







Human Resources for Health in District Public Health System of India



State-wise Report 2023

National Health System Resource Centre







Human Resources for Health in District Public Health System of India: State-wise Report-2023

The HRH Infographics Report 2023 has been developed and produced by the Human Resources for Health and Health Policy and Integrated Policy (HRH-HPIP) team at the National Health Systems Resource Centre (NHSRC).

We would like to express our sincere appreciation to the State Departments of Health and Family Welfare, as well as the State Health Societies under the National Health Mission (NHM), for their invaluable support. We extend our gratitude to the Nodal Officers for HRH in States and Union Territories for providing the necessary data and information for this report.

Additionally, we would like to acknowledge the unwavering support and guidance offered by the esteemed Maj Gen (Prof) Atul Kotwal, Executive Director of NHSRC, who has provided valuable insights. His expertise has been instrumental in shaping this publication.

Suggested Citation

Human Resources for Health in District Public Health Systems, NHSRC, New Delhi, 2023

Content

About the HRH Infographics	3
Andaman and Nicobar Islands	6
Andhra Pradesh	8
Arunachal Pradesh	10
Assam	12
Bihar	14
Chandigarh	16
Chhattisgarh	18
Delhi	20
Dadra and Nagar Haveli & Daman and Diu	22
Goa	24
Gujarat	26
Haryana	28
Himachal Pradesh	30
Jammu and Kashmir	32
Jharkhand	34
Karnataka	36
Kerala	38
Ladakh	40
Lakshadweep	42
Madhya Pradesh	44
Maharashtra	46
Manipur	48
Meghalaya	50
Mizoram	52
Nagaland	54
Odisha	56
Puducherry	58
Punjab	60
Rajasthan	62
Sikkim	64
Tamil Nadu	66
Telangana	68
Tripura	
Uttar Pradesh	
Uttarakhand	
West Rangal	76

About the HRH Infographics

The Human Resources for Health and Health Policy and Integrated Planning (HRH-HPIP) division of National Health Systems Resource Centre (NHSRC) initiated the publication of HRH Infographics in 2020. The aim was to present the available data in a comprehensible format and improve its utilization in planning, monitoring, and decision-making processes. The HRH infographics provides an overview of HRH for District Hospitals and other public health facilities below the district level. This includes the District and Sub-district Hospitals, Community Health Centers (rural and urban), Primary Health Centers (rural and urban) and Sub-Health Centers/ Ayushman Arogya Mandir.

The HRH infographics mainly focus on the main categories of HRH, including MPW (Male and Female/ ANM), Staff Nurses, Lab technicians, Pharmacists, Medical Officers – MBBS, and Clinical Specialists. The data used in the HRH infographics is for the financial year 2022-23. It has been primarily obtained from Programme Implementation Plans, and the in-place data used in the report is as on 31st March 2023.

The infographics provide a snapshot of HRH status of each state and union territory. It can help identify gaps and areas needing improvement, enabling informed decision-making and effective planning by the policymakers and stakeholders.

Layout of the State HRH Infographics Sheet

The state-specific sheets have been broadly categorized into five main sections:

- Policy and Systems: This section focuses on HRH governance and includes information on the availability
 of specialist cadre, HRH policies, presence of separate recruitment board for health, implementation of
 HRIS and HRH integration.
- 2. **HRH Generation**: This new section provides data on availability of educational seats for Medicine and Nursing in each state/ Union territory. This information can help the decision makers in assessing availability in relation to their requirements and will enable them to take appropriate actions.
- 3. **HRH Availability**: This section offers an overview of the availability of health workforce. The initial graph represents the sanctioned and available human resources from regular cadre and those supported under NHM in accordance with the Indian Public Health Standards.
 - The other graph provides a snapshot of vacancies in the regular cadre and under NHM.
 - Additionally, the section includes the important doctor-nurses ratio. While the ideal doctor-nurse ratio can vary based on the factors such as health facility type, available resources and patient conditions, a commonly cited ratio of 1 doctor for every 3 nurses is considered necessary for effective coordination and service outcomes.
- 4. **NHM Budget Share**: This section is primarily for the central and state level planners and decision makers. It summarizes the HRH budget and Programme management cost relative to the total Resource Envelope of the state/ UT for the financial year (FY) 2022-23.
- 5. **HRH Performance**: This section presents information regarding the productivity of the HRH based on data reported in HMIS for the period between 1st April 2022 and 31st March 2023. The data accessed for this section was as of April 18, 2024.

Definitions and Explanations

- Specialist Cadre: The specialist doctors (PG MOs) under regular services are recruited directly at a higher level than the General Duty Medical Officers (UG-MBBS GDMOs). Also, a provision has been made for differential salaries between GD-MOs and Specialists.
- HRH Policy: The State/ UT has developed and implemented a comprehensive HRH policy for the NHM staff.
- Separate Recruitment Board for Health: The state has a State Health recruitment Board that is utilized for conducting recruitments in the health sector instead of the State Public Service Commission.
- Implementation of HRMIS: The state/ UT has implemented a Human Resource Information System (HRIS) for all HRH (both regular cadre and contractual).

- HRH Availability in State: The graph provides a comparison of the required HRH as per IPHS norms, the
 total number of posts sanctioned and HRH in-place. The graph includes details of the main cadres, including
 Multi-Purpose Health Workers (Male and Female/ ANM), Staff Nurses, Lab technicians, Pharmacists,
 Medical Officers MBBS and Clinical Specialists.
 - Required: The total number of staff required for the functional public health facilities (District hospital and below) as per IPHS norms. This is represented by a dotted red straight line. The requirement in the state/ UT will change over the year as there are newer facilities being constructed or upgraded.
 - Sanctioned: The total number of posts sanctioned under the regular cadre as reported by the states/ UTs and approved under NHM in the Record of Proceedings (ROP) for FY 2022-24, for both rural and urban facilities for the district hospitals and below level. Any HRH approved for mobile health team is not included. The percentage has been calculated as the sum of sanctioned regular posts and approved NHM posts divided by the total number of staff required as per IPHS norms.
 - o **In-place**: Total number of posts filled against the sanctioned posts under the regular cadre and approved posts under NHM as reported by the states/ UTs. The percentage has been calculated as the total number of HRH in-place against the total number of staff required as per IPHS norms.
- **HRH Vacancies in the State**: The bar graph compares the vacancies under the regular cadre and NHM (rural and urban). The data represents only facility level HRH for the six main cadres, including MPW (Male and Female/ ANM), Staff Nurses, Lab technicians, Pharmacists, Medical Officers and Clinical Specialists. It doesn't include any details of HRH supported for mobile health teams.
 - Vacancy Regular Cadre: The percentage has been calculated as the total number of vacant posts against the posts sanctioned in regular cadre, as reported by the states/ UTs, for the district hospitals and below level facilities.
 - Vacancy Contractual: The percentage has been calculated as the total number of vacant posts, as reported by the states/ UTs, against the posts approved under NHM in the ROP 2022-24 for both rural and urban health facilities.
- Doctor (MO and Specialist) to Staff Nurse Ratio: The total number of GDMOs and Specialists compared to
 the number of Staff Nurses reported by the state/ UT under regular cadre and on contract serving at the
 district hospital and below level facilities. For example, a doctor to nurse ratio of 1:3 means there is one
 doctor for every 3 staff nurses.

• NHM Budget Share

- Budget Share of HRH: This represents the proportion of NHM budget approved in FY 2022-23 for remuneration and incentives of service delivery positions and programme management positions under NHM, against the total Resource Envelope (RE). The circle represents the total resource envelope. The two levels within the circle represent the proportion of NHM budget approved in FY 2022-23 for service delivery HRH and programme management HRH out of the total RE.
- Budget share of Service Delivery HRH: The stacked bar graph illustrates the distribution of the budget allocated for the remuneration and budget allocated for allowances and incentives of service delivery staff as a proportion of the total budget approved for remuneration of service delivery staff.
- Budget share of Programme Management: The proportion of NHM budget approved in FY 2022-23 for Programme Management including the Programme Management HRH and activities under NHM, against the total Resource Envelope (RE).
 - PM HRH: Includes all the HRH engaged at the state, regional, district, block level Programme Management Units (PMU) or those posted in facilities and performing monitoring, supervision and administrative tasks such as data entry, accounting, supervision. This includes the Programme Officers, Managers, Consultants, Supervisors, Coordinators, Administrative staff, Assistants, Finance staff, Engineers, MIS Staff, Data Entry Operators etc. The indicator shows the proportion of budget approved under NHM (NRHM+NUHM) for programme management HRH in FY 2022-23 against the total RE.
 - **PM Activities**: Refer to the office expenses of the PMU staff, monitoring and supervision, review meeting etc. This indicator shows the total proportion of budget approved under NHM (NRHM+NUHM) for programme management activities, as a proportion of the total RE.
- HRH Performance: It is important to acknowledge that the definitions and formulae used in assessing the HRH performance are based on simplified assumptions and do not account for the other functions that healthcare workers perform on a daily basis, especially those which may not be captured in HMIS or are difficult to put in terms of data. For example, medical officers may be required to conduct post-mortems, which can result in fewer outpatient visits being recorded. Similarly, nurses may be deployed to emergency rooms or labor and delivery units, which may not be reflected in the inpatient numbers. Despite these

limitations, using the same formulae and definitions across all states and UTs enables comparison and indepth analysis of factors that may be affecting healthcare worker productivity.

- Average cases per month: Total number of cases reported in the FY 2022-23 in the HMIS portal divided by 12 (total number of months in a year).
- Average cases per day: Average cases per month divided by average working days in a month. For
 calculating average in-patients per day, 30 working days in a month have been considered and for
 other cases, 25 working days per month have been taken.
- OPD Attendance per Doctor: The ratio of average number of allopathic OPD per day (excluding Dental OPD) to the total number of GDMOs and Specialists in-place under regular cadre and NHM, as reported by the states. The number of specialists in-place doesn't include the number of Anaesthetists, Radiologists, Pathologists and Microbiologists.
- Dental OPD per Dental Surgeon: The ratio of average number of dental OPD per day to the total number of Dentists and Dental Surgeons in-place under regular cadre and NHM, as reported by the states.
- o **In-patient head count at midnight per Nurse**: Average number of in-patient headcount at midnight/ midnight census per day (number of patients at midnight/6 AM every day) divided by the number of nurses in-place per shift under regular cadre and NHM, as reported by the states. The total nurses in place have been divided by 3 to get the number of nurses per shift (three shifts in a day).
- o **In-patient cases per Nurse**: Average number of in-patient per day (all admissions of male and female Children and Adults with plan to stay overnight/24 hours) divided by the number of nurses in-place per shift under regular cadre and NHM, as reported by the states. The total nurses in-place has been divided by 3 to get the number of nurses per shift (three shifts in a day).
- Major operations using Anaesthesia per Anaesthetists: The ratio of average number of major operations carried out using general or spinal anaesthesia per month to the total number of Anaesthetists in-place under regular cadre and NHM, as reported by the state. This does not include the number of LSAS trained doctors in the state/ UT.
- o **Caesareans (C-Section) per ObGY:** The ratio of average number of C-Section deliveries performed per month to the total number of ObGY Specialist in-place under regular cadre and NHM, as reported by the state. This does not include the number of EmOC trained doctors available in the state/ UT.
- Hysterectomy surgeries per ObGy: Average number of major surgeries/ Hysterectomies performed per month divided by the total number of ObGy Specialists in-place under regular cadre and NHM as reported by the state.
- Lab Tests per lab technicians: The ratio of average number of blood tests per day to the total number of Lab technicians in-place under regular cadre and NHM, as reported by the states. Some states have engaged PPP partners at state or at facility level for performing lab tests. The LTs, if engaged under PPP are mostly not recorded in HMIS. This will influence the productivity calculated for the LTs in place.

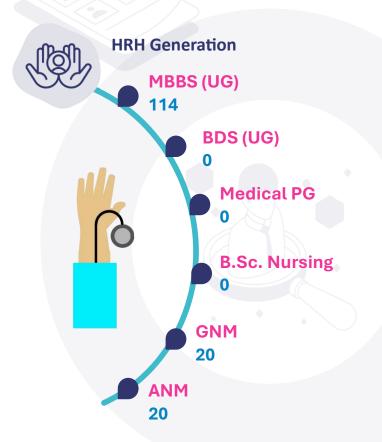
Sources of data

- 1. Indian Public Health Standards, 2012
- 2. Health Management Information System (HMIS)
- 3. NHM Programme Implementation Plans 2022-24
- 4. NHM Record of Proceedings 2022-24
- 5. HRH data reported by the states to NHSRC and MoHFW
- 6. PIB/11 August 2023/Update on Medical Education/MoHFW Link: https://pib.gov.in/PressReleasePage.aspx?PRID=1947690
- 7. Indian Nursing Council Annual Report 2022-23
- 8. College List Dental Council of India Link:https://dciindia.gov.in/CollegeSearch.aspx?ColName=&CourseId=1&SplId=0&StateId=&Hospital=&Ty pe=0&Status=%E2%80%93Select%E2%80%93
- 9. Human Resources for Health in District Public Health Systems of India: State Wise Report of 2022

Andaman and Nicobar Islands

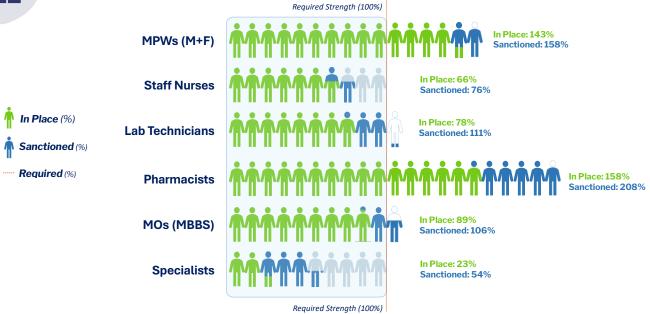
HR Infographics of District Hospital and Below-level Health Facilities

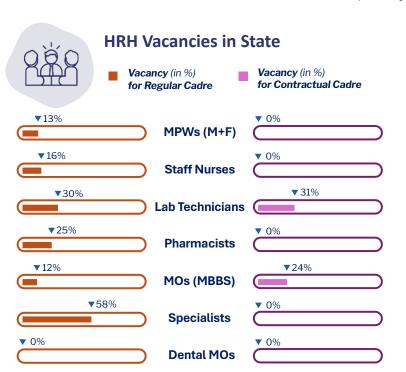




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HRH Availability in State







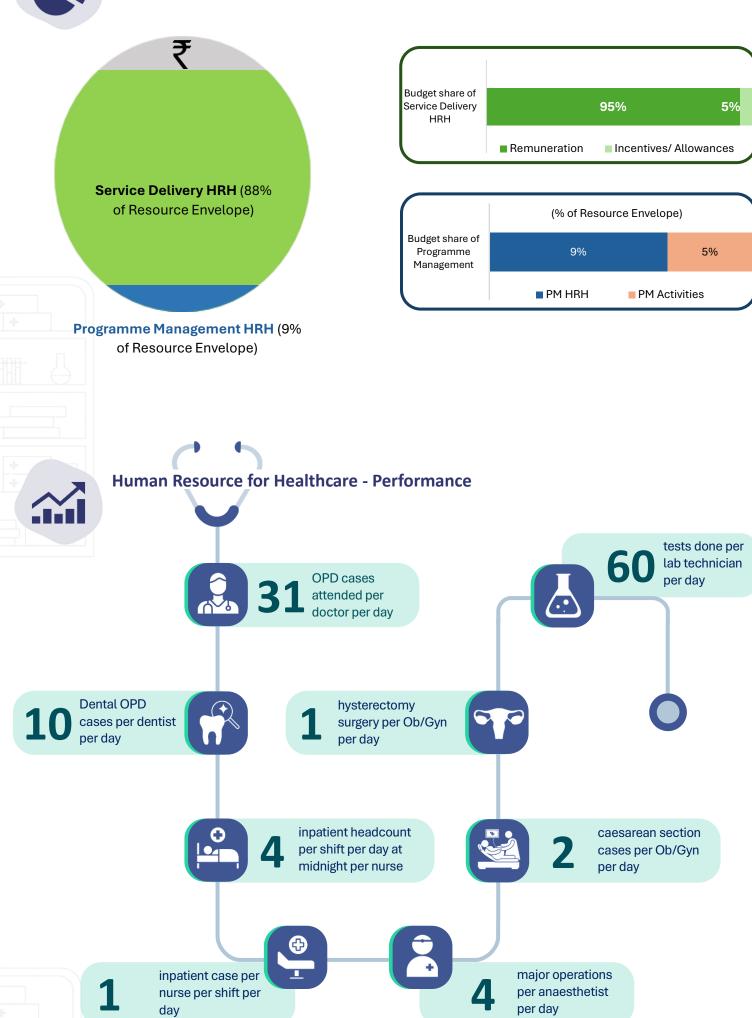




HR Infographics of District Hospital and Below-level Health Facilities



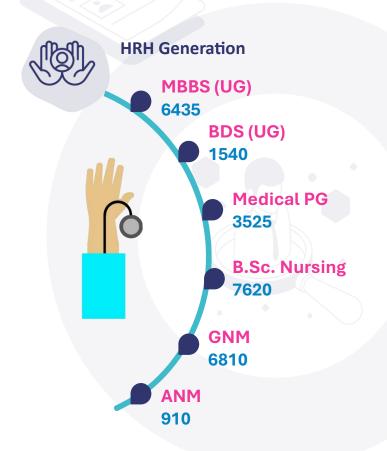
NHM Budget Share - HRH and Programme Management



·■ Andhra Pradesh

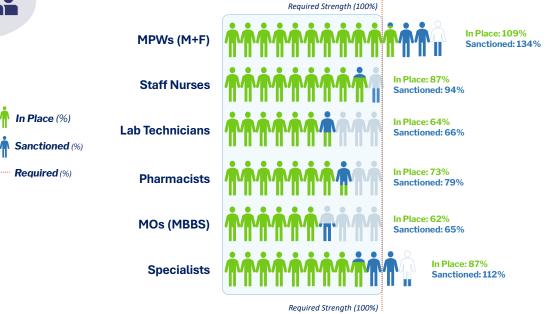
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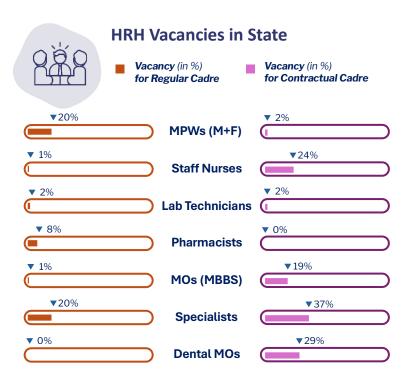




