

INTERNATIONAL RESEARCH JOURNAL OF MANAGEMENT SOCIOLOGY & HUMANITIES



ISSN 2277 – 9809 (online)

ISSN 2348 - 9359 (Print)

An Internationally Indexed Peer Reviewed & Refereed Journal

www.IRJMSH.com
www.isarasolutions.com

Published by iSaRa Solutions

Impact of Ayushman Arogya Mandirs on Preventive Healthcare Services in Delhi

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ABSTRACT

Ayushman Arogya Mandirs (AAMs), formerly Health and Wellness Centres, represent the Comprehensive Primary Health Care (CPHC) pillar of the Ayushman Bharat programme. Their policy design seeks to move primary care closer to communities and expand the focus from episodic curative treatment to preventive, promotive, screening, wellness, chronic disease and referral services. This paper examines the contribution of AAMs to preventive healthcare in Delhi through a patient-centred empirical assessment of accessibility, affordability, availability, quality of care and satisfaction. The paper is based on the supplied research proposal and its primary survey of 330 patients across 11 revenue districts of Delhi. The study follows a descriptive and analytical cross-sectional design using a structured questionnaire and 5-point Likert-scale measures. Descriptive statistics, Pearson correlation and multiple linear regression were used to examine the relationship between the four healthcare-service dimensions and patient satisfaction. The findings indicate generally favourable patient perceptions: overall satisfaction recorded a mean score of 3.853, while availability and accessibility recorded mean scores of 3.750 and 3.745 respectively; quality of care was comparatively lower at 3.667. The regression model explained 50.9% of the variance in satisfaction (adjusted $R^2 = 50.3\%$). Quality of care ($B = 0.517$, $p < .001$) and accessibility ($B = 0.419$, $p < .001$) were the strongest positive predictors. Affordability was not statistically significant in the multivariable model ($B = 0.073$, $p = .149$), while availability showed a small negative coefficient ($B = -0.121$, $p = .023$), suggesting operational volatility and possible suppression effects. The survey also estimated average financial relief of ₹245.90 per encounter, largely from consultation and medicine savings. The evidence suggests that AAMs are strengthening the urban primary-care safety net and creating conditions for preventive care, but their preventive potential will depend on continuity of medicines, quality of interpersonal care, screening follow-up and a transition from episodic visits to longitudinal health management. Because the study is cross-sectional and clinic-based, the findings indicate perceived contribution rather than causal impact.

Keywords: Ayushman Arogya Mandir; preventive healthcare; comprehensive primary healthcare; Delhi; patient satisfaction; accessibility; affordability; availability; quality of care; universal health coverage

Suggested citation focus: The paper evaluates the perceived contribution of Ayushman Arogya Mandirs to preventive primary healthcare in Delhi using patient-level evidence.

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1. INTRODUCTION

Healthcare is a central component of human development because health status affects quality of life, productivity, household economic security and social participation. In India, the challenge is not only the availability of advanced hospitals but also the ability of households to obtain timely, affordable and continuous care at the first point of contact. Primary healthcare is therefore fundamental to universal health coverage because it can provide prevention, early detection, basic treatment, counselling, referral and continuity of care before health problems become severe.

The Ayushman Bharat programme introduced a major policy emphasis on strengthening primary healthcare through Health and Wellness Centres, subsequently renamed Ayushman Arogya Mandirs. The official AAM framework describes these centres as facilities intended to provide universal and free Comprehensive Primary Health Care close to the community, covering preventive, promotive, curative, rehabilitative and palliative dimensions. The expanded package includes maternal and child health, family planning, communicable diseases, common outpatient care, screening and management of non-communicable diseases, oral health, eye and ENT care, elderly and palliative care, emergency care and basic mental-health services. Wellness, yoga, health awareness, teleconsultation and free essential medicines and diagnostics are also integral to the model.

Delhi provides an important urban setting for evaluating this approach. The city has high population density, socioeconomic diversity, mobility, migration and a large demand for both public and private healthcare. At the same time, tertiary public hospitals can experience substantial patient loads, while private primary care can impose direct costs on households. Neighbourhood-level AAMs are intended to reduce these barriers by bringing first-contact care nearer to residents and by lowering the direct financial cost of consultations, medicines and basic diagnostics.

The present study uses the patient as the unit of analysis. It focuses on four service dimensions—accessibility, availability, affordability and quality of care—and treats patient satisfaction as the principal outcome. This framework is relevant to preventive healthcare because prevention depends not simply on the existence of a facility but on whether residents can reach it, trust the provider, obtain medicines and diagnostics, understand health advice and return for follow-up. A service that is geographically accessible but poorly stocked or weak in communication may not sustain preventive behaviour.

The paper, therefore, asks whether users perceive the AAM model as improving the conditions required for preventive primary healthcare in Delhi. The term “impact” is used in the paper in the sense of observed or perceived contribution from the cross-sectional patient evidence; the design does not establish a counterfactual causal effect.

