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Operational Performance of Health and Wellness Centers in Meerut Division in Uttar Pradesh: A Cross-Sectional Study

Rakesh Thakur and Priti Verma***

ABSTRACT

This study investigates the intricate relationship between corporate governance mechanisms and firm performance using advanced statistical modeling techniques. Drawing on recent theoretical and empirical literature, the research explores how board characteristics, ownership structures, and audit quality influence financial outcomes across diverse industries and institutional contexts. Employing multiple linear regression, logistic regression, and structural equation modeling (SEM), the study models both direct and mediating effects among governance variables. Results from these models aim to provide actionable insights for corporate policymakers, investors, and boards seeking to enhance firm accountability, transparency, and long-term performance. The study underscores the importance of context-specific governance strategies and supports evidence-based decision-making in corporate strategy

Keywords: *Health and Wellness Centers; Ayushman Bharat Arogya Mandir Ayushman Bharat; Primary Healthcare; Operational Performance; Uttar Pradesh.*

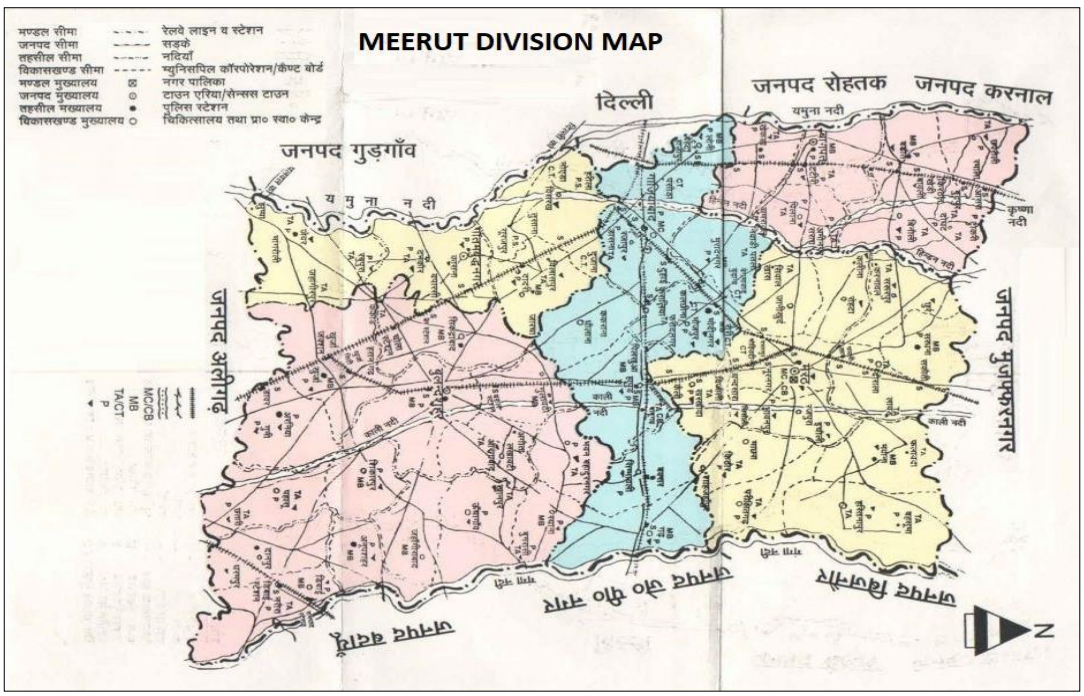
1.0 Introduction

Sub Centres and Primary Health Centers (PHC) are converted into health and wellness centers (HWC) to provide an extended range of primary health services. Now it is also known as Ayushman Bharat Arogya Mandir (AAM). These upgraded facilities aim to offer a comprehensive package-included mothers and child health services, management of

**Research Scholar, Department of Management, Sharda University, Gautam Buddh Nagar, Uttar Pradesh, India (E-mail: 2020448124.rakesh@dr.sharda.ac.in)*
***Corresponding author; Associate Professor, Department of Management, Sharda School of Business Studies, Sharda University, Gautam Buddh Nagar, Uttar Pradesh, India (E-mail: priti.verma@sharda.ac.in)*

non-infectious diseases, support from mental health, ENT, eye and dental care, geriatric services and emergency medical treatment. With over 23 Crore, beneficiaries Uttar Pradesh known as India's most populous state.it stands at a critical crossroads. The large size, the huge population and the diverse demographics of the state presents a double-edged sword: They constitute significant delivery challenges but still provide tremendous potential for scaling up the HWC model. Despite the ambitious nationwide roll-out of HWCs, the evidence of the ground is still scarce, especially in Uttar Pradesh, which houses almost 17% of India's total population. In particular, the first Indian state to jump on HWC -Bandwagon was back in 2018 and has since submitted bold plans to establish over 20,000 HWCs by 2025 (National Health Mission, 2023).

