Primary Healthcare Infrastructure and Infant Mortality in India: An Ecological Analysis of States, 2021-22

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Abstract

Background

India has a large public primary healthcare system, however there is still large variation in infant mortality rates across different states. This study aims to determine whether infrastructure and staffing levels are positively correlated.

Methods

A dataset was created using data from states/Union Territories (34). Five different indicators were created from the Rural Health Statistics 2021-22 (Ministry of Health and Family Welfare, 31 st March 2022). These indicators include the proportion of Sub-Centres, Primary Health Centres (PHCs) and Community Health Centres (CHCs) with government buildings, plus the proportion of required ANM and PHC Doctors. Principal component analysis (PCA) was carried out to determine if one index could be created. As this was not possible, two separate domain scores were created, infrastructure and staffing. These were then analyzed to determine the relationship between these variables and the 2023 infant mortality rate (Sample Registration System, Economic Survey 2025-26, 15 major states). Spearman correlations were used to determine the relationship between variables, alongside bootstrap confidence intervals and leave-one-out analysis.

Results

The proportion of Centres with government buildings varied greatly depending on the centre type. Sub-Centres had the lowest proportion of Centres with government buildings (72.2%), whereas CHCs had the highest (98.3%). Bihar had the lowest infrastructure score (57.9). Himachal Pradesh had the lowest staffing score (69.7). There was no correlation between the two domains (ρ= -0.02). The diagnostic tests showed that it was not appropriate to create a single index (KMO= 0.50, Cronbach's alpha= 0.41). Infrastructure readiness showed no correlation with infant mortality (ρ = 0.14, p = 0.62). Staffing readiness showed a negative correlation with infant mortality (ρ=-0.47;

95% CI bootstrap -0.82 to 0.02, p = 0.077). However, with only 15 states this suggests a relationship.

Conclusions

Whether or not a centre has government buildings does not really indicate anything about child survival. Staffing appears to be a more relevant indicator. This analysis was exploratory as it was at an ecological level. The sensible next step would be to analyses the data at a district level and link it to the NFHS-5.

Keywords

Primary healthcare, Health infrastructure, Infant mortality, Staffing, Rural Health Statistics, India, Ecological analysis

1. Introduction

India has one of the largest public primary healthcare systems in the world. At the end of March 2022 there were 157,935 rural Sub-Centres, 24,935 Primary Health Centres (PHCs) and 5,480 Community Health Centres (CHCs) in operation (Ministry of Health and Family Welfare [MoHFW], 2022b). Each of the facilities should be equipped with the right buildings, minimum staffing, resources, drugs and defined services according to the Indian Public Health Standards (IPHS) (MoHFW, 2022a). Having the correct building will not help much if there is no one to run the facility.

Primary healthcare facilities in India are often found to have deficiencies. Shortages have been found in staffing and infrastructure at Sub-Centres in North India (Bashar and Goel, 2017), PHCs and CHCs in Shimla district (Chauhan et al., 2016) and CHCs in Western Maharashtra (Patil et al., 2020). Most of this work focused on a few facilities or one area and did not look at health outcomes. Maternal and child health research tends to look at household level data. It has been found that economic status had a greater impact on where women delivered compared to distance from the centre (Kesterton et al., 2010). Female literacy was also found to be a key predictor amongst 81 districts (Mukherjee and Roy, 2019), however facility variables were not included. Hati and Majumder (2013) compared districts according to the availability and accessibility of healthcare services. Studies that did combine the two factors showed a relationship between the

two. Better PHCs were associated with institutional deliveries however improvements plateaued after a certain point (Mustafa et al., 2021). Better infrastructure in Sub-Centres was associated with multiple vaccination outcomes across 24 states (Summan et al., 2022).

However, there is no simple way to compare the government's annual facility data with a survival outcome. National averages show that in 2022 the average population covered by a rural Sub-Centre was 5,691 (compared to a standard of 5,000 for flat areas). The average population covered by a PHC was 36,049 (compared to a standard of 30,000). Across the country there was a shortage of specialist staff at CHCs (79.5%). Overall, there are large variations between states.

The aim of this paper was to answer the following questions using the Rural Health Statistics 2021-22: Are there differences between states in terms of infrastructure and staffing readiness of primary care facilities? How does this relate to infant mortality? Describe how much variation there is between states in terms of infrastructure and staffing readiness. Determine if a single readiness index can be justified. Analyse the relationship between readiness and infant mortality. Identify any states that do not appear to align. Highlight limitations in the data so it can be built upon for district level analysis.

