Health Labour Market Analysis: CHHATTISGARH

Jointly prepared by
WHO and State Health Resource Centre, Chhattisgarh
for the
Department of Health and Family Welfare, Chhattisgarh

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To meet the health workforce requirements for the successful achievement Universal Health Coverage (UHC) in the state of Chhattisgarh a Health Labour Market Analysis (HLMA) was conducted as a collaboration between the Department of Health and Family Welfare and Medical Education, the State Health Resource Center, Chhattisgarh, and the World Health Organization. The HLMA is a policy informing document providing insight into key health workforce bottlenecks and opportunities in the state. The central aim of the HLMA was to develop policy recommendations regarding the health workforce in the state to enable progress towards the achievement of UHC.

Through a process of stakeholder engagement two key questions relating the human resources for health in the state were identified:

1. Is the production of health workers (with a focus on specialists, medical officers and nurses) in Chhattisgarh sufficient to meet current demand and how can the recruitment and deployment be improved?
2. What are the key health workforce elements to consider for a successful rolling out of the Health and Wellness Centers in Chhattisgarh?

**Assessing the Demand for Medical Officers – How many more doctors does Chhattisgarh need?**

The total number of doctors in Chhattisgarh is estimated to be around 8,500 including both public and private sector. This translates into approximately 3 doctors per 10,000 population far below the national average of approximately 8 doctors per 10,000 population.

In Chhattisgarh, approximately 3,800 doctors are working in the public sector, around half of them are Specialists, which is around 45% of total doctors working in the state. This proportion is better than the national average.

**Number of Government Doctors (including specialists) in Chhattisgarh**

![Bar chart showing the number of government doctors in Chhattisgarh](chart)

- **Doctors under DHS (regular + Contractual)**: 180
- **Doctors with PG qualifications working under DHS**: 431
- **Doctors under DME**: 900
- **Doctors working in DHS under 2-Year Bond for MBBS and PG Education**: 95
- **Doctors working in AIIMS**: 300
- **Doctors in Hospitals owned by Public Sector Units (Industrial Organisations owned by Central Government)**: 200
- **Doctors working under DME**: 105
- **Doctors working in Hospitals owned by Public Sector Units (Industrial Organisations owned by Central Government)**: 150
- **Total in Public Sector**: 1,961

**Source of Data**: Data collected from DHS, DME and AIIMS
However, while the number of approved posts has increased recently, the number of medical officers holding position in the public sector did not keep pace until 2018. The situation has improved marginally in 2019 with recruitment of 239 new MOs.

The number of vacant posts of regular MOs under DHS is significant especially in peripheral areas, reaching more than 70% in 5 districts.
The presence of private doctors is also highly skewed with a large proportion being in bigger urban areas. The state currently needs to recruit around 1200 more MOs to meet its existing needs of the government healthcare facilities.

Is the production of medical officers in Chhattisgarh sufficient to meet current demand?

The annual intake of medical students rose from fivefold between 2003 and 2019. Resulting in 2.59 medical graduate per 100,000 population in 2019 which although a vast improvement still sits below the national figure of 5.19 per 100,000 population.

Has the increase in supply resulted in an increased availability of medical officers working with government?

There is a clear absorption capacity issue: over the past two decades the state has produced around 4,000 MBBS doctors, but only around 900 regular MOs have been recruited. Therefore, attracting and recruiting appears as a major challenge for the absorption of medical officers in the health labour market. The age profile of existing regular MOs shows that the recruitments have been inadequate.

### Table - Age distribution of regular Medical Officers

<table>
<thead>
<tr>
<th>Age category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 30 years</td>
<td>12 (1%)</td>
</tr>
<tr>
<td>31-40 years</td>
<td>260 (22%)</td>
</tr>
<tr>
<td>41-50 years</td>
<td>037 (26%)</td>
</tr>
<tr>
<td>51-60 years</td>
<td>389 (33%)</td>
</tr>
<tr>
<td>Above 60 years</td>
<td>200 (17%)</td>
</tr>
<tr>
<td>Age not mentioned</td>
<td>12 (1%)</td>
</tr>
<tr>
<td>Total</td>
<td>1180</td>
</tr>
</tbody>
</table>

Source of Data: Data collected from DHS

The recruitment drives have not been regular with gap of two to three years in successive drives. The success rate in attracting MOs has improved to some extent as seen in the last recruitment drive.
The key concern, that continues to persist in the recent recruitment drives also, is of inability to attract MOs to fill the vacancies in rural and remote areas.