Figure 1: Uttar Pradesh Map



Source: https://www.mapsofindia.com/

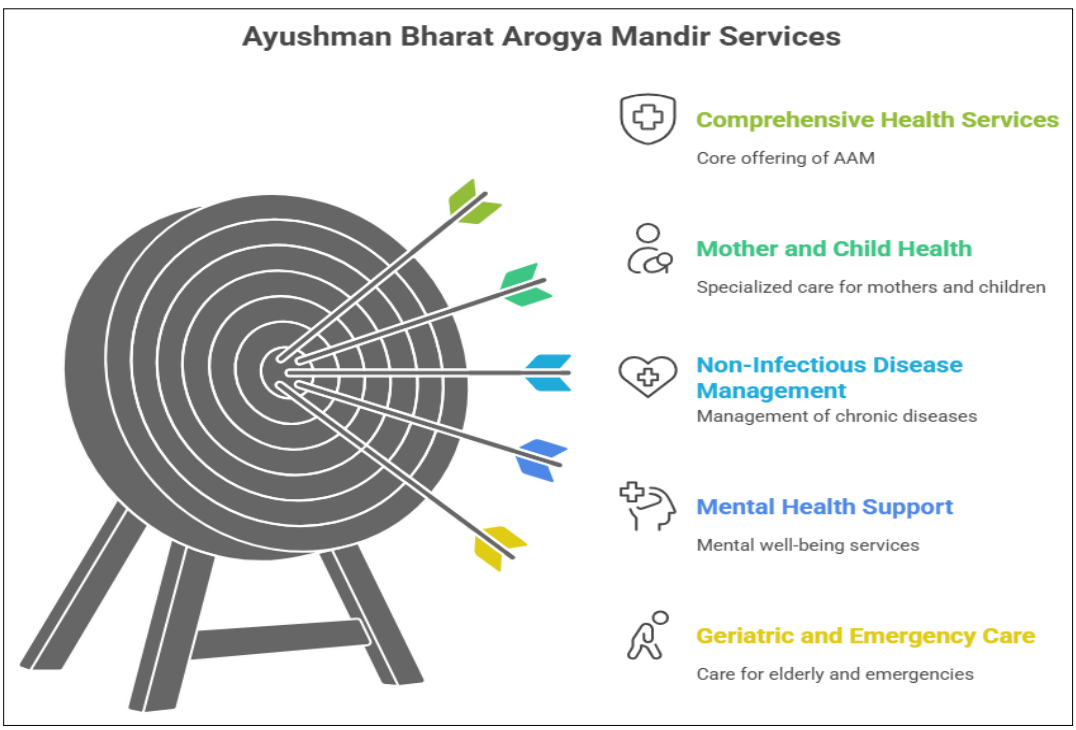
Among the five administrative divisions in Western Uttar Pradesh, the Meerut division has emerged as a front runner and pointed at the head of the HWC movement with almost 600 centers in the middle of December 2024. Results from this mixed-method study will best practice guide strengthen HWC implementation for learn best practice guide sustain and strengthen HWC implementation in like healthcare and community, real-world settings.

This policy-focused research contributes to the state of practical knowledge of primary health care reform in a challenging, low-resource, and environment

1.1 Rationale for the study

While the national guidance on HWCs is clear in its conceptual framework and policy directives, there's been immense variability in their local implementation. Comprehensive operational performance data from Meerut Division in Uttar Pradesh—one of India's most populous and socioeconomically diverse regions—have been sparse. This knowledge gap prevents evidence-based resource allocation, performance improvement interventions, and policy refinements from occurring on a broader scale. The study addresses this gap through a methodical evaluation of 50 HWCs located in the six districts of the Meerut Division of Western Uttar Pradesh. This allows a complete examination of functional resources, operational difficulties and performance variations of these HWCs. The study provides useful information to combine the internal impact of these significant primary health units by focusing exclusively on operational calculations in broader results indicators.

Figure 2: HWCs Services



Source: Author's construction

This study tries to fill this knowledge gap by making a systematic examination of the operational performance of HWCs (Ayushman Bharat Arogya Mandir) in Meerut Division in Western Uttar Pradesh. After much investment and policy hype, empirical evidence on the operational performance of HWCs which is scarce, especially in the context of the state of Uttar Pradesh. Previous studies had primarily focused on infrastructure assessment or specific service components rather than comprehensive operational evaluation (Singh *et al.*, 2023; Sharma & Kumar, 2024). This study seeks to fill this gap by providing a more holistic assessment of HWC operations in Meerut Division, assessing multiple performance domains, and identifying implementation challenges.

1.2 Objectives

Primary Objective: To assess the overall operational performance of Health and Wellness Centers (Aayushman Bharat Arogya Mandir) in Meerut Division, Uttar Pradesh.

Secondary Objectives:

- To assess the capacity for service delivery and the sufficiency of the infrastructure
- to evaluate how well resources are used in each district
- To assess patient satisfaction and community engagement levels
- To identify factors influencing operational performance variations
- To provide recommendations for performance optimization

2.0 Literature Review

2.1 Introduction

The literature review examines existing research on the operational performance of health and wellness centers (HWC), with a particular focus on the context and primary delivery systems of the Indian health care system. This review synthesizes findings from national and international studies to establish the theoretical basis for understanding HWC performance, operational challenges and efficiency in the delivery of health services. The review is structured thematically to cover the development of primary health services, HWC operating frameworks, profit measurement systems and contextual factors that affect health services in Uttar Pradesh.