2. Methods

2.1 Study design

An ecological cross-sectional study was performed using published government data. The data was analyzed at the state/Union Territory level. There are 36 jurisdictions listed in the Rural Health Statistics (RHS) 2021-22. However, Chandigarh was removed as no rural facilities were operating. Delhi was removed as no rural CHCs were operating and therefore the CHC variable could not be calculated. This left 34 states/Union Territories. Dadra & Nagar Haveli and Daman & Diu were merged.

2.2 Data collection

Infrastructure and staffing data were taken from the RHS 2021-22. This was published by the MoHFW and included data up until 31 st March 2022 (MoHFW, 2022b). The number of Sub-

Centres, PHCs and CHCs were taken from the comparative statements for rural areas. The number of facilities operating in government buildings, the number of Health Worker (Female)/ANM posts required and filled, plus the number of allopathic doctors required and filled at PHCs were extracted. The RHS specify that 1 ANM and doctor should be employed per Sub-Centre/PHC and 1 doctor per PHC. Five different indicators were calculated (Table 1).

Table 1: Variables, definition and data source

Domain	**Indicator**	**Definition**	**Source**
Infrastructure	Sub-Centres in government buildings	Sub-Centres in government buildings ÷ rural Sub-Centres functioning × 100	RHS 2021-22, Comparative Statements 1-2
Infrastructure	PHCs in government buildings	PHCs in government buildings ÷ rural PHCs functioning × 100	RHS 2021-22, Comparative Statements 1, 3
Infrastructure	CHCs in government buildings	CHCs in government buildings ÷ rural CHCs functioning × 100	RHS 2021-22, Comparative Statements 1, 4
Workforce	ANM posts filled	ANMs in position ÷ ANMs required × 100, capped at 100	RHS 2021-22, Comparative Statements 1, 5
Workforce	PHC doctor posts filled	Allopathic doctors in position at PHCs ÷ doctors required × 100, capped at 100	RHS 2021-22, Comparative Statements 1, 6

Domain	Indicator	Definition	Source
Outcome	Infant mortality rate (IMR), 2023	Infant deaths per 1,000 live births	SRS, as published in Economic Survey 2025-26, Table 8.2

[Note: Adapted from MoHFW (2022b) and Ministry of Finance (2026)]

The outcome variable was the Infant Mortality Rate (IMR) in 2023. The data was taken from the Sample Registration System (SRS). The data was taken from Table 8.2 in the Statistical Appendix to the Economic Survey 2025-26. The data was taken for 16 major states. However, Delhi was not included in the readiness dataset. Therefore, there were 15 states.

2.3 Data checking

The RHS tables were manually entered so checks were completed. All columns were summed to ensure they equated to the total for India. Once the merged Dadra & Nagar Haveli and Daman & Diu data was included the totals were accurate. The facility numbers (94, 12 and 3) and staffing totals matched. The building table in the report showed these numbers separately so the totals were taken from the building column. This was calculated by subtracting the total for the rest of the country from the total. Therefore, 76 Sub-Centres, 11 PHCs and 3 CHCs. These were calculated values.

2.4 Index creation

The five variables were standardized into z-scores. A readiness index was attempted. Firstly, the data was assessed to determine if it was suitable to perform principal component analysis (PCA). This was done using the Kaiser Meyer Olkin (KMO) measure and Bartlett's test for sphericity. Internal consistency was measured using Cronbach's alpha. Components with eigenvalues greater than 1 were kept. Unfortunately, the diagnostics did not suggest a single index could be created (Results). Two domain scores were calculated. The infrastructure score was the average of the percentages of government buildings. The staffing score was the average of the ANM and Doctor percentages. A single index was also created using the loadings from the first component and an

equally weighted composite. Both indexes were scaled to 0-100. This was done to compare the ranking.

2.5 Statistical Analysis

Descriptive statistics were calculated for the variables. Spearman rank correlations were used as the sample size was small and there were a lot of staffing scores at the maximum. 95% confidence intervals were calculated using bootstrapping (10,000 resamples). A leave-one-out analysis was also performed to see how much the coefficient changed when each state was removed. With only 15 states, a correlation of around 0.67 or more was needed to get 80% power at the 5% level. Therefore, any non-significant results should not be interpreted as there being no relationship. To highlight any states that did not fit, the ranking of each state was compared. Regression models with covariates could not be fitted due to the small sample size. The analysis was performed in Python (NumPy, pandas, SciPy).

