent	01
c) Supervisor	-
d) Staff Nurse	17 (GNM)
e) Auxiliary Nurse Midwife	31 (Total Nursing Staff 48)
Technician	<u>^</u>
a) Laboratory	04
b) Radiology	Not Available
c) ECG	Not Available

Parameter	Standard	Actual
Nurse: Bed Ratio	1:05 per shift	1:05

Doctor: Bed Ratio	1:10 per shift	1:10
Staff Absenteeism	\leq 5 (beyond holidays)	00

Section C: Service Delivery & Utilisation

Indicator	Value (monthly average of last 1 year (Feb 2024- Mar2025	Yearly average for last 5 years (2020-2024)
Patient OPD Load (OBG)	1756	15055
Patient IPD Load (OBG)	547	4807
Bed Occupancy Rate (%)	82.84	736.37
Women with \geq 3 ANC visits	30% -35%	30% -35%
Women with 1 PNC Visit within 48 hrs	60% - 70%	60% - 70%
No. of Institutional Deliveries	3372	7360
No. and % of Normal Deliveries	730,21.64%	1385, 18.82%
Deliveries by Skilled Birth Attendant	100%	100%
No. and % of C-Section Deliveries	2642, 78.36%	5975, 81.18%
No. and % of Emergency C-Section Deliveries	1780, 67.37%	3640, 60.92%
Avg. No. of Major Surgeries	2642	5975
Avg. No. of emergency Surgeries	1780	3640
No. of High-risk pregnancies admitted	1650	3480
No. of High-Risk Pregnancies Managed	1559	3090
No. of High-Risk Pregnancies referred	91	390
Average number of cases referred out	11.5	152
Average number of cases referred In	39	562
Is Safe abortion services provided?	No	No
Is Family planning services provided?	Yes	Yes
Child Health Related Services		
OPD Load (Pediatrics)	798	5769
IPD Load	167	1581
Neonates receiving BCG	Yes (Provide By DWH)	Yes (Provide By DWH)
Newborn check-up within 48 hrs	Yes	Yes
Sick newborns treated	Yes	Yes
Other Services		
Is Blood storage unit/ Blood bank service available?	Yes	Yes
Nearest blood bank	Yes	Yes
Is Comprehensive Lactation Management Centre available?	No	No
Avg. No. of Laboratory tests	1163	7770
Approx. percentage of OPD & IPD diagnostic services available in facility in a day (USG etc)	379	2408
Data Source: Record review

Patient Services Turnaround Time

Service	Standard	Status
OPD Registration	<15 minutes	<15 minutes
Consultant Appointment Time	<2 hours	<2 hours
Diagnostic Test Wait Time	<2 hours	<2 hours
Diagnostic Report Availability	Same Day / within 24 hr	Same
	(post 2PM)	

Quality and Safety Indicators

Indicator	Threshold	Status
Patient Fall Incidents	<5 per quarter	00
Infection Rate (post-delivery return)	≤10%	00
ALOS – Normal Delivery	≤3 days	≤3 days
ALOS – C-Section Delivery	≤7 days	≤7 days

ALOS-Average Length of Stay Section D: Infrastructure

Indicator	Observation
Layout of facility (as per IPHS Norms)	Up to the Mark
Total Number of beds	100
Number of labour beds/tables	04
Number of beds (if available):	SNCU - 08
SNCUNICUPICU	
Cleanliness of Wards & Corridors & Toilets	Daily Shift Wise
Condition of Building/Wing	Updated
Spalling/Leakage/Broken Fixtures	No
Availability of Specialized Wards	Yes
Availability of Water Supply(24x7)	Yes
Availability of Power Supply (24x7)	Yes
Availability of Power Backup	Yes
Obstetric HDU+ICU (Hybrid)	02+06
Number of beds	08
Number of Functional OTs	02
Pre-Op and Post-Op resting rooms	Yes
Building Maintenance	

Building Maintenance

Issue	Tolerance	Status
Water Leakage Rectification	Within 24 hours	Within 24 hours
Concrete Spalling (Internal)	Zero	Zero
Broken furniture & fixtures: Zero for	Zero	Zero
patient furniture's		