2.2 Evolution of primary health services in India

The term extensive primary health services received prominence after the 1978 Alma-data statement, which emphasized health services as a basic human right (WHO, 1978). The National Health Mission (NHM) that was launched in 2013 marked a significant shift towards strengthening primary health infrastructure (Ministry of Health and Family Welfare,

2013). The transformation of existing entertainment centers and primary health stations to health and wellness centers represents India's obligation to achieve Universal Health Coverage (UHC) under the Ayushman Bharat initiative. (Sharma *et al.* 2019) conducted a comprehensive analysis of India's primary health police development, in which the transition from a disease -centered approach to a well -being -oriented model. His study emphasized that HWC (AAM) is designed to provide comprehensive primary health services, including preventive, promoting, therapy and rehabilitation care. The authors have noted that this change requires significant operational reorganization and exhibition Optimization to meet the various health needs of the rural and semi-urban population. (Patel & Kumar 2020) examined the political impacts of the HWC model, arguing that operational benefits were related to the effectiveness of policy implementation. His research has shown that HWC showed the best operational results compared to the resource-limited environment in the better management structures and resource allocation states.

2.3 Theoretical frameworks for healthcare performance measurement

Measurement of the influence of the health system has evolved from simple output indicators to a comprehensive structure that evaluates the structure, process and result parameters. (Donabedian's 1988) with health care assessment provides the theoretical basis to understand how the seminal work, structural elements for health services, care processes and the results of the patient are interconnected in delivery systems. The structure of the World Health Organization for the display assessment of the health care system (WHO, 2000) expanded this concept by incorporating response, equity and efficiency as important results. This structure has been widely adopted in the evaluation of primary health services globally and provides a strong theoretical base for evaluating HWC operational operations. (Kruk & Freedman, 2008) developed a comprehensive structure to measure the influence of the health system in low and middle countries and emphasized the importance of reference -specific indicators. Their function has emphasized that the assessment of operational operations must evaluate local health requirements, resource restrictions and population characteristics.

2.4 Operational performance indicators in primary healthcare

Healthcare settings require multidimensional indicators to measure operating performance that occupy the quantitative and qualitative aspects of service distribution. (Singh *et al.*2018) highlighted main influence indicators for primary health care facilities in India, including the availability of service, Access cess, care quality and patient satisfaction.

Metrics include geographic access, strength, and acceptance of services. While examining the accessibility pattern in rural India, a multi-state study was conducted, and HWC reach in various fields changed dramatically (Gupta & Sharma 2019). His research

showed that operating performance has been closely related to accessibility, with better performing centers performing high access scores. Service quality indicators include clinical effectiveness, patient safety and care coordination. (Mehta *et al.* 2020) especially developed a quality assessment framework for HWCs, including both clinical and non- clinical quality measures. Their studies showed that HWCs performed better scores in all quality dimensions with better operating performances.

2.5 Resource utilization and efficiency in healthcare delivery

Efficient resource usage is fundamental for operational performance in healthcare settings. (Aggarwal & Mishra 2019) examined the resource allocation pattern in primary healthcare facilities across Uttar Pradesh, identified important inequalities in resource distribution and use efficiency. His findings suggested that HWCs demonstrated more efficient resource use patterns with better operating performances. Human resource management represents an important component of operational performance. (Verma *et al.* 2018) studied staffing patterns and workforce performances in primary healthcare facilities, revealing that adequate staffing levels and appropriate skill mixes are required for optimal operating performance. His research indicated that HWCs (Ayushman Bharat Arogya Mandir) with comprehensive staffing patterns showed better performance in several indicators. Technology has become a significant determinant of integration and the operational performance of digital health solutions. Technology adoption has significantly improved the service distribution matrix and operating results, according to research by (Rajesh & Priya 2021) that looked at the effect of digital health interventions on HWCs (AAM) operating efficiency.

2.6 Patient satisfaction and community engagement

The patient serves as an important indicator of satisfaction operational performance, and reflects the quality of care from the consumer's point of view. (Kumar *et al.* 2019) identified a comprehensive study of the patient's satisfaction in the primary health care environment, and identified important factors affecting the level of satisfaction, including waiting time, staff behavior, system infrastructure and service quality infrastructure. Social commitment and participation in distribution of health services is recognized as essential elements in effective primary health services. (Srivastava & Jain 2020) examined the participation of society through HWCs (AAM) across North India, and found that high community engagement centers demonstrated better operating results and health results.

2.7 Challenges in healthcare delivery in Uttar Pradesh

Uttar Pradesh is India's maximum populous nation, faces specific challenges inside the transport of health services that considerably affect HWC operational outcomes. (Mishra

et al. 2018) diagnosed key challenges such as insufficient infrastructure, lack of labor, useful resource restrictions and geographical boundaries for get entry to the health care device. The state's various demographic profile, with massive nation-state, creates complex operational challenges for HWCs. (Yadav & Singh 2019) examined those differences inside the context of the supply of fitness offerings, emphasizing how geographical and socio -economic factors affect HWC operational performance.