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HRH Availability in State





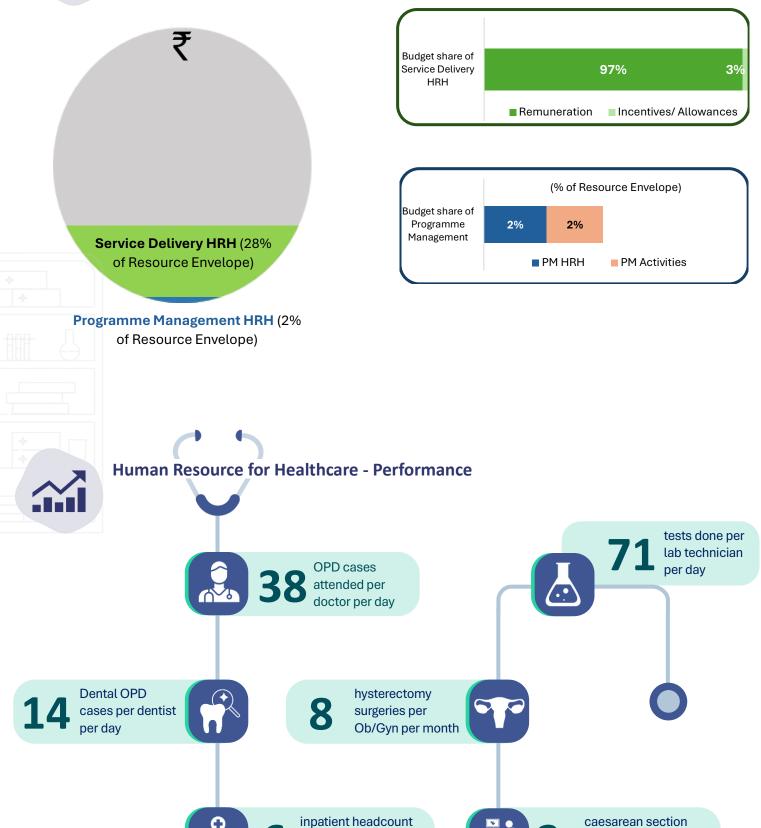








NHM Budget Share - HRH and Programme Management



inpatient cases per nurse per shift per day



major operations per anaesthetist per day

cases per Ob/Gyn per

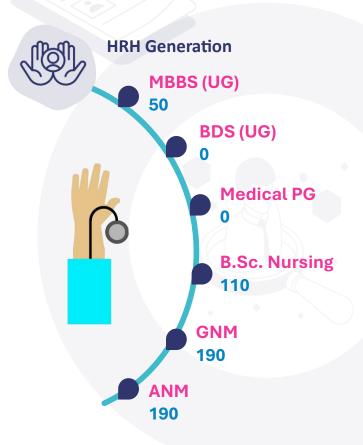
per shift per day at

midnight per nurse

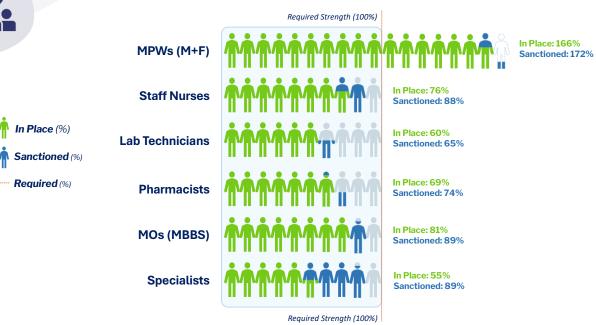
Arunachal Pradesh

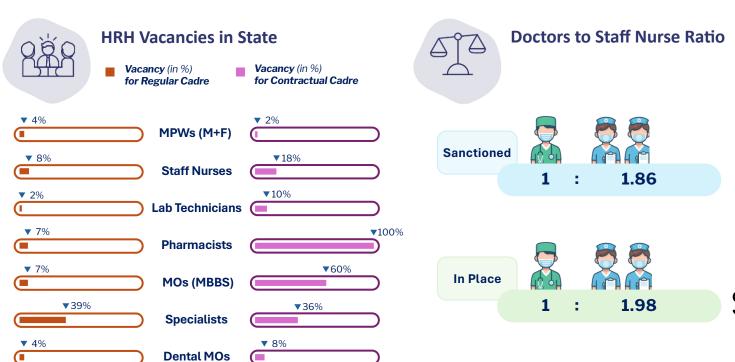
HR Infographics of District Hospital and Below-level Health Facilities