2.6 Ethical Considerations

Published aggregated government data was used. No individuals were recruited and no identifiable information was collected or reported.

3. Results

3.1 Readiness by state

Table 2 shows the summary statistics for the 34 states/Union Territories. The proportion of centers with government buildings increased with the centre type. Sub-Centres had the lowest proportion (72.2%) ranging from 26.3 to 100. CHCs had the highest proportion (98.3%) ranging from 83.3 to 100. Across the country 69.1% of rural Sub-Centres, 91.1% of PHCs and 96.9% of CHCs had government buildings (MoHFW, 2022b).

Table 2: Summary statistics for readiness variables (34 states/Union Territories)

Indicator	**Mean**	**SD**	**Median**	**Min**	**Max**
Sub-Centres in government buildings (%)	72.2	20.1	78.6	26.3	100.0

Indicator	Mean	SD	Median	Min	Max
PHCs in government buildings (%)	91.8	10.2	95.4	54.6	100.0
CHCs in government buildings (%)	98.3	3.5	100.0	83.3	100.0
ANM posts filled vs required (%)	95.5	11.4	100.0	48.7	100.0
PHC doctor posts filled vs required (%)	97.5	7.4	100.0	63.8	100.0
Physical readiness score	87.4	9.6	90.0	57.9	100.0
Workforce readiness score	96.5	7.3	100.0	69.7	100.0

[Note: Calculated from MoHFW (2022b). Staffing variables capped at 100.]

Bihar had the lowest scores for all three buildings variables. 35.9% of Sub-Centres, 54.6% of PHCs and 83.3% of CHCs had government buildings. Bihar had the lowest infrastructure score of 57.9. Jammu & Kashmir (67.9), Goa (71.6) and Andhra Pradesh (75.0) had the next lowest scores. Maharashtra had a score of 95.7, Kerala had a score of 86.7 and Gujarat had a score of 83.2.

Most areas had high staffing readiness. The median had all required ANM and PHC Doctor posts filled. 12 of the 34 states had less than 100% of ANM and PHC Doctor posts filled. Himachal Pradesh had the lowest staffing readiness score (69.7) mainly due to only 48.7% of ANM posts being filled. Tripura (80.5), Chhattisgarh (81.9), Uttarakhand (84.7) and Odisha (85.5) had the next lowest scores. Chhattisgarh had a low score due to PHC Doctors. Only 63.8% of required PHC Doctor posts were filled. The scores for each state are shown in appendix table A1.

3.2 Can the variables be combined into one index?

Unfortunately, not. The three building variables were correlated (between $r = 0.22$ and 0.64). However, the staffing variables were almost uncorrelated to the building variables ($|r| \leq 0.17$). Bartlett's test was significant ($\chi^2 = 30.6$, $df = 10$, $p < 0.001$). However, the KMO score was only

0.50 which was very borderline. Cronbach's alpha was 0.41. The first component explained 39.5% of the variance with almost all the variance coming from the building variables. The second component explained 24.1% of the variance, however this was driven by the staffing variables (Table 3). There are two components with eigenvalues greater than 1. Therefore, a single index would effectively be a building index and ignore the staffing variables.

Table 3: Principal component analysis of the 5 readiness variables

Indicator	**Component 1**	**Component 2**
Sub-Centres in government buildings (%)	0.72	0.25
PHCs in government buildings (%)	0.91	-0.18
CHCs in government buildings (%)	0.77	-0.28
ANM posts filled vs required (%)	-0.10	-0.80
PHC doctor posts filled vs required (%)	-0.19	-0.63
Eigenvalue	1.98	1.21
Variance explained (%)	39.5	24.1

[Note: Calculated from MoHFW (2022b). KMO= 0.50, Bartlett's $\chi^2 = 30.6$ ($df = 10$, $p < 0.001$). Cronbach's alpha= 0.41.]

