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ACRONYMS

ANC	antenatal care
ANM	auxiliary nurse midwife
ASHA	accredited social health activist
AYUSH	ayurveda, yoga and naturopathy, unani, siddha, and homoeopathy
BHC	Building Healthy Cities
IPHS	Indian Public Health Standards
IUD	intrauterine device
JSI	JSI Research & Training Institute, Inc.
NHM	National Health Mission
NUHM	National Urban Health Mission
PHC	primary health center
PNC	postnatal care
TCIHC	The Challenge Initiative for Healthy Cities
UPHC	urban primary health center
USAID	United States Agency for International Development

ABSTRACT

This study evaluates the current status of multiple urban primary health centers (UPHCs) in Indore in relation to the Indian Public Health Standards (IPHS). The main purpose of the study was to identify the status and adequacy of infrastructure, equipment, diagnostics, medicines, and health care service delivery of each selected public health care facility to enable Indore Smart City Development Limited and the Health Office to address any barriers that limit UPHCs from using resources and functioning at their best.

This study took a qualitative approach and used the patient perspective to shed light on obstacles that may hinder or motivate patients as they use available health services. Interviews and direct observation were carried out at 10 UPHCs in Indore. A questionnaire based on IPHS requirements was prepared and used for the assessment. Data were supplemented by secondary data collected by The Challenge Initiative for Healthy Cities. Analysis was done in Microsoft Excel to evaluate each UPHC's capacity individually and then to pull out themes or issues across UPHCs.

Results show that none of the 10 UPHCs studied met all IPHS requirements across the seven dimensions: population coverage, hours of operation, staffing, location, functions, management, and infrastructure. While most of the facilities did well on population coverage and location, there were significant issues with staff vacancies, insufficient infrastructure, and inconsistent availability of services during scheduled hours of operation.

This study concludes with key recommendations for improving UPHCs in Indore.

INTRODUCTION

The global focus on primary health care can be traced back to the Alma-Ata declaration, issued by the World Health Organization in 1978. The declaration proposed that primary health care could serve as a platform to improve health standards for all people by the year 2000. It described primary health care as "essential health care based on practical, scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation" (World Health Organization 1978). Primary health care serves as the first point of care for patients within the health system, and is considered by some, including the Government of India, to be the cornerstone of health services (Directorate General 2012).

In India, the Department of Health and Family Welfare at the national and state level is responsible for planning, organizing, and funding health services at three levels: primary, secondary, and tertiary. Primary health care focuses on preventive and curative primary care services, and referrals to secondary and tertiary hospitals. Primary health centers (PHCs) were introduced in 1946 with a mandate to provide integrated curative and preventive care in rural communities (National Urban Health Mission n.d.). Until recently, standardized PHCs were limited to rural areas. In urban areas, a variety of health centers were established to provide primary health care services, varying from state to state under various projects. These facilities included urban health posts, urban health and family welfare centers, and urban health centers. Such services have been sporadic and unsystematic in their population coverage, service package, and locations.

To systematically address the health needs of India's urban population, the National Urban Health Mission (NUHM) was introduced in 2013. According to the Government of India, the NUHM "envisages to meet health care needs of the urban population with the focus on urban poor, by making available to them essential primary health care services and reducing their out of pocket expenses for treatment. This will be achieved by strengthening the existing health care service delivery system, targeting the people living in slums and converging with various schemes relating to wider determinants of health like drinking water, sanitation, school education, etc., implemented by the Ministries of Urban Development, Housing and Urban Poverty Alleviation, Human Resource Development, and Women and Child Development" (National Health Mission n.d. b). One way NUHM is improving access to health care for urban populations is by introducing urban PHCs (UPHCs). While UPHCs are similar in design to PHCs in rural areas, the way UPHCs provide services, and the services they offer, are adjusted to better serve the unique needs of urban populations, especially those living in slum areas.

In Indore, city health planners have requested information on the functioning and capabilities of the 14 UPHCs within the city limits. The Challenge Initiative for Healthy Cities (TCIHC) conducted a readiness assessment of all Indore UPHCs and civil dispensaries covering various parameters in 2018. However, that assessment did not

compare the UPHCs to the 2015 Indian Public Health Standards (IPHS). This study uses IPHS standards to identify gaps in selected parameters.

This study was conducted by the United States Agency for International Development-funded Building Healthy Cities (BHC) project, with support from the Chief Medical and Health Officer and Indore Smart City Development Limited.

1. Indian Public Health Standards for Urban Primary Health Centers

IPHS for public health facilities were first published by the Government of India in 2007 and have been used as the reference point for public health care infrastructure planning and improvement in the states and union territories. IPHS are a set of uniform standards established to improve the quality of health care delivery in the country. They have been revised to reflect updated health system structures and the addition of new programs, including those targeting noncommunicable diseases (National Health Mission, n.d. a). The standards for UPHCs can be found in a number of documents, including the *Quality Standards for Urban Primary Health Centre* developed in 2015 (National Health Mission 2015), *IPHS Guidelines for Primary Health Centres* revised in 2012 (Directorate General 2012), and other UPHC management guidelines (National Urban Health Mission, n.d.). The 2015 standards, used for this review, cover the following dimensions:

Population coverage

It is recommended that one UPHC cover between 50,000 to 60,000 people, with approximately half of that target population living in slum areas. This wide range is due to differences in slum population density between urban areas. UPHCs in cities with more densely populated slum areas are expected to provide services to more people. In such cases, the catchment area can be increased to 75,000.

Hours of operation

UPHCs must provide services for at least eight hours each day, ideally during times convenient for the urban working population. While the recommended hours of operation for UPHCs is 12:00 noon to 8 p.m., states may adjust the times as needed to better serve the needs of the local population. If states choose to keep UPHCs open for additional hours each day—due to high caseloads for example—the centers are required to hire additional staff.

Location

The location of UPHCs were designated to improve access to health services for vulnerable populations. They are required to be located less than ½ a kilometer from a slum area.

Staff

UPHCs should employ the following health and support staff:

Cadre	Number at UPHC
Medical Officer In-Charge	1
Second Medical Officer (part time)	1
Lady Health Visitor	1
Nurse	3
Lab Technician	1
Pharmacist	1
Auxiliary Nurse Midwife	3-5
Public Health Manager/Mobilization Officer	1
Support Staff	3
Monitoring and Evaluation Unit	1

Source: National Health Mission. 2015. "Quality Standards for Urban Primary Health Centre." New Delhi, India: National Health Mission, Ministry of Health and Family Welfare, Government of India. https://www.nhm.gov.in/images/pdf/NUHM/Quality_Standards_for_Urban_Primary_Health_Centre.pdf.