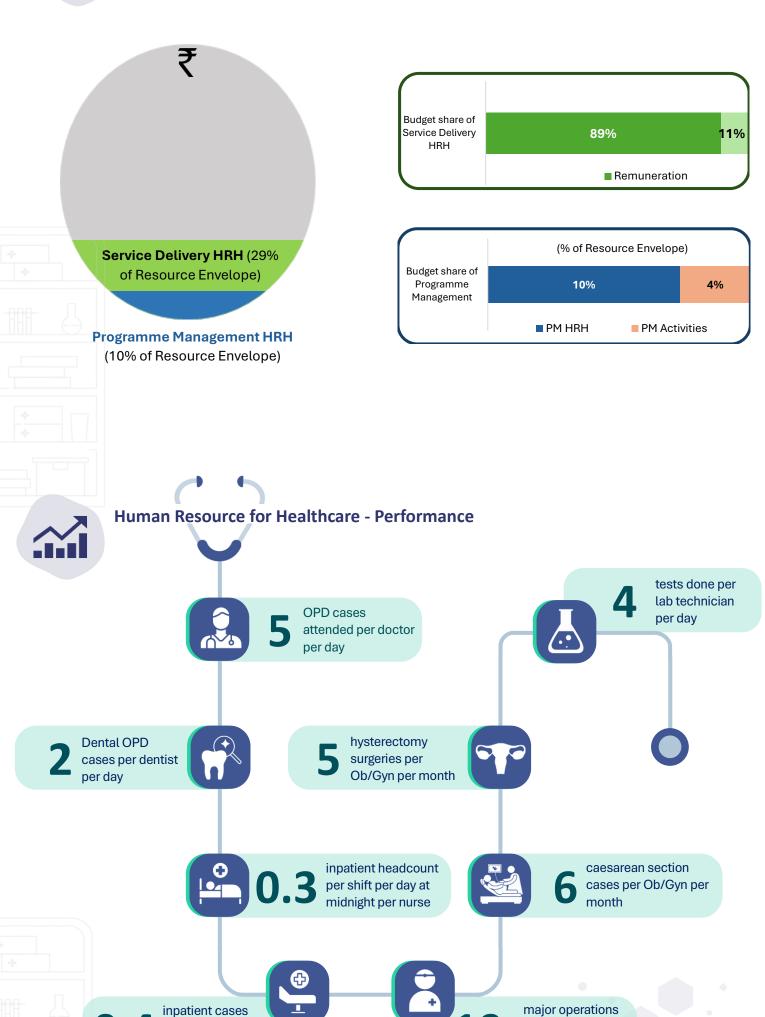
HRH Availability in State







NHM Budget Share - HRH and Programme Management

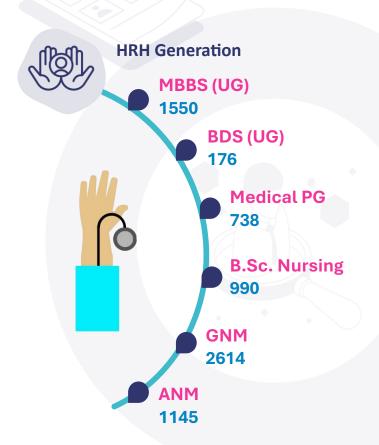


per nurse per shift per day per anaesthetist

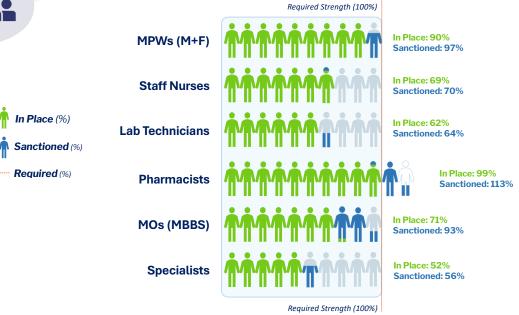
per month

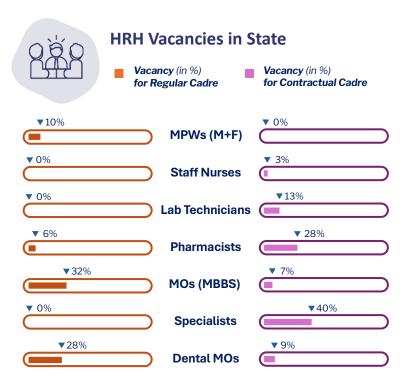
Assam





HRH Availability in State







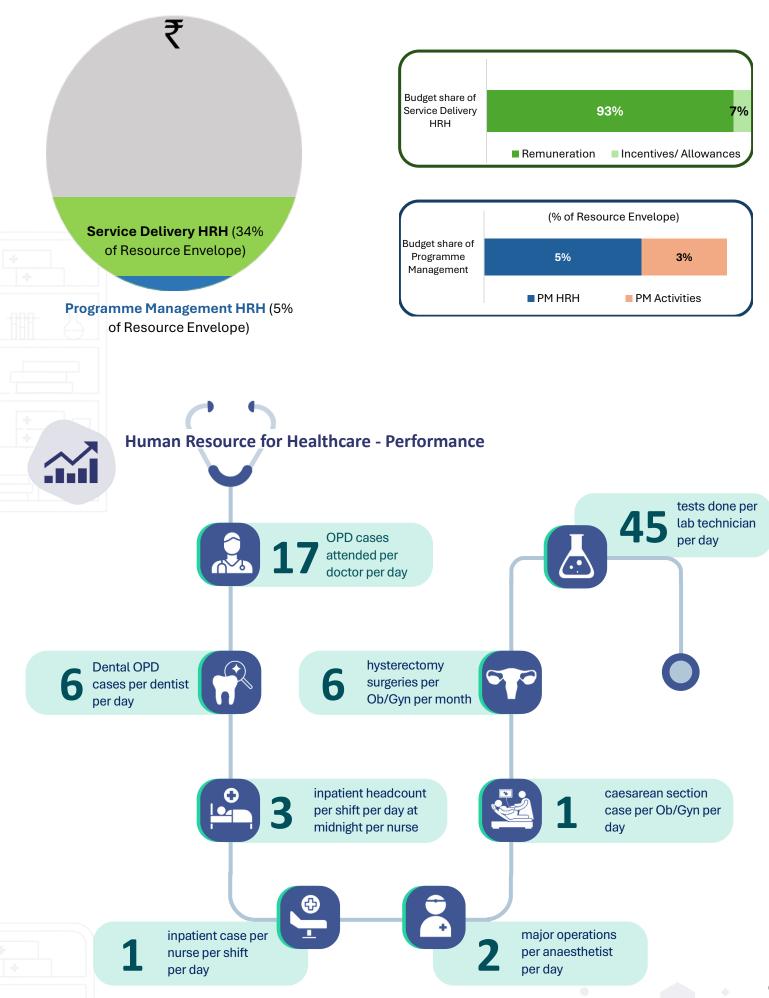






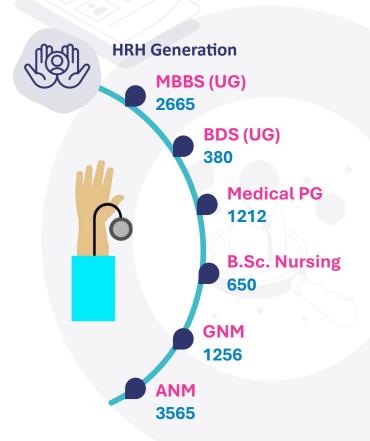


NHM Budget Share - HRH and Programme Management



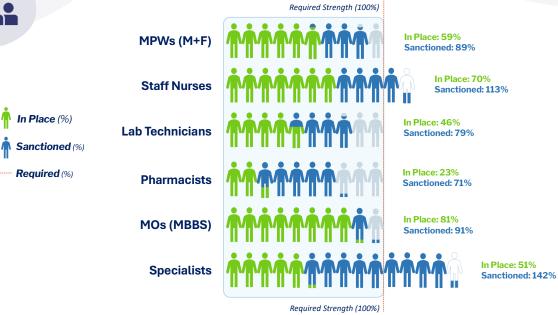
Bihar

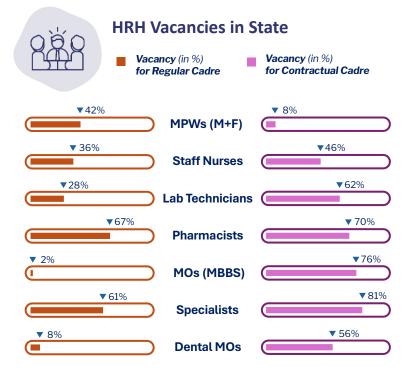




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HRH Availability in State







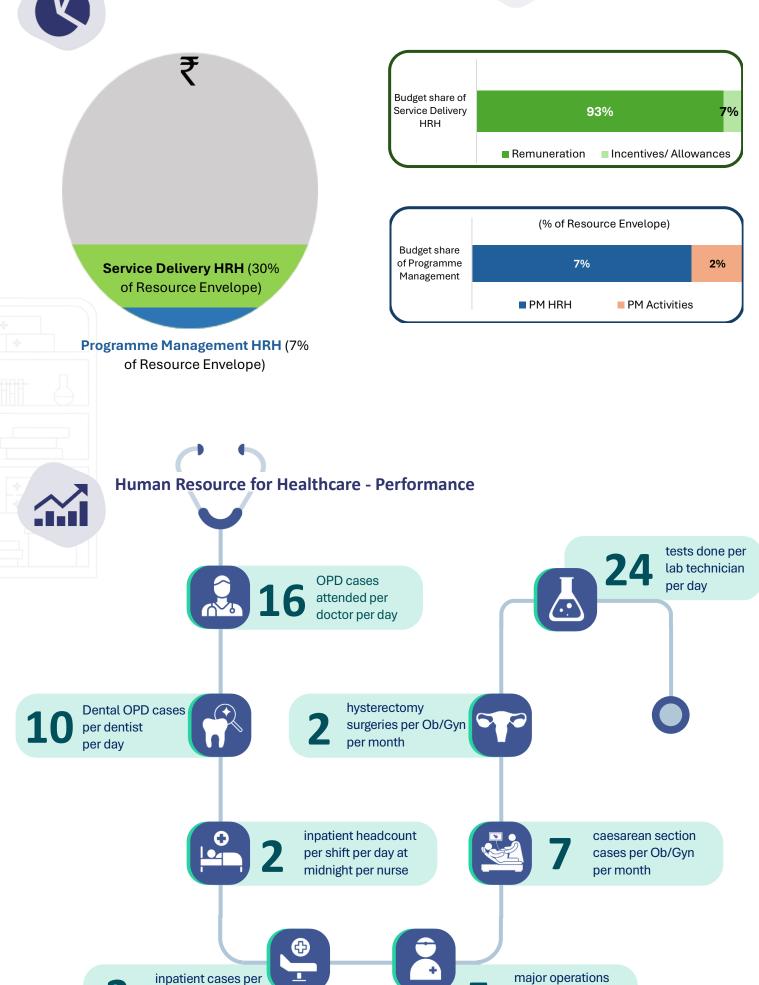








NHM Budget Share - HRH and Programme Management



per anaesthetist

per day

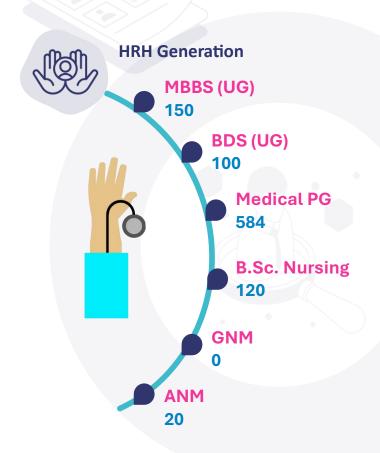
nurse per shift per

day

HR Infographics of District Hospital and Below-level Health Facilities

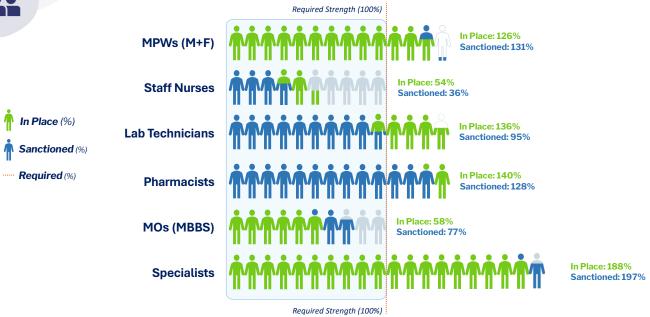
· Chandigarh

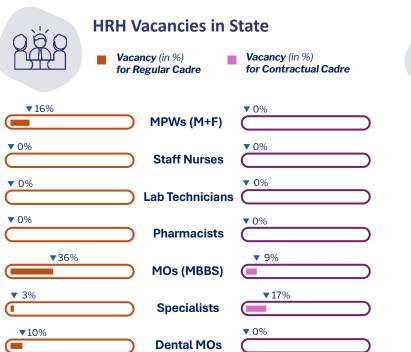




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HRH Availability in State



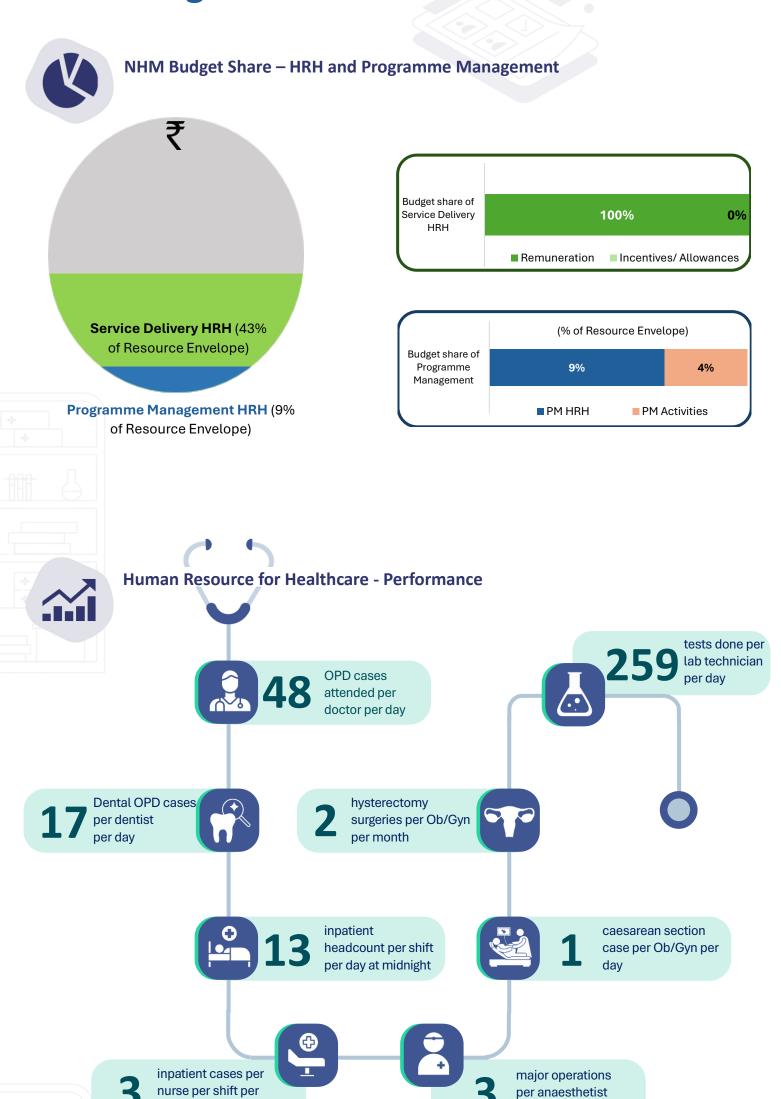






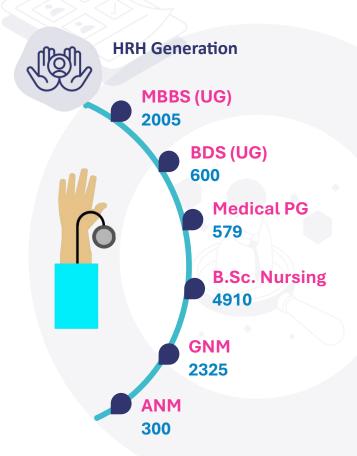


Chandigarh



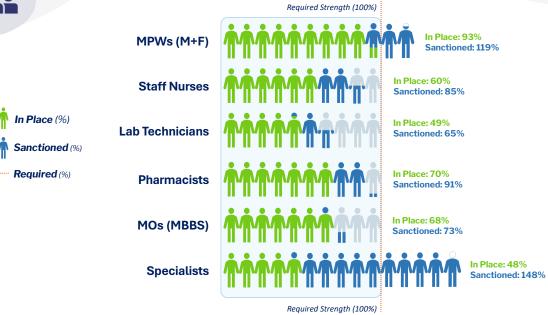
Chhattisgarh

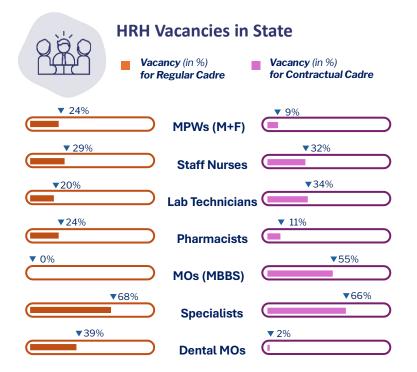




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HRH Availability in State







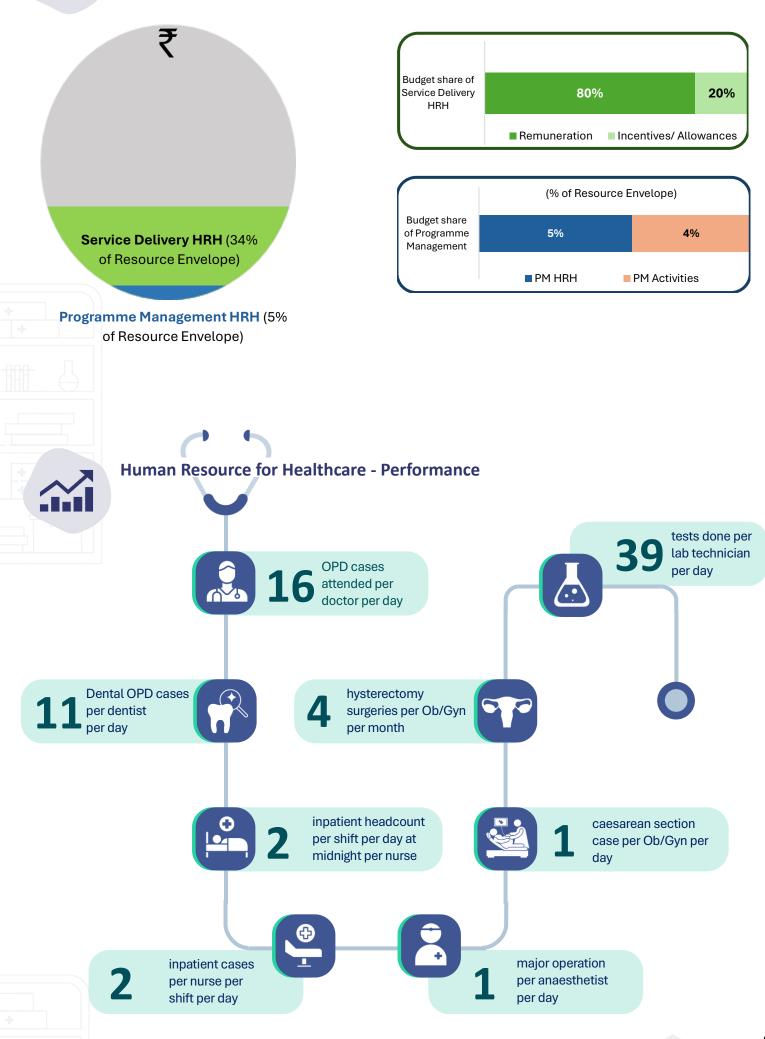




Chhattisgarh

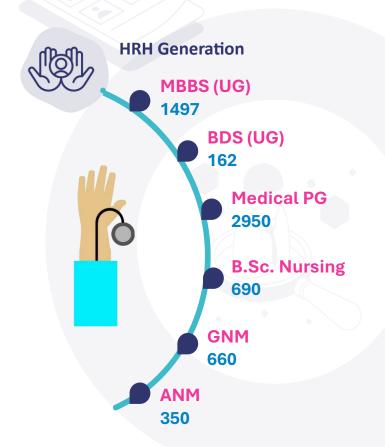


NHM Budget Share – HRH and Programme Management

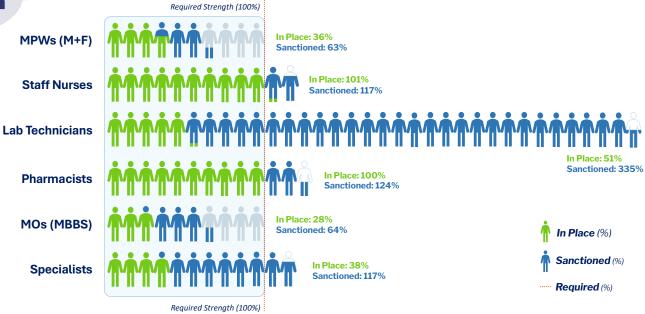


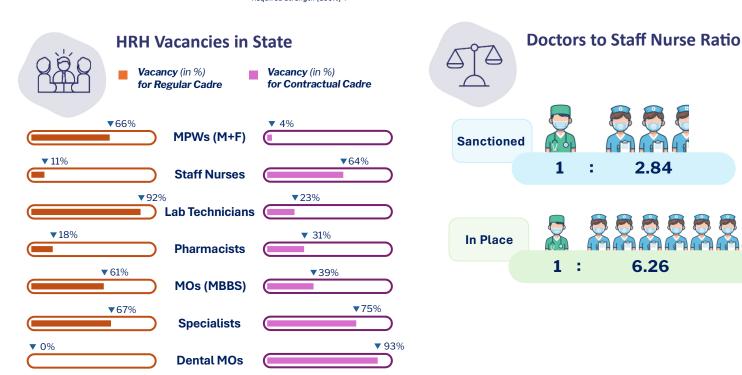
Delhi





HRH Availability in State



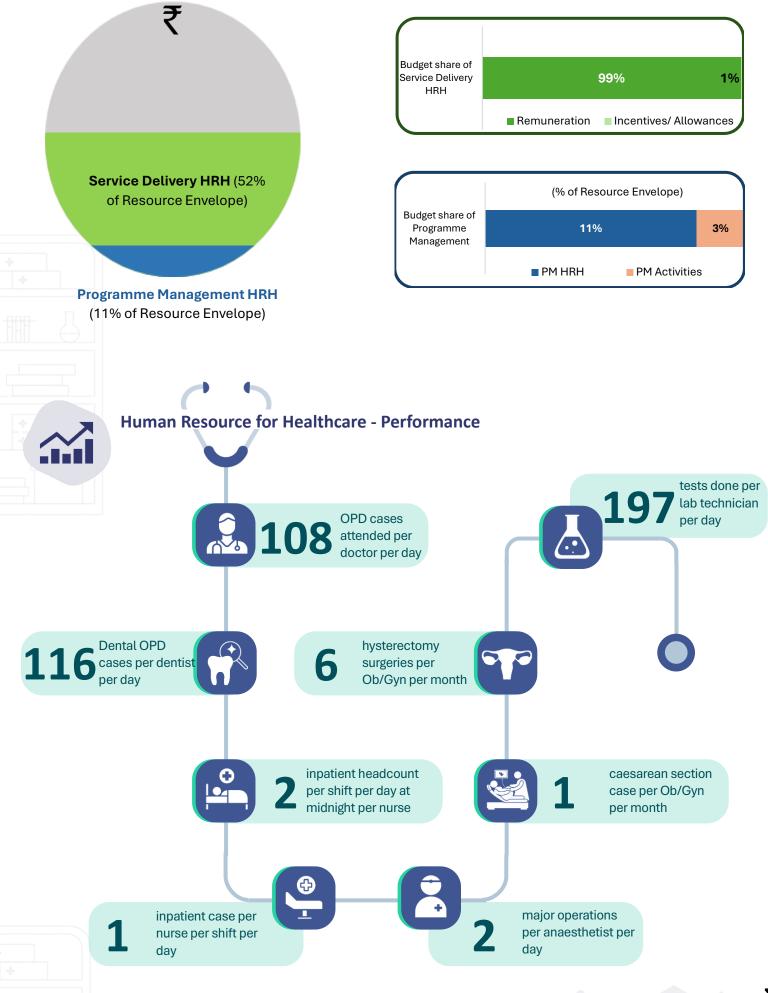


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NHM Budget Share – HRH and Programme Management



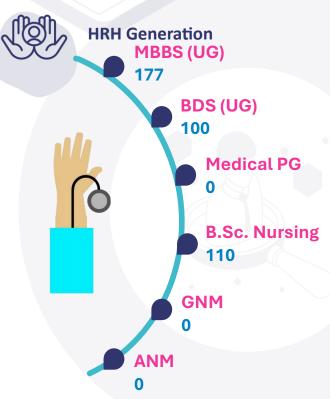
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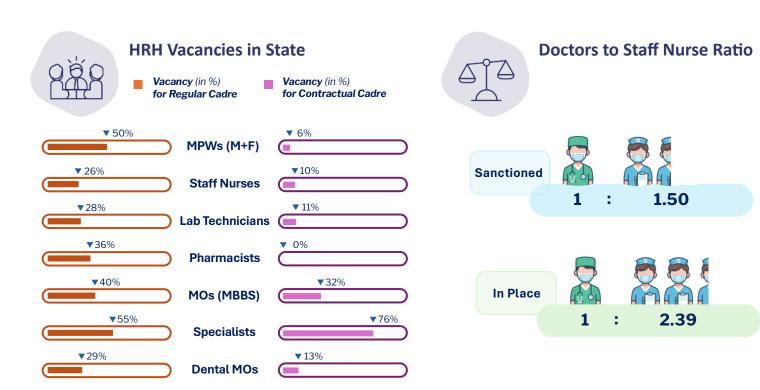
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HR Infographics of District Hospital and Below-level Health Facilities





HRH Availability in State Required Strength (100%) In Place: 58% Sanctioned: 85% MPWs (M+F) In Place: 54% **Staff Nurses** Sanctioned: 69% In Place (%) In Place: 64% **Lab Technicians** Sanctioned: 82% Sanctioned (%) Required (%) In Place: 70% **Pharmacists** Sanctioned: 95% In Place: 56% Sanctioned: 91% MOs (MBBS) In Place: 66% **Specialists** Required Strength (100%)



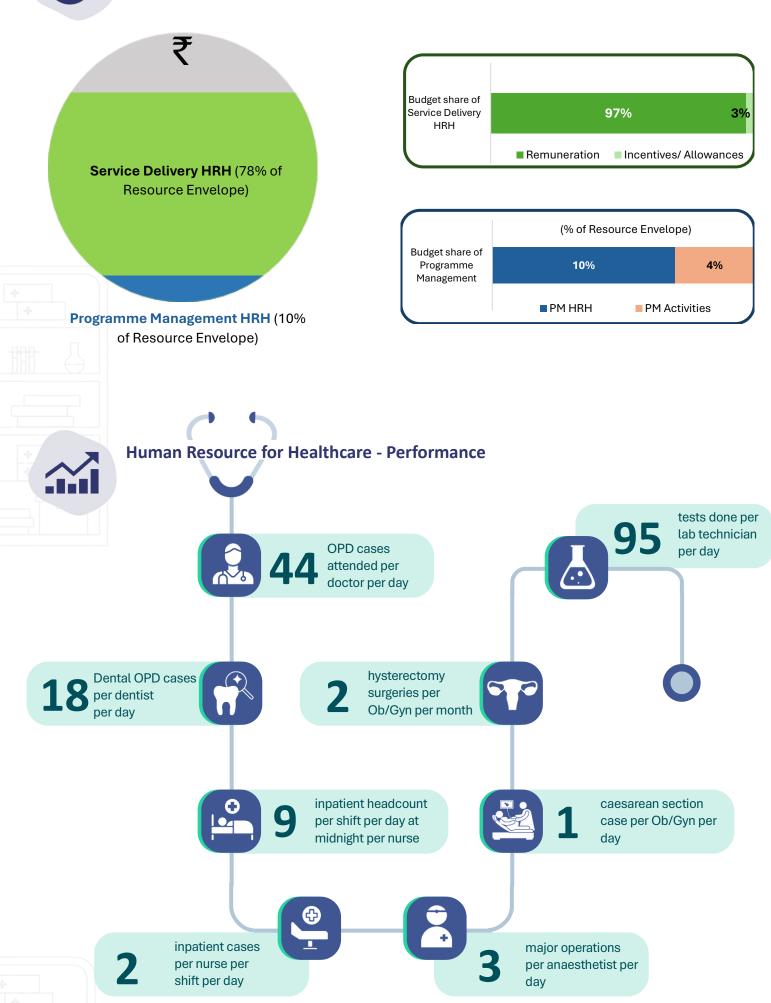
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HR Infographics of District Hospital and Below-level Health Facilities

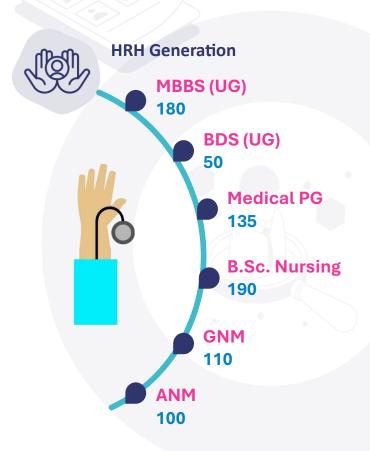


NHM Budget Share - HRH and Programme Management



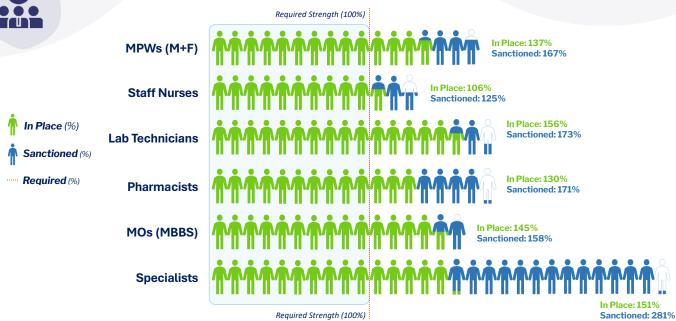


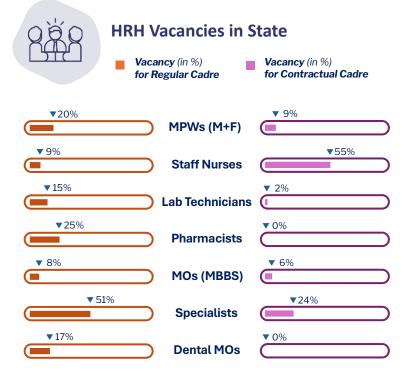




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HRH Availability in State







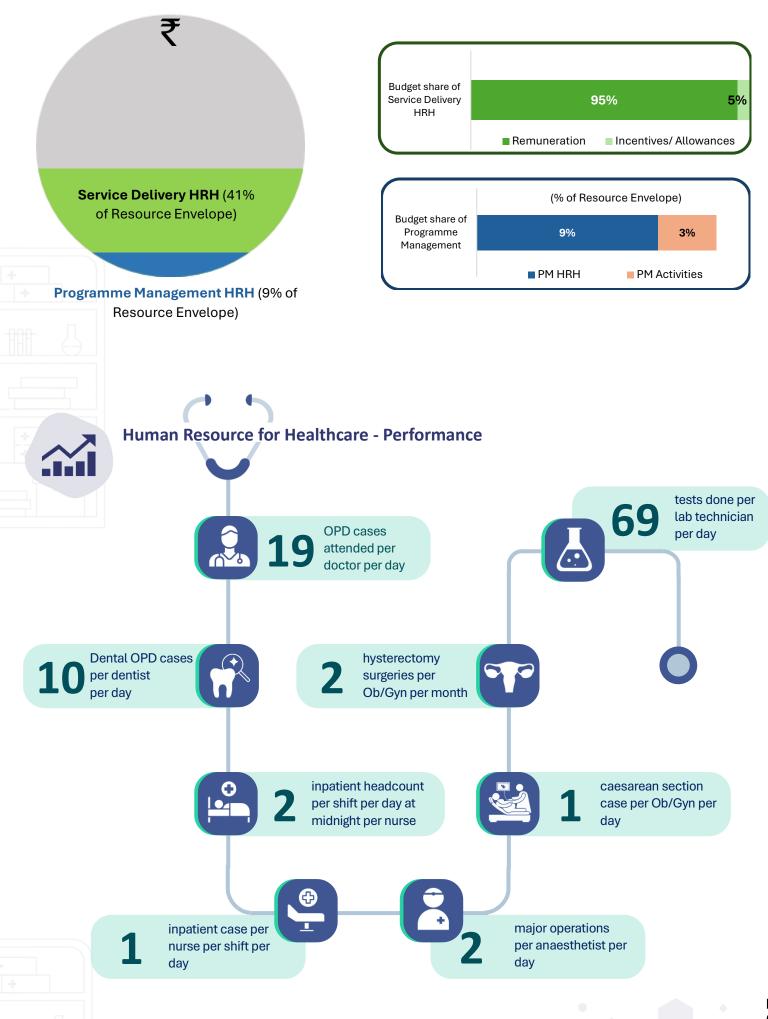




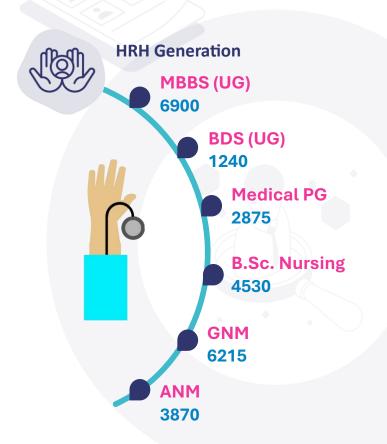




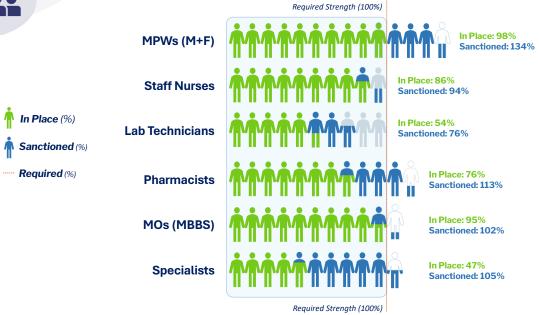
NHM Budget Share – HRH and Programme Management