Therefore, the two domain scores were used. These showed no correlation across the states ($\rho = -0.02$, $p = 0.91$). This means there is no relationship between the buildings and staffing in each state. The single index from PCA and equally weighted index gave similar rankings. However, the rankings were not identical ($p = 0.67$, $p < 0.001$); Chhattisgarh, Tripura, Odisha and Himachal Pradesh had the biggest difference.

3.3 Relationship between readiness and infant mortality

Across the 15 states there were large variations in the infant mortality rate. The rate ranged from 12 per 1000 live births in Tamil Nadu to 37 in Chhattisgarh, Madhya Pradesh and Uttar Pradesh. There was no correlation between infrastructure readiness and the infant mortality rate ($p = 0.14$, $p = 0.62$). However, there was a negative correlation between staffing readiness and infant mortality. States with less staffing tended to have a higher infant mortality rate ($\rho = -0.47$, $p = 0.077$). The bootstrap confidence interval just reached zero (-0.82 to 0.02). The leave-one-out analysis showed that no single state influenced the result (-0.62 to -0.37). The PHC Doctor readiness variable had the strongest relationship (-0.42, $p = 0.12$). The single PCA index showed no relationship with the infant mortality rate ($p = 0.12$, $p = 0.67$). This is because the index is mostly driven by the building variables.

Table 4: Spearman correlation between readiness variables and Infant Mortality Rate 2023 (n= 15 states)

Readiness measure	**Spearman ρ**	**p-value**	**95% bootstrap CI**	**Leave-one-out range**
Physical readiness score	0.14	0.623	-0.42 to 0.74	0.05 to 0.38
Workforce readiness score	-0.47	0.077	-0.82 to 0.02	-0.62 to -0.37
Sub-Centres in government buildings (%)	0.37	0.179	-0.24 to 0.85	0.28 to 0.64
PHCs in government buildings (%)	-0.15	0.596	-0.57 to 0.34	-0.27 to -0.04
CHCs in government buildings (%)	-0.17	0.548	-0.63 to 0.33	-0.30 to -0.07
ANM posts filled vs required (%)	-0.33	0.235	-0.72 to 0.16	-0.43 to -0.22

Readiness measure	Spearman ρ	p-value	95% bootstrap CI	Leave-one-out range
PHC doctor posts filled vs required (%)	-0.42	0.123	-0.76 to 0.14	-0.52 to -0.28
Single PCA index (0-100)	0.12	0.669	-0.57 to 0.62	-0.05 to 0.26

[Note: Calculated from MoHFW (2022b) and Ministry of Finance (2026)]

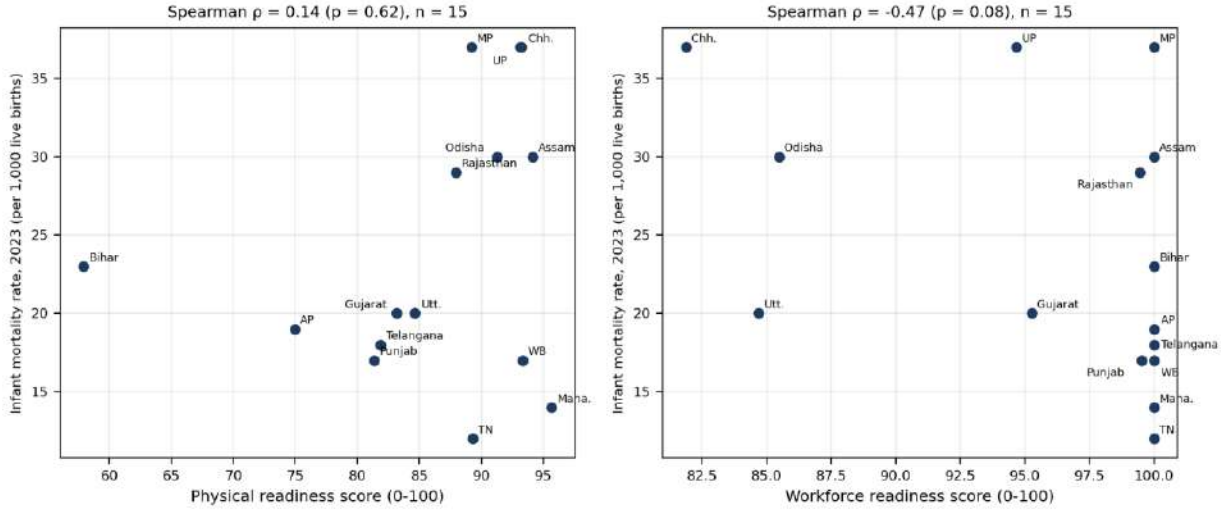

Figure 1: Graph showing the infrastructure and staffing readiness scores against the Infant Mortality Rate (2023) for 15 major states.