2. POLICY AND CONCEPTUAL BACKGROUND

Ayushman Arogya Mandirs form one component of the wider Ayushman Bharat architecture. The original policy vision sought to strengthen the primary-care base while PM-JAY addressed financial protection for secondary and tertiary hospitalisation. The AAM component is distinct because it is designed to deliver comprehensive primary care to the population rather than only insurance-funded hospital treatment.

The preventive orientation of AAMs is particularly important for India's growing non-communicable disease burden. Hypertension, diabetes and common cancers require population-level screening, early identification, counselling, treatment adherence and follow-up. AAMs also create a platform for maternal and child health, immunisation, reproductive health, communicable disease control, health education and wellness activities. In policy terms, the model therefore shifts primary care from a narrow, disease-specific approach toward a broader population-health approach.

Three mechanisms connect AAMs with preventive healthcare. First is proximity. When a primary-care facility is located within or close to a neighbourhood, travel time and travel expenditure are reduced and care becomes easier to seek before illness becomes severe. Second is financial protection. Free consultations, essential medicines and basic diagnostics reduce the immediate price of care and can make screening and follow-up more feasible for low-income households. Third is continuity. A local facility can create repeated contact between households and the health system, allowing screening results, chronic conditions, counselling and referrals to be followed over time.

The conceptual framework of the supplied study treats accessibility, availability, affordability and quality of care as independent variables and patient satisfaction as the dependent variable. Accessibility includes distance, convenience, waiting time and ease of consultation. Availability includes doctors, medicines, staff and basic facilities. Affordability includes free consultation, medicines, diagnostics and reduced out-of-pocket expenditure. Quality of care includes treatment effectiveness, communication, staff support, privacy, cleanliness and the overall patient experience.

In a preventive-healthcare interpretation, satisfaction is not an end in itself. It is a proxy for whether the service is acceptable enough to encourage future use. Positive experiences can support trust, repeated attendance and adherence, whereas poor experiences can discourage people from returning even when services are nominally free. The study therefore connects service quality with the behavioural possibility of moving from episodic treatment toward preventive and longitudinal care.

The policy logic is consistent with the wider primary-healthcare literature. Community perceptions of HWCs have shown that users value the wider range of curative and NCD services, free medicines and tests, shorter travel distances and supportive health workers. However, gaps in mental health, dental care, injuries and referral coordination have also been reported. These findings suggest that preventive impact is multidimensional: service availability must be combined with functionality, continuity and trust.

3. REVIEW OF LITERATURE

The literature on AAMs and their predecessor Health and Wellness Centres has developed rapidly since the launch of Ayushman Bharat in 2018. Early conceptual work emphasised the potential of HWCs to strengthen comprehensive primary healthcare and Universal Health Coverage by expanding the range of services delivered at community level. Ved et al. (2020) described the HWC model as a major opportunity to move Indian primary care from selective programmes

toward comprehensive services, while also noting that implementation would depend on human resources, infrastructure, medicines, referral systems and community participation.

Community-level evidence provides support for the relevance of the model. A qualitative assessment by Saprii and colleagues found that community members valued the wider curative package and specifically recognised hypertension and diabetes services as important additions. Participants generally viewed essential medicines and point-of-care tests positively and appreciated supportive health-worker behaviour. At the same time, unmet expectations remained for injuries, dental care and mental health, and referral coordination remained a weakness. The evidence implies that AAMs can attract people when services are relevant and functional, but the preventive promise depends on the strength of the broader care pathway.

Patient satisfaction has also been measured in specific settings. Sivakumar et al. (2024), studying 808 beneficiaries in Cuddalore district, found that satisfaction was higher among rural beneficiaries than urban beneficiaries. Provider attitude, doctor interest, waiting time, pharmacy experience, health improvement and the absence of user charges were important aspects of satisfaction. This study is particularly relevant to the Delhi analysis because it demonstrates that satisfaction is influenced by both clinical and operational features of primary care.

Implementation studies show that physical and logistical capacity varies. A Punjab readiness study found gaps in diabetes screening related to lack of glucometers or testing supplies and identified weaknesses in referral tracking. A 2025 assessment in Andhra Pradesh reported strong diagnostic and teleconsultation performance in the facilities studied but also found infrastructure gaps, including limited uninterrupted electricity and incomplete emergency-service provision. A Kashmir study of 125 AAM subcentres similarly highlighted the importance of training, logistics and drug availability for NCD screening and management.

Recent reviews reinforce the same pattern. Gulati et al. (2024) described AAMs as an important component of India's movement toward Universal Health Coverage, while noting that staffing, supply chains and infrastructure remain important determinants of performance. Bhatia, Dwivedi and Aggarwal (2025) synthesised evidence on HWCs using an ADO framework and highlighted the importance of location, medicines, waiting time, trust and facility readiness. Vatse, Dixit and Pandey (2025) found variation in NCD readiness across states, with recurrent concerns around equipment, medicine supplies, linkages and community awareness.