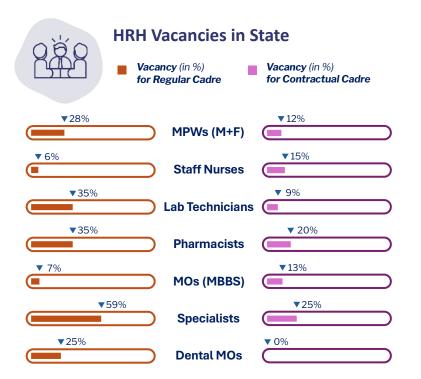






HRH Availability in State







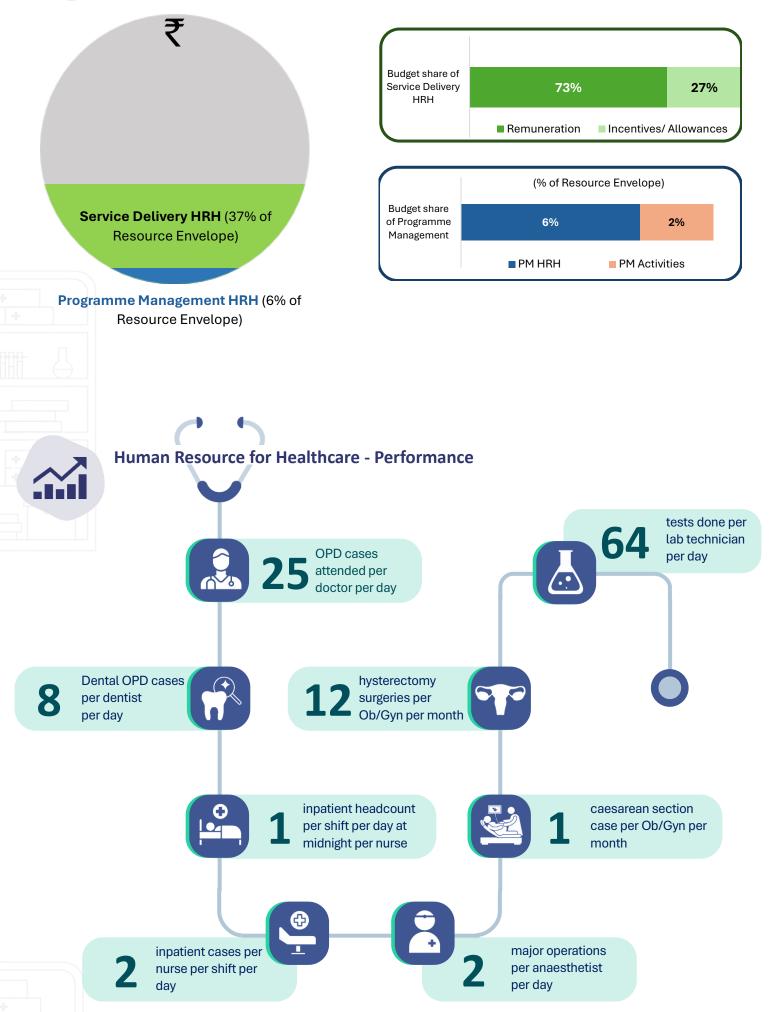




Gujarat

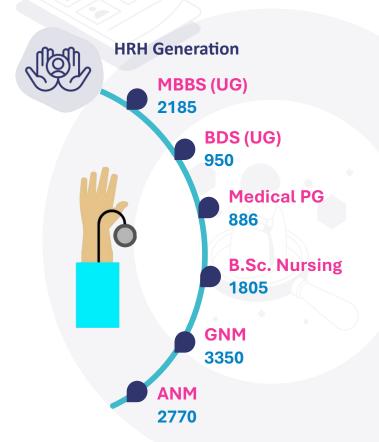


NHM Budget Share – HRH and Programme Management



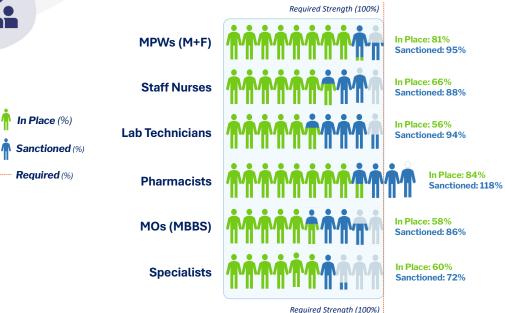
· Haryana

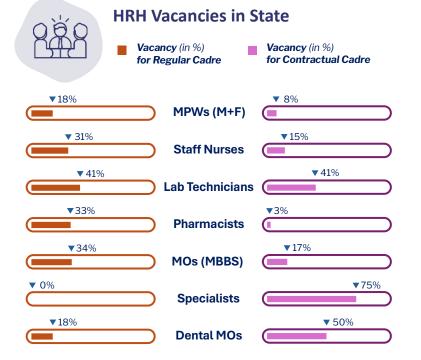




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HRH Availability in State







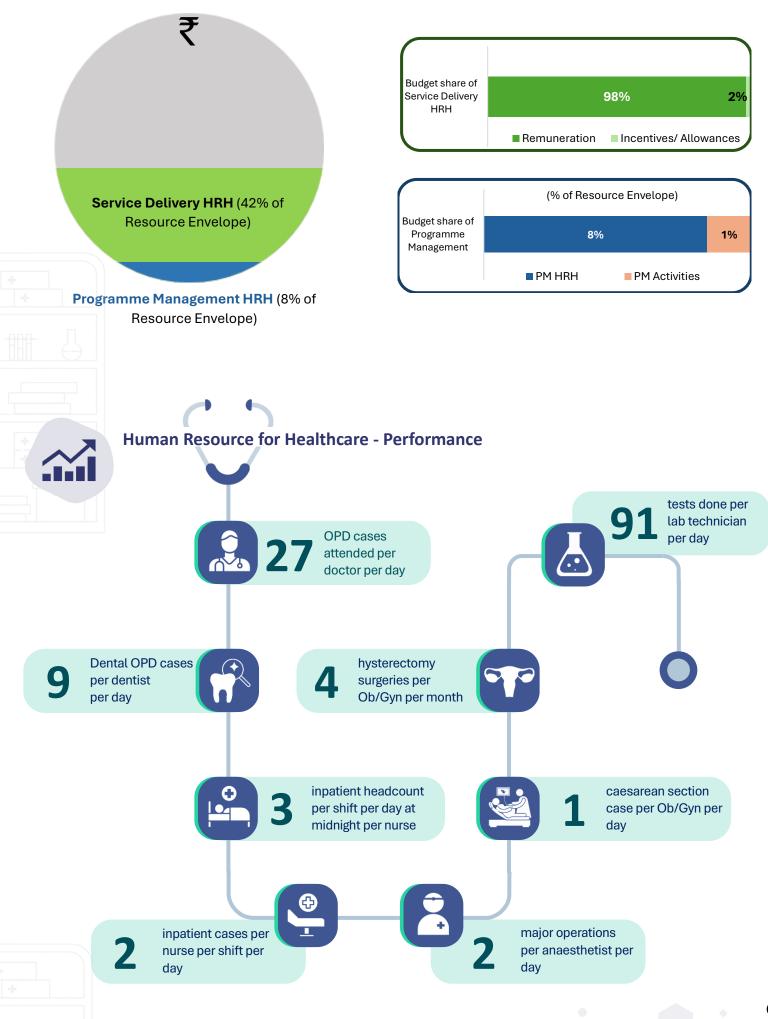


In Place			
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Haryana



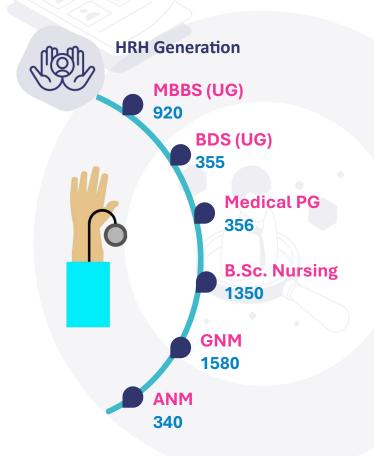
NHM Budget Share - HRH and Programme Management



Himachal Pradesh

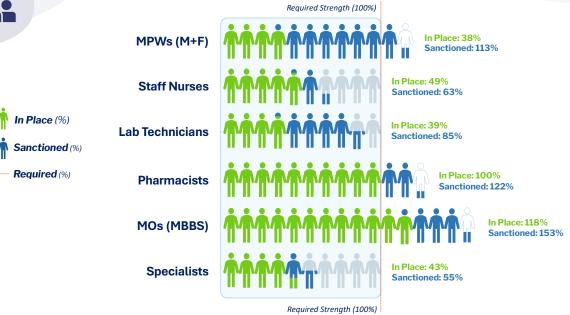
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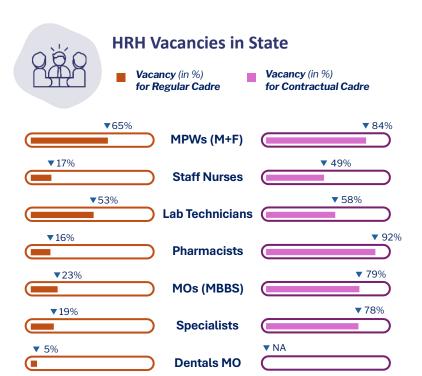




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HRH Availability in State





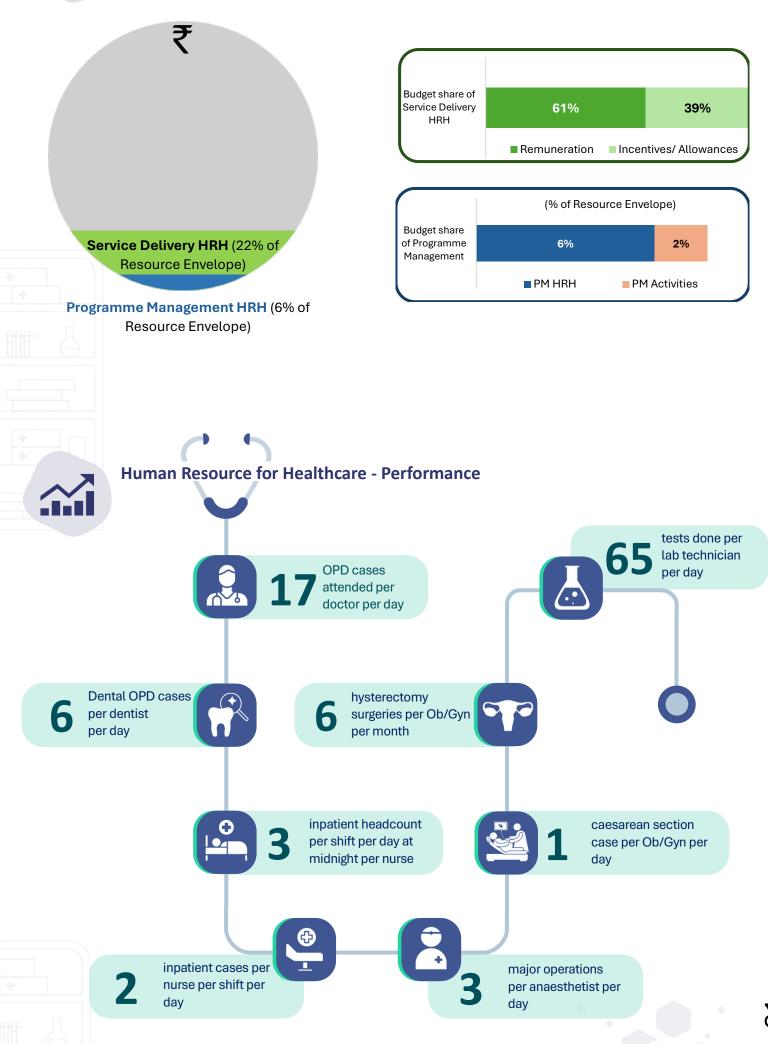








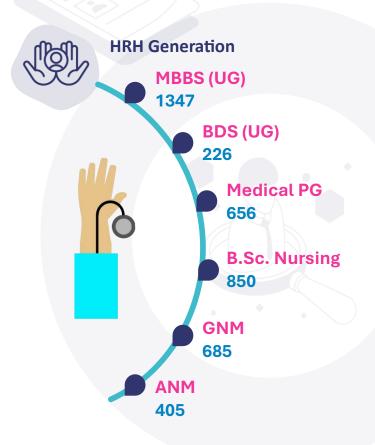
NHM Budget Share – HRH and Programme Management



Jammu and Kashmir

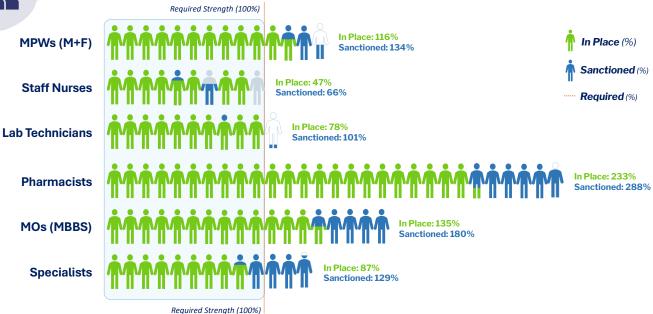
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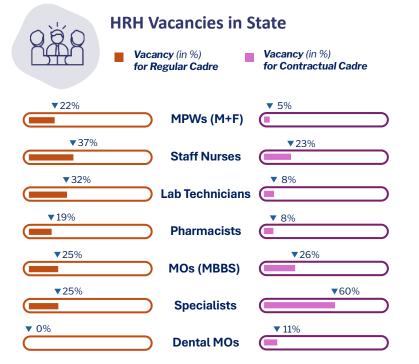




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HRH Availability in State





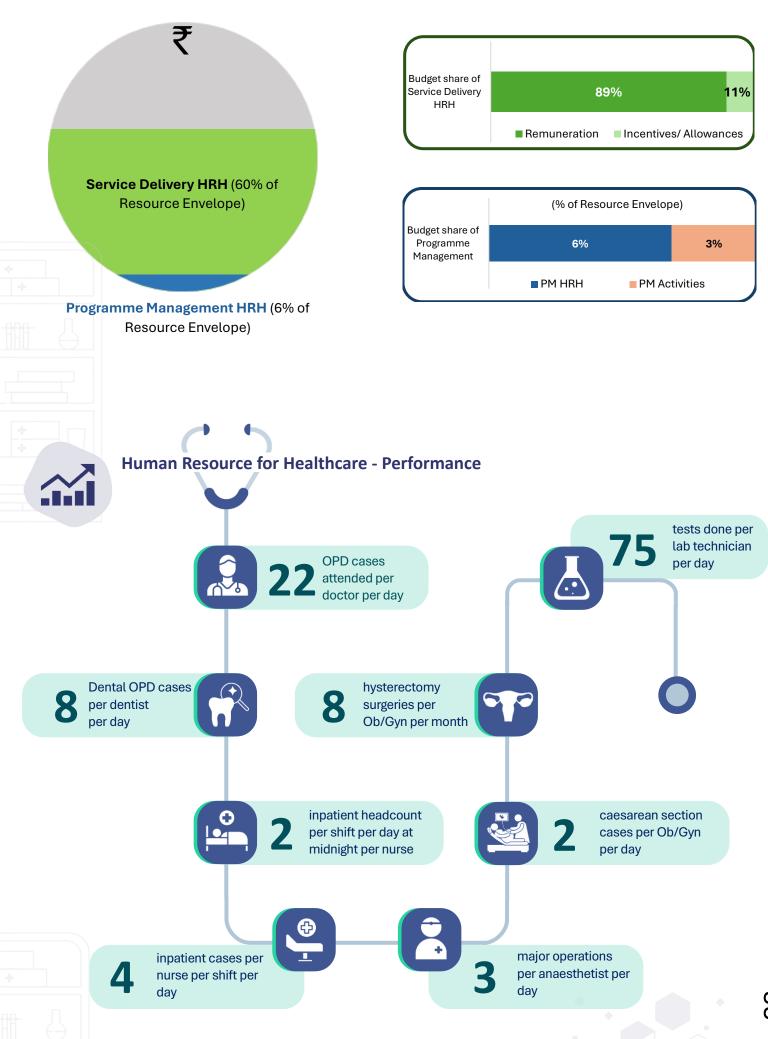








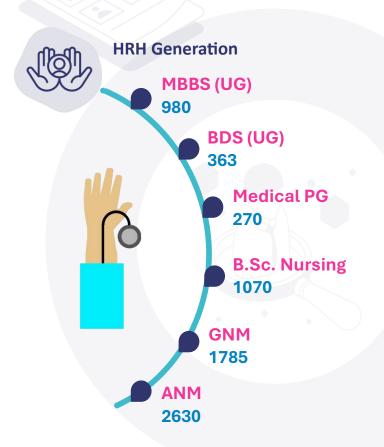
NHM Budget Share - HRH and Programme Management



Jharkhand

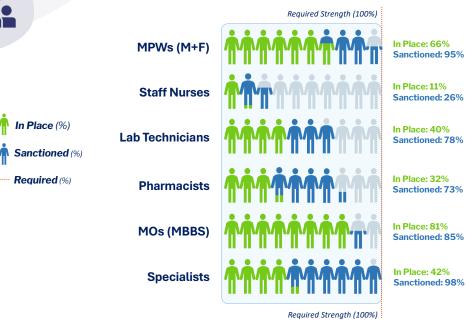
HR Infographics of District Hospital and Below-level Health Facilities

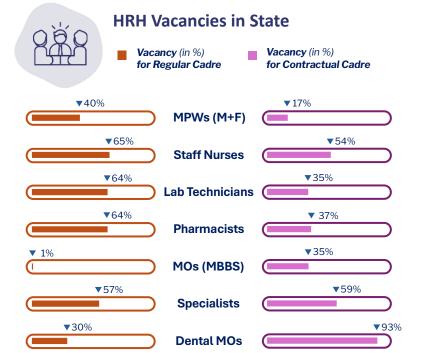




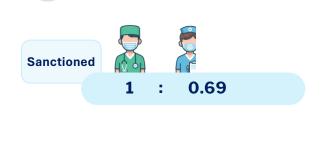
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HRH Availability in State







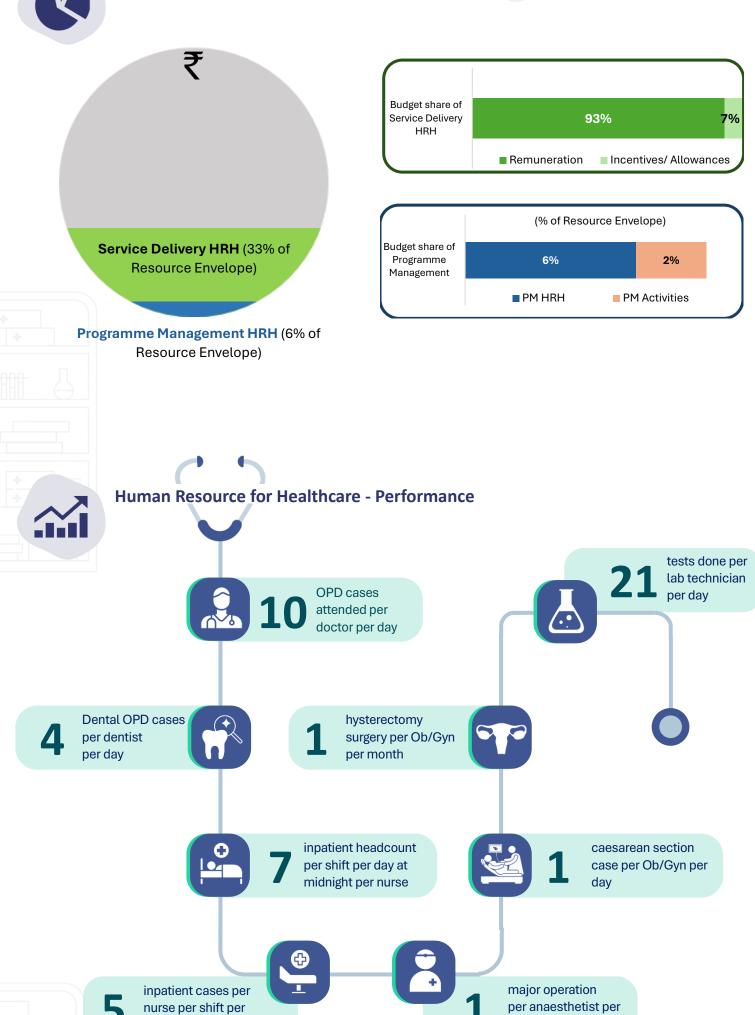




day



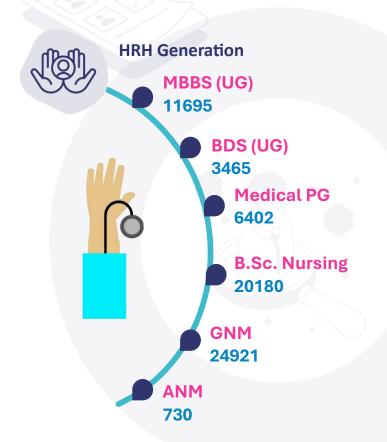
NHM Budget Share - HRH and Programme Management