Functions of the UPHC

UPHCs are expected to provide comprehensive primary health care to the catchment area, both at the health center and through outreach services. The specific types of services provided are listed below, and include prevention, treatment, and counselling around those health areas.

- Treatment of common ailments.
- Preventive and promotive services aligned with all national health programs.
- Maternal and child health care including, antenatal care (ANC) and postnatal care (PNC), and treatment of routine childhood illnesses.
- Immunization services.
- Sexual and reproductive health services, including family planning.
- Adolescent health services.
- Geriatric care.
- Alternative medicines including ayurveda, yoga and naturopathy, unani, siddha, and homoeopathy (AYUSH).
- Outreach activities providing preventive, promotive, and curative care, including regular health and nutrition days.
- Nutrition services targeting children, adolescents, pregnant women, and the general population.
- Referral of patients to higher levels of care when necessary.

- Promotion of safe water, sanitation, and hygiene practices.
- Laboratory tests.
- Provision of incentives under special schemes to eligible beneficiaries.
- Infection control and prevention services.
- Information, education, and communication, and behavior change communication.
- Implementation of services in accordance with national health programs.

In addition to health services, UPHCs are expected to perform the following functions:

- Cooperation with other sectors where possible.
- Disease surveillance and notification.
- Completion of a health needs and vulnerability assessment.
- Data collection, monitoring, and analysis.

Management of the UPHC

The UPHC is managed by the medical officer in-charge. The person in that position oversees the medical care provided in the UPHC and during outreach services, and supervises all medical and support staff. In addition, the medical officer in-charge oversees the administrative aspects of the UPHC, monitors equipment and infrastructure issues, and is responsible for ensuring a constant supply of needed drugs and medical supplies.

Each UPHC must also provide a method by which patients can submit grievances, such as a complaint box. The UPHC is required to address each grievance in a timely manner.

National Health Mission (NHM) guidelines require that a *rogi kalyan samiti* or primary health center management committee be established to provide external oversight of the UPHC, and of the quality of the management and services provided.

Infrastructure, financing and governance mechanism

The construction of UPHCs is funded by the state government. An annual grant of Rs 2.5 lakh (~3,750 USD) will also be provided to each UPHC for public health programs, maintenance, and upkeep. In addition, the *rogi kalyan samiti* for each UPHC is empowered to generate funds though user fees and other mechanisms, and to use those funds to improve UPHC services.

Reporting and governance oversight of the UPHC is conducted by the city or district project management unit.

METHODS

This study took a qualitative approach, and used the patient perspective to shed light on obstacles that may hinder or motivate patients as they attempt to use health services. Interviews were conducted at the 10 UPHCs in Indore that were functional at the time of the study. A questionnaire based on IPHS standards was prepared and used to collect data from the selected UPHCs. Facility visits were conducted to collect data for the questionnaire, and to interview the medical officer in-charge to understand the barriers and problems in providing quality service delivery especially to vulnerable populations in the area. Data were supplemented by secondary quantitative data collected in 2018 by TCIHC regarding readiness across all 14 UPHCs. Analysis was done using Microsoft Excel to assess each UPHC individually and then to pull out themes or issues across UPHCs.

FINDINGS OF ASSESSMENT

Analysis across the 10 UPHCs was completed following the dimensions of the IPHS.

1. Population Coverage

The size of the population covered by individual UPHCs in Indore varied from 29,800 to 100,000. Only two out of the 10 UPHCs covered fewer than to 50,000 people, which is the norm under IPHS. Population coverage by individual UPHCs is described in Table 1 and Figure 1 below.

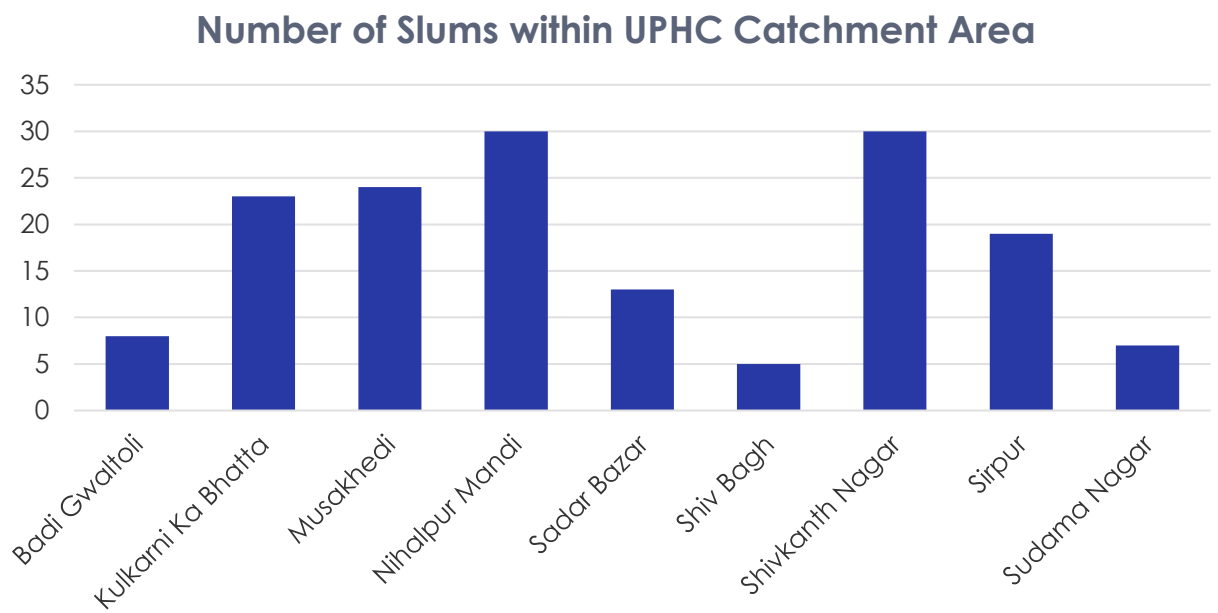
Table 1. Population Covered by UPHCs in Indore

UPHC	Population Covered	Hours of Operation
Shiv Bagh	55,352	12 noon - 8 p.m.
Musakhedi	63,000	12 noon - 8 p.m.
Badi Gwaltoli	60,167	12 noon - 8 p.m.
Sudama Nagar	60,000	12 noon - 8 p.m.
Nihalpur Mandi	64,000	12 noon - 8 p.m.
Sadar Bazar	50,000	12 noon - 8 p.m.
Babu Morai	86,000	12 noon - 8 p.m.
Sirpur	100,000	12 noon - 8 p.m.
Shivkanth Nagar	29,800	12 noon - 8 p.m.
Kulkarni Ka Bhatta	48,000	12 noon - 8 p.m.
10 UPHC Sample Average	61,632	12 noon - 8 p.m.
IPHS Standard	50,000	8 hours (Preferably 12 noon - 8p.m.)