Evidence from Delhi's Mohalla Clinics is also relevant as a contextual comparator, although the two programmes are institutionally different. Evidence on Mohalla Clinics has shown high levels of satisfaction, short travel distances, free medicines and diagnostics, and willingness to return. This literature supports the general proposition that neighbourhood-based primary care can improve access and affordability in urban communities, while also showing the need for better preventive and promotive integration.

Overall, the literature identifies a clear research gap. Many studies measure infrastructure, service availability, utilisation or programme achievements, while fewer integrate patient satisfaction with accessibility, affordability, availability and quality of care in an urban AAM setting. The present

Delhi study addresses this gap through a patient-centred empirical design across all eleven revenue districts.

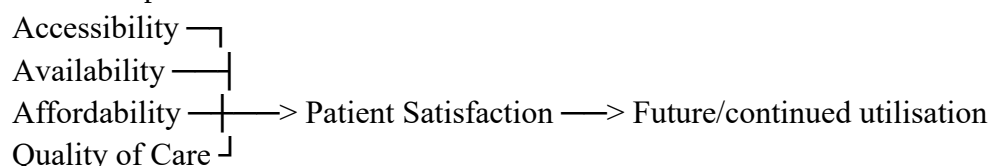
4. RESEARCH GAP, OBJECTIVES AND HYPOTHESES

Despite substantial expansion of AAMs, evidence from Delhi remains comparatively limited when the research question is framed around the patient experience of comprehensive primary healthcare. National and state-level studies provide information on service packages, facility readiness, screening, teleconsultation and medicine availability, but patient-centred analysis is less common. This matters because preventive healthcare depends on repeated interaction with the health system and therefore on trust, convenience, communication and continuity.

The study has six principal objectives:

1. To assess the satisfaction level of patients using AAM services in Delhi.
2. To examine how accessibility, affordability, availability and quality of care influence patient satisfaction.
3. To understand patient perceptions and trust in AAM healthcare facilities.
4. To estimate the cost-effectiveness/financial relief associated with free or low-cost services.
5. To assess the relationship between healthcare quality and future utilisation of AAM services.
6. To evaluate the perceived contribution of AAMs to strengthening urban primary healthcare and preventive care in Delhi.

The conceptual model is:



For analytical purposes, the following hypotheses were framed:

- H1: Accessibility is positively associated with patient satisfaction.
- H2: Availability is positively associated with patient satisfaction.
- H3: Affordability is positively associated with patient satisfaction.
- H4: Quality of care is positively associated with patient satisfaction.
- H5: The combined service dimensions significantly explain variation in patient satisfaction.

Because the design is cross-sectional, the hypotheses should be interpreted as associational rather than causal. The title uses the term “impact,” but the empirical analysis measures perceived contribution and statistical association rather than a before-after treatment effect. This distinction is important for responsible interpretation.

5. RESEARCH METHODOLOGY

Research design: The study is descriptive and analytical, with a cross-sectional quantitative design. The descriptive component profiles respondents, healthcare utilisation and perceptions; the analytical component examines relationships among accessibility, availability, affordability, quality of care and satisfaction.

Study area and population: The study was conducted among patients visiting Ayushman Arogya Mandirs in Delhi. The research covered the eleven revenue districts of Delhi and focused on users seeking consultation, treatment, medicines and other health services.

Sample: The final sample consisted of 330 unique respondents. The supplied proposal indicates that the sample was distributed across eleven districts and that the field design used mixed sampling procedures. The empirical section therefore provides an urban, multi-district patient perspective rather than a facility-level census.

Sampling: Convenience sampling was used to approach willing patients during clinic hours, while variation across days and time periods was introduced to reduce temporal selection bias. The proposal also describes the use of statistical sampling to ensure a sufficient number of observations for correlation and regression analysis. The combined approach increased feasibility and diversity but does not provide the same representativeness as a fully probability-based district-cluster sample.

Instrument: A structured, self-designed questionnaire was developed from the study objectives and reviewed and refined through a pilot exercise. It contained demographic questions, healthcare utilisation questions, availability and cost questions, trust/future-use questions and satisfaction statements. Most satisfaction measures used a 5-point Likert scale.

Variables: Patient satisfaction was the dependent variable. The independent constructs were accessibility, availability, affordability and quality of care. Accessibility covered distance, convenience, waiting time and ease of consultation. Availability covered doctors, medicines, staff and facilities. Affordability captured free or low-cost care and savings in consultation, medicines, diagnostics and travel. Quality of care covered treatment, communication, staff behaviour, privacy, cleanliness and the patient experience.

Data collection and ethics: Respondents were informed about the purpose of the research; participation was voluntary and responses were treated as anonymous and confidential. Data were collected physically at AAM facilities during working hours. The proposal records a pilot test and subsequent refinement of the questionnaire.

Data analysis: Data were cleaned, coded and organised in Microsoft Excel. Frequency and percentage analyses were used for descriptive profiling. Mean, median and dispersion statistics were used for the constructs. Pearson product-moment correlation was used to examine bivariate relationships, followed by multiple linear regression to estimate the simultaneous predictive contribution of the four service dimensions. The proposal also reports diagnostic checks for multicollinearity, homoscedasticity and residual normality.