day

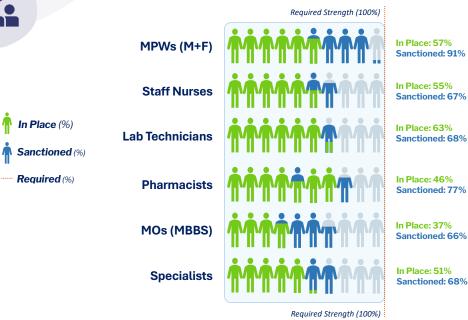
Karnataka

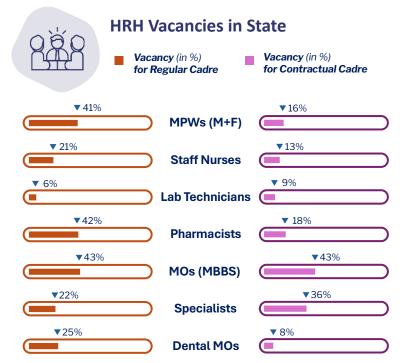




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HRH Availability in State







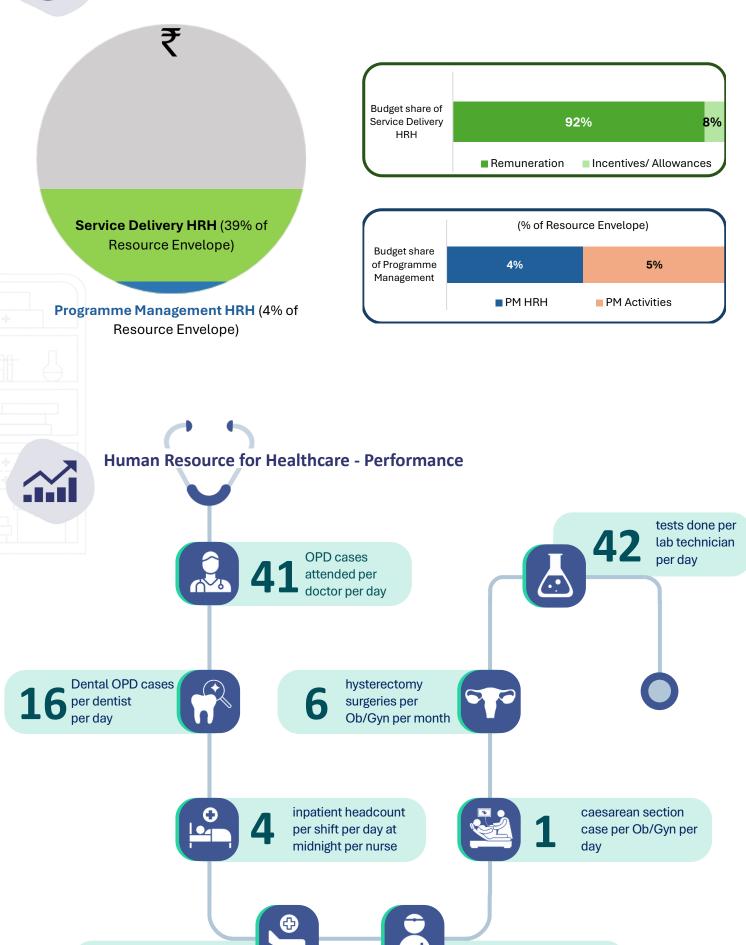




· Karnataka



NHM Budget Share - HRH and Programme Management



inpatient cases

per day

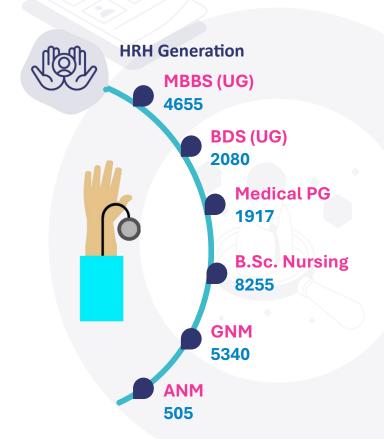
per nurse per shift

major operations

per anaesthetist per

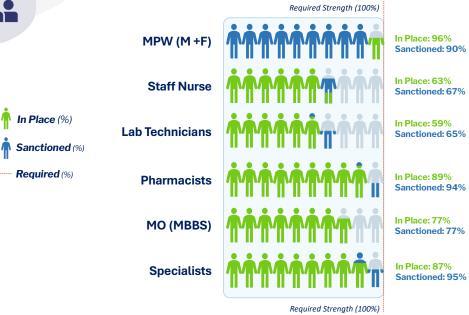
· Kerala

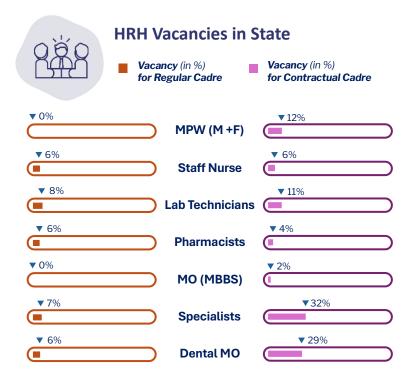




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HRH Availability in State







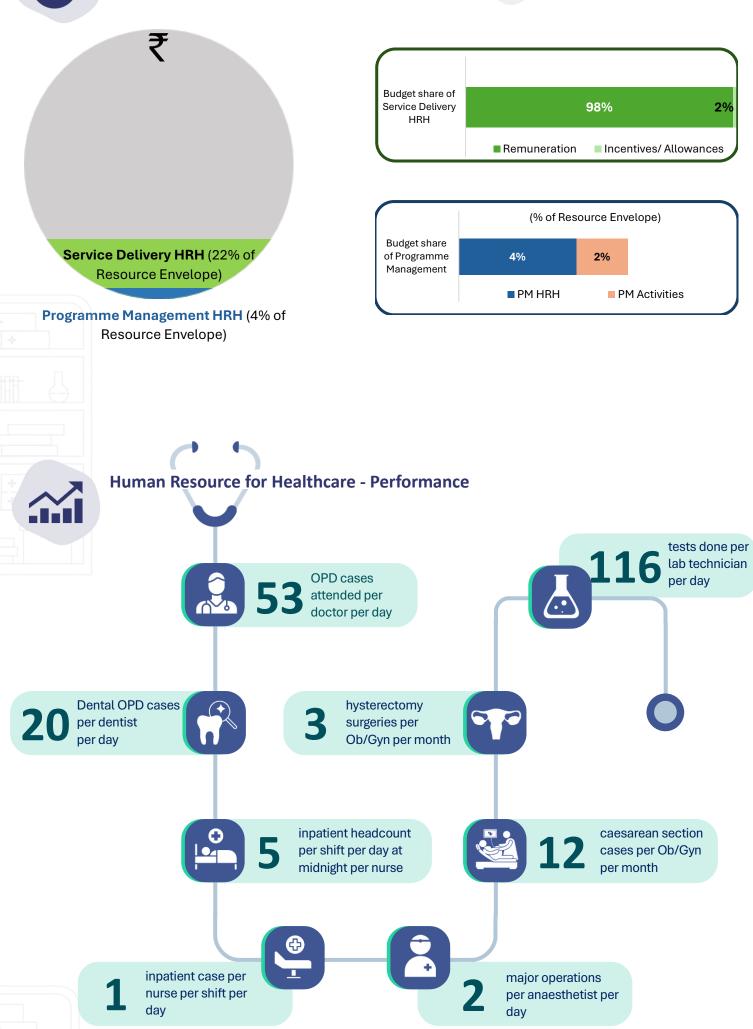


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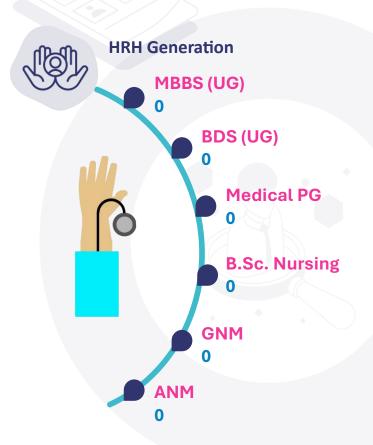


NHM Budget Share – HRH and Programme Management



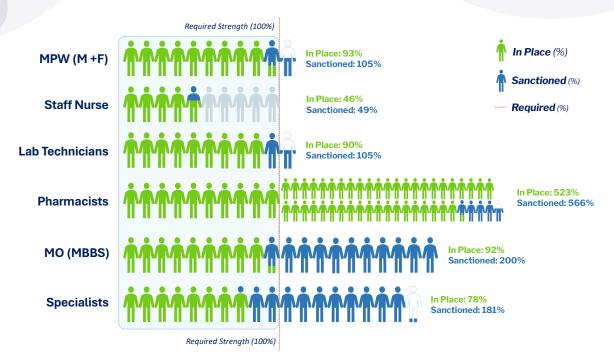
· Ladakh

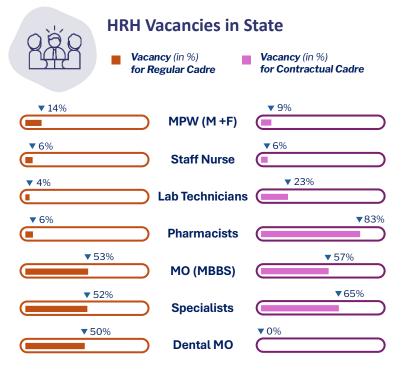






HRH Availability in State







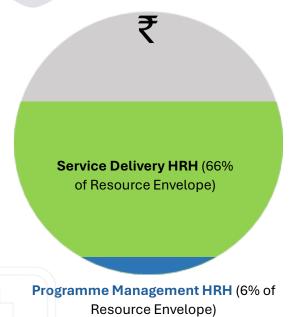


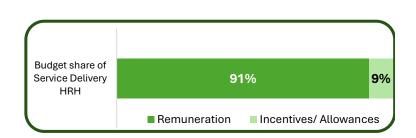


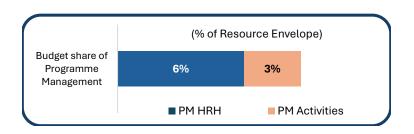
·■ Ladakh



NHM Budget Share – HRH and Programme Management







Human Resource for Healthcare - Performance



tests done per lab technician per day



Dental OPD cases per dentist per day



hysterectomy surgeries per Ob/Gyn per month







inpatient headcount per shift per day at midnight per nurse



7

caesarean section cases per Ob/Gyn per month

1

inpatient case per nurse per shift per day

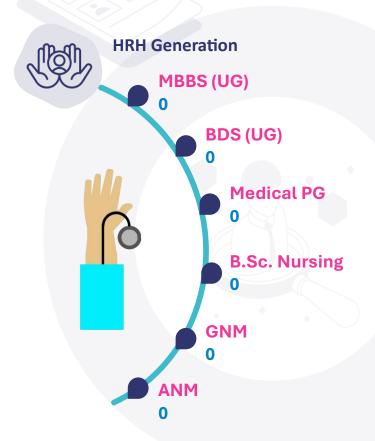


major operation per anaesthetist per day

Lakshadweep

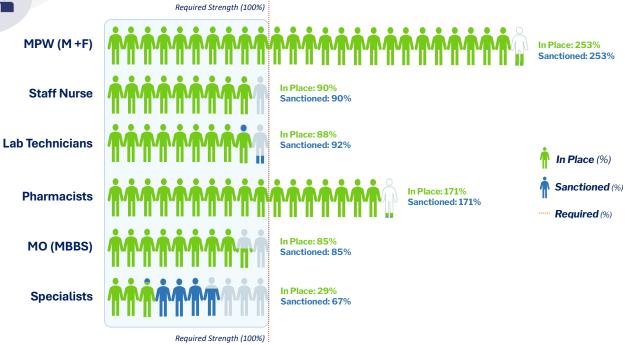
HR Infographics of District Hospital and Below-level Health Facilities

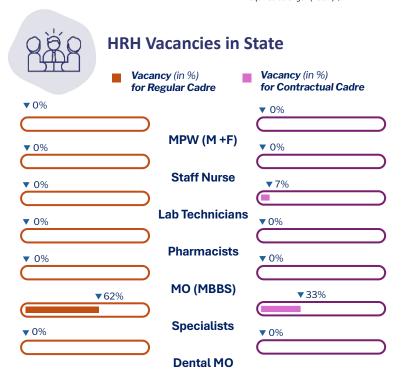




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HRH Availability in State







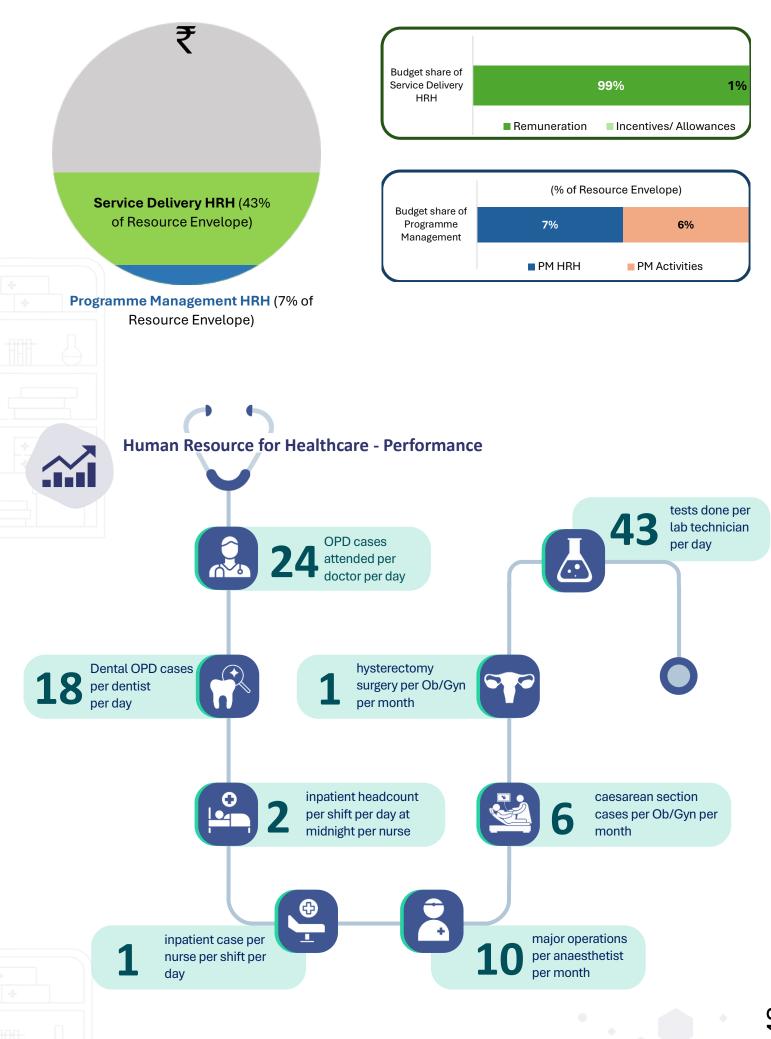




Lakshadweep



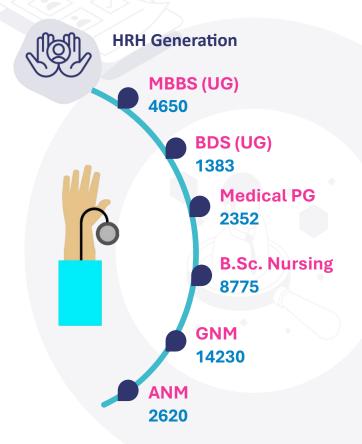
NHM Budget Share - HRH and Programme Management



Madhya Pradesh

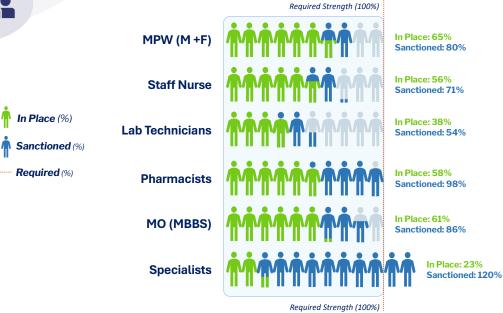
HR Infographics of District Hospital and Below-level Health Facilities

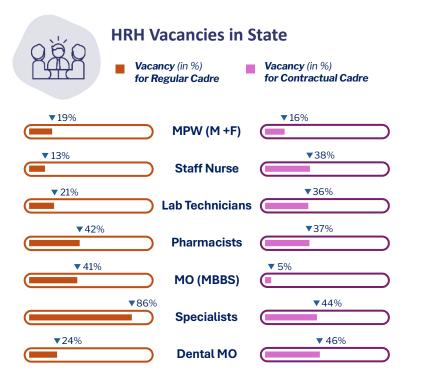
Policy and Systems Specialist Cadre HRH Policy Separate Recruitment Board for Health Implemented HRMIS HRH Integration



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HRH Availability in State





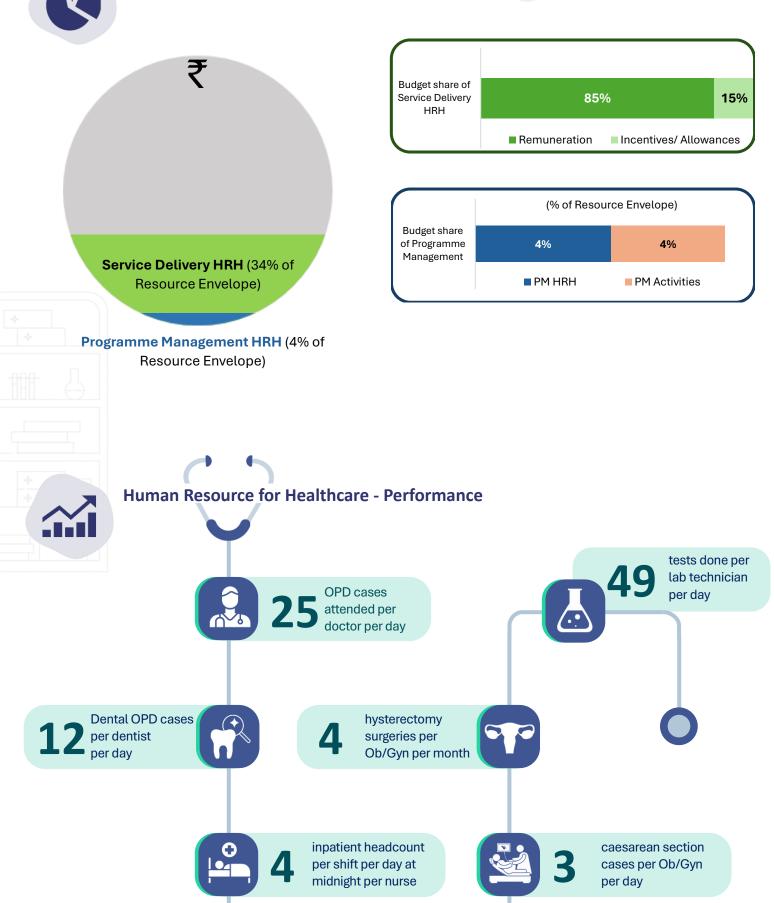








NHM Budget Share - HRH and Programme Management



inpatient cases per nurse per shift per day



major operations per anaesthetist per day

Maharashtra

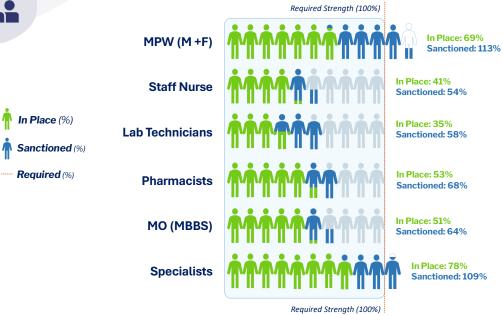
HR Infographics of District Hospital and Below-level Health Facilities

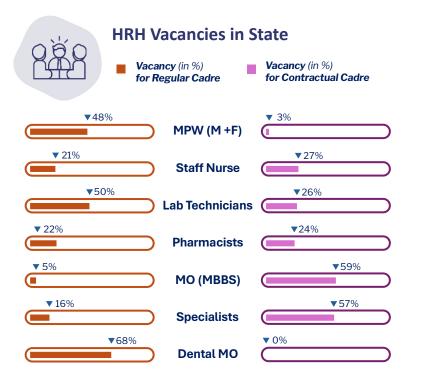




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HRH Availability in State





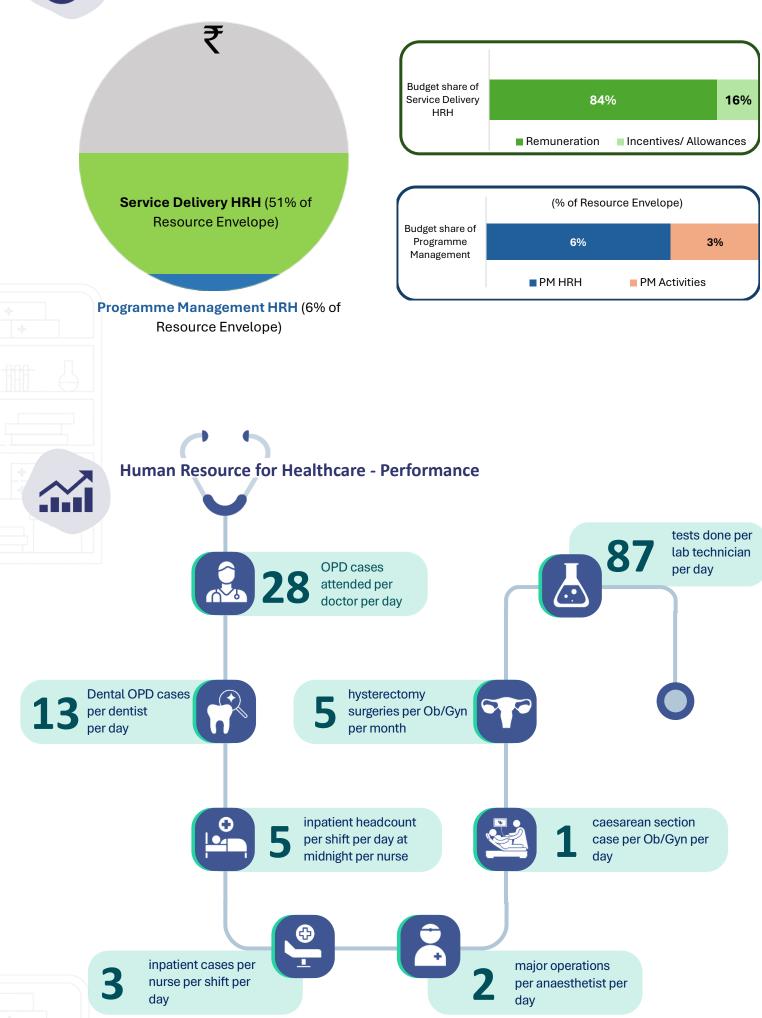






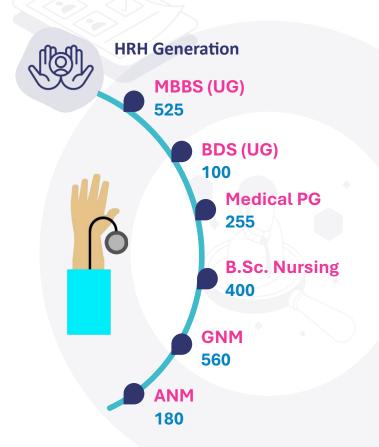


NHM Budget Share - HRH and Programme Management



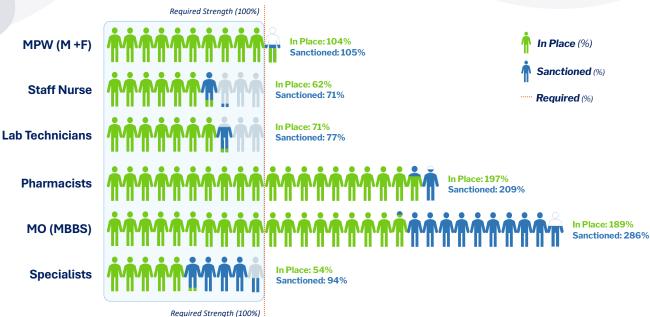
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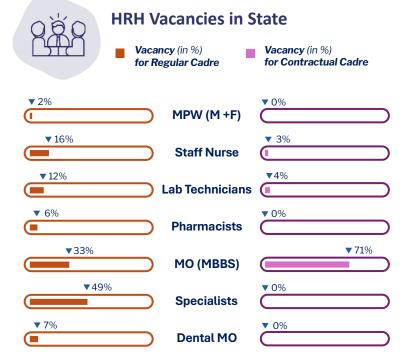