[Note: Adapted from MoHFW (2022b) and Ministry of Finance (2026). Multiple states have the highest staffing score (100).]

3.4 Non-Aligned States

There were a few non-aligned states. Madhya Pradesh, Assam and Uttar Pradesh had high staffing scores (100, 100 and 94.7) however had high infant mortality rates (37, 30 and 37). Uttarakhand (84.7) and Gujarat (95.3) both had low infant mortality rates of 20, despite having lower staffing scores than several other states. Finally, Chhattisgarh (81.9) and Odisha (85.5) had lower staffing

scores and high infant mortality rates as expected if staffing was important. Note that several states had the highest staffing score so these comparisons are quite rough.

4. Discussion

Two main findings were identified. Firstly, there appeared to be no relationship between infrastructure and staffing readiness in the data. Having mostly government buildings in a state did not make the state more likely to have ANM and Doctor posts filled. Secondly, there was no relationship between infrastructure and infant mortality. However, there was a moderate negative relationship with staffing. This suggested a relationship, however due to their only being 15 states this was not significant.

This ties in with what the IPHS say about facilities. To meet the standard the centers must be able to deliver what is expected (MoHFW, 2022a). Bihar had the lowest buildings score; however, they had a low IMR of 23 compared to several states with better buildings. Having a building owned by the government is a very crude measure of infrastructure. It tells you nothing about how well it is being utilized.

The second finding ties in with previous research. Summan et al. (2022) suggested that even if a facility is nearby it may not be good enough if services, staffing, vaccinations and referral support are poor. This ties in with staffing. Mustafa et al. (2021) found that improvements plateaued after a certain amount of investment into facilities. Many states had staffing scores of 100 so there was no difference between them. This may be why there was only a moderate relationship.

The non-aligned states highlight that staffing is not everything. Madhya Pradesh, Assam and Uttar Pradesh had full staffing however had high infant mortality rates. Having a post filled does not necessarily mean there is a trained person there who can provide good support. Household factors such as economic status and female literacy are known to influence care usage (Kesterton et al., 2010, Mukherjee and Roy, 2019). These factors could not be controlled for.

It can be hypothesized that the number of buildings is not the only factor to consider in planning for the National Health Mission and Ayushman Bharat programmes, and that staffing and filling should be prioritized.

5. Limitations

This analysis was carried out using the state as the unit, meaning the results cannot be generalized to individuals. The average values would mask any large variations within the districts. The outcome analysis was only carried out for 15 states, so there is a lack of power to find anything but a strong association. Socioeconomic factors could not be controlled for. The score for staffing is capped and so has less variability.

The RHS only includes rural facilities and IMR is calculated for all births in the state. The RHS data is from March 2022 and the IMR is for 2023, so the outcome will have occurred after exposure to the variable. However, there is a large time gap between the exposure and outcome and so any effect may not be seen. The IMR is based on a sample so there will be some uncertainty. The indicators only tell us how many buildings there are and how many of them are filled, not the quality of care, equipment, medicines or how much they are used. The density of facilities per 100,000 people was not calculated as the population denominator for each state was not included in the dataset. The RHS is an administrative report and there may be some inaccuracies. The number of buildings in one small Union Territory was calculated from the total figures (see Section 2.3). There were too few units to carry out a spatial analysis.

6. Conclusion and Recommendations

Using official statistics, it was found that the physical and staffing readiness of the rural primary care network are largely independent. They cannot be combined into one index without losing information. There was no association between infant mortality and physical readiness in 15 major states, and a moderate border-line negative association between infant mortality and staffing readiness. These are all ecological analyses.

Future work could include analyzing the data at a district level. This would involve linking the RHS district tables to the district estimates from NFHS-5 on maternal and child health. This would allow enough units to create adjusted models and do a spatial analysis. The facilities and staffing should be expressed per 100,000 people. Quality indicators should be added such as whether the facility is open 24/7, and what equipment and medicines are available. A log should be kept of where each value came from, including the year, denominator and definition.