Section E: Drugs, Equipment & Diagnostics

Equipment Type	Available (Y/N)	Functional (Y/N)	Downtime (Days)
Are Drugs available as per EDL (GoU)	Yes	NA	NA
X-Ray	Yes	Yes	NA
Ultrasound	Yes	Yes	NA
ECG	Yes	Yes	NA
Operation Theatre Equipment	Yes	Yes	NA
Life-Support Equipment (Ventilators etc.)	Yes	Yes	NA

Maintenance of Equipment

Status
Yes
NA
NA
Updated

AMC- Annual Maintenance coverage

Section F: Skill Room

Yes/No

If Yes then,

Material	Yes/No
a) LCD Projector	Yes
b) Desktop Computer	Yes
c) Female Pelvis	Yes
d) Maternal and Neonatal Birthing Simulator Models	Yes
e) Maternity Examination Models	Yes
f) Development Process of Fetus Models	Yes
g) Episiotomy Training Simulator	Yes
h) View box	Yes
i) Set of instruments/forceps	Yes
Others	Yes

Indicator	Feedback/Comments
MDSR	Not Available
CDSR	Not Available
Medical audits	Not Available
Inspection report	Not Available

Mother and Child Wing, Mirzapur

Section A: Basic Facility Information

District Name: Mirzapur	Facility Name:100 Bedded MCH Win Mirzapur	
Date of Visit:	Total Facility Catchment Population:	
Name of Facility In-charge: Dr. S P Singh	Facility Type:PPP	
Name of Assessor(s):	NIN no:	

Section B: Human Resources

Total number of healthcare workers in the facility:107......

Specialist As per the service provider (Specialist: Bed=1:20 per shift) :	Observation (Yes/No) & Numbers
i) Obstetrician	04
ii) Anaesthetist	02
iii) Paediatrician/Neonatologist	02
iv) Radiologist/Sonologist	01
v) Biochemist/Pathologist/Microbiologist	01
General (Doctor: Bed = 1:20) per shift :	
(1) Medical Officer Obstetrics - Female Only.	02
(2) Medical Officer Pediatrics & Anesthesia - Male / Female.	03
Nursing (Nurse: Bed =1:5) per shift	
a) Superintendent	
b) Assistant Superintendent	01
c) Supervisor	01
d) Staff Nurse	24 (GNM)
e) Auxiliary Nurse Midwife	25 (ANM) Total Nursing Staff-49
Technician	
a) Laboratory	03
b) Radiology	Not Available
c) ECG	Not Available

Parameter	Standard	Actual
Nurse: Bed Ratio	1:05 per shift	1:05
Doctor: Bed Ratio	1:10 per shift	1:10
Staff Absenteeism	\leq 5 (beyond holidays)	0

Section C: Service Delivery & Utilisation

Indicator	Value (monthly average of last 1 year(Feb 2024-Mar-2025	Yearly average for last 5 years(2020- 2024)
Patient OPD Load (OBG)	1678	11885
Patient IPD Load (OBG)	525	3446
Bed Occupancy Rate (%)	78	78.33
Women with \geq 3 ANC visits	25%-30%	25%-30%
Women with 1 PNC Visit within 48hrs	Aprox-100%	Aprox-100%
No. of Institutional Deliveries	184	1718
No. and % of Normal Deliveries	54 ,29.35%	377 ,21.94%
Deliveries by Skilled Birth Attendant	100 %	100 %
No. and % of C-Section Deliveries	130 ,70.65 %	1342, 78.11%
No. and % of Emergency C-Section Deliveries	107,82%	1125,83.83%
Avg. No. of Major Surgeries	130	1342
Avg. No. of emergency Surgeries	107	1125
No. of High-risk pregnancies admitted	157	673
No. of High-Risk Pregnancies Managed	149	552
No. of High-Risk Pregnancies referred	8	120
Average number of cases referred out	29	288
Average number of cases referred In	30	26
Is Safe abortion services provided?	No	No
Is Family planning services provided?	Yes	Yes
Child Health Related Services		
OPD Load (Pediatrics)	345	3806
IPD Load	182	2051
Neonates receiving BCG	Done in DWH	Done in DWH
Newborn check-up within 48 hrs	Yes	Yes
Sick newborns treated	Yes	Yes
Other Services		
Is Blood storage unit/ Blood bank service available?	Yes	Yes
Nearest blood bank	Yes	Yes
Is Comprehensive Lactation Management Centre available?	No	No
Avg. No. of Laboratory tests	211	2014
Approx. percentage of OPD & IPD diagnostic services available in facility in a day (USG etc)	No	No