Source: BHC Interview data. 2019.

Figure 1 provides supplementary information from the TCIHC dataset on the number of slums covered by each UPHC—the exact number of the population covered in these slums was not provided. Those with very low numbers of slums included would be unlikely to meet the IPHS standard for approximately half of their population to come from slum areas.

Figure 1. Slum coverage for 10 UPHCs



Source: TCIHC. 2018. "UPHC readiness dataset." Indore, India: TCIHC.
Updated to 2019 based on discussions with TCIHC, July 2019.

2. Hours of Operation

All sampled UPHCs officially operated between 12 noon and 8 p.m., as this time was found to be the most convenient for beneficiaries (Table 1). Unofficially, however, another study conducted by BHC found that UPHCs may be fully or partially closed during official work hours: "nearly all UPHCs were open for fewer hours than the 12 noon to 8 p.m. schedule indicated in the NUHM guidelines. Open times at clinics were posted for 12 noon to 7 p.m. and 12 noon to 4 p.m., and in one case, even during those hours, no clinical providers were in attendance and no patients were seen" (Pomeroy-Stevens et al. 2018). Further follow up is needed to understand the reasons for partial or complete closures during official open hours.

3. Location

In addition to the information on slum areas provided in Figure 1, the TCIHC dataset also provided information on location in relation to the closest referral center (Table 2). All but two of the selected UPHCs were located within a slum. The average time to a referral center was about 14 minutes.

Table 2. Location in Relation to Closest Referral Center and Slum Residence

Name of UPHC	Name of Nearest Secondary/Tertiary Facility	Time to Nearest Facility	Located in a Slum?
Shivkanth Nagar	Nandnager Hospital	5 minutes	Yes
Badi Gwaltoli	PC Sethi Hospital	10 minutes	Yes
Sirpur	District Hospital	10 minutes	Yes
Musakhedi	PC Sethi Hospital	10 minutes	Yes
Sadar Bazar	Hukumchand Hospital	15 minutes	No
Babu Morai	District Hospital	15 minutes	Yes
Shiv Bagh	PC Sethi Hospital	15 minutes	Yes
Sudama Nagar	Malharganj Hospital	20 minutes	No
Nihalpur Mandi	District Hospital	30 minutes	Yes
Kulkarni Ka Bhatta	N/A	N/A	Yes

**NA = Not Available*
Source: TCIHC. 2018. "UPHC readiness dataset." Indore, India: TCIHC.
Slum Residence information from BHC's primary data collection, 2019.

4. Staffing

There were a large number of vacant posts as compared to IPHS standards (see Table 3). There were no medical officers in three of the 10 selected UPHCs. None of the UPHCs had a lady health visitor, public health manager, or monitoring and evaluation staff. Important posts of nurse, lab technician, and pharmacists were also not filled in all UPHCs. There should be three auxiliary nurse midwives (ANMs) for each UPHC but only three UPHCs had the correct number.

Table 3. Staffing in Selected Indore UPHCs

Urban PHC	Medical Officer In-Charge	2nd Medical Officer (Part Time)	Lady Health Visitor	Nurse	Lab Tech.	Pharmacist	Auxiliary Nurse Midwife	Public Health Manager	Support Staff	Monitoring & Evaluation
Shiv Bagh	1	0	0	0	1	0	1	0	1	0
Musakhedi	0	0	0	1	0	1	1	0	1	0
Badi Gwaltoli	1	0	0	1	1	0	0	0	0	0
Sudama Nagar	1	0	0	0	0	1	0	0	1	0
Nihalpur Mandi	1	0	0	1	1	0	1	0	1	0
Sadar Bazar	0	0	0	1	0	1	3	0	1	0
Babu Morai	1	0	0	0	0	0	0	0	1	0
Sirpur	1	0	0	0	1	0	0	0	1	0
Shivkanth Nagar	0	0	0	0	0	0	3	0	1	0
Kulkarni Ka Bhatta	1	0	0	0	0	0	3	0	1	0
IPHS Standard	1	1	1	1	1	1	3-5	1	3	1
Percent of 10 Selected UPHCs Meeting IPHS Standard	70%	0%	0%	40%	40%	30%	30%	0%	0%	0%

**Green indicates UPHCs that meet IPHS standard for that cadre.*
Source: BHC Interview data. 2019.

From BHC interviews, officers in charge noted the struggles with vacancies. It also appears from the interview data that while most UPHCs had planned induction trainings for medical officers and ANMs, only one UPHC had completed these trainings, and one had not completed the trainings. A similar pattern appeared for intrauterine device (IUD) training for nurses.

5. Functions

Table 4 depicts services provided by UPHCs in Indore. Most of the essential services are being provided by UPHCs in spite of a shortage of staff.