Analytical caution: The study is not a randomised or longitudinal impact evaluation. It cannot isolate the effect of AAMs against a counterfactual group, and clinic-based respondents may systematically differ from residents who do not use AAMs. The results therefore describe perceived service performance and statistical associations.

6. EMPIRICAL PROFILE OF RESPONDENTS AND SERVICE USE

The empirical dataset provides a useful picture of who is using AAMs in Delhi. Women constituted 225 of the 330 respondents (68.18%), while men constituted 105 (31.82%). The predominance of

women suggests that neighbourhood primary-care facilities have an important role in household health management, although the data alone cannot determine whether this reflects greater need, caregiving responsibilities, service preferences or lower utilisation by men.

Age patterns indicate that AAM use is not restricted to elderly populations. Respondents aged 18–30 years represented 34.24% of the sample, while those aged 31–45 years represented 28.48%. The 46–60 year group represented 24.85%. Together these groups indicate that more than four-fifths of encounters involved adults in economically active age ranges. This finding is relevant to preventive healthcare because health promotion and early NCD screening among working-age adults can reduce future morbidity and productivity losses.

Occupational characteristics also show socioeconomic vulnerability. Housewives accounted for 136 respondents (41.21%), private-sector workers for 78 (23.64%), unemployed respondents for 52 (15.76%), daily-wage workers for 23 (6.97%) and government employees for 20. The concentration of users among people without formal employment-linked health benefits strengthens the relevance of free neighbourhood care as a social-protection mechanism.

The income profile was similarly concentrated at the lower end. The largest group reported monthly household income of ₹0–1,000 (113 respondents; 34.24%), followed by ₹1,001–5,000 (84; 25.45%) and ₹5,001–10,000 (76; 23.03%). Only 57 respondents (17.27%) reported more than ₹10,000 per month. Although these income categories should be interpreted carefully because they are self-reported and unusually low for urban household-income measurement, the sample clearly contains a substantial proportion of financially vulnerable users.

The utilisation history suggests that AAMs may be changing the pathway through which residents obtain primary care. Before using the neighbourhood service, 53.03% of respondents had visited public tertiary facilities and 29.70% had used private clinics. The study reports that 62.73% of respondents were repeat users of the AAM network. This pattern indicates institutional acceptance and the possibility of continuity, while also suggesting that neighbourhood primary care may divert some demand from overcrowded tertiary facilities.

However, visit-frequency patterns indicate that utilisation is still partly episodic. Many respondents reported one or a few visits per month. From a preventive-care perspective, this is both a strength and an opportunity: the network already provides a point of contact, but the system needs mechanisms to convert episodic contacts into systematic screening, follow-up, counselling and chronic-disease management.

7. FINANCIAL PROTECTION AND ACCESSIBILITY

One of the clearest contributions identified by the study is financial relief. The average estimated saving per encounter was ₹245.90. Consultation and medicine savings accounted for the largest component, with an average of ₹181.80 per visit, representing 73.93% of total estimated relief. Diagnostic-laboratory savings averaged ₹53.00 per visit (21.55%), while travel savings averaged ₹21.10 (8.52%).

These figures are important because preventive healthcare often involves repeated low-cost contacts rather than one major hospital episode. A household that does not have to pay for basic consultation, essential medicines or screening tests faces a lower financial threshold for seeking

care. This can facilitate early presentation for hypertension, diabetes, communicable disease symptoms, maternal care, health counselling and other services.

The financial findings should not, however, be interpreted as proof that AAMs alone prevent catastrophic expenditure at the population level. The study estimates savings from the patient's reported encounter rather than measuring total household health expenditure longitudinally. Nevertheless, the results provide evidence that AAM visits can generate immediate financial value for users.

Accessibility is the second important pathway. A neighbourhood facility reduces the physical and time costs associated with reaching distant hospitals. This is particularly relevant for women, older persons, low-income households and workers who may face opportunity costs when seeking care. The empirical mean accessibility score was 3.745 on the study's 5-point scale, indicating a generally favourable perception.

The relationship between accessibility and satisfaction was also statistically important. In the multiple regression model, accessibility had a positive unstandardised coefficient of $B = 0.419$ with $t = 7.239$ and $p < .001$. This means that, holding the other service dimensions constant in the model, higher perceived accessibility was associated with higher satisfaction.

Accessibility also has a preventive dimension. A person who can reach a primary-care facility quickly is more likely to use the facility for early symptoms, routine screening or follow-up rather than waiting until illness becomes severe. Geographic proximity can therefore support earlier intervention and reduce avoidable pressure on tertiary services.

At the same time, accessibility is not only about distance. Waiting time, opening hours, physical accessibility for persons with disabilities, transport connections, clarity of location and the ease of obtaining consultation all matter. The proposal recommends using GIS-based population and settlement mapping to optimise future facility placement. Such planning would strengthen the spatial logic of AAMs in Delhi, where neighbourhood density and mobility patterns vary substantially.