Is the production of specialists in Chhattisgarh sufficient to meet current demand and how can recruitment and deployment process be improved?

There are estimated 3,461 specialists in the state, similar to the number of medical officers. A serious shortage of specialists in the public sector is observed throughout the state, especially in District Hospitals and CHCs. The state needs to recruit around 1600 more specialists for filling vacancies in DHS and DME.

This shortage is largely attributable to the inability of the system to recruit efficiently and attract specialists especially in remote and rural areas. As a result, over time the number of specialists (regular) working in Chhattisgarh declined whereas the number of approved posts increased, and this despite an increase in the number of PG seats in medical colleges in the state.

One key barrier in the recruitment of specialists in Chhattisgarh is that there is no direct recruitment into medical specialist into regular posts, rather the medical specialist cadre is a promotion. Doctors with PG qualifications are recruited as MOs and after five years of service, they are eligible to be promoted as Specialists. Specialists do not find it attractive to join as MOs and at MO level salaries. Even after promotion as Specialists after 5 years of service, the salary increase is inadequate to be attractive.

### Table - Recruitment drives conducted for Medical Officers in last 5 Years

<table>
<thead>
<tr>
<th>Year of Recruitment drive</th>
<th>Recruitment Agency</th>
<th>No. of posts advertised</th>
<th>No. of Medical officers recruited</th>
<th>% Recruited against Advertised</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>Health Department</td>
<td>709</td>
<td>128</td>
<td>18%</td>
</tr>
<tr>
<td>2016</td>
<td>Health Department</td>
<td>616</td>
<td>214</td>
<td>35%</td>
</tr>
<tr>
<td>2019</td>
<td>Health Department</td>
<td>423</td>
<td>239</td>
<td>57%</td>
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Source of Data: Data collected from DHS
<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Policy options</th>
</tr>
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</table>
| Promote diploma/alternative short-training courses and task-shifting | • Introducing task shifting from Specialists to MOs in DHs and CHCs.  
• MOs to be trained in most common surgeries and diagnosis and treatment of common diseases and given permission and incentives to perform these procedures.  
• Restart Family Medicine PG diploma course and recognise it as specialisation under DHS  
• Start other multi-skilling courses  
• Adopt the NHM flexible norms for engaging visiting specialists for Fixed days or surgeries  
• Greater use of existing mechanisms like DNB |
| Improve recruitment process. The state needs to recruit around 1600 more specialists and 1200 more MBBS doctors for government sector. | • Direct Recruitments of Specialists in Regular Appointments of DHS by modifying Selection Rules  
• Regular recruitment drives (at least 1 annually)  
• Campus selection (in and out of state)  
• Interaction with medical students in state during internship  
• Better deployment strategy for MOs and PGs on Bond  
• Transparent allocation of location of postings  
• Facilitate recruitment of regular posts from outside the state by introducing flexibility in selection process |
| Increase the attractiveness of the government sector for MOs | • Increase salaries substantially in regular appointments, including NPA. Restrict private practice by government doctors.  
• Increase salaries for contractual positions in some rural districts by using the flexibility allowed by NHM  
• District level supplementation for remuneration |
| Improve supportive services and other benefits to improve retention in remote areas | • Facilitate enrolment of rural students  
• Improve financial and non-financial incentives in less desirable locations. Provide free hostel accommodation, transport etc.  
• Ensure career pathway, improved by serving in rural & remote areas:  
1- Points in PG entrance for MOs serving in tribal areas  
2- Sponsor MOs in rural, remote & tribal areas to attend special PG family medicine courses (post MBBS)  
3- Time bound transfer option for doctors posted in tribal areas  
4- Compulsory posting (around 20% part of career) in tribal areas for every regular MO/specialist  
5- Making at least 3-year service in tribal areas compulsory for promotions |
Is the production of nurses in Chhattisgarh sufficient to meet current demand and how can recruitment and deployment process be improved?