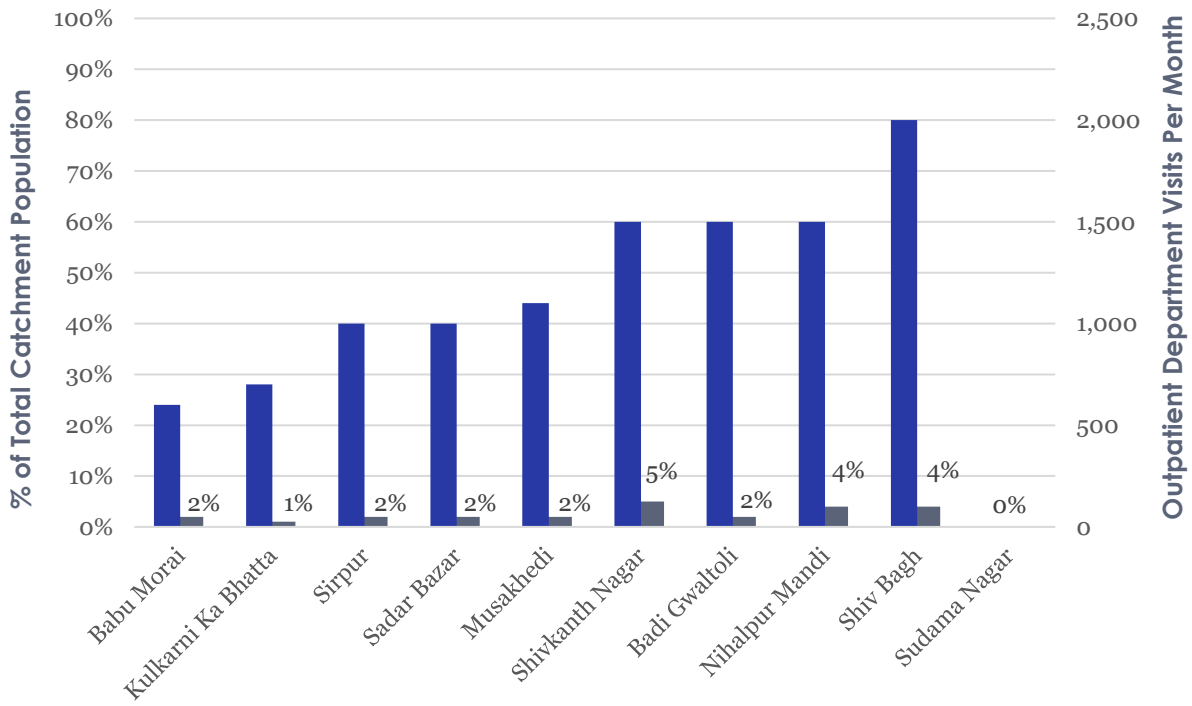
Table 4. Services Provided at Selected Indore UPHCs

Urban PHC	Ante-natal Care	Post-natal Care	Newborn Care	Mgmt. of Diarrhea	Mgmt. of Pneumonia	Immuni-zation	Family Planning Services	Basic Diagnostics (Hb, Sugar, and Urine Albumin)	Referrals to Higher Levels
Shiv Bagh	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Musakhedi	Yes	Yes	No	Yes	No	Yes	Yes	Yes	Yes
Badi Gwaltoli	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sudama Nagar	No	No	No	Yes	Yes	No	Yes	Yes	Yes
Nihalpur Mandi	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sadar Bazar	Yes	No	No	Yes	No	Yes	Yes	Yes	Yes
Babu Morai	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Sirpur	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Shivkanth Nagar	Yes	Yes	No	Yes	Yes	Yes	Yes	No	Yes
Kulkarni Ka Bhatta	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes
IPHS Standard	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Percent of 10 selected UPHCs meeting IPHS standard	80%	70%	60%	100%	80%	80%	100%	80%	100%

**Green indicates UPHCs that meet IPHS standard for that cadre.*
Source: BHC Interview data. 2019.

The average number of patients per month receiving outpatient visits in UPHCs varied between 700 and 2,000 (Figure 2). Some UPHCs were handling a higher volume of outpatient department visits than would be expected for their catchment area—for instance, both Shivkanth Nagar and Badi Gwaltoli UPHCs saw 1,500 outpatient department visits per month on average, the equivalent of 5 percent of Shivkanth Nagar's catchment population (29,800), but 2.5 percent of Badi Gwaltoli's catchment (60,167). This utilization could mean Shivkanth Nagar is running at a higher capacity and may need more supplies than its catchment suggests. Interview data suggested that 100 percent of the selected UPHCs faced moderate to severe drug shortages. In three of the facilities, it was expected that someone from the facility would be required to collect pharmaceuticals from the central store at their own time and expense.

Figure 2. Average Monthly Number of Outpatient Department Visits by UPHC



Source: TCIHC. 2018. "UPHC readiness dataset." Indore, India: TCIHC.

6. Infrastructure

Only one of the 10 selected UPHCs (10 percent) were located in government buildings (Table 5). The rest were situated in rented facilities. Only 3 out of 10 (30 percent) had adequate space (minimum of 1,500 sq. ft. for services). All UPHCs had adequate water and electricity. On the other hand, none of the UPHCs had separate washrooms for women and men.

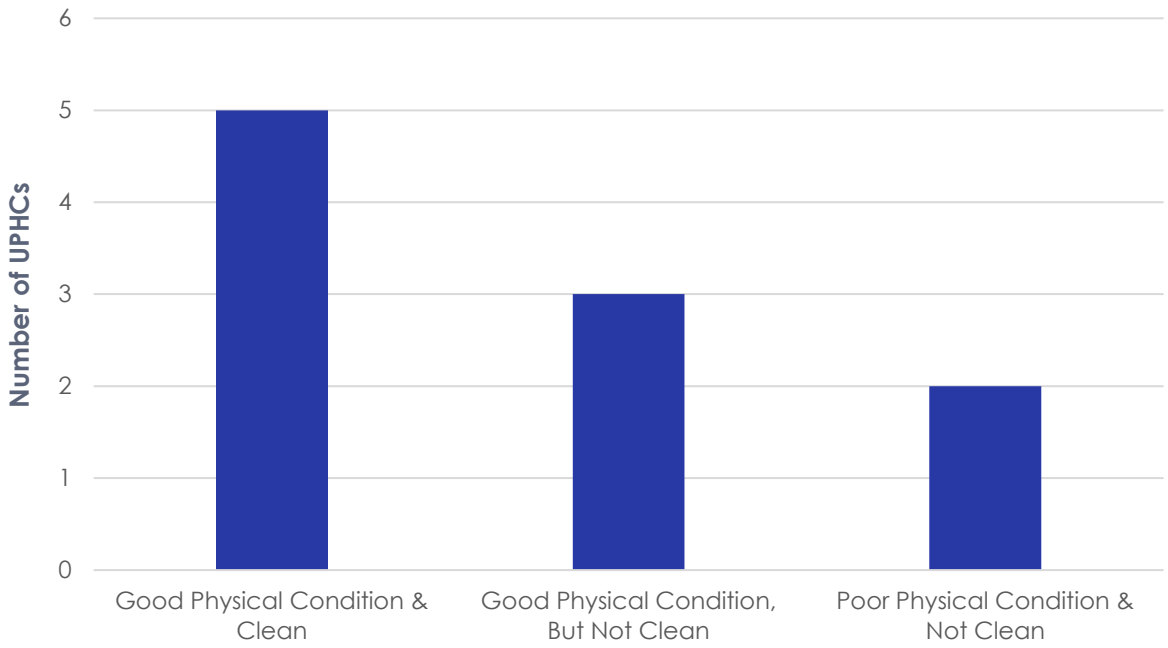
Table 5. Basic Physical Amenities at Urban PHCs, Indore