8. QUALITY, AVAILABILITY AND PATIENT SATISFACTION

The descriptive results show that overall patient satisfaction was favourable, with a mean score of 3.853. Availability scored 3.750 and accessibility 3.745, while quality of care recorded the lowest construct mean at 3.667. Importantly, the lower quality score remained above the midpoint, suggesting that the principal issue is not complete dissatisfaction but a relative weakness compared with the other service dimensions.

At the individual-item level, clinical explanation was rated highly, with a mean of approximately 3.87, and time spent with doctors was approximately 3.83. These results indicate that direct clinician-patient interaction is one of the strengths of the service. Conversely, the lowest item concerned progress toward personal long-term health goals, at approximately 3.61. This finding is especially significant for prevention because long-term health outcomes require repeated follow-up rather than one-off treatment.

The results therefore suggest a transition point in the AAM model. The network appears effective as a first-contact and low-cost service, but the next stage of development should strengthen

continuity and longitudinal management. For example, a person screened for hypertension should not simply receive a result; the system should support confirmation, treatment initiation where appropriate, medication continuity, lifestyle counselling, follow-up measurement and referral when required.

Availability presents a more complex picture. At the bivariate level, the four independent variables were positively associated with satisfaction. However, in the simultaneous regression model, availability had a small negative coefficient ($B = -0.121$, $t = -2.291$, $p = .023$). The supplied analysis interprets this as a possible suppression or operational-volatility effect rather than a straightforward statement that availability is harmful. Stock-outs, changes in doctor availability and differences in service experience can produce inconsistent responses.

This finding has direct policy relevance. Free services create value only when the promised service is actually available at the time of need. A patient who travels to a nearby AAM but cannot obtain a required medicine or diagnostic test may experience greater disappointment than a patient who did not expect the service in the first place. Thus, supply-chain reliability is a preventive-healthcare issue, not merely an administrative concern.

Quality of care was the strongest positive predictor in the regression model. The coefficient was $B = 0.517$, $t = 8.202$, $p < .001$. The model explained 50.9% of the variance in patient satisfaction, with adjusted R^2 of 50.3%. The closeness of R^2 and adjusted R^2 suggests that the four-variable model provides a substantial explanatory contribution without a large penalty for model complexity.

Affordability was descriptively strong but not statistically significant in the multivariable model ($B = 0.073$, $p = .149$). This can be described as an affordability paradox: when free or low-cost care is already a defining feature of the system, affordability may cease to differentiate satisfaction as strongly as quality and accessibility. In practical terms, removing the financial barrier is necessary but may not be sufficient to create a high-quality preventive-care experience.

9. IMPACT ON PREVENTIVE HEALTHCARE: INTEGRATED DISCUSSION

The evidence indicates that AAMs in Delhi are contributing to the foundations of preventive healthcare through four linked pathways: proximity, financial protection, expanded service availability and patient-provider interaction.

First, proximity improves the opportunity for prevention. Preventive care is sensitive to convenience because many people postpone screening or health advice when accessing a facility requires substantial time or expense. The positive regression coefficient for accessibility indicates that the neighbourhood model is not simply a logistical innovation; access is strongly related to the patient experience.

Second, financial protection can reduce the threshold for early care. The estimated ₹245.90 average relief per encounter is particularly relevant to the low-income profile of the sample. Free consultation, medicines and diagnostics can make repeated contacts more feasible. The preventive effect is strongest when savings are combined with proactive outreach, screening and follow-up.

Third, the expanded AAM service package creates a platform for prevention. Official AAM guidance includes NCD screening and management, maternal and child health, immunisation,

health awareness, yoga and wellness, mental health, elderly care and other services. This breadth is a major conceptual shift from a narrow curative clinic. However, the existence of a package does not guarantee full implementation at every facility. Evidence from other states shows that infrastructure, supplies, trained personnel and referral coordination can constrain actual delivery. Fourth, quality of communication is central to preventive behaviour. The study's strong regression coefficient for quality of care shows that patients' experience of clinical interaction matters. Clear explanations can improve understanding of risk factors, medicines, lifestyle modification and follow-up. Respect, privacy and confidentiality can also be particularly important for sensitive conditions.

The data also reveal a major strategic opportunity: repeat use. With 62.73% of respondents reported as repeat users, AAMs have an established patient relationship on which preventive programmes can be built. Instead of treating each visit as an isolated transaction, AAMs could use repeat contacts to create patient-level prevention pathways: NCD screening registers, risk stratification, follow-up reminders, medication adherence checks, lifestyle counselling and referral tracking.

The main limitation to preventive impact is episodic utilisation. The study suggests that many patients continue to visit primarily when they have an acute problem. Prevention requires a more proactive model. Health workers can use community platforms, wellness sessions and digital reminders to identify people who are not currently seeking care but are at risk.