Data Source: Record review

Patient Services Turnaround Time

Service	Standard	Status
OPD Registration	<15 minutes	<15 minutes
Consultant Appointment Time	<2 hours	<2 hours
Diagnostic Test Wait Time	<2 hours	<2 hours
Diagnostic Report Availability	Same Day / within 24 hr (post 2PM)	Same Day

Quality and Safety Indicators

Indicator	Threshold	Status
Patient Fall Incidents	<5 per quarter	00
Infection Rate (post-delivery return)	≤10%	00
ALOS – Normal Delivery	≤3 days	≤3 days
ALOS – C-Section Delivery	≤7 days	≤7 days

ALOS-Average Length of Stay Section D: Infrastructure

Section D. I	mastructure	
Indicator		

Indicator	Observation
Layout of facility (as per IPHS Norms)	Up to the mark
Total Number of beds	100
Number of labour beds/tables	4
Number of beds (if available):	7
 SNCU √ NICU X PICU X 	
Cleanliness of Wards & Corridors& Toilets	Daily shift wise
Condition of Building/Wing	updated
Spalling/Leakage/Broken Fixtures	No
Availability of Specialized Wards	Yes
Availability of Water Supply(24x7)	Yes
Availability of Power Supply (24x7)	Yes
Availability of Power Backup	Yes
Obstetric HDU+ICU (Hybrid)	(02+06)
Number of beds	8
Number of Functional OTs	2
Pre-Op and Post-Op resting rooms	Yes

Building Maintenance

Issue	Tolerance	Status
Water Leakage Rectification	Within 24 hours	Within 24 hours
Concrete Spalling (Internal)	Zero	Zero
Broken furniture & fixtures: Zero for patient furniture's	Zero	Zero

Equipment Type	Available (Y/N)	Functional (Y/N)	Downtime (Days)
Are Drugs available as per EDL (GoU)	Yes	NA	NA
X-Ray	Yes	Yes	NA
Ultrasound	Yes	Yes	NA
ECG	Yes	Yes	NA
Operation Theatre Equipment	Yes	Yes	NA
Life-Support Equipment (Ventilators etc.)	Yes	Yes	NA

Section E: Drugs, Equipment & Diagnostics

Maintenance of Equipment

Indicator	Status
Is 100% AMC in place for all equipment?	Yes
Downtime of Critical Equipment (≤1 day per quarter)	NA
Downtime of Non-Critical Equipment (≤3 days per quarter)	NA
Calibration of Equipment Up to Date?	Updated

AMC- Annual Maintenance coverage

Section F: Skill Room

Yes/No

If yes then,

Material	Yes
a) LCD Projector	Yes
b) Desktop Computer	Yes
c) Female Pelvis	Yes
d) Maternal and Neonatal Birthing Simulator Models	Yes
e) Maternity Examination Models	Yes
f) Development Process of Fetus Models	Yes
g) Episiotomy Training Simulator	
h) View box	Yes
i) Set of instruments/forceps	Yes
Others	Yes

Indicator	Feedback/Comments
MDSR	Not Available
CDSR	Not Available
Medical audits	Not Available
Inspection report	Not Available

Mother and Child Wing, Sonbhadra

Section A: Basic Facility Information

District Name:Sonbhadra	Facility Name:100 Bedded MCH Sonbhadra	
Date of Visit:	Total Facility Catchment Population:	
Name of Facility In-charge: Dr.D.K.Singh	Facility Type:PPP MODE	
Name of Assessor(s):	NIN no:	

Section B: Human Resources

Total number of healthcare workers in the facility: 105

Specialist As per the service provider (Specialist: Bed=1:20 per shift) :	Observation (Yes/No) & Numbers
i) Obstetrician	04
ii) Anesthetist	01
iii) Pediatrician/Neonatologist	03
iv) Radiologist/Sonologist	01
v) Biochemist/Pathologist/Microbiologist	01
General (Doctor: Bed = 1:20) per shift :	
(1) Medical Officer Obstetrics - Female Only.	01
(2) Medical Officer Pediatrics&Anesthesia - Male / Female.	03
Nursing (Nurse: Bed =1:5) per shift	
a) Superintendent	01
b) Assistant Superintendent	00
c) Supervisor	01
d) Staff Nurse	32 GNM
e) Auxiliary Nurse Midwife	18 (TOTAL NURSING STAFF-50)
Technician	
a) Laboratory	03
b) Radiology	Not Available
c) ECG	Not Available