Urban PHC	Building	Area	Space for Services	Electricity	Water	Men's/ Women's Washrooms
Shiv Bagh	Rented	1,500 sq. ft.	Adequate	Y	Y	N
Musakhedi	Rented	1,000 sq. ft	Constrained	Y	Y	N
Badi Gwaltoli	Rented	1,000 sq. ft	Constrained	Y	Y	N
Sudama Nagar	Rented	1,500 sq. ft	Adequate	Y	Y	N
Nihalpur Mandi	Rented	600 sq. ft	Constrained	Y	Y	N
Sadar Bazar	Government Building	1,500 sq. ft	Adequate	Y	Y	N
Babu Morai	Rented	1,000 sq. ft	Constrained	Y	Y	N
Sirpur	Rented	1,000 sq. ft	Constrained	Y	Y	N
Shivkanth Nagar	Rented	800 sq. ft	Constrained	Y	Y	N
Kulkarni Ka Bhatta	Rented	1,000 sq. ft	Constrained	Y	Y	N

Source: BHC Interview data. 2019.

BHC heard that only 3 (30 percent) of the selected UPHCs had operational dispensary counters where patients could buy items such as contraceptives, oral rehydration solution packets, and receive vitamin A and vaccinations. The physical condition of the facilities and their cleanliness was also variable (Figure 4).

Figure 4: Physical Condition of Selected UPHCs



Source: BHC Interview data. 2019.

7. Management, Financing, and Governance

Since 2013, with the initiation of NUHM, the UPHCs have been financed by the Government of India under NHM. Funds received by the state are transferred to various cities through the office of the Chief Medical and Health Officer. A dedicated officer is in charge of NUHM. The state government compiles information from each district (covering urban and rural areas) and prepares an annual costed project implementation plan. Once approved by the Ministry of Health and Family Welfare, funds are released for NHM (National Rural Health Mission and its urban counterpart, the NUHM) to the state in two installments. BHC was unable to document specific management, financing, and governance actions at each UPHC, so compliance at the facility level still needs verification.

8. Interviews with Key Stakeholders

During the assessment of UPHCs, the BHC team discussed issues with service providers and other city officials. The following are the key discussion points that emerged from these interviews:

- Inadequate funds with the Department of Health and Family Welfare under NUHM was identified as the main barrier in construction of buildings for UPHCs.
- The feasibility of using buildings available under the *Pradhan Mantri Awas Yojana* (Prime Minister Housing Development Scheme) to house UPHCs needs to be explored.
- Mobilization of funds from legally mandated corporate social responsibilities and individual donors could also be explored.
- A dedicated supply van for doorstep delivery of supplies including medicines was suggested for effective logistic management and avoidance of stockouts.
- Under Clean India Mission, regular biomedical waste collection and disposal should also be developed.
- It was suggested to organize weekly clinics at the UPHCs for specialized services, depending on needs of the target population and addressing areas such as maternal and child health, lifestyle/noncommunicable disease, geriatric care, and adolescent health. If required, the involvement of private or charitable health providers may be explored. To begin with, this system could be piloted in one or two selected UPHCs.
- An integrated AYUSH and allopathic system could be piloted to assess the feasibility of service delivery and utilization by the beneficiaries.
- A model to create the primary-secondary-tertiary online referral system may be developed.

DISCUSSION AND RECOMMENDATIONS

Reforms in India's public health care system began in 2005 with the launch of the National Rural Health Mission (Ministry of Health and Family Welfare 2011). The focus was on strengthening primary health care in rural areas and improving utilization of health care services by engaging accredited social health activists (ASHAs). To provide equitable health care services for the urban poor, NUHM was initiated in 2013. The guidelines included setting up UPHCs, engaging ASHAs and encouraging community involvement through women's health committees called *mahila arogya samiti*. The IPHS provided guidelines for UPHCs on infrastructure, human resources, medicines, and diagnostics required for proper function and effective health care service delivery to the population, specifically to the urban poor and vulnerable groups. This report highlights the current status of UPHCs against those standards and identifies constraints in providing basic health care services to citizens.

In addition to assessing the gaps in UPHC compliance with IPHS norms, qualitative information was also gathered during interviews with service providers. The recommendations given below are based on the above mentioned findings and interviews.

1. Construct New Buildings for UPHCs through Intersectoral Coordination

Almost all (9 out of 10) UPHCs are operating in rented buildings; they are not in very visible and accessible locations in the slums. Due to space constraints, UPHCs are not optimally performing their basic functions, including service delivery. In meetings with the Chief Executive Officer of Indore Smart City Development Limited, the feasibility of using buildings available under the *Pradhan Mantri Awas Yojana* (Prime Minister Housing Development Scheme) to house UPHCs was discussed. Mobilization of funds from corporate social responsibilities and individual donors could also be explored.

2. Fill Vacant Posts under NUHM

None of the UPHCs had adequate human resources as prescribed in IPHS. Vacant posts must be addressed or else basic healthcare services cannot be provided to the citizens. Steps should be taken at the state and city level to assess reasons for the high level of vacancies and address them to fill vacant posts either on a permanent basis or by contract. Some states have made community-based posting compulsory for doctors after graduation, as well as internships for defined periods. This model can be piloted. Some posts (e.g. lab technicians) can be outsourced if available outside the government sector.

3. Map Services and Underserved Areas

Indore is expanding rapidly. Mapping of UPHCs and civil dispensaries needs to be carried out to identify underserved areas where additional UPHCs may be required. Out of the estimated 2.5 million city population, nearly one-third—more than 0.8 million

people—consists of urban poor and vulnerable populations living in hundreds of slums and other settlements. It was observed that the inadequate number of UPHCs has put a heavy burden on the existing UPHCs. Eighty percent of UPHCs were serving populations in excess of the catchment population prescribed in the IPHS.

4. Address the Supply Issue

Almost all UPHCs are facing a problem of insufficient supplies of medicines and equipment from the central store. Often they do not receive supplies from the central supply store, and UPHC staff are expected to secure them with their own means of transportation. Per department instructions, only online requests for the provision of drugs and supplies are acceptable, but most UPHCs do not have functional computer and internet connectivity. Support to UPHCs for hardware and proper connectivity needs to be ensured. A dedicated supply van for doorstep delivery of supplies must also be ensured.

5. Develop Biomedical Waste Collection and Disposal System

As the cleanest city in India, Indore should focus on regular biomedical waste collection and disposal. A system for collection of waste from public health facilities and centralized disposal mechanism should be developed in coordination with and assistance from the *Swachh Bharat* Mission Indore office.