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HRH Availability in State







Doctors to Staff Nurse Ratio



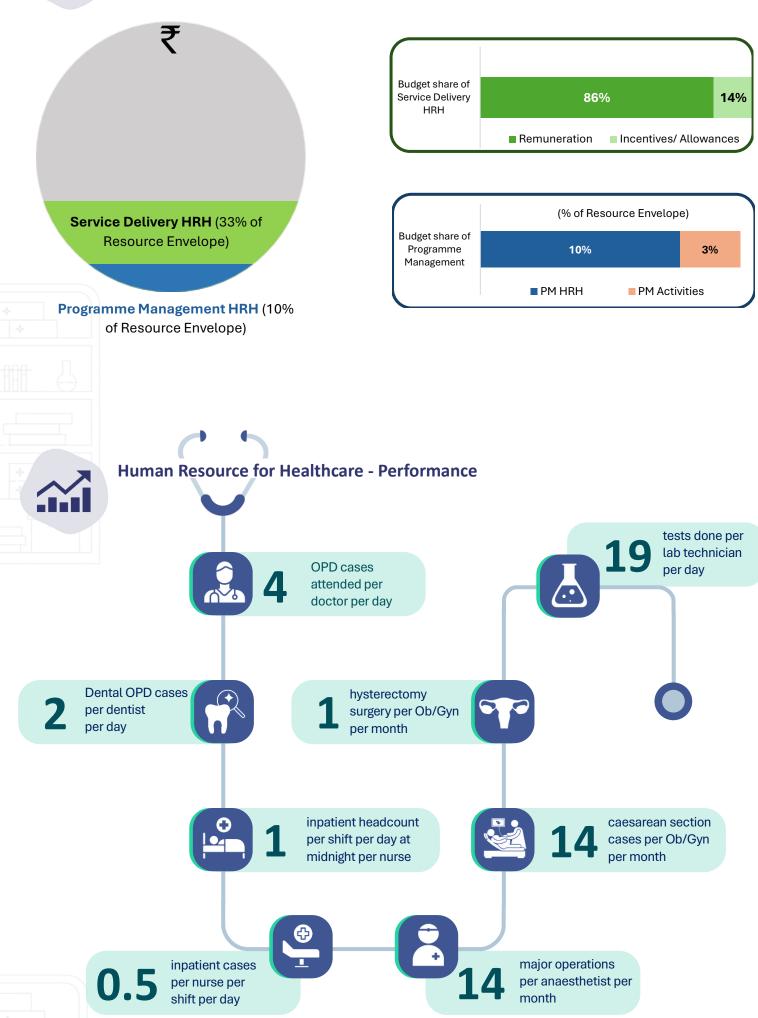
0.74

364 A

· Manipur



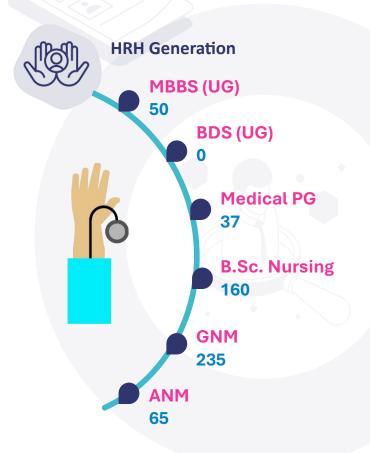
NHM Budget Share – HRH and Programme Management



Meghalaya

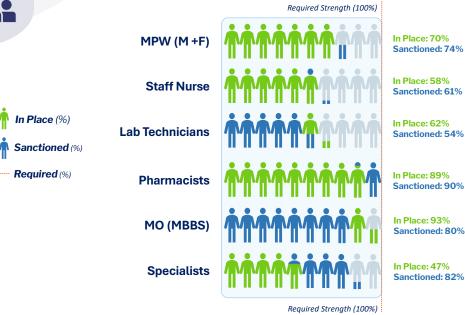
HR Infographics of District Hospital and Below-level Health Facilities

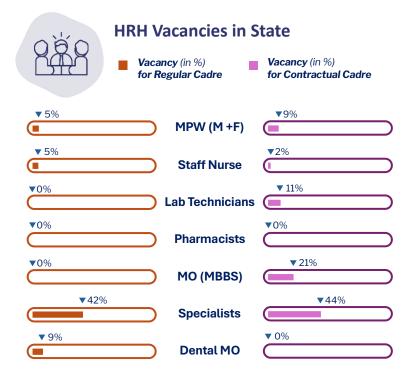




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HRH Availability in State







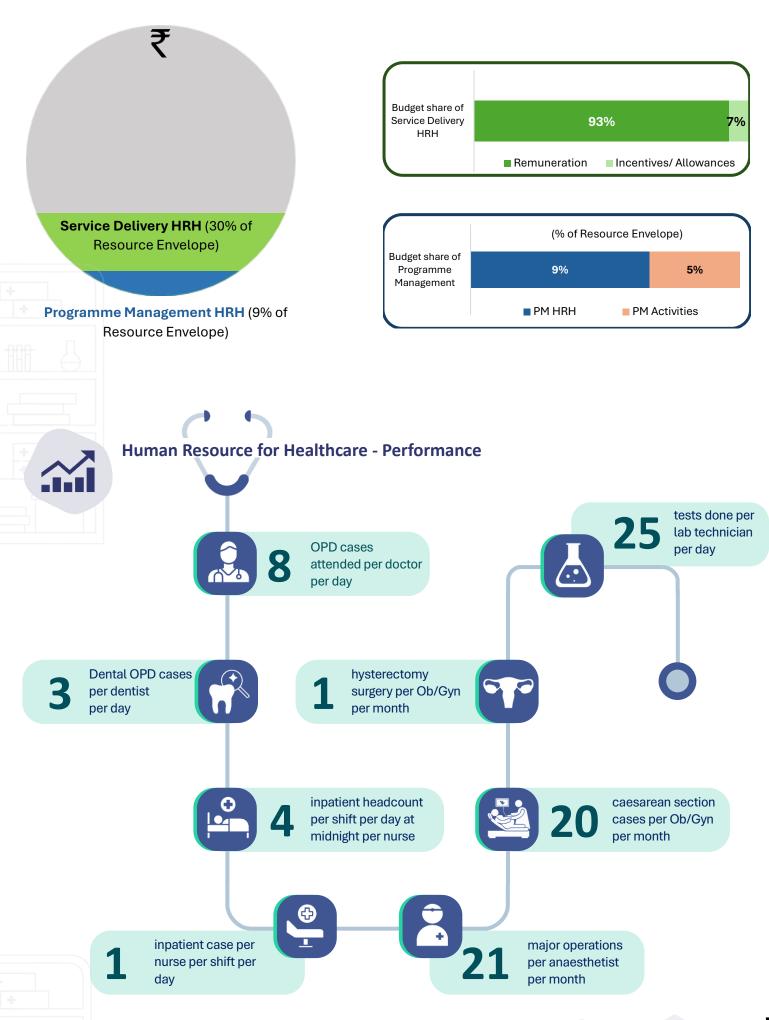




Meghalaya

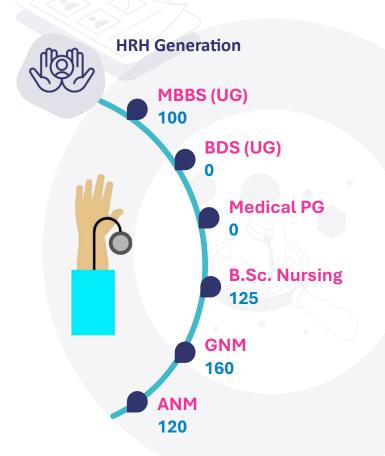


NHM Budget Share – HRH and Programme Management



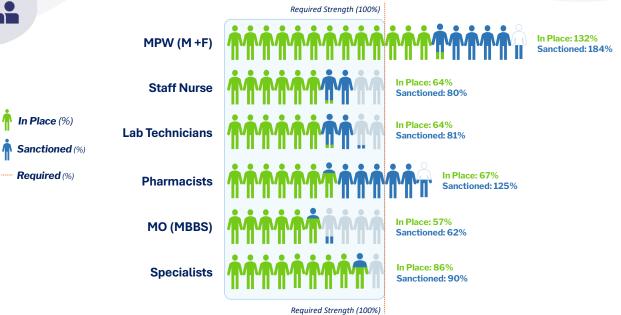
Mizoram

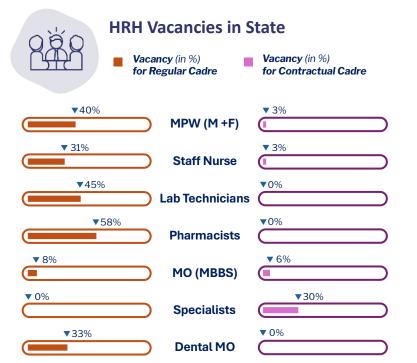




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HRH Availability in State







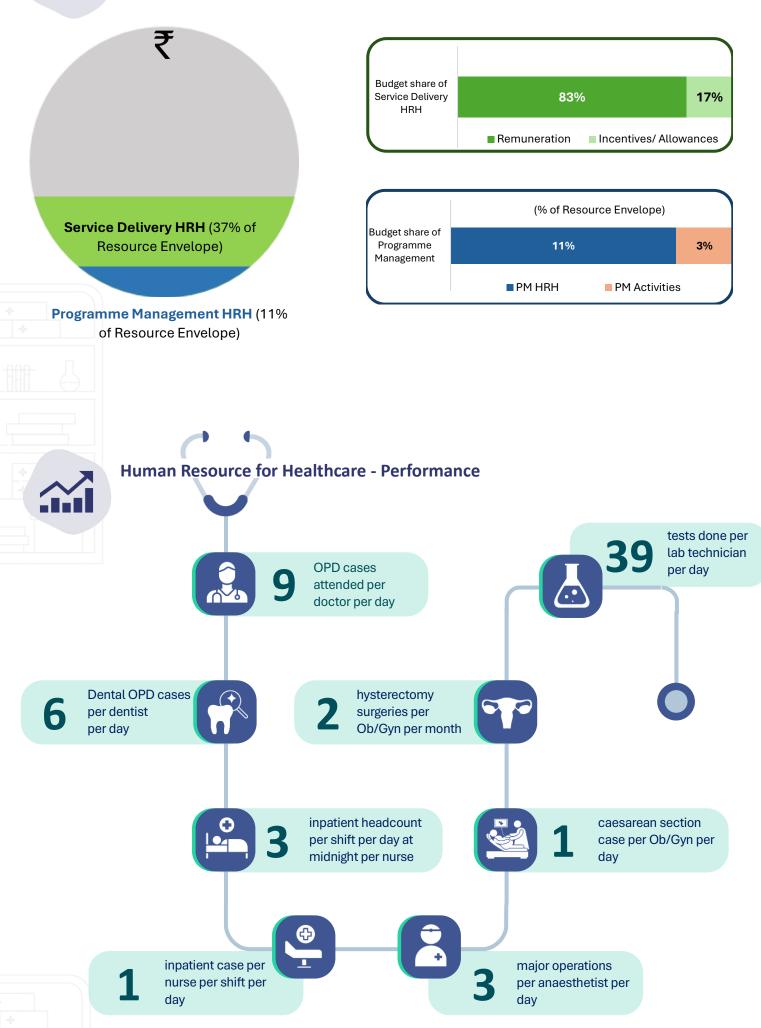




Mizoram

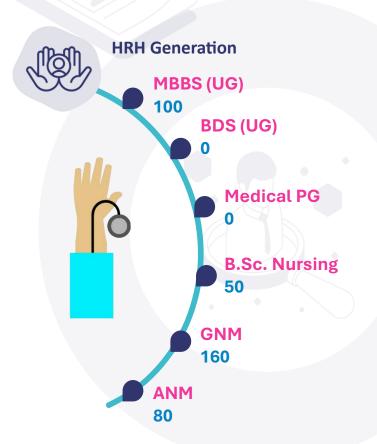


NHM Budget Share - HRH and Programme Management



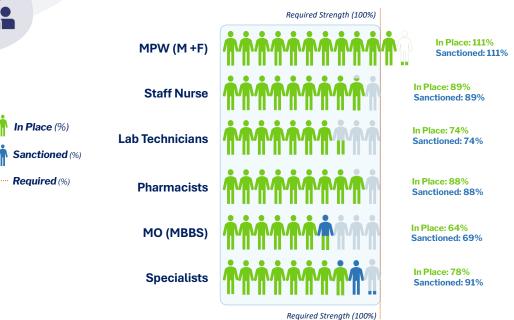
• Nagaland

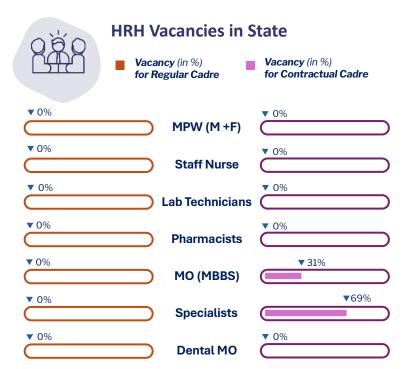




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HRH Availability in State







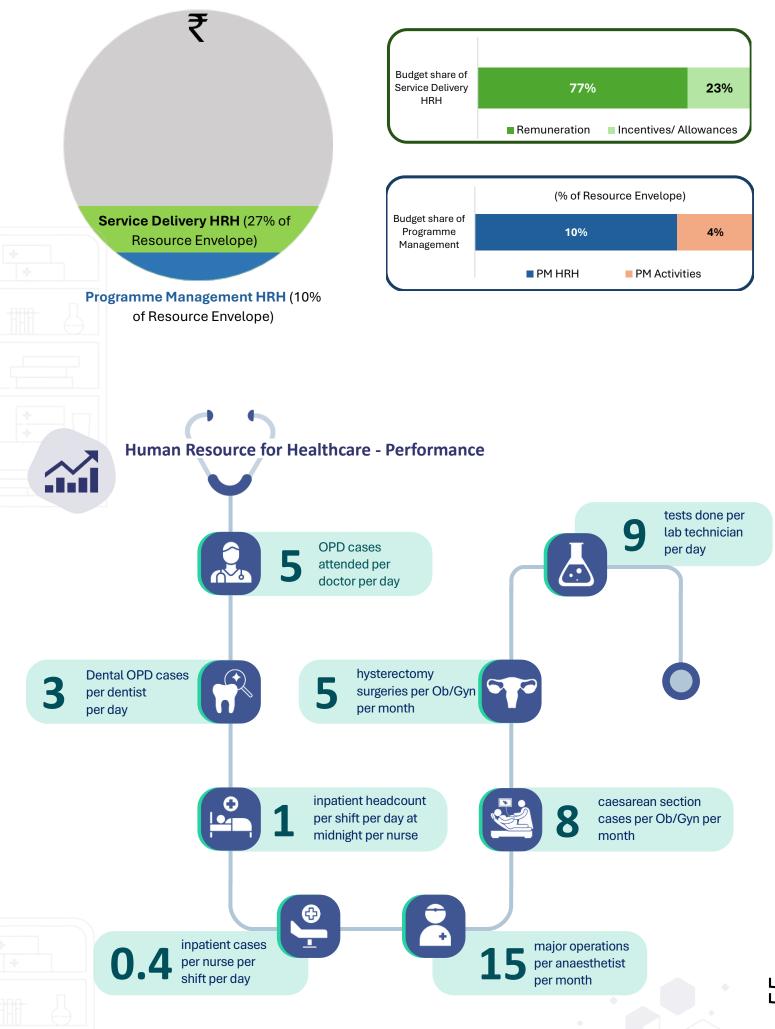




• Nagaland

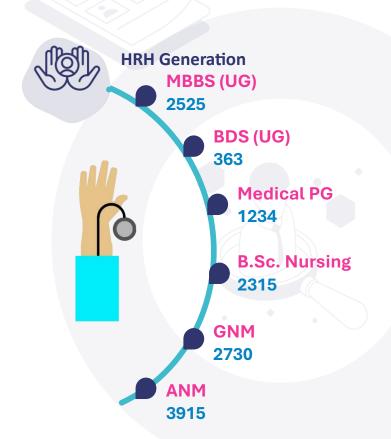


NHM Budget Share - HRH and Programme Management



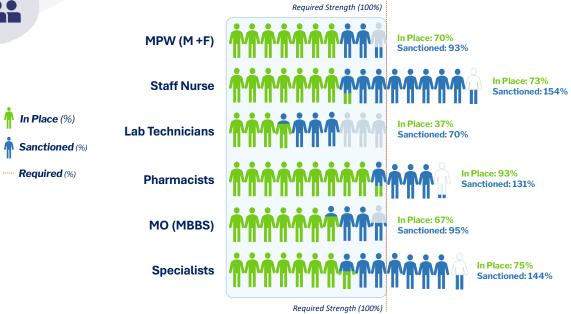
· Odisha

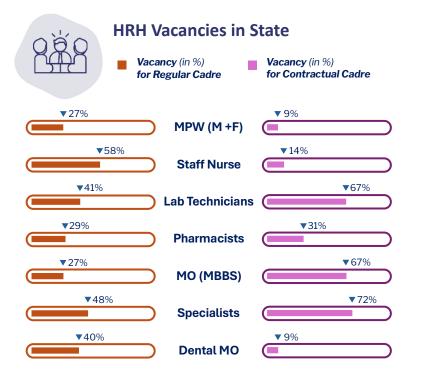




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HRH Availability in State







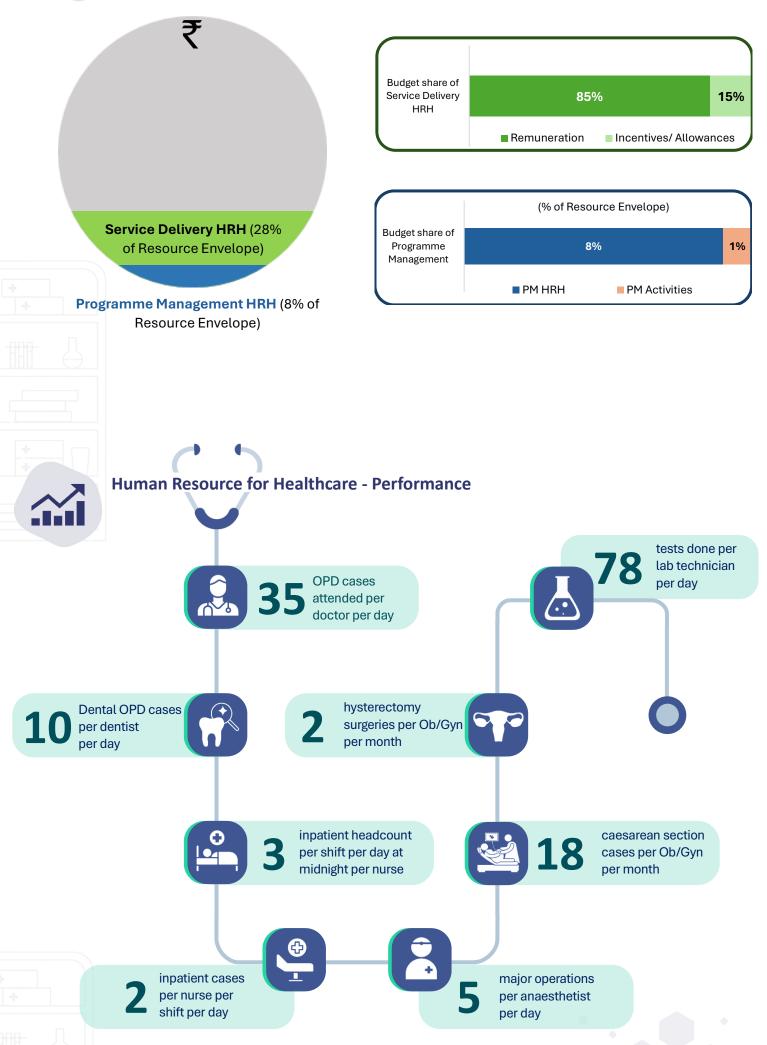




Odisha



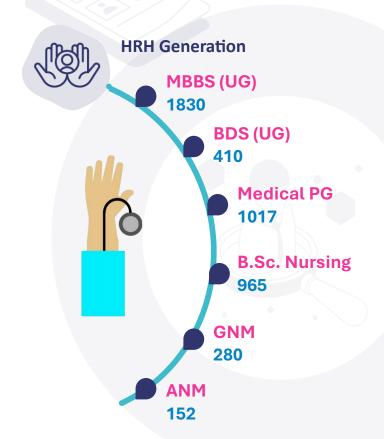
NHM Budget Share – HRH and Programme Management



Puducherry

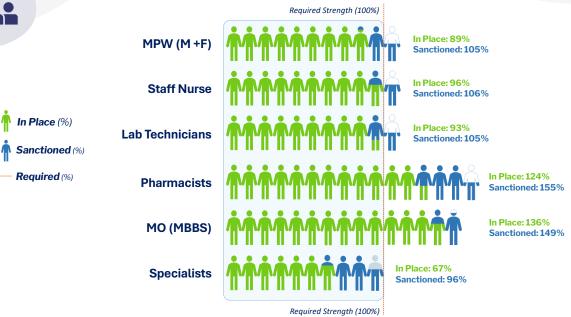
HR Infographics of District Hospital and Below-level Health Facilities