Parameter	Standard	Actual
Nurse:Bed Ratio	1:05 per shift	1:05 per shift
Doctor:Bed Ratio	1:10 per shift	1:10 per shift
Staff Absenteeism	\leq 5 (beyond holidays)	00

Section C: Service Delivery Utilisation

Indicator	last 1 year(Feb 2024-	Yearly average for last years(2020-2024)	5
	Mar2025		

1556.14 81.01% 357.85 61.14% 86.22%	1179.86 81.24% 282.35, 59.78%
86.22%	=0.000/
	78.82%
180	2500
80.20	5660
183.49	147.67
68.78, 37.48%	54.26, 36.74%
100%	100%
114.71, 62.51%	93.41 63.25%
114.71, 62.51%	93.41 63.25%
114.71	93.41
62.51%	63.25%
481	1600
457, 95.2%	1250 78.12%
24, 4.98%	350 21.87%
11.71%	15.74%
25.58%	29.22%
	NO
YES	YES
364.64 18.98%	272.31 18.75%
227.35 38.85%	189.88 40.20%
DONE IN DWH	DONE IN DWH
YES	YES
YES	YES
YES	YES
YES	YES
NO	NO
648.57 33.76%	494.75 34.06%
695.71 36.22%	470.75 32.41%
	183.49 68.78, 37.48% 100% 114.71, 62.51% 114.71, 62.51% 114.71, 62.51% 114.71 62.51% 481 457, 95.2% 24, 4.98% 11.71% 25.58% NO YES 364.64 18.98% 227.35 38.85% DONE IN DWH YES YES YES YES NO YES Getation 18.98% 227.35 38.85% DONE IN DWH YES YES

Patient Services Turnaround Time

Service	Standard	Status	
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OPD Registration	<15 minutes	<15 minutes
Consultant Appointment Time	<2 hours	<2 hours
Diagnostic Test Wait Time	<2 hours	<2 hours
Diagnostic Report Availability	Same Day / within 24 hr (post	Same
	2PM)	

Quality and Safety Indicators

Indicator	Threshold	Status
Patient Fall Incidents	<5 per quarter	00
Infection Rate (post-delivery return)	≤10%	00
ALOS – Normal Delivery	≤3 days	≤3 days
ALOS – C-Section Delivery	≤7 days	≤7 days
ALOS Avarage Length of Stav		

ALOS-Average Length of Stay

Indicator	Observation
Layout of facility (as per IPHS Norms)	UP TO THE MARK
Total Number of beds	100
Number of labour beds/tables	04
Number of beds (if available):	
• SNCU	08
NICU	
• PICU	
Cleanliness of Wards & Corridors& Toilets	DAILY SHIFT WISE
Condition of Building/Wing	Updated
Spalling/Leakage/Broken Fixtures	No
Availability of Specialized Wards	Yes
Availability of Water Supply(24x7)	Yes
Availability of Power Supply(24x7)	Yes
Availability of Power Backup	Yes
Obstetric HDU+ICU (Hybrid)	02+06
Number of beds	08
Number of Functional OTs	02
Pre-Op and Post-Op resting rooms	Yes

Section D: Infrastructure

Building Maintenance

Issue	Tolerance	Status
Water Leakage Rectification	Within 24 hours	Within 24 hours
Concrete Spalling (Internal)	Zero	Zero
Broken furniture & fixtures: Zero for	Zero	Zero
patient furniture's		

Section E: Drugs, Equipment & Diagnostics

Equipment Type	Available (Y/N)	Functional (Y/N)	Downtime (Days)
Are Drugs available as per EDL (GoU)	Y	Y	NA

X-Ray	Y	Y	NA
Ultrasound	Y	Υ	NA
ECG	Y	Y	NA
Operation Theatre Equipment	Y	Y	NA
Life-Support Equipment (Ventilators	Y	Υ	NA
etc.)			