6. Conduct Weekly Clinics for Specialized Care

The district may decide to conduct weekly clinics at the UPHCs for specialized services, depending on the needs of the target population, in areas such as maternal and child health, lifestyle/noncommunicable disease, geriatric care, and adolescent health. If required, the involvement of private or charitable health providers may be explored. Community health workers, volunteers, members of *mahila arogya samiti* (women's health committees), and ASHAs can be leveraged to publicize these clinics. Building a network of stakeholders for successful conduct of such clinics is essential. To begin with, this system could be piloted in one or two selected UPHCs.

7. Promote AYUSH Services In UPHCs

To improve the delivery of services by dedicated AYUSH doctors, measures must be taken to better equip the urban health centers with medicines and equipment. The existing AYUSH physicians must be kept up to date with modern scientific developments and tools. Different systems of AYUSH are better at managing different types of diseases. For example, some systems or therapeutic approaches of AYUSH are effective in the management of chronic diseases, while others are effective in the control of epidemics. An integrated AYUSH system and allopathic system could be piloted to assess the feasibility of service delivery and utilization by the beneficiaries.

8. Investigate Referral System (Hub and Spoke Model)

A model to create the primary-secondary-tertiary online referral system may be developed. Save the Children is doing this in the PC Sethi Hospital coverage area and this could be implemented in all the zones. This will, in time, encourage health care data collection, transparency, quality management, patient safety, efficiency, efficacy, and appropriateness of care. Capacity building of medical health professionals could be conducted.

CONCLUSION

In spite of deficiencies, most of the UPHCs are able to carry out most of their functions and provide a high volume of outpatient department services. Once the above mentioned deficiencies are addressed and the timing of functioning of UPHCs improved, one could expect that they can provide quality services to an even higher number of beneficiaries.

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ANNEX I: UPHC PROFILES

1. Shiv Bagh, Urban Primary Health Center

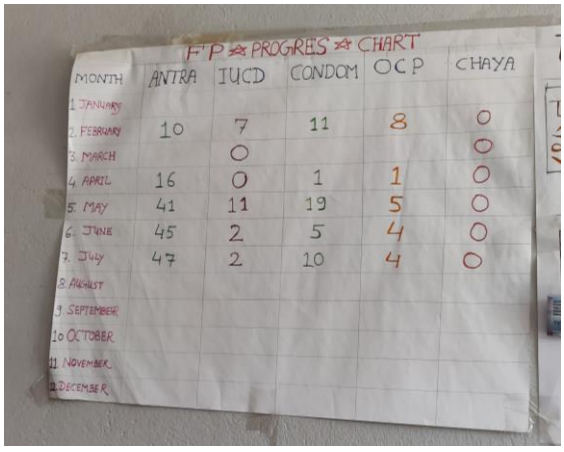
Infrastructure: The facility was operating in a rented building with an area of around 1,500 sq. ft. It is located in a slum called Shiv Bagh near the velocity multiplex. The facility was clean, well plastered, and plaster was intact everywhere. The floor was in good condition. Prominent display boards regarding service availability in the local language were installed properly. There was a counter near the entrance of the UPHC for dispensing contraceptives, oral rehydration solution packets, vitamin A and vaccinations, which was not functioning. No separate public utilities for men and women were available in the center. Separate rooms for the outpatient department, the doctor, pharmacy for drug dispensing, drug storage, laboratory, and a family welfare room were available within the facility. The facility had 24/7 water and electricity supply.

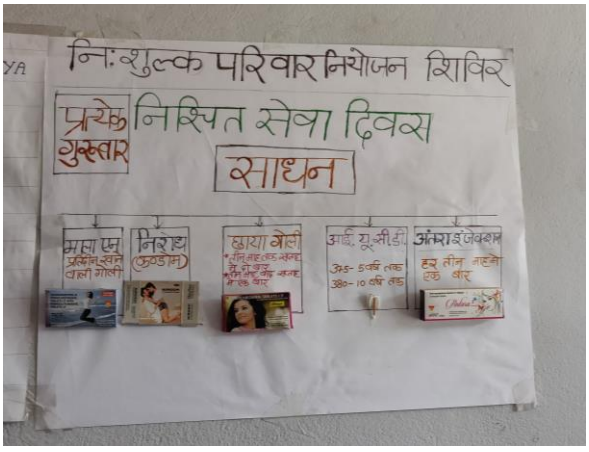
Human Resources: The positions of medical officer, ANM, lab technician and support staff were filled but positions of staff nurse and pharmacist were vacant at the facility.

Services at the Facility: The facility was providing ANC, PNC, newborn care, management of diarrhea, management of pneumonia, and basic diagnostic services properly.

Equipment Drug and Supplies: There was a scarcity of supplies in the facility. The medical officer said that supply of medicines was insufficient and someone from the facility had to go to collect medicines from the central store by their own arrangements and expenditures.

Training: Induction training for medical officers, IUD training for staff nurses, and induction training for ANMs were organized.






Pathalogy Investigation
1. Hemolglobin (Colour Scale)
2. Urine for albumin/sugar
3. Urine for pregnancy test
4. Malaria antigen for p.vivex & P. falciperum
5. Slide collection for PBF & sputum AFB
6. Hemoglobin (sahils method)
7. Urine (microscopy, acetone, biles salt & bile pigments)
Biochemical test
8. Blood sugar test
9. Blood urea test
10. Serum cholesterol test
11. Serum Bilirubin Test
12. typhoid card (widal) test
13. BT, CT, test
14. Stool exam
15. ESR test
दी जाने वाली सेवाएँ
1. ओपीडी सेवाएँ
2. टीकाकरण
3. पेथालॉजी की सुविधाएँ
4. परिवार कल्याण सेवाएँ
5. परामर्श सेवाएँ
6. दवाई वितरण
7. प्राथमिक उपचार सुविधाएँ
8. समस्त राष्ट्रीय स्वास्थ्य कार्यक्रम
9. समुदाय आधारित गतिविधियाँ
10. पुर्नरक्षित राष्ट्रीय क्षय नियंत्रण कार्यक्रम
11. आउटरीच सेवाएँ
12. असंचारी रोग नियंत्रण कार्यक्रम
13. रेफरल
शहरी स्वास्थ्य मिशन, इन्दौर


मधुमेह (डायबिटिज)
प्रतीक्षा क्षेत्र

2. Musakhedi, Urban Primary Health Center

Infrastructure: This UPHC was functioning in a rented building with an area around 1,000 sq. ft., located in a slum called Indira Ekta Nagar near Musakhedi Square. The facility was not clean enough but well plastered and the plaster was intact everywhere. The floor was in good condition. Prominent display boards regarding service availability in the local language were not installed properly. The UPHC had space constraints. The counter near the entrance of the UPHC to obtain contraceptives, oral rehydration solution packets, vitamin A and vaccinations was not functioning. No separate public utilities for men and women were available in the facility. Separate rooms for the outpatient department, the family welfare room, drug storage and dispensing, and laboratory were present but there was no separate room for the doctor. The facility had 24/7 water and electricity supply.