The findings are consistent with national evidence that AAMs have expanded primary-care services and wellness activities. The official AAM framework identifies screening, prevention, health promotion, teleconsultation, yoga and community health awareness as core elements. The challenge for Delhi is therefore less about establishing the concept and more about achieving consistent, high-quality implementation across neighbourhoods.

The study's results support the interpretation that AAMs are an important urban primary-care safety net. They have reduced some geographical and financial barriers for the surveyed users and have created an institutional platform capable of supporting preventive healthcare. However, the evidence does not establish a causal reduction in disease incidence, hospitalisation or mortality. Such outcomes require longitudinal population-level evaluation.

10. DISCUSSION IN RELATION TO EARLIER STUDIES

The Delhi findings broadly agree with the emerging national literature while adding an important patient-centred perspective. Ved et al. (2020) argued that HWCs could strengthen primary healthcare by expanding the scope of services and moving the health system closer to communities. The current study provides empirical support for the access mechanism: accessibility is both positively perceived and a strong predictor of satisfaction.

The qualitative community assessment reported by Saprii et al. similarly found that people valued the expanded service package, especially NCD services, essential medicines and supportive health workers. The Delhi results extend this insight by quantifying the relationship between service dimensions and satisfaction and by estimating the financial relief experienced by patients.

Sivakumar et al. (2024) found substantial satisfaction among HWC users but also differences between rural and urban settings. Their identification of waiting time, pharmacy experience, health improvement and absence of user charges as important factors is compatible with the Delhi finding that service quality and accessibility matter strongly. The lower quality-of-care mean in Delhi suggests that interpersonal and continuity dimensions remain areas for improvement even when the basic service is positively received.

The Punjab readiness study and the 2025 Andhra Pradesh implementation assessment both underline the importance of operational capacity. Their findings regarding diagnostic readiness, electricity, infrastructure and referral systems reinforce the interpretation of the Delhi availability coefficient. Availability should not be treated as a static indicator; it is a reliability problem. The patient needs the right service, medicine, diagnostic or provider at the right time.

The AAM literature also supports the importance of community participation and wellness. Recent national reviews report substantial expansion in wellness sessions and the institutionalisation of Jan Arogya Samitis. This creates a pathway for preventive health promotion that is broader than clinical consultations.

The Delhi context is additionally illuminated by Mohalla Clinic research. Mohalla Clinics have demonstrated the value of neighbourhood access, free services and continuity of basic primary care. However, AAMs have a broader policy mandate and are linked to the Ayushman Bharat architecture. Therefore, lessons from Mohalla Clinics should be treated as contextual evidence rather than as direct evidence of AAM performance.

A key contribution of the present paper is the identification of the “affordability paradox.” The descriptive importance of affordability is high because free care creates immediate economic value, yet affordability is not a significant independent predictor after the other service dimensions are considered. This is consistent with a service-quality perspective: once cost barriers are removed, users may differentiate providers based more strongly on access, communication, trust and reliability.

Another contribution is the preventive interpretation of the quality coefficient. A strong quality-of-care relationship suggests that prevention cannot be reduced to screening equipment or service lists. A screening result must be communicated clearly; treatment advice must be understood; follow-up must be encouraged; and patients must trust the health worker enough to return. In this sense, quality is a behavioural infrastructure for prevention.

Overall, the evidence supports a three-stage interpretation of AAM development in Delhi: Stage 1—make care geographically and financially accessible; Stage 2—ensure reliable and respectful delivery; Stage 3—convert repeated encounters into longitudinal prevention and chronic-care management. Delhi appears to have made substantial progress through the first stage and parts of the second, while the third remains the major strategic opportunity.

11. POLICY IMPLICATIONS AND RECOMMENDATIONS

1. Strengthen patient-centred communication. The strongest predictor of satisfaction was quality of care. AAM staff should receive periodic training in respectful communication, shared decision-making, privacy, explanation of medicines and preventive counselling. Simple indicators such as

consultation time, explanation of diagnosis and patient understanding can be incorporated into routine quality monitoring.

2. Build reliable medicine and diagnostic supply chains. The negative availability coefficient highlights operational volatility. AAMs should use demand forecasting, minimum and maximum stock levels, real-time inventory dashboards and early-warning systems for essential medicines and consumables. Stock-out monitoring should be treated as a quality indicator because it can interrupt both treatment and prevention.

3. Convert screening into follow-up. NCD screening has limited preventive value if positive cases are not confirmed, counselled and monitored. AAMs should maintain population-based registers for hypertension, diabetes and other priority conditions, with defined follow-up intervals and referral tracking.

4. Use GIS for urban facility planning. Delhi's population density and settlement structure vary significantly. Future AAM locations and service catchments should be planned using GIS-based mapping of population density, vulnerable communities, transport accessibility and existing facility capacity. The objective should be to minimise travel friction while avoiding unnecessary duplication.

5. Strengthen wellness and health-promotion activities. Yoga, lifestyle counselling, tobacco and alcohol awareness, nutrition education and health observance days should be linked to measurable community outcomes. Wellness sessions can be used to recruit residents for NCD screening and follow-up.