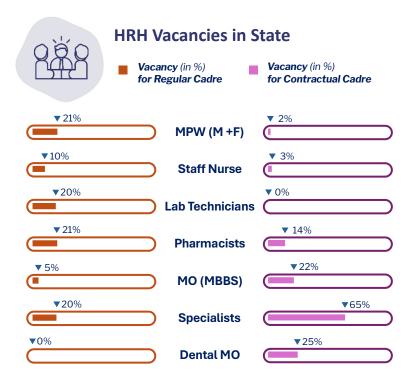




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HRH Availability in State





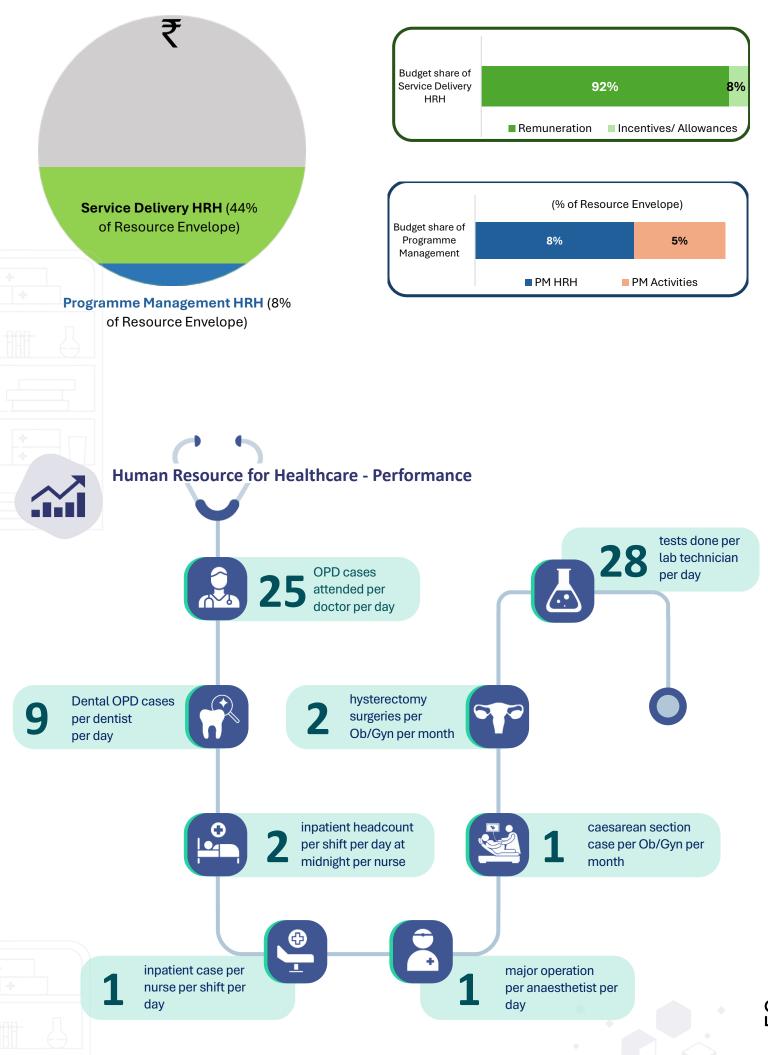




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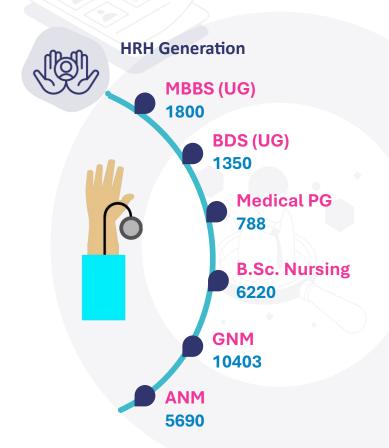


NHM Budget Share - HRH and Programme Management



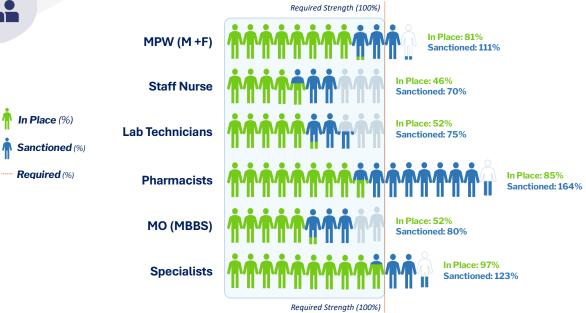
··· Punjab

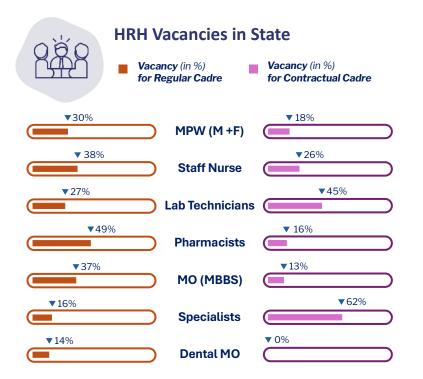




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HRH Availability in State







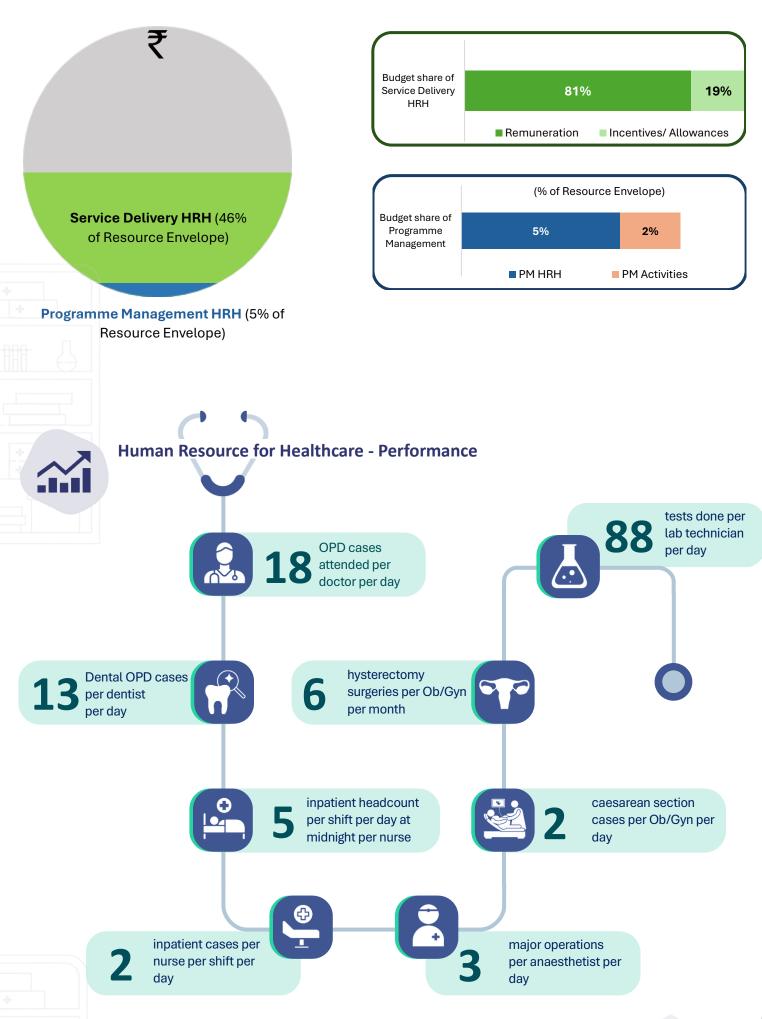




Punjab

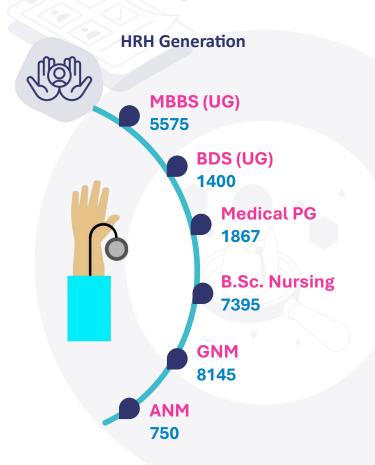


NHM Budget Share – HRH and Programme Management



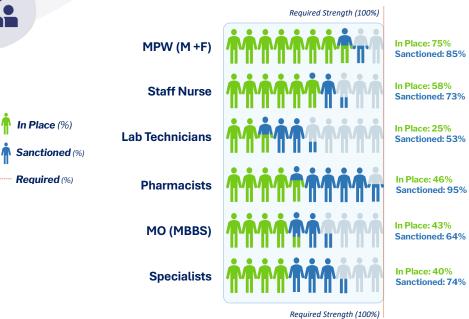
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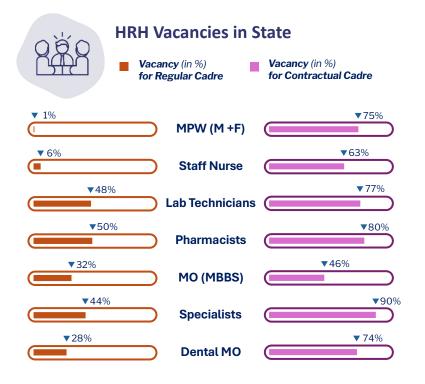




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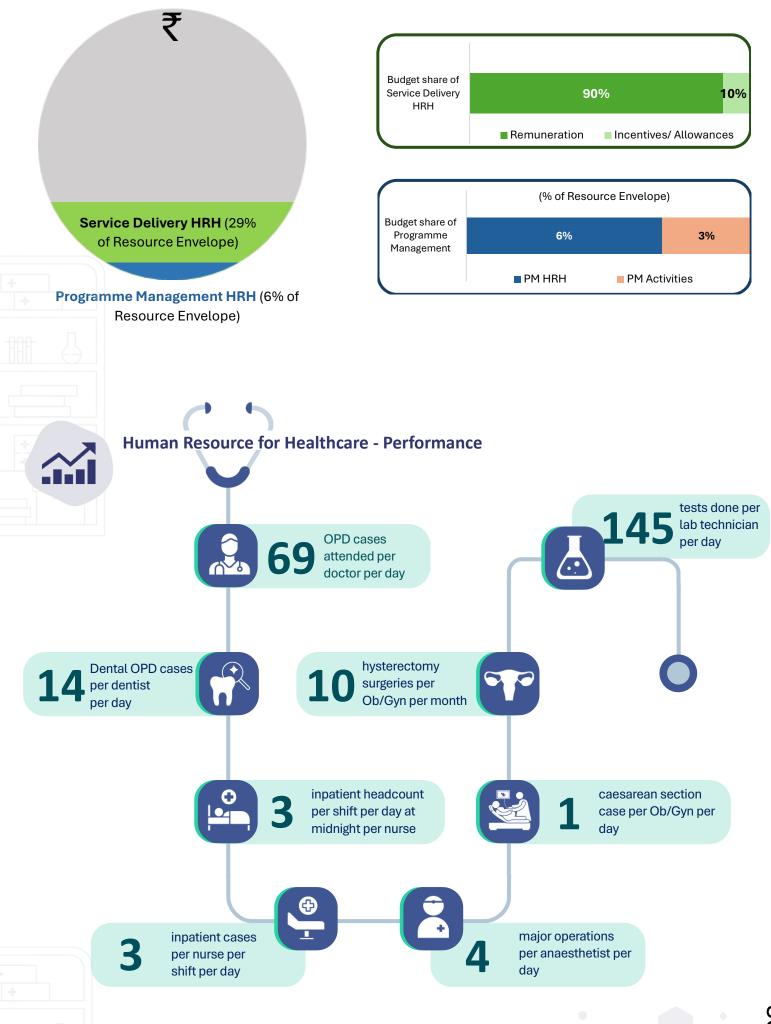




· Rajasthan

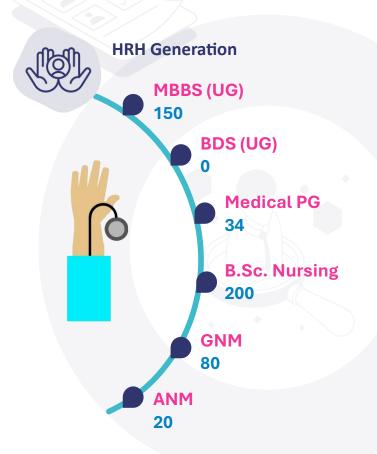


NHM Budget Share - HRH and Programme Management



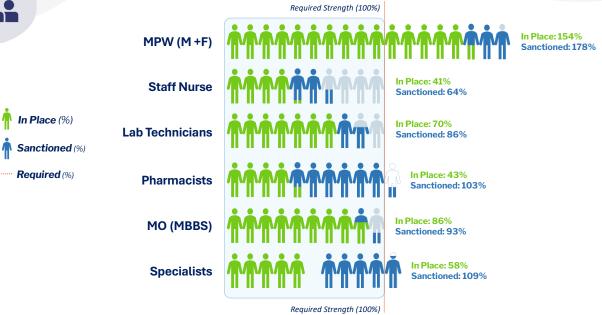


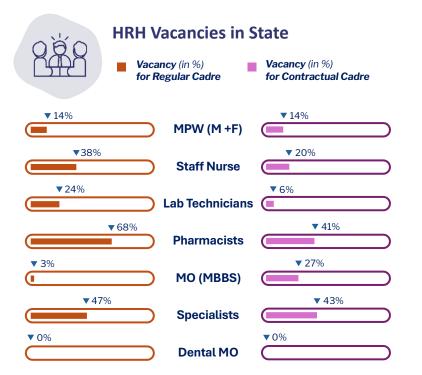




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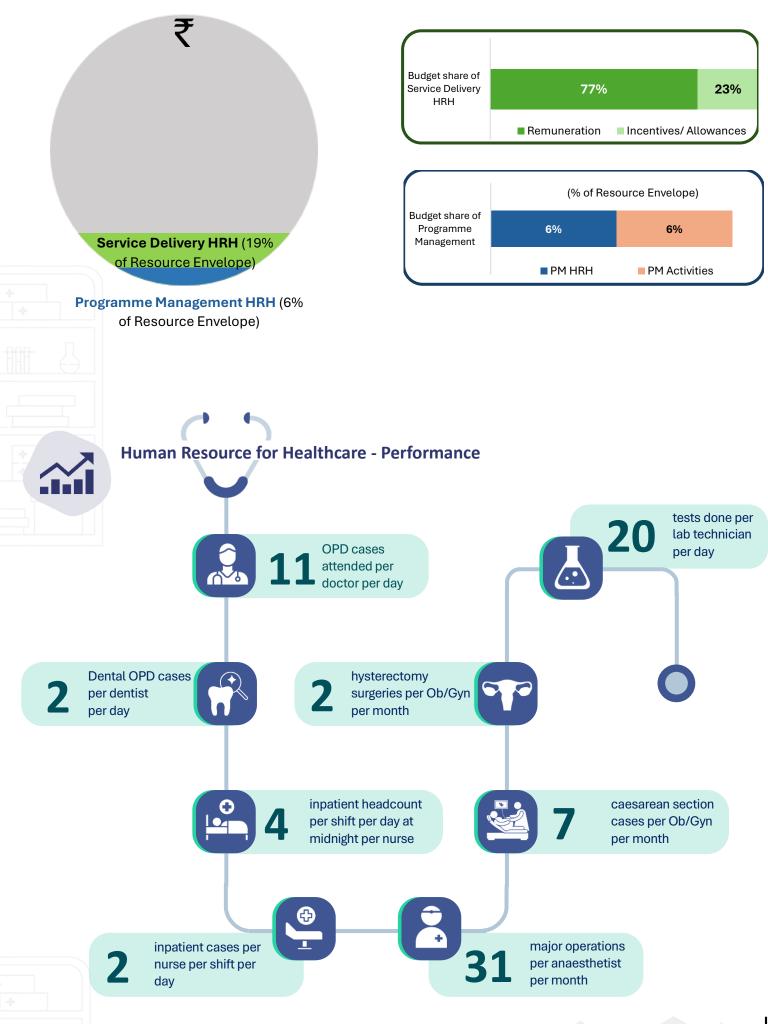








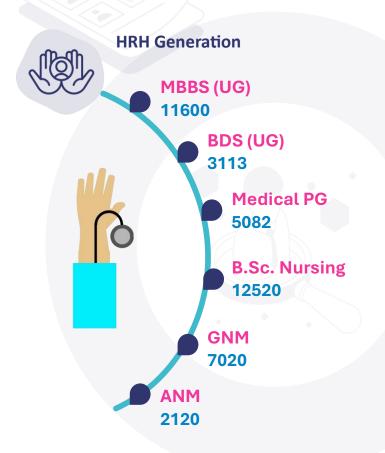
NHM Budget Share – HRH and Programme Management



Tamil Nadu

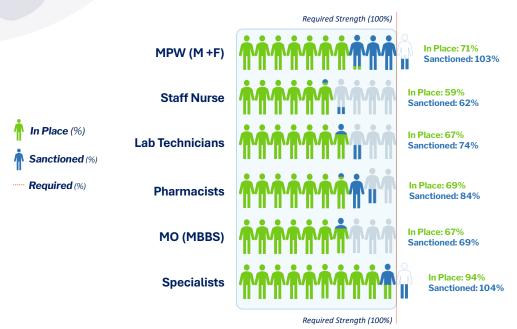
HR Infographics of District Hospital and Below-level Health Facilities