A paradox of sorts is occurring for Staff Nurses (SNs) in the State. There exists simultaneously a significant number of vacant positions around 1500 in DHS and 1500 in DME in the public sector and a large oversupply of qualified nursing graduates seeking such roles. Essentially the labour market for SNs is not clearing.

Wages are not too low to attract nurses. Regular public sector jobs are the most financially attractive jobs for SNs. Particularly regular SNs who earn double the salary of contractual SNs. It appears that the recent increase in supply of nurses is putting downward pressure on salaries, especially in private sector, making public sector jobs even more attractive.

Reserved posts for scheduled tribes (ST) (in some districts as high at 50%) does not seem to be an obstacle. In many areas 50% of the newly registering nurses are ST.

Delays in recruitment drives need to be addressed.

Approved Regular Staff Nurses posts in Chhattisgarh

There are an increasing number of nursing graduates in the State driven by a boom in private nursing education. There are 84 GNM and 87 BSc nursing colleges. This mushrooming has created challenges in ensuring quality of education which need to be redressed.

According to estimates, the public sector currently absorbs 20% of the registered nurses in the State with another 20-30% being absorbed by the private sector. The majority of the remaining 50% of nurses are unemployed, with small portions having found work in other sectors, or having lost faith in the local labour market left the pool of job seekers or the State.
<table>
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| Develop a more effective and transparent recruitment process | • Developing fast track time-bound recruitment policies to fill the vacancies (simplify procedures, reinforce admin capacity, better coordination between MoH and Ministry of Finance, make the recruitment and deployment more transparent, etc.)  
• Focus on DME which has very high regular Nurses vacancies  
• Having a regular annual recruitment drive will allow a better match between the demand and the supply for the health workforce  
• Pro-actively identify unemployed nurses and retrain/train them, including for the Health and Wellness Centres roll out  
• Prioritize recruitment of nurses who have been trained through government sponsored schemes |
| Improve accreditation and quality control mechanisms for all educational institutions | • Strengthening regulation to improve quality of education in private nursing schools over quantity  
• Decide seats in private sector based on market availability and demand for nurses  
• Start nurse mentoring programmes |
| Reduce the salary gap between contractual and regular nurses | • Increase the salary of contractual nurses  
• Give extra points for experience in contractual jobs when recruiting for regular posts  
• Convert contractual nurses into regular cadre after a minimum length of service |

**Policy Recommendations for Assistant Medical Officer (AMO) Cadre**

AMOs are the three-year diploma clinicians working mainly in rural PHCs. They have been the backbone of primary care provisioning in the state. There are around 1200 AMOs working. Although a successful innovation started by Chhattisgarh, the course was closed after producing around 1300 diploma graduates.

<table>
<thead>
<tr>
<th>Recommendations</th>
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| Reduce salary difference between Contractual and Regular AMOs and create a career pathway for this cadre | • Introducing policy to facilitate transitioning from contractual to regular AMO  
• Prioritising contractual AMOs for MLHP role in Health and Wellness Centres  
• Creating an attractive career pathway for this cadre |
| Improve capacity of AMOs | • Invest further in skills of AMOs  
• The state can consider restarting the 3 Year Diploma/BSc Community Health course in order to meet the long term primary care provisioning needs of rural and remote areas |

**What are the key health workforce elements to consider for a successful rolling out of the Health and Wellness Centers in Chhattisgarh?**

Health and Wellness Centers (HWCs) for Comprehensive Primary Health Care is a Flagship Programme. Korba district of Chhattisgarh was the pioneer in starting HWCs in 2015 and
reaching 70 centres in 2017. The national roll-out of HWCs was inaugurated by the Prime Minister in Bijapur, Chhattisgarh in 2018. Chhattisgarh has been innovative leader in HRH staffing for the rollout of HWCs.