6. Improve male and working-age engagement. Women constituted 68.18% of respondents and working-age adults formed the majority of users. AAMs should develop outreach approaches that reach men and workers who may find standard clinic hours inconvenient. Workplace-linked awareness, flexible outreach and digital reminders can improve preventive participation.

7. Institutionalise community participation. Jan Arogya Samitis can provide a structured mechanism for identifying local barriers, reviewing complaints and monitoring service quality. Community feedback should be disaggregated by gender, age, disability and socioeconomic status to identify groups that remain underserved.

8. Strengthen referral coordination. Preventive primary care is only as effective as its referral pathway. AAMs should use digital referral records and feedback loops so that patients referred to higher facilities can be tracked until the required service is completed.

9. Develop longitudinal performance indicators. Satisfaction should be complemented by indicators such as NCD screening coverage, treatment initiation, follow-up completion, medicine stock-out days, referral completion, immunisation coverage, wellness participation and avoidable hospital referrals. These indicators would better capture preventive impact than satisfaction alone.

10. Evaluate outcomes longitudinally. Future studies should follow AAM users over time and compare them with comparable residents using other primary-care pathways. This would allow stronger conclusions about causal effects on preventive behaviour, health expenditure, disease control and hospital utilisation.

12. LIMITATIONS, FUTURE RESEARCH AND CONCLUSION

The study has several limitations. First, the cross-sectional design captures perceptions at one point in time and cannot establish causality. The word “impact” in the title should therefore be understood as perceived or observed contribution. Second, the study is clinic-based and uses mixed sampling with a substantial convenience component; residents who do not visit AAMs are not represented. This creates potential catchment and selection bias. Third, the study relies on patient self-report for satisfaction and estimated savings. Fourth, doctors, administrators and policymakers were not included, so the analysis cannot triangulate patient perceptions with provider or system-level perspectives. Fifth, the study does not directly measure long-term health outcomes such as disease incidence, blood-pressure control, diabetes control, hospitalisation or mortality.

Future research should address these limitations through longitudinal and quasi-experimental designs. A district-level panel study could compare AAM users before and after exposure to strengthened preventive services. A matched comparison between AAM catchments and areas served by alternative primary-care arrangements could provide stronger causal evidence. Mixed-method research should include patients, CHOs, doctors, pharmacists, ASHAs, administrators and community representatives. GIS analysis could examine whether facility location predicts utilisation after controlling for population density and socioeconomic conditions.

The study nevertheless provides a substantial patient-centred evidence base for Delhi. The findings indicate that AAMs are functioning as an important neighbourhood primary-care safety net. The overall satisfaction mean of 3.853, together with favourable accessibility and availability scores, suggests positive acceptance among users. The estimated ₹245.90 average financial relief demonstrates immediate economic value, especially for low-income households. The 62.73% repeat-use rate indicates that the network has developed a meaningful level of institutional loyalty. Most importantly, the regression results identify quality of care and accessibility as the strongest positive predictors of satisfaction. This finding carries a major preventive-healthcare lesson: free care must be accompanied by good care, and good care must be easy to reach. Affordability removes a barrier, but quality, trust and accessibility determine whether the health system becomes attractive enough to support repeated use. Availability must also become more reliable so that the benefits of the model are not weakened by stock-outs or inconsistent staffing.

The strategic opportunity for AAMs in Delhi is to move from episodic illness management toward proactive population health management. The network already has the physical proximity, financial model and service architecture to support prevention. The next phase should integrate NCD screening, wellness, counselling, medicine continuity, referral tracking, digital reminders and community participation into a single longitudinal pathway.

In conclusion, the evidence supports the proposition that Ayushman Arogya Mandirs are making a positive contribution to the conditions required for preventive primary healthcare in Delhi. Their strongest achievements are improved neighbourhood access, reduced direct financial burden and the creation of a trusted point of contact with the health system. Their main challenges are service-quality consistency, supply reliability and the conversion of episodic visits into continuous preventive care. Strengthening these dimensions can help AAMs progress from a safety-net model

to a durable urban comprehensive primary-healthcare system aligned with Universal Health Coverage and Sustainable Development Goal 3.

13. AUTHOR'S NOTE ON EVIDENCE AND INTERPRETATION

This research paper has been developed from the supplied research proposal/report titled around Ayushman Arogya Mandirs in Delhi. The empirical values reported in the Results section—sample size, demographic percentages, financial savings, construct means and regression coefficients—are taken from the supplied research material rather than newly generated data. The paper does not invent additional respondent-level observations.

For publication, the researcher should retain the original questionnaire, anonymised dataset, sampling records, consent documentation and statistical output so that all reported estimates can be independently audited. The exact fieldwork dates, ethics/permission details, district-by-district allocation and final questionnaire version should be inserted if the target journal requires them.

The paper also deliberately distinguishes “preventive-healthcare contribution” from a causal “impact.” A cross-sectional satisfaction survey can demonstrate perceived usefulness, association and service experience, but it cannot prove that AAMs caused a reduction in disease incidence or hospitalisation. Strong causal claims should therefore be reserved for longitudinal, quasi-experimental or experimental evidence.