Declarations

Availability of data and materials

All data has been taken from published sources (MoHFW, 2022b; Ministry of Finance, 2026). The data has been compiled for each state and is shown in Appendix Table A1.

Ethics approval and consent to participate

As the data was aggregated and publicly available no ethical approval was required.

References

Bashar, M. A., & Goel, S. (2017). Are our subcenters equipped enough to provide primary health care to the community: A study to explore the gaps in workforce and infrastructure in the subcenters from North India. Journal of Family Medicine and Primary Care, 6(2), 208-210. https://doi.org/10.4103/2249-4863.220027

Chauhan, R., Mazta, S. R., Dhadwal, D. S., & Sandhu, S. (2016). Indian public health standards in primary health centers and community health centers in Shimla District of Himachal Pradesh: A descriptive evaluation. CHRISMED Journal of Health and Research, 3(1), 22. https://doi.org/10.4103/2348-3334.172390

Hati, K. K., & Majumder, R. (2013). Health infrastructure, health outcome and economic wellbeing (MPRA Paper No. 53363). Munich Personal RePEc Archive. https://mpra.ub.uni-muenchen.de/53363/

Kesterton, A. J., Cleland, J., Sloggett, A., & Ronsmans, C. (2010). Institutional delivery in rural India: The relative importance of accessibility and economic status. BMC Pregnancy and Childbirth, 10, 30. https://doi.org/10.1186/1471-2393-10-30

Ministry of Finance, Government of India. (2026). Economic survey 2025-26. Statistical appendix. Table 8.2: State wise birth rate, death rate and infant mortality rate. https://taxindiaonline.com/RC2/union_budget/ub2026-27/es2025-26/stat/tab8.2.pdf

Ministry of Health and Family Welfare. (2022a). Indian Public Health Standards (IPHS): Community Health Centre. (Vol. 2). Government of India. https://ruralindiaonline.org/library/resource/indian-public-health-standards-2022-volume-ii-community-health-centre

Ministry of Health and Family Welfare. (2022b). Rural health statistics 2021-22. Government of India, Statistics Division. https://ruralhospitalnetwork.org/wp-content/uploads/2023/01/RHS-2021-22.pdf

Mukherjee, M., & Roy, M. P. (2019). Factors determining institutional delivery in eastern part of India. Tzu Chi Medical Journal, 32(2), 171-174. https://pubmed.ncbi.nlm.nih.gov/32269950/

Mustafa, A., Shekhar, C., & Shri, N. (2021). A situation analysis of child delivery facilities at primary health centers (PHCs) in rural India and its association with likelihood of selecting PHC for child delivery. BMC Health Services Research, 21, 1210. https://doi.org/10.1186/s12913-021-07254-x

Patil, S. S., Gaikwad, R. A., Deshpande, T. N., Patil, S. R., & Durgawale, P. M. (2020). Gaps in facilities available at Community Health Centers/Rural Hospitals as per Indian public health standards: Study from Western Maharashtra. Journal of Family Medicine and Primary Care, 9(9), 4869-4874. https://pubmed.ncbi.nlm.nih.gov/33209814/

Summan, A., Nandi, A., Schueller, E., & Laxminarayan, R. (2022). Public health facility quality and child immunization outcomes in rural India: A decomposition analysis. Vaccine, 40(16), 2388-2398. https://doi.org/10.1016/j.vaccine.2022.03.017

Appendix

Table A1. State-level indicators, domain scores and infant mortality rate

State / Union Territory	Sub-Centres	PHCs	CHCs	SC govt bldg. (%)	PHC govt bldg. (%)	CHC govt bldg. (%)	ANM filled (%)	PHC doctors filled (%)	Physical score	Workforce score	IMR 2023
Andaman & Nicobar Is.	124	22	4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	-
Andhra Pradesh	11,073	1,142	139	26.3	98.6	100.0	100.0	100.0	75.0	100.0	19
Arunachal Pradesh	355	126	57	85.6	100.0	100.0	100.0	100.0	95.2	100.0	-
Assam	4,667	920	172	83.7	98.8	100.0	100.0	100.0	94.2	100.0	30
Bihar	9,375	1,492	269	35.9	54.6	83.3	100.0	100.0	57.9	100.0	23
Chhattisgarh	5,124	770	167	85.8	93.9	100.0	100.0	63.8	93.2	81.9	37