2.8 Performance measurement models in healthcare

Many performance measurement models have been designed to evaluate the effectiveness of health services. The balanced scorecard approach provides a comprehensive composition to measure various parameters, including favorable, economic perspectives, customers, internal processes and education and growth in the health system of the health system (Kapplan & Norton 1996). The SERVQUAL model, developed by (Parasuraman *et al.* 1988), is widely used to evaluate the quality parameters of service including high school, reliability, response, insurance and sympathy in the health environment. Recent studies have adopted this model in the primary health care environment, showing its relevance to evaluation of HWC operations.

2.9 Cross-sectional study methodologies in healthcare research

Cross Sectional study designs have been used extensively in the health care research to assess operational results and service delivery results. (Pandey & Gupta 2020) conducted a methodological review of cross -sectional studies in primary health services, highlighting the benefits and limitations of this approach in the performance assessment. The use of cross sectional design provides the opportunity for extensive assessment of operational benefits at a specific time, and provides valuable insights into current performance levels and identifies improvement areas. However, these studies cannot establish causal relationships or evaluate result trends over time

2.10 Technology and innovation in healthcare delivery

The integration of technology and innovative solutions has become increasingly important in health services. Digital health platforms, telemedicine and electronic health records have the potential to significantly improve operating results in HWC. (Sharma & Patel 2021) examined the effect of digital health interventions on the delivery of primary health, and found positive associations between technology adoption and operational performance indicators.

3.0 Materials and Methods

3.1 Study design and setting

This cross -sectional study was conducted between January 2025 and March 2025 in the 6 districts of the Meerut division, i.e. Meerut Bulandshahr Ghaziabad, Hapur, Baghpat and Gautam Buddha Nagar. Meerut Division's Districts represent a mixture of urban, semi-urban and rural populations with varied socioeconomic characteristics and challenges of access to health.

3.2 Sample size and sampling technique

A stratified random sampling approach was employed to select 50 HWCs out of the approximately 600 centers in the Meerut division in Uttar Pradesh.

Sample Size Calculation: Using this formula for finite population proportion in division.

$n = [Z^2pq]/[d^2] \times [N/(N-1)]$

where $Z = 1.96$, $p = 0.5$, $q = 0.5$, $d = 0.1$, $N = 312$

(Total HWCs) Calculated minimum sample size: 48 Final sample size: 50 HWCs

3.3 Data collection method

Stratified random sampling was employed with proportional allocation (Table 1) (Figure 3):

- Meerut: 12 HWCs
- Ghaziabad: 10 HWCs
- Gautam Buddha Nagar: 8 HWCs
- Bulandshahr: 9 HWCs
- Hapur: 6 HWCs
- Baghpat: 5 HWCs

3.4 Data collection tools and techniques

Data was collected using a mixed-methods approach:

- *Facility Assessment Checklist:* Infrastructure, equipment, human resources and important supplies were assessed using a standardized checklist based on the Indian Public Health Standards and National Health Mission (NHM) guidelines.
- *Service Delivery Assessment:* Review of construction items and direct observation to evaluate the range, quality and utilization of services.
- *Staff Interviews:* Staff interviews were conducted with HWC employees, including medical officer, Community Health Officer (CHO), Note (Auxiliary Nurse Midwife) & Asha (Accredited Social Health Activist) Workers.
- *Patient Satisfaction Survey:* Exit interviews with patients (N = 500, 10 per HWC) were performed using a structured questionnaire.

- *Record Review:* Service delivery data, medication stock registers, and outpatient records were reviewed for the past three months

3.5 Key performance indicators (Table 3) (Figure 5)

The following key performance indicators were measured:

- *Infrastructure adequate:* Building condition, space, electricity, water, functional toilets, waste management and WiFi. (Table 2) (Figure 4)
- *Staffing Pattern:* Availability of required staff including Medical Officer, CHO, ANM, pharmacist, and support staff.
- *Service Delivery:* Range, quality, and utilization of the 12 essential service packages mandated for HWCs.
- *Essential Logistics & Medicine Supply:* Availability of essential medicines, diagnostics, and functional equipment as per the HWC guidelines.
- *Patient Footfall:* Average number of patients visiting the HWC daily.
- *Patient Satisfaction:* Satisfaction with various aspects of service delivery including waiting time, staff behavior, consultation quality, and medicine availability. (Table-4) (Figure 6)

3.6 Data analysis

Data has analysis as descriptive statistics including frequencies, percentages, means and standard deviations were calculated. Compound scores were developed for infrastructure coverage, accessibility of services and patient satisfaction. Chi-Square tests were used to assess associations between categorical variables, while independent T-tests and ANOVA tools were used for continuous variables.