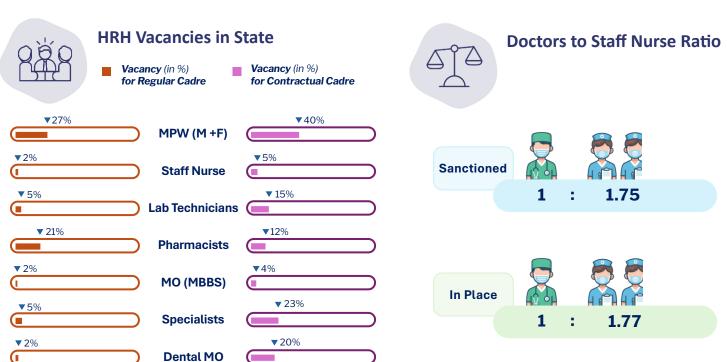




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HRH Availability in State

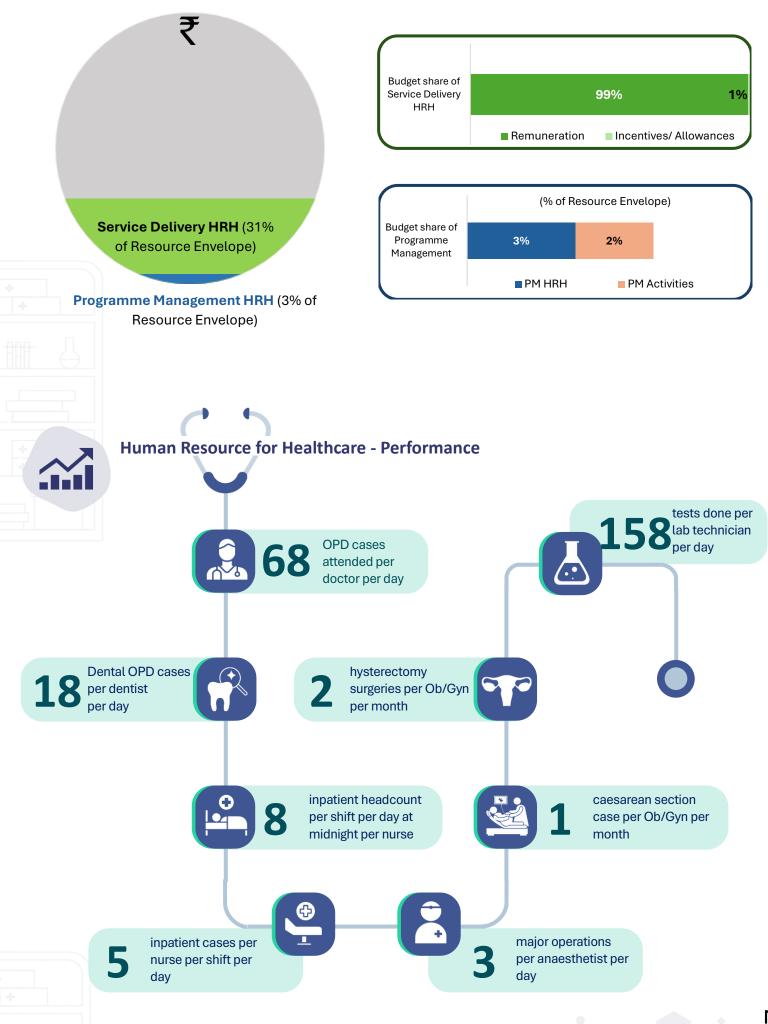




Tamil Nadu

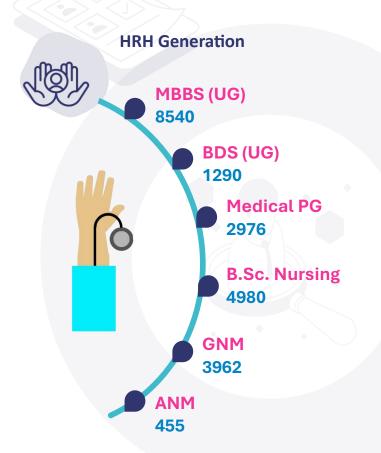


NHM Budget Share – HRH and Programme Management



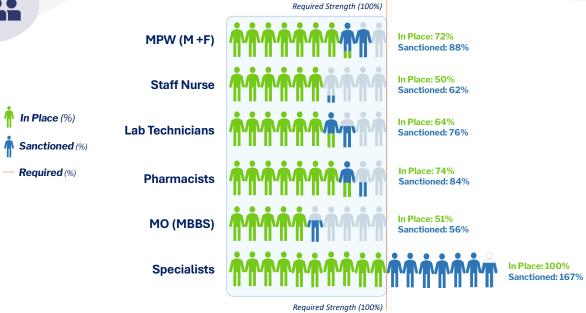
Telangana

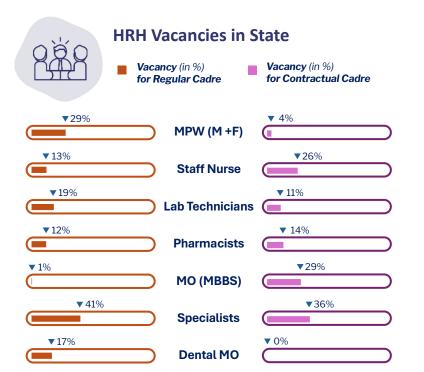




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HRH Availability in State







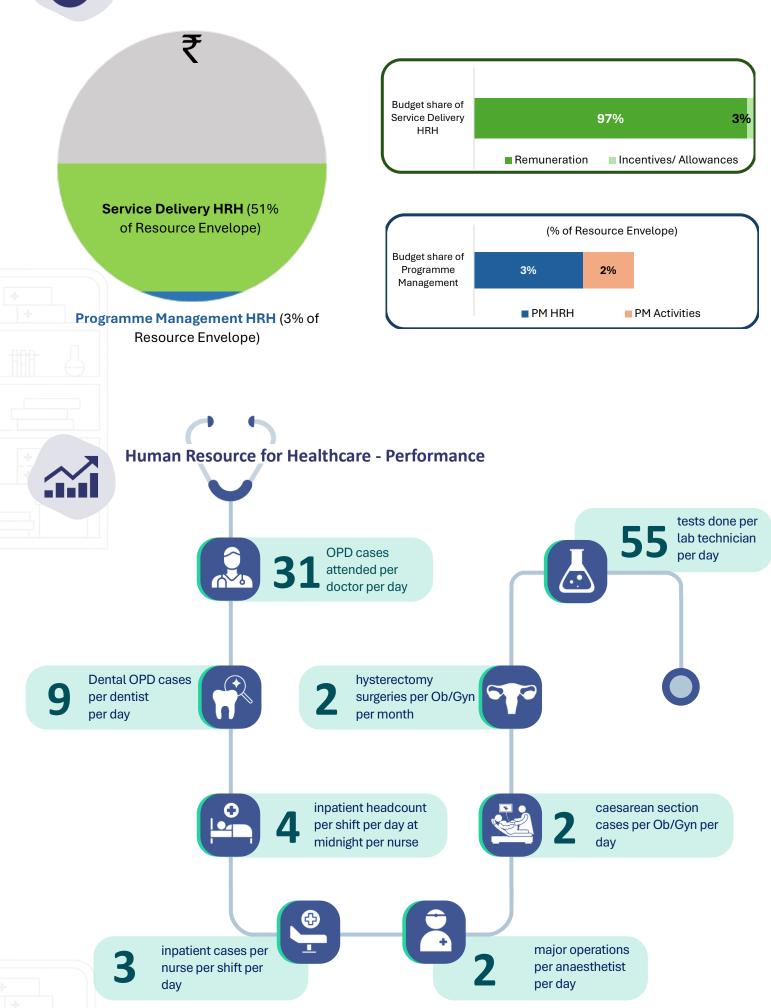




· Telangana

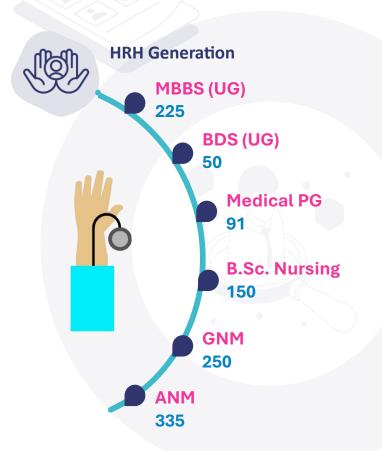


NHM Budget Share – HRH and Programme Management

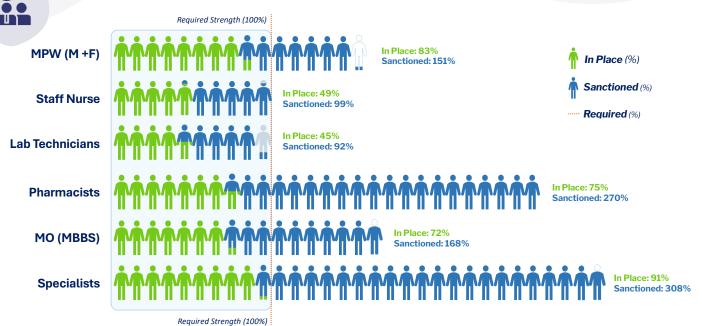


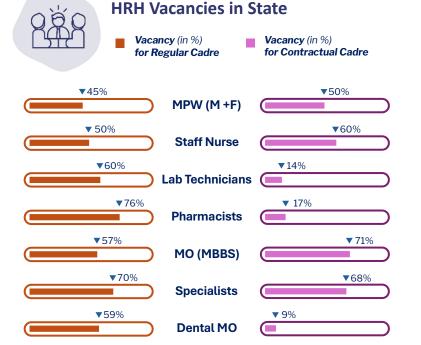
Tripura





HRH Availability in State







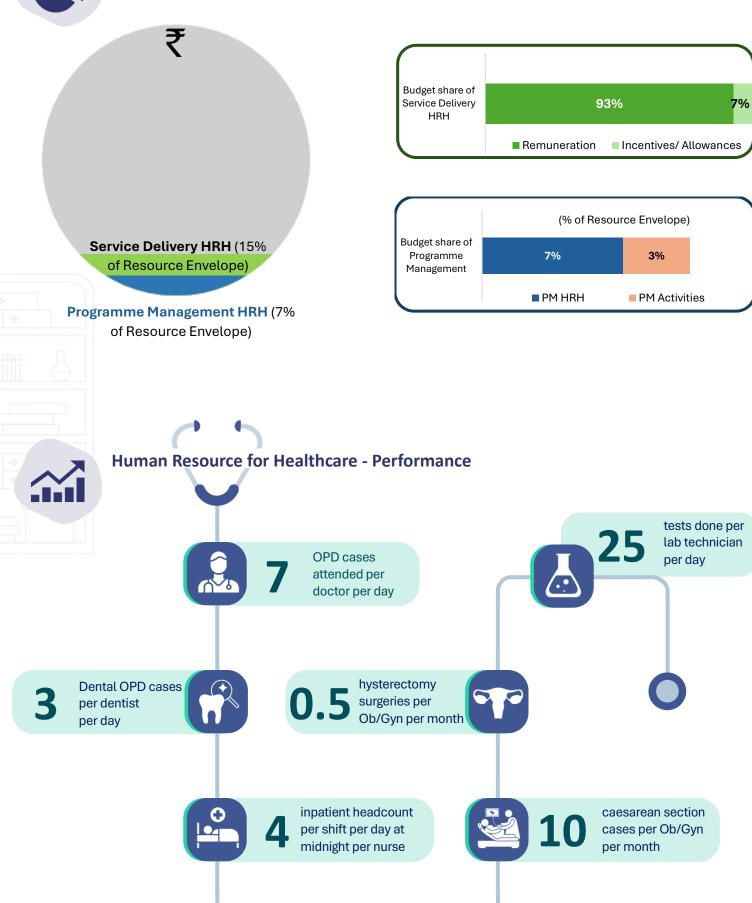


In Place				
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Tripura



NHM Budget Share - HRH and Programme Management



major operations per anaesthetist

per month

inpatient cases per

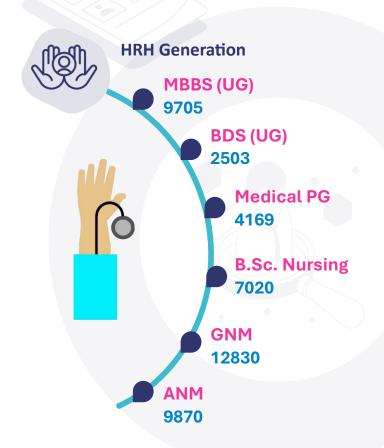
nurse per shift per

day

Uttar Pradesh

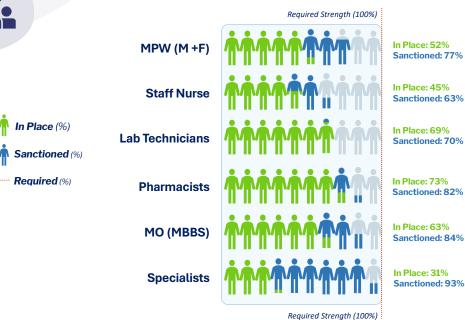
HR Infographics of District Hospital and Below-level Health Facilities

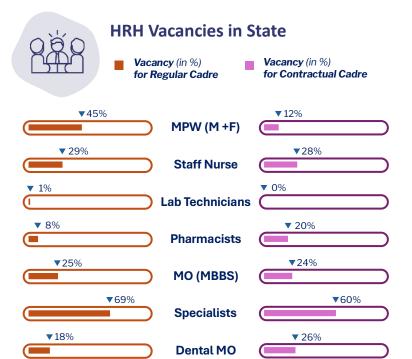




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HRH Availability in State





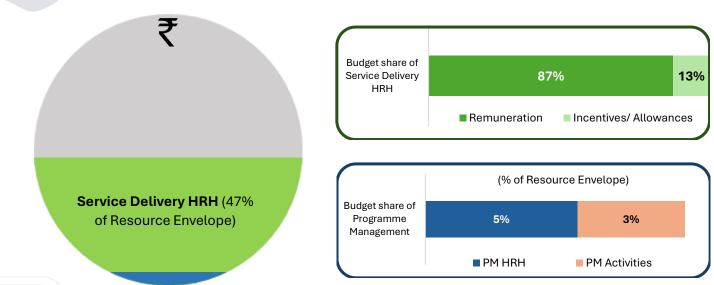








NHM Budget Share - HRH and Programme Management



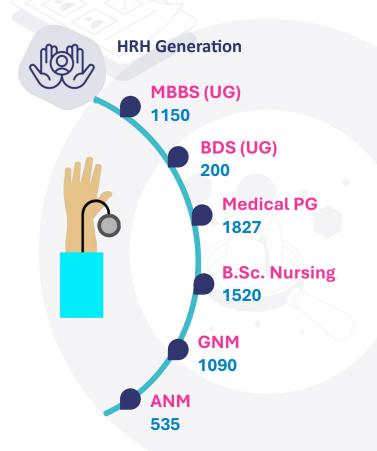
Programme Management HRH (5% of Resource Envelope) **Human Resource for Healthcare - Performance** tests done per lab technician **OPD** cases per day attended per doctor per day **Dental OPD cases** hysterectomy surgeries per Ob/Gyn per dentist per month per day inpatient headcount caesarean section per shift per day at case per Ob/Gyn per midnight per nurse inpatient cases per major operations

nurse per shift per

Uttarakhand

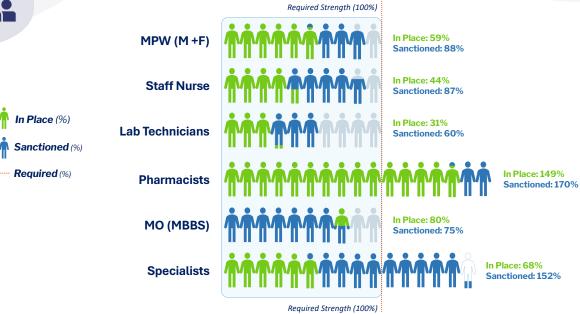
HR Infographics of District Hospital and Below-level Health Facilities

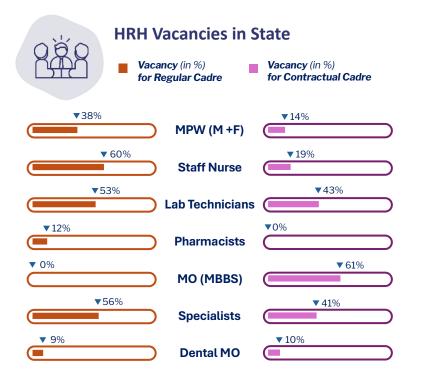




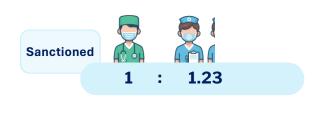
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HRH Availability in State





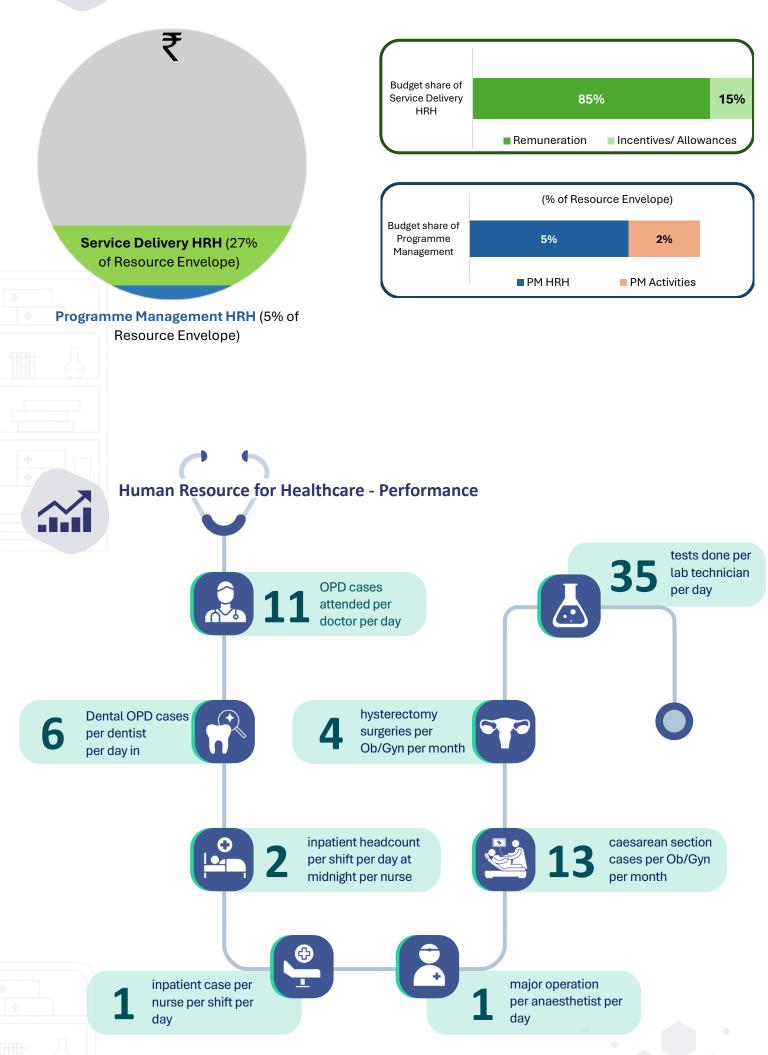








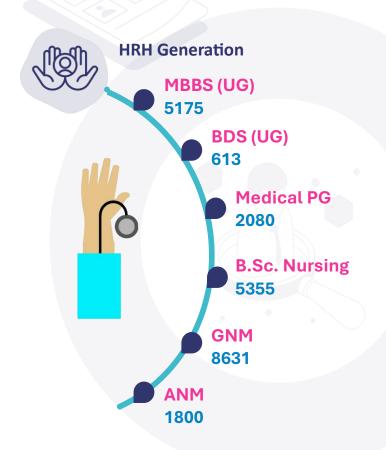
NHM Budget Share - HRH and Programme Management



HR Infographics of District Hospital and Below-level Health Facilities

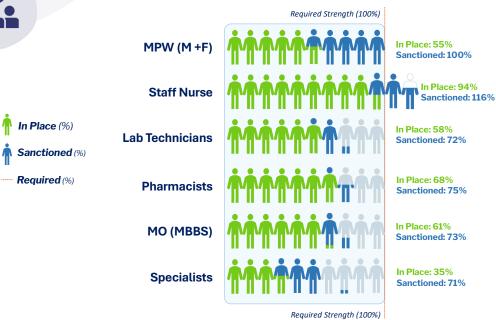
West Bengal

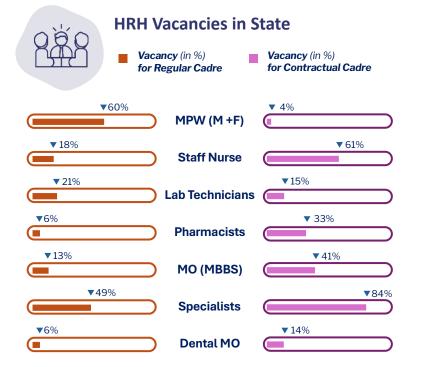




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HRH Availability in State







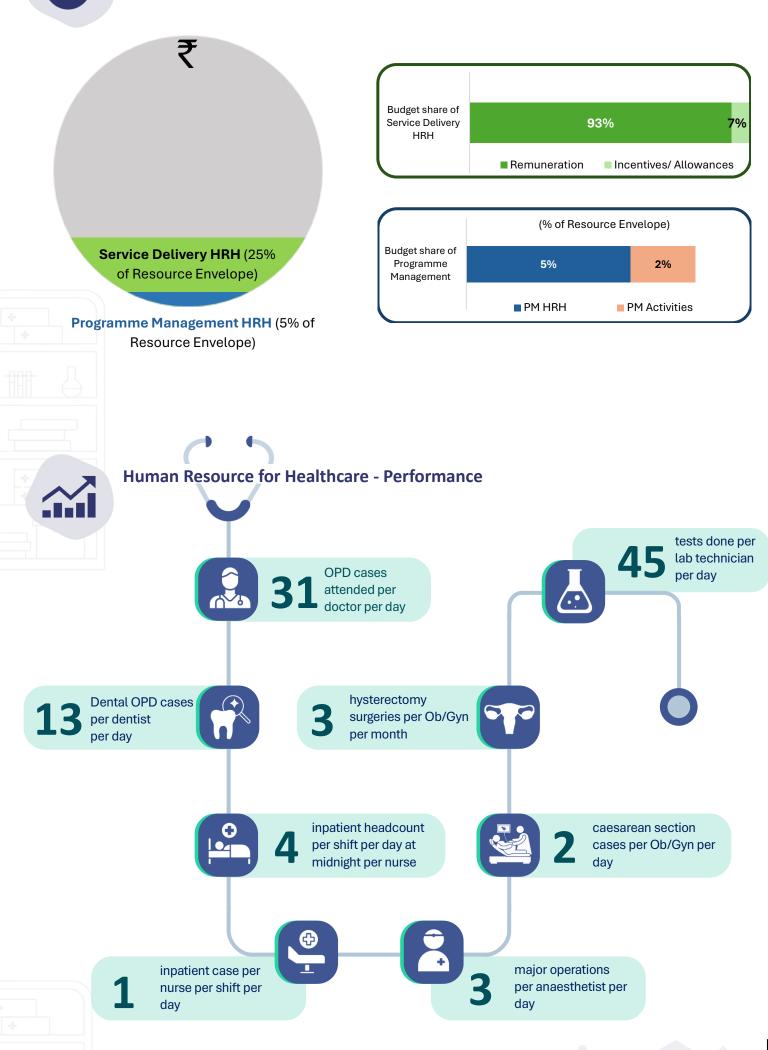




West Bengal



NHM Budget Share - HRH and Programme Management





Ministry of Health & Family Welfare
Government of India