The central policy message is nevertheless clear: Delhi's AAM network has a strong platform for preventive healthcare because it combines neighbourhood access, free/low-cost services, expanded primary-care packages and repeated patient contact. The highest returns are likely to come from improving quality of interaction, reliability of medicines and diagnostics, screening follow-up, referral coordination and proactive community engagement. These priorities can transform AAMs from convenient first-contact clinics into integrated urban preventive-healthcare hubs.

14. REFERENCES

1. Bhatia, S., Dwivedi, V., & Aggarwal, A. (2025). Establishment of Ayushman Bharat Health and Wellness Centers in India: A systematic review using the Antecedents, Decisions and Outcomes (ADO) framework. *Asia-Pacific Journal of Health Management*, 20(3), Article i5015.
2. Bukhari, F., Tariq, R., Fazili, A., & Nazir, D. (2025). Assessment of implementation of NPNCD in Ayushman Arogya Mandir subcenters of Kashmir: A cross-sectional study. *International Journal of Life Sciences, Biotechnology and Pharma Research*, 14(4), 479–484.
3. Gulati, S., Mote, B. N., Bhatt, J., Bandyopadhyay, S., Srinivasaiyer, A. K., Singh, G. B., & Kotwal, A. (2024). Ayushman Arogya Mandir and India's progress toward Universal Health Coverage: A narrative review. *Community Processes—Comprehensive Primary Healthcare*, National Health Systems Resource Centre.
4. Ministry of Health and Family Welfare, Government of India. (2025). Annual Report 2024–25. Government of India.
5. Ministry of Health and Family Welfare, Government of India. (2026). Ayushman Arogya Mandir: Comprehensive Primary Health Care—official portal, service packages and operational information.

6. Saprii, L., et al. (2024). How useful do communities find the health and wellness centres? A qualitative assessment of India's new policy for primary health care. *BMC Primary Care*, 25.
7. Shenoy, P. S., Gopal, K. M., Madnani, P., Singh, H., & Kannan, P. (2025). Implementation assessment of Ayushman Arogya Mandirs in Andhra Pradesh, India: A mixed-methods study of facilitators and barriers. *Asian Journal of Education and Social Studies*, 51(9), 306–317. <https://doi.org/10.9734/ajess/2025/v51i92366>
8. Sivakumar, A., Boratne, A. V., Chellamuthu, L., & Venkataraman, S. (2024). Utilization patterns and satisfaction levels among beneficiaries attending Ayushman Bharat health and wellness centres in a coastal district of Tamil Nadu, India. *International Journal of Community Medicine and Public Health*, 11(10), 4023–4030. <https://doi.org/10.18203/2394-6040.ijcmph20242888>
9. Vats, H., Dixit, A., & Pandey, R. R. (2025). Readiness of NCD services at Ayushman Arogya Mandirs (AAMs) in India: A review of recent studies. *International Journal of Health Systems and Implementation Research*, 9(1), 8–12.
10. Ved, R., Sethi, R., et al. (2020). Health & Wellness Centers to Strengthen Primary Health Care in India: Concept, Progress and Ways Forward. *Indian Journal of Community Medicine / related indexed literature*.
11. World Health Organization. (2008). Primary health care: Now more than ever. World Health Report 2008. World Health Organization.
12. World Health Organization & UNICEF. (2018). A vision for primary health care in the 21st century: Towards universal health coverage and the Sustainable Development Goals. World Health Organization.
13. Government of India, Ministry of Health and Family Welfare. (2018). Ayushman Bharat: Comprehensive Primary Health Care through Health and Wellness Centres—Operational Guidelines.
14. Government of India, Ministry of Health and Family Welfare. (2024). Ayushman Bharat Health and Wellness Centres / Ayushman Arogya Mandir: service packages, wellness and community participation guidance.
15. Government of India, Ministry of Health and Family Welfare. (2024–25). National Health Mission and Comprehensive Primary Health Care programme reports.
16. Magotra, et al. (2024). Utilization of comprehensive healthcare packages at Ayushman Arogya Mandirs in Jammu: community-level evidence on awareness and service use.
17. Bisht, N. S. (2025). Baseline assessment of Ayushman Arogya Mandirs in Almora district, Uttarakhand: Infrastructure, service delivery, and community engagement. *International Journal of Scientific Research in Engineering and Management*, 9(11).
18. Sharma, Subbiah, & Pancholi. (2024). Review of Ayushman Bharat, Health and Wellness Centres and PM-JAY: policy evolution and implementation evidence.
19. Agarwal, et al. (2021). Access, utilization, perceived quality, and satisfaction with health services at Mohalla (Community) Clinics of Delhi, India. *Journal of Family Medicine and Primary Care*.

20. Patient Perceptions and Expectations From Primary Health-care Providers in India. (2015). Indian Journal of Community Medicine / primary-care patient-experience literature.

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