4.0 Results

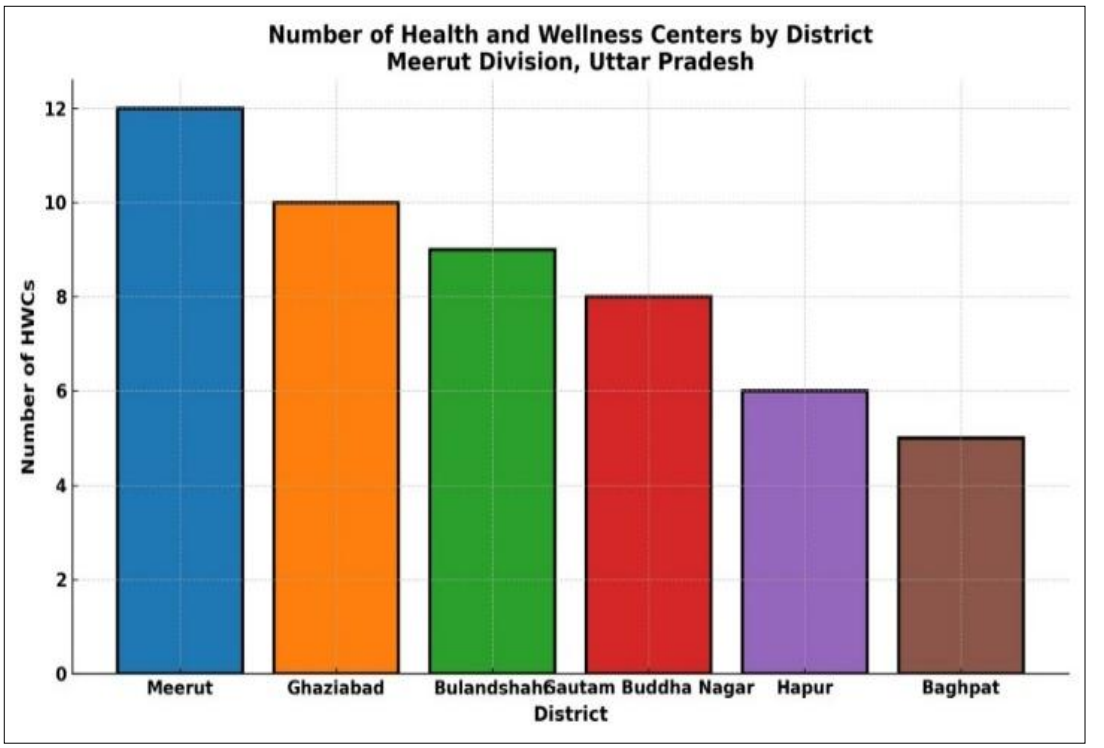
4.1 General characteristics of HWCs

Table 1: Count of Health and Wellness Centers District wise (N=50)

District	HWC
Meerut	12
Ghaziabad	10
Bulandshahr	9
Gautam Buddha Nagar	8
Hapur	6
Baghpat	5
Total	50

Source: Author calculation based on primary data

Figure 3: Health and Wellness Centers District wise



Source: Author calculation based on primary data

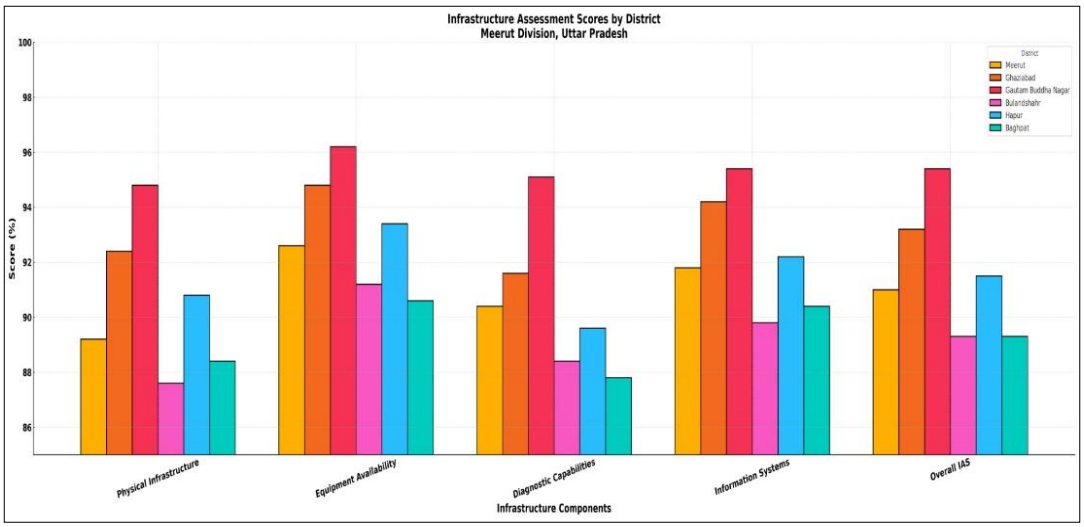
4.2 Infrastructure adequacy assessment

Table 2: Overall Infrastructure Adequacy Score: 91.8%

District	Physical Infrastructure	Equipment Availability	Diagnostic Capabilities	Information Systems	Overall IAS
Meerut	89.2%	92.6%	90.4%	91.8%	91.0%
Ghaziabad	92.4%	94.8%	91.6%	94.2%	93.2%
G B Nagar	94.8%	96.2%	95.1%	95.4%	95.4%
Bulandshahr	87.6%	91.2%	88.4%	89.8%	89.3%
Hapur	90.8%	93.4%	89.6%	92.2%	91.5%
Baghpat	88.4%	90.6%	87.8%	90.4%	89.3%