Human Resources: The positions of ANM, staff nurse, pharmacist, and support staff were filled; the positions of medical officer and lab technician were vacant at the facility.

Services at the Facility: The facility was providing ANC, PNC, management of diarrhea, immunization, family planning services, and basic diagnostic services properly but not newborn care and management of pneumonia due to space and staff limitations.

Equipment Drug and Supplies: There was a scarcity of supplies in the facility. The staff nurse said that the medicine being supplied to the facility was insufficient and that someone from the facility had to go to collect medicines from the store by their own arrangements and expenditures, but that somehow they were managing basic medicines for people.

Training: IUD training for staff nurses and induction training for ANMs had been organized.

3. Badi Gwaltoli, Urban Primary Health Center

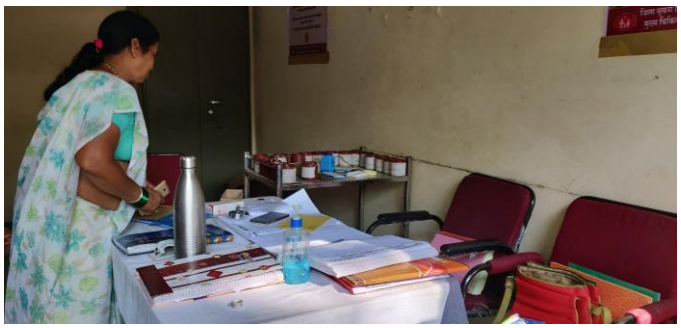
Infrastructure: The facility was operating in a rented building with an area around 1,000 sq. ft. located in a slum called Badi Gwaltoli. The facility was clean enough, well plastered and plaster was intact everywhere. The floor was in good condition. Prominent display boards regarding service availability in the local language were installed properly. Space constraints were present. The counter near the entrance of the UPHC to obtain contraceptives, oral rehydration solution packets, vitamin A and vaccination was not functioning. No separate public utilities for men and women were available with the facility. Separate space for a doctor room, laboratory, drug storage, and pharmacy for drug dispensing was available but there was no separate space for the outpatient department, the family welfare room, the office, and store room. The facility had 24/7 water and electricity supply.

Human Resources: The position of medical officer, staff nurse, and lab technician were filled; the posts of pharmacist, ANM, and support staff were vacant at the facility.

Services at the Facility: The facility was providing ANC, PNC, management of diarrhea, immunization, family planning services, newborn care, management of pneumonia, and basic diagnostic services properly.

Equipment Drug and Supplies: There was a scarcity of supplies in the facility. The medical officer said that insufficient medicine was being supplied to the facility and someone from the facility had to collect medicines from store by their own arrangements and expenditures but somehow they are managing basic medicine supply for people.

Training: The facility had induction training for medical officers; IUD training for staff nurses and induction training for ANMs had been organized



4. Sudama Nagar, Urban Primary Health Center

Infrastructure: This UPHC was operating in a rented building having area around 1,500 sq. ft. on the first floor in a temple campus located in Sudama Nagar and provided by a trust. The facility was not properly plastered and was not clean. The floor was in good condition. Prominent display boards regarding service availability in the local language were installed properly. A space constraint was not visible, but space was not organized properly. A counter near the entrance of the UPHC to obtain contraceptives, oral rehydration solution packets, vitamin A, and vaccinations was not functioning. No separate public utilities for males and females were available with the facility. Separate space for the outpatient department, drug storage, and pharmacy for drug dispensing was available but there was no separate space for a doctor room, laboratory, a family welfare room, office, and store room. The facility had 24/7 water and electricity supply.

Human Resources: The positions of medical officer, pharmacist and support staff were filled; the posts of ANM, staff nurse, and lab technician were vacant at the facility.

Services at the Facility: The facility was providing management of diarrhea, immunization, and family planning services properly but not ANC, PNC, newborn care, management of pneumonia and basic diagnostic services due to staff limitations.

Equipment Drug and Supplies: The facility did not have sufficient supplies. The medical officer said that insufficient medicine was being supplied to the facility and somebody from facility had to collect medicines from the store by their own arrangements and expenditures but somehow they were managing the basic medicine supply for people.

Training: Induction training for medical officers, IUD training for staff nurses, and induction training for ANMs had been organized.

5. Nihalpur Mundi, Urban Primary Health Center

Infrastructure: This UPHC operated from a rented building that had an area of around 600 sq. ft., located in a slum named Nihalpur Mundi. The facility was properly plastered and clean. The floor was in good condition. Prominent display boards regarding service availability in the local language were installed properly. Space constraints were visible. A counter near the entrance of the UPHC to obtain contraceptives, oral rehydration solution packets, vitamin A, and vaccinations was functioning. No separate public facilities for men and women were available within the facility. Separate space for the outpatient department, laboratory, a family welfare room, and pharmacy for drug dispensing was available, but separate space for drug storage, a doctor's room, office and store room wqs not available in the facility. The facility had 24/7 water and electricity supply.

Human Resource: The position of medical officer, lab technician, staff nurse, ANM, and support staff were filled; the post of pharmacist was vacant at the facility.

Services at the Facility: The facility was providing management of diarrhea, immunization, and family planning services properly but not ANC, PNC, newborn care, management of pneumonia, and basic diagnostic services due to staff limitations.

Equipment Drug and Supplies: The facility did not have sufficient supplies. The medical officer said that insufficient medicine was being supplied to the facility and that he had used his own car to collect medicines from the store.

Training: Induction training for medical officers, IUD training for staff nurses, and induction training for ANMs had been organized.