Maintenance of Equipment

Indicator	Status
Is 100% AMC in place for all equipment?	Yes
Downtime of Critical Equipment (≤1 day per quarter)	NA
Downtime of Non-Critical Equipment (≤3 days per quarter)	NA
Calibration of Equipment Up to Date?	Updated
AMC- Annual Maintenance coverage	- Panton

AMC- Annual Maintenance coverage

Section F: Skill Room

Yes/No

If Yes then,

Material	Yes/No
a) LCD Projector	Yes
b) Desktop Computer	Yes
c) Female Pelvis	Yes
d) Maternal and Neonatal Birthing Simulator Models	Yes
e) Maternity Examination Models	Yes
f) Development Process of Fetus Models	Yes
g) Episiotomy Training Simulator	Yes
h) View box	Yes
i) Set of instruments/forceps	Yes
Others	Yes

Indicator	Feedback/Comments
MDSR	Not Available
CDSR	Not Available
Medical audits	Not Available
Inspection report	Not Available

Mother and Child Wing, Chandauli

Section A: Basic Facility Information

Facility Name: 100 Bedded MCH Wing Chandauli
Total Facility Catchment Population:
Facility Type: PPP
NIN no:

Section B: Human Resources

Total number of healthcare workers in the facility: 108

Specialist As per the service provider (Specialist: Bed=1:20 per shift) :	Observation (Yes/No) & Numbers
i) Obstetrician	04
ii) Anesthetist	02
iii) Pediatrician/Neonatologist	03
iv) Radiologist/Sonologist	01
v) Biochemist/Pathologist/Microbiologist	-
General (Doctor: Bed = 1:20) per shift :	
(1) Medical Officer Obstetrics - Female Only.	01
(2) Medical Officer Pediatrics & Anesthesia - Male / Female.	03
Nursing (Nurse: Bed =1:5) per shift	
a) Superintendent	-
b) Assistant Superintendent	01
c) Supervisor	03
d) Staff Nurse	18 (GNM)
e) Auxiliary Nurse Midwife	33 (Total Nursing Staff 51)
Technician	
a) Laboratory	03
b) Radiology	01
c) ECG	-

Parameter	Standard	Actual
Nurse: Bed Ratio	1:05 per shift	1:05 per shift
Doctor: Bed Ratio	1:10 per shift	1:10 per shift
Staff Absenteeism	\leq 5 (beyond holidays)	00

Section C: Service Delivery & Utilisation

Indicator	Value (monthly average of last 1 year(Feb 2024- Mar2025	Yearly average for last 5 years(2020-2024)
Patient OPD Load (OBG)	1466.5	16951.4
Patient IPD Load (OBG)	340.42	3514
Bed Occupancy Rate (%)	79.79%	76.88%
Women with \geq 3 ANC visits	153.21	2145
Women with 1 PNC Visit within 48 hrs	71.28	4990
No. of Institutional Deliveries	197.35	1577.8
No. and % of Normal Deliveries	35.92, 18.20%	327.8, 20.77%
Deliveries by Skilled Birth Attendant	100%	100%
No. and % of C-Section Deliveries	161.42, 81.79%	1250, 79.22%
No. and % of Emergency C- Section Deliveries	71.28, 36.11%	998, 63.25%
Avg. No. of Major Surgeries	161.42	1250
Avg. No. of emergency Surgeries	71.28	998
No. of High-risk pregnancies admitted	164	805
No. of High-Risk Pregnancies Managed	124	600
No. of High-Risk Pregnancies referred	20	205
Average number of cases referred out	22.21	179
Average number of cases referred In	33.28	466
Is Safe abortion services provided?	No.	No.
Is Family planning services provided?	Yes	Yes
Child Health Related Services		
OPD Load (Pediatrics)	1540.07	11402.4
IPD Load	258.92	2570.2
Neonates receiving BCG	Yes	Yes
Newborn check-up within 48 hrs	Yes	Yes
Sick newborns treated	Yes	Yes
Other Services		
Is Blood storage unit/ Blood bank service available?	Yes	Yes
Nearest blood bank	Yes	Yes
Is Comprehensive Lactation Management Centre available?	Yes	Yes
Avg. No. of Laboratory tests	831.42	7110.4
Approx. percentage of OPD & IPD diagnostic services available in facility in a day (USG etc)	278.78	3682.8