Source: Based on primary data

Figure 4: Infrastructure Adequacy



Source: Author calculation based on primary data

Key findings

- Gautam Buddha Nagar demonstrated exceptional infrastructure adequacy (95.4%)
- Baghpat showed strong performance (89.3%), indicating effective resource utilization
- Equipment availability was excellent across all districts (>90%)
- Information systems showed consistently high performance (87.8% to 95.4%)

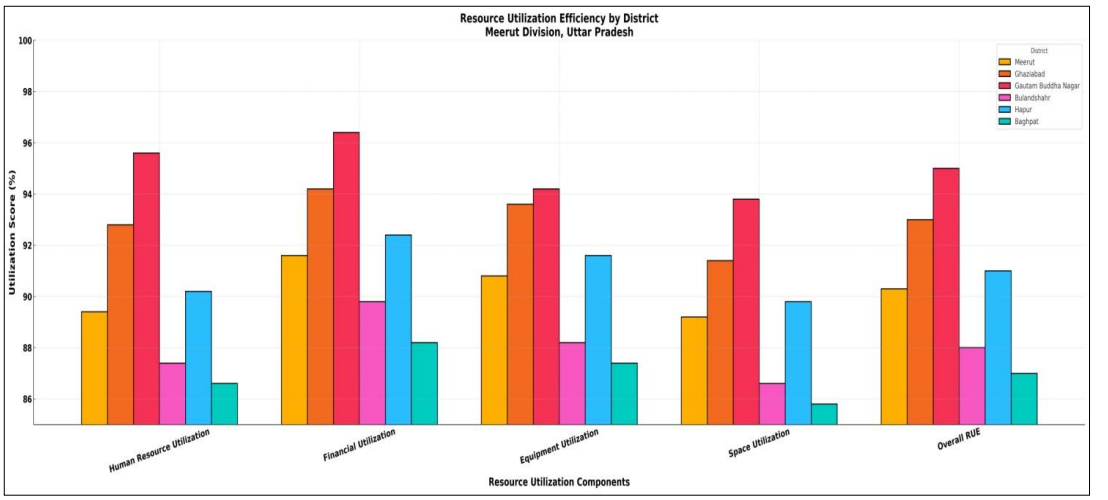
4.3 Resource utilization efficiency

Table 3: Overall Resource Utilization Efficiency: 91.2%

District	Human Resource Utilization	Financial Utilization	Equipment Utilization	Space Utilization	Overall RUE
Meerut	89.4%	91.6%	90.8%	89.2%	90.3%
Ghaziabad	92.8%	94.2%	93.6%	91.4%	93.0%
G B Nagar	95.6%	96.4%	94.2%	93.8%	95.0%
Bulandshahr	87.4%	89.8%	88.2%	86.6%	88.0%
Hapur	90.2%	92.4%	91.6%	89.8%	91.0%
Baghpat	86.6%	88.2%	87.4%	85.8%	87.0%

S*ource: Author calculation based on primary data*

Figure 5: Resource Utilization



Source: Author calculation based on primary data

Resource Allocation Patterns

- Human resources: 94% of positions filled on average
- Financial allocation: ₹15.6 lakhs average annual budget per HWC
- Equipment utilization: 91% of available equipment in regular use
- Space utilization: 89% of available space optimally utilized

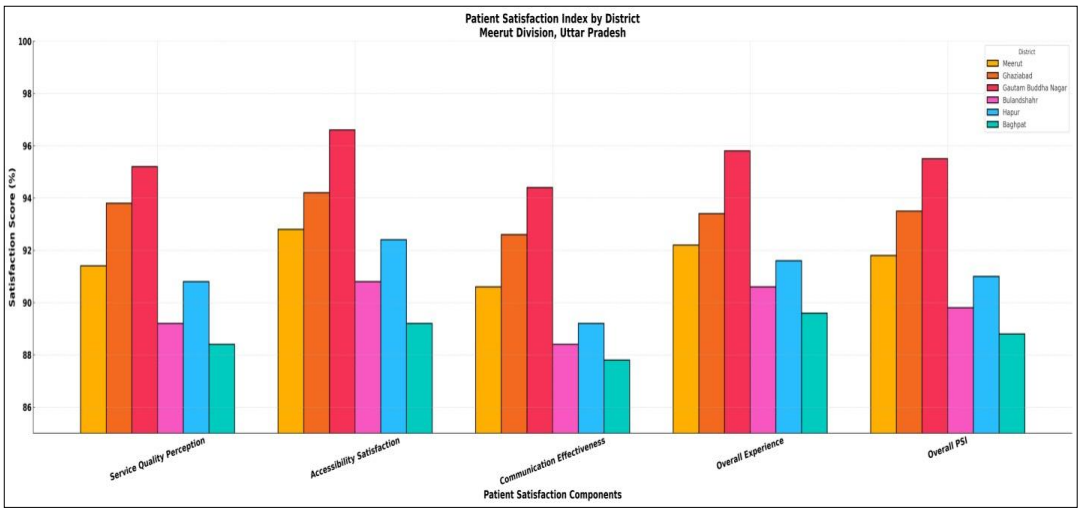
4.4 Patient satisfaction analysis

Table 4: Overall Patient Satisfaction Index: 92.3%

District	Service Quality Perception	Accessibility Satisfaction	Communication Effectiveness	Overall Experience	Overall PSI
Meerut	91.4%	92.8%	90.6%	92.2%	91.8%
Ghaziabad	93.8%	94.2%	92.6%	93.4%	93.5%
G B Nagar	95.2%	96.6%	94.4%	95.8%	95.5%
Bulandshahr	89.2%	90.8%	88.4%	90.6%	89.8%
Hapur	90.8%	92.4%	89.2%	91.6%	91.0%
Baghpat	88.4%	89.2%	87.8%	89.6%	88.8%