6. Sadar Bazar, Urban Primary Health Center

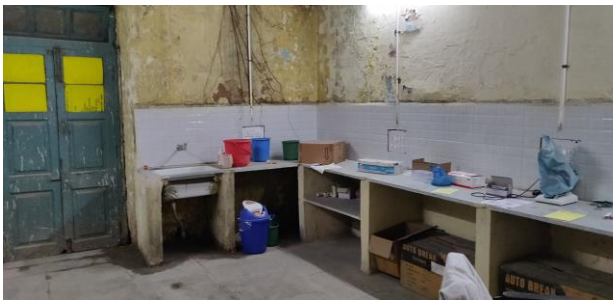
Infrastructure: The facility was operating in an old government building of another government department. The facility had an area around 1,500 sq. ft. located on Sadar Bazar Road. The facility was not properly plastered and not clean. The floor was not in good condition. Prominent display boards regarding service availability in the local language were installed properly. Space constraints were not visible, but the condition of the building was not up to the mark. A counter near the entrance of the UPHC to obtain contraceptives, oral rehydration solution packets, vitamin A and vaccinations was functioning. Separate public facilities for men and women were not available in the facility. Separate space for the outpatient department, laboratory, a doctor's room, and pharmacy for drug dispensing was available but there was no separate space for a family welfare room, drug storage, and office available with the facility. The facility had 24/7 water and electricity supply.

Human Resources: The position of staff nurse, ANM, pharmacist, and support staff were filled; the posts of medical officer and lab technician were vacant at the facility.

Services at the Facility: The facility was providing ANC, basic diagnostic services, management of diarrhea, immunization, and family planning services properly, but not PNC, newborn care, and management of pneumonia.

Equipment Drug and Supplies: The facility did not have sufficient supplies. Staff said that insufficient medicine was being supplied to the facility.

Training: Induction training for medical officers, IUD training for staff nurses, and induction training for ANMs had been organized.



7. Babu Morai, Urban Primary Health Center

Infrastructure: The facility was operating in a rented building located in slum Babu Morai Mohalla. The facility had an area of around 1,000 sq. ft. located on Airport Road. The facility was properly plastered and clean and the floor was in good condition. Prominent display boards regarding service availability in the local language were installed properly. Space constraints were visible. A counter near the entrance of the UPHC to obtain contraceptives, oral rehydration solution packets, vitamin A, and vaccinations was not functioning. No separate public facilities for men and women were available within the facility. Separate space for the outpatient department, a family welfare room, drug storage, a doctor's room, and pharmacy for drug dispensing was available but no separate space for laboratory and office was available within the facility. The facility had 24/7 water and electricity supply.

Human Resources: The position of medical officer and support staff were filled; the posts of staff nurse, ANM, pharmacist, and lab technician were vacant at the facility.

Services at the Facility: The facility was providing ANC, basic diagnostic services, PNC, newborn care, management of pneumonia, management of diarrhea, immunization, and family planning services properly.

Equipment Drug and Supplies: The facility did not have sufficient supplies. The medical officer said that insufficient medicine was being supplied to the facility.

Training: Induction training for medical officers, IUD training for staff nurses, and induction training for ANMs had been carried out.

8. Sirpur, Urban Primary Health Center

Infrastructure: The facility was operating in a rented building located in slum Sirpur. The facility had an area of around 1,000 sq. ft. located on Sirpur Road. The facility was properly plastered and clean and the floor was in good condition. Prominent display boards regarding service availability in the local language were installed properly. Space constraints were visible. A counter near the entrance of the UPHC to obtain contraceptives, oral rehydration solution packets, vitamin A and vaccinations was functioning. No separate public facilities for men and women were available within the facility. Separate space for the outpatient department, a family welfare room, drug storage, a doctor's room, laboratory, office, and pharmacy for drug dispensing was available with the facility. The facility had 24/7 water and electricity supply.

Human Resources: The positions of medical officer, lab technician, and support staff were filled; the posts of staff nurse, ANM, and pharmacist were vacant at the facility.

Services at the Facility: The facility was providing basic diagnostic services, newborn care, management of pneumonia, management of diarrhea, immunization, and family planning services properly but not ANC and PNC services.

Equipment Drug and Supplies: The facility did not have sufficient supplies. The medical officer said that insufficient medicine was being supplied to the facility.

Training: Induction training for medical officers, IUD training for staff nurses, and induction training for ANMs had been organized.

9. Shivkanth Nagar, Urban Primary Health Center

Infrastructure: The UPHC was operating in a rented building located in slum Shivkanth Nagar. The facility had an area around 800 sq. ft., located on Sanwer Road. The facility was properly plastered but not clean. The floor was in good condition. Prominent display boards regarding service availability in local language were installed properly. Space constraints were visible. A counter near the entrance of the UPHC to obtain contraceptives, oral rehydration solution packets, vitamin A, and vaccinations was not functioning. Separate public utilities for men and women were not available in the facility. Separate space for the outpatient department, a family welfare room, drug storage, a doctor room, laboratory, and office was available within the facility, but no separate space was available for a pharmacy for drug dispensing. The facility had 24/7 water and electricity supply.

Human Resources: The positions of ANM and support staff were filled; the posts of medical officer, lab technician, staff nurse, and pharmacist were vacant at the facility.

Services at the Facility: The facility was providing ANC, PNC, management of pneumonia, management of diarrhea, immunization, and family planning services properly but not basic diagnostic services and newborn care.

Equipment Drug and Supplies: The facility did not have sufficient supplies. Support staff said that insufficient medicine was being supplied to the facility.

Training: Induction training for medical officers, IUD training for staff nurses and, induction training for ANMs had been organized.

10. Kulkarni Ka Bhatta, Urban Primary Health Center

Infrastructure: This UPHC was operating in a rented building located in slum Kulkarni ka Bhatta. The facility had an area around 1,000 sq. ft. The facility was properly plastered but not clean. The floor is wan good condition. Prominent display boards regarding service availability in the local language were not installed properly. Space constraints were visible. The counter near the entrance of the UPHC to obtain contraceptives, oral rehydration solution packets, vitamin A and vaccinations was not functioning. Separate public utilities for men and women were not available in the facility. Separate space for a doctor room and office was available with the facility but no separate space was available for the outpatient department, family welfare room, drug storage, pharmacy for drug dispensing, and laboratory. The facility had 24/7 water and electricity supply.

Human Resources: The positions of medical officer, ANM and support staff were filled; posts of lab technician, staff nurse, and pharmacist were vacant at the facility.

Services at the Facility: The facility was providing ANC, PNC, management of pneumonia, management of diarrhea, immunization, and family planning services properly but not basic diagnostic services,

Equipment Drug and Supplies: The facility did not have sufficient supplies. Support staff said that insufficient medicine was being supplied to the facility.

Training: Induction training for medical officers, IUD training for staff nurses, and induction training for ANMs had been organized.

BUILDING HEALTHY CITIES

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