AMOs as Mid-level health providers are an innovative HRH solution the state adopted to address the health workforce needs of HWCs, making it the first state to introduce this model in the country. The state has also built a system to train enough MLHPs from BSc. Nurses. For the current six-month MLHP course the State has built a capacity to train more than 1000 MLHPs annually, mostly in District Hospitals designated as Programme Study Centres. There is a plan to add more study centers, especially Medical Colleges in order to improve quality. The current position is that the state has enough nurses and does not need to include other streams to get enough number of MLHPs.

Nevertheless, there are three key issues that will need to be addressed regarding the production of MLHPs in Chhattisgarh – 1. Regional Distribution; 2. Quality of Training; and 3. Clarity Regarding Roles and Responsibilities

Auxiliary Nurse Midwives (ANMs), male multipurpose workers and ASHAs constitute other elements of the envisioned Primary Health Care Team. Currently the majority of the subcentres do not have 2nd ANMs which is needed for successful rollout. There is, therefore, a need to recruit 3100 more ANMs and consider role division between the two ANMs. The modest amount team incentives in comparison to the performance-based incentives for MLHPs needs to also be addressed.

Policy recommendations for a successful rolling out of the Health and Wellness Centers in Chhattisgarh

<table>
<thead>
<tr>
<th>Recommendations</th>
<th>Policy Options</th>
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</thead>
<tbody>
<tr>
<td><strong>Education and training</strong></td>
<td>• Ensuring quality in training of MLHPs, their continuous skill building on the job and mentoring</td>
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<tr>
<td><strong>Roles and responsibilities</strong></td>
<td>• Clarifying role of HWCs, thereby MLHPs, in curative care - i.e. the approach should be “resolve more and refer some” and not mainly referral based</td>
</tr>
<tr>
<td></td>
<td>• Ensuring two ANMs per HWC, completing recruitments of sanctioned posts of 2nd ANMs</td>
</tr>
<tr>
<td></td>
<td>• Team-Building of HWC workforce</td>
</tr>
<tr>
<td></td>
<td>• Dovetailing of roles between AMOs and Nurse MLHPs</td>
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<tr>
<td></td>
<td>• Equitable incentives for ANMs and staff other than MLHPs</td>
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<tr>
<td></td>
<td>• Redefining the role of male MPWs, to align with the required functions in HWCs</td>
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</table>

Lessons learned and building on successes in Chhattisgarh

• Enough production of HRH in state esp. nurses to fill vacancies
• Increase in production of doctors
• Recruitments have improved to some extent in last 4-5 years
• Collaborations for training of HRH with Teaching Institutions like AIIMS, NIMHANS etc.
• Short Courses to enable task shifting/multi-skilling e.g. 3-month course on Pediatric skills for MOs in collaboration with AIIMS
Many Studies of HRH issues in Chhattisgarh, capacity to undertake required analysis. A shared understanding of HRH issues and solutions in different sections of health department.

Moving forward
Chhattisgarh successfully increased and strengthened its health workforce over the last decades and has been a pioneer in innovating human resources for health cadres at the primary care level. As such the health and wellness centers have been kickstarted in the state though the use of Assistant Medical Officers.

However, challenges remain notably in terms of filling the pervasive vacancies that hinder access to publicly funded health care. Strengthening the production of doctors and ensuring sufficient faculty capacity is going to be a priority in the state. Yet, for some cadres such as nurses, there is already sufficient production to fill the currently vacant posts. Therefore, swift policy response is possible. Nevertheless, to balance out the geographical distribution of health workers across the state explicit and proactive policy action will need to be adopted.

The HLMA policy recommendations complement and strengthen some of the recent initiatives and policies adopted in Chhattisgarh. As such it is an opportune time to develop a new health workforce strategy. This will be a key element to ensure the successful implementation of the HLMA policy recommendations and develop a future health workforce fit for delivering the UHC that the citizens of Chhattisgarh deserve.