Data Source: Record review

Patient Services Turnaround Time

Service	Standard	Status
OPD Registration	<15 minutes	<15 minutes
Consultant Appointment Time	<2 hours	<2 hours
Diagnostic Test Wait Time	<2 hours	<2 hours
Diagnostic Report Availability	Same Day / within 24 hr	Same
	(post 2PM)	

Quality and Safety Indicators

Indicator	Threshold	Status
Patient Fall Incidents	<5 per quarter	00
Infection Rate (post-delivery return)	≤10%	00
ALOS – Normal Delivery	≤3 days	≤3 days
ALOS – C-Section Delivery	\leq 7 days	≤7 days

ALOS-Average Length of Stay

Section D: Infrastructure

Indicator	Observation
Layout of facility (as per IPHS Norms)	Up to march
Total Number of beds	100
Number of labour beds/tables	4
Number of beds (if available):	
SNCUNICUPICU	8 (SNCU)
Cleanliness of Wards & Corridors& Toilets	Daily Shift wise
Condition of Building/Wing	Updated
Spalling/Leakage/Broken Fixtures	No
Availability of Specialized Wards	Yes
Availability of Water Supply(24x7)	Yes
Availability of Power Supply(24x7)	Yes
Availability of Power Backup	Yes
Obstetric HDU+ICU (Hybrid)	02+06
Number of beds	8
Number of Functional OTs	02
Pre-Op and Post-Op resting rooms	Yes
Building Maintenance	

Zero

Issue	Tolerance	Status
Water Leakage Rectification	Within 24 hours	Within 24 hours
Concrete Spalling (Internal)	Zero	Zero

Section E: Drugs, Equipment & Diagnostics

Broken furniture & fixtures: Zero Zero

for patient furniture's

Equipment Type	Available (Y/N)	Functional (Y/N)	Downtime (Days)
Are Drugs available as per EDL (GoU)	Yes	NA	NA
X-Ray	Yes	Yes	NA
Ultrasound	Yes	Yes	NA
ECG	Yes	Yes	NA
Operation Theatre Equipment	Yes	Yes	NA
Life-Support Equipment (Ventilators etc.)	Yes	Yes	NA

Maintenance of Equipment

ted
1

AMC- Annual Maintenance coverage

Section F: Skill Room

Yes/No

If Yes then,

Material	Yes/No
a) LCD Projector	Yes
b) Desktop Computer	Yes
c) Female Pelvis	Yes
d) Maternal and Neonatal Birthing Simulator Models	Yes
e) Maternity Examination Models	Yes
f) Development Process of Fetus Models	Yes
g) Episiotomy Training Simulator	
h) View box	Yes
i) Set of instruments/forceps	Yes
Others	Yes

Indicator	Feedback/Comments
MDSR	Not Available
CDSR	Not Available
Medical audits	Not Available
Inspection report	Not Available

Photos Gallery







Assessment of MCH Services under PPP Model – UP





Duty Rooster, Labor room, MCH Wing, Varanasi





Annexure 2: Summary of Contractual KPI Compliance across MCH Wings

This annexure provides a **contract compliance perspective** complementing the clinical and patientcentric findings. It will help decision-makers understand where governance gaps lie, and which areas need enforcement or renegotiation.

KPI Description	Chandauli	Sonbhadra	Varanasi	Mirzapur
Availability of contractual HR (Specialists,	√ Fully	√ Fully	√ Fully	√ Fully
Nurses, Support Staff)	Met	Met	Met	Met
12-hour coverage in the Labour Room and OT	√ Met	√ Met	√ Met	√ Met
Functionality of Level I Diagnostics	√ Met	√ Met	√ Met	√ Met
Availability of Level II USG	X Not Met	X Not Met	X Not Met	X Not Met
High-Risk Pregnancy (HRP) tracking and dedicated register maintained	X Not Met	X Not Met	X Partial	X Not Met
Documentation of caesarean indications using clinical SOPs	X Not Met	X Not Met	X Not Met	X Not Met
Referral registers and back-referral documentation	X Not Met	X Not Met	X Not Met	X Not Met
Grievance redressal system in place (box, helpline, logs)	X Not Met	X Not Met	X Not Met	X Not Met
Regular monthly joint review with DHS and partner	X Not Met	X Not Met	X Not Met	X Not Met
Biomedical waste segregation and disposal records	√ Partial	X Not Met	√ Partial	X Not Met
Stock availability of essential drugs and consumables	√ Met	√ Met	√ Partial	X Not Met
Cleanliness, maintenance, and patient safety infrastructure	√ Partial	X Not Met	√ Partial	X Not Met