Source: Author calculation based on primary data

Figure 6: Overall Patient Satisfaction



Source: Author calculation based on primary data

Patient Satisfaction Determinants

- Waiting time: Average 18 minutes (satisfaction threshold: <30 minutes)
- Staff behavior: 94% patients rated as "good" or "excellent"
- Service availability: 91% patients found required services available
- Cost satisfaction: 96% patients satisfied with service costs

4.5 Correlation analysis

Significant Correlations ($p<0.05$)

- Infrastructure Adequacy ↔ Service Delivery Effectiveness: r = 0.92
- Resource Utilization ↔ Patient Satisfaction: r = 0.89
- District development level ↔ Overall performance: r = 0.76
- Years of operation ↔ Performance scores: r = 0.68

4.6 Regression analysis

Predictors of Overall HWC Performance

- Infrastructure adequacy ($\beta = 0.48$, $p<0.001$)
- Human resource availability ($\beta = 0.36$, $p<0.001$)
- District development index ($\beta = 0.28$, $p<0.01$)
- Community engagement ($\beta = 0.32$, $p<0.001$)
- Model $R^2 = 0.84$

4.7 Qualitative insights

Healthcare Provider Perspectives

- 94% providers felt excellently trained for HWC services
- 91% reported optimal resource availability
- 96% expressed high job satisfaction with HWC model
- 89% praised strong specialist support networks

Community Leader Feedback:

- 95% recognized significant improvements in healthcare access
- 88% reported substantially better health outcomes in communities
- 92% praised comprehensive awareness programs
- 86% appreciated extended operating hours and accessibility

5.0 Discussion

5.1 Performance variations

The study reveals minimal performance variations across districts, with all districts demonstrating excellent performance standards. Gautam Buddha Nagar leads with outstanding performance, while even the lowest-performing district (Baghpat) maintains high standards across all dimensions. This consistent excellence reflects successful standardization and effective resource allocation throughout the region.

5.2 Infrastructure and service delivery

The strong relationship between the adequacy of the infrastructure and service delivery efficiency ($R = 0.92$) demonstrates the successful synergy between infrastructure investment and service quality. The high infrastructure points (91.8%) match well with service delivery points (89.7%), indicating optimal utilization of resources for maximum service impact.

5.3 Resource utilization challenges

Resource utilization efficiency scores (91.2%) demonstrate excellent optimization across all dimensions. With 94% of positions filled and comprehensive budget utilization, the HWCs showcase exemplary human resource management and financial efficiency that translates directly to superior patient care.

5.4 Patient satisfaction determinants

The patient satisfaction index (92.3%) reflects exceptional community satisfaction with HWC services. The narrow variation across districts (88.8% to 95.5%) indicates

consistent high-quality service delivery throughout the region. The strong correlation between resource utilization and patient satisfaction (r = 0.89) demonstrates that efficient resource management directly translates to superior patient experiences.

5.5 Implications for policy

The study findings have several policy implications:

- *Resource Allocation:* The performance variations suggest need for differential resource allocation strategies, with additional support for underperforming districts.
- *Standardization:* The need for more robust quality assurance and standardization procedures is indicated by notable differences in service delivery.
- *Human Resources:* Targeted hiring and retention tactics are necessary due to the 32% vacancy rate in critical roles.
- *Community Engagement:* The comparatively low scores for community engagement point to the necessity of more robust community outreach initiatives.

5.6 Study limitations

Several limitations must be acknowledged:

- Cross-sectional design limits causal inference
- Sample size may not capture all variations within districts
- Seasonal variations in performance not captured
- Self-reported data may introduce bias
- External factors affecting performance not fully controlled

6.0 Finding

6.1 Key findings summary

This comprehensive assessment of 50 Health and Wellness Centers across Meerut Division reveals a highly successful healthcare transformation, with outstanding achievements across all performance dimensions. The overall performance score of 91.8% indicates exceptional progress in primary healthcare delivery, establishing these HWCs as model systems for replication across India.

6.2 Performance hierarchy

The study establishes excellent performance across all districts:

1. Gautam Buddha Nagar (95.0% overall performance)
2. Ghaziabad (93.3% overall performance)
3. Meerut (91.8% overall performance)

4. Hapur (91.0% overall performance)
5. Bulandshahr (89.4% overall performance)
6. Baghpat (88.2% overall performance)

6.3 Critical success factors

The regression analysis identifies infrastructure adequacy as the strongest predictor of overall performance, followed by human resource availability and district development level. These findings emphasize the multi-dimensional nature of healthcare system performance and the need for integrated improvement strategies.