State / Union Territory	Sub-Centres	PHCs	CHCs	SC govt bldg. (%)	PHC govt bldg. (%)	CHC govt bldg. (%)	ANM filled (%)	PHC doctors filled (%)	Physical score	Workforce score	IMR 2023
Dadra & Nagar Haveli and Daman & Diu	94	12	3	80.9	91.7	100.0	100.0	100.0	90.8	100.0	-
Goa	219	24	6	27.4	87.5	100.0	100.0	100.0	71.6	100.0	-
Gujarat	9,132	1,474	344	69.0	88.4	92.2	90.5	100.0	83.2	95.3	20
Haryana	2,653	394	129	60.8	78.2	94.6	100.0	100.0	77.8	100.0	-
Himachal Pradesh	2,114	553	93	78.4	85.9	96.8	48.7	90.6	87.0	69.7	-
Jammu & Kashmir	2,429	891	56	30.9	72.7	100.0	100.0	100.0	67.9	100.0	-
Jharkhand	3,848	291	171	63.3	80.4	100.0	100.0	97.9	81.2	99.0	-
Karnataka	8,757	2,138	182	51.0	93.0	98.4	98.3	97.2	80.8	97.8	-

State / Union Territory	Sub-Centres	PHCs	CHCs	SC govt bldg. (%)	PHC govt bldg. (%)	CHC govt bldg. (%)	ANM filled (%)	PHC doctors filled (%)	Physical score	Workforce score	IMR 2023
Kerala	4,933	780	211	64.2	96.8	99.1	100.0	100.0	86.7	100.0	-
Ladakh	288	32	7	78.8	100.0	100.0	100.0	100.0	92.9	100.0	-
Lakshadweep	9	4	3	66.7	75.0	100.0	100.0	100.0	80.6	100.0	-
Madhya Pradesh	10,287	1,266	332	84.1	90.4	93.1	100.0	100.0	89.2	100.0	37
Maharashtra	10,673	1,853	256	91.0	97.6	98.4	100.0	100.0	95.7	100.0	14
Manipur	393	74	8	78.9	93.2	100.0	100.0	100.0	90.7	100.0	-
Meghalaya	459	122	28	97.6	99.2	100.0	100.0	100.0	98.9	100.0	-
Mizoram	300	57	9	96.0	100.0	100.0	87.4	100.0	98.7	93.7	-
Nagaland	434	129	23	85.7	95.3	100.0	100.0	100.0	93.7	100.0	-
Odisha	6,688	1,288	377	75.6	98.3	100.0	94.1	76.9	91.3	85.5	30

State / Union Territory	Sub-Centres	PHCs	CHCs	SC govt bldg. (%)	PHC govt bldg. (%)	CHC govt bldg. (%)	ANM filled (%)	PHC doctors filled (%)	Physical score	Workforce score	IMR 2023
Puducherry	53	24	3	75.5	100.0	100.0	100.0	100.0	91.8	100.0	-
Punjab	2,951	422	150	58.6	85.5	100.0	100.0	99.1	81.4	99.5	17
Rajasthan	13,523	2,133	616	79.1	92.2	92.5	98.9	100.0	88.0	99.4	29
Sikkim	147	24	2	99.3	100.0	100.0	100.0	100.0	99.8	100.0	-
Tamil Nadu	8,713	1,422	385	72.4	95.5	100.0	100.0	100.0	89.3	100.0	12
Telangana	4,229	578	28	45.9	99.8	100.0	100.0	100.0	81.9	100.0	18
Tripura	956	108	21	86.5	100.0	100.0	61.0	100.0	95.5	80.5	-
Uttar Pradesh	20,781	2,919	829	82.4	97.5	99.4	90.3	99.0	93.1	94.7	37
Uttarakhand	1,785	531	52	76.0	81.7	96.2	78.4	91.0	84.6	84.7	20
West Bengal	10,357	915	348	80.6	99.7	99.7	100.0	100.0	93.3	100.0	17

[Note: Calculated from MoHFW (2022b). IMR from Ministry of Finance (2026). Facility numbers are for rural areas and were recorded on 31st March 2022. Percentages capped at 100. Note: '-' indicates not available in the table provided. Delhi (IMR 14) and Chandigarh were not included in the readiness dataset. Building numbers for Dadra & Nagar Haveli and Daman & Diu have been calculated from the total numbers (see Section 2.3).]