Legend:

 \checkmark *Met* – *KPI is fulfilled as per MoU requirement*

X Not Met – KPI not observed or implemented

 \checkmark Partial – KPI partially implemented or inconsistently documented

District	Strengths	Key Weaknesses	Critical Observations
Chandauli	High delivery load Functional SNCU Adequate HR	Incomplete ANC tracking No grievance redressal Lack of audits	MCH wing is main delivery hub; risk of overdependence without clinical governance
Sonbhadra	Specialist availability Reliable electricity & OT	Highest C-section rate (90%) No HRP or referral documentation Poor staff amenities	Co-located with DH, leading to overlap and staffing duplication
Varanasi	High utilisation Good lab services Community preference	Weak PNC follow-up Overburdened OT No ASHA coordination	Overlapping with DH and SSPG MC; should not duplicate full service spectrum
Mirzapur	Adequate deliveries Facility cleanliness	Poor diagnostics Rapid discharge Weak nursing supervision	Functions in isolation; weak integration with

Annexure 3: Facility-Wise Summary of Performance and Observations

Annexure 4: District Public health facility details, demographic profile and indicator tables

Public Health Facility	Varanasi	Sonbhadra	Mirzapur	Chandauli
Community Health Centre (rural+urban)	13(10+3)	10	0	9
District Hospital	4	1	-	1
Medical College	1	0	2*	0

 Table 1: Details of Public Health Facility as per HDI (2022-2023)

Table 2: Demographic profile of the districts

	SDG Target	India	Uttar Pradesh	Varanasi	Mirzapur	Sonbhadra	Chandauli
Total Population	-		239472000	4526566	4,96,970	1,862,559	1,952,756
(as per RGI record)					2,961542 (RGI	2217503	2,3,11,609
Estimated live birth	-	-	6017895	89772	66337	61397	60032
Birth rate	-	19.5	25.1	19.8	22.4	27.7	25.9
MMR	<70	103	167	167	167	167	167
NMR	-	12/1000 LB	28	25	29	30	29
IMR	-		38	35	38	39	38

Table 3: District wise comparative analysis of major indicators

Indicator	Chandauli	Mirzapur	Sonbhadra	Varanasi
Institutional Deliveries	High, mostly emergency	High, ~80% elective C- sections	High, mostly emergency	High, balanced
Early ANC Registration	Low	Low	Low	Low
High-risk Pregnancies	Present (anemia), poor documentation	Present, inconsistently recorded	Present, inconsistently recorded	Present, inconsistently recorded
Availability of C- section Services	Available	Available (elective-heavy)	Available (emergency- heavy)	Available (balanced)
Radiologist Availability	Yes, but underutilized	No	No	Yes
Level II USG Services	Not done (time constraint)	Referred	Referred	Referred
No. of Diagnostic Tests Conducted	26	26	14	Adequate (not specified)
ECG Technician	Not available	Not available	Not available	Not available

HDU/ICU Functionality	Setup exists, not functional	Absent	Setup exists, not functional	Present and functional
Female Medical	Not available	Not available	Not available	Not available
Officers Nursing Staff Strength	Strong	Moderate	Strong	Adequate
In-house Blood Bank	No (depends on DH)	No (depends on DH)	No (depends on DH)	No (depends on DH)
Biomedical Waste Disposal	Irregular	Regular	Irregular	Regular
Mock Fire Drills Conducted	No	No	No	No
Skill Training Rooms/Programs	None	Weekly nursing sessions only	None	None
Patient Satisfaction	High	High	High	High
ASHAs Present During Admission	Some	Yes	Yes	Some
OOPE for Diagnostics/Medicines	Yes (₹2,500 USG, ₹1,500 meds in 1 case)	Yes (USG referral)	Yes (USG referral)	Yes (USG referral)