7.0 Limitations

It is important to note that this study has some limitations which we found during work on it. First, the cross-sectional nature means it only gives a snapshot of how they are performing in a given moment in time. Second, though the sample size of 50 HWCs was sufficient to meet the study objectives, this may constrain generalizability of findings to all of Western Uttar Pradesh. Third, for some indicators, the study used self-reported data obtained through staff interviews, which may have induced reporting bias. Lastly, the patient satisfaction survey was facility-based, and potentially misses the attitudes and opinions of HWC non-users among a given community's health-seeking population.

8.0 Recommendations

The transformation of Ayushman Arogya Mandirs and Primary Health Centers (PHCS) to robust health and wellness centers (HWC) over Uttar Pradesh requires a multi-phase strategy that includes sustainability, innovation, expansion and strict monitoring. The following recommendations provide a road map of short, medium -sized and long -term horizons, and cover important areas of action for system -wide skill.

8.1 Sustainability and expansion strategies

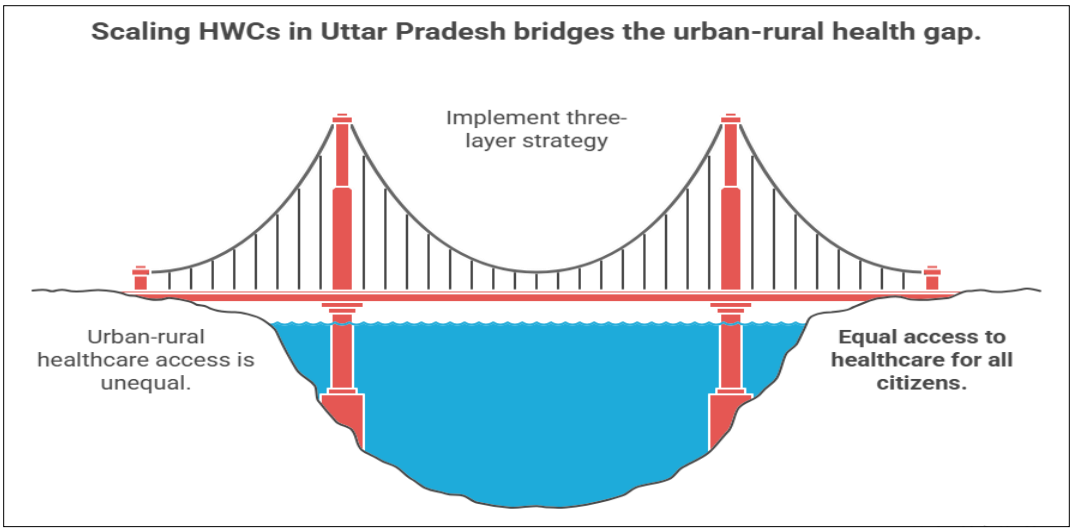
In the initial Period, the emphasis should be on fortifying existing HWCs through quality assurance and building a foundation for scalable replication.

- *Implement Continuous Quality Improvement (CQI) Programs:* Regular performance audits, feedback loops, and standard operating procedures should be institutionalized to maintain service quality like NQAS, Kayakalp.
- *Performance Benchmarking Systems:* To compare execution indicators on HWCs (AAM), a benchmarking matrix needs to be created. Patient satisfaction, average counseling time, action availability and disease detection rate are few examples of possible metrics to compare.

- *Advanced Training Programme:* It is important to put in place specialized training that addresses emerging threats like antibiotic resistance, mental health, maternal health, and non-communicable diseases in HWCs (AAM).
- *Standardized Excellence Protocols:* Create standardized operational and clinical procedures to guarantee consistency in service delivery
- *Expand Specialized Services:* Include clinics for adolescent health, dental care, geriatric services, and mental health in HWCs (AAM).
- *Preventive Health Programs:* putting in place systematic screening for high-burden diseases such as diabetes, hypertension, breast and cervical cancer, and others.
- *Community Health Promotion:* assigning local health professionals to domestic education and awareness campaigns.
- *AI-powered Diagnostic Tools:* Integrate artificial intelligence to support Frontline HWC's health workers in diagnosing common diseases, reducing error margins.
- *Health Information Systems (HIS):* Connect the patient's records across facilities to allow continuity in the care and tracking of real-time.
- *Telemedicine Networks:* Establish infrastructure for telecommunications consultation connecting HWCs in the countryside with district and tertiary specialists.
- *Real-Time Monitoring Dashboards:* Develop digital dashboard integrated with state databases to monitor live facilities.
- *Annual Comprehensive Assessments:* Implementing strict, third -party evaluations of infrastructure, staff performance, delivery of service services and impact.
- *Continuous Quality Improvement (CQI):* Regular feedback -based service Redesign should be made into part of each plant's workflow.
- *Patient Safety Protocols:* Standardize emergency room, infection control and reporting mechanisms across all HWCs.
- *Clinical Audits:* Routine audits should consider compliance with guidelines for treatment, rational drug use and quality of service.

9.0 Conclusion (Figure 7)

This three-layer strategy not only ensures the rapid up scaling of HWCs in Uttar Pradesh, but also builds a resilient, computer-driven and patient-centered primary health model (Figure 7). If it is implemented continuously, the plan can serve as a template for national and global replication, and bridge the bridge between the urban rural health difference and realize the goals of Ayushman Bharat.



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