Integrated Primary Health Care Costing Activity in India: Proposal for BIHAR

**Background:**

A strong, responsive, and sustainable primary health care (PHC) system is essential for achieving universal health coverage (UHC) under which all people have access to good quality health services without suffering financial hardship. However, for many, PHC services are unavailable, inaccessible, or unaffordable in the absence of sufficient resources. In low-income countries especially, the need for increasing resources for PHC is greatest where it estimated that PHC spending per capita needs to increase from $25 to $65 while health workforces need to increase from 5·6 workers per 1000 population to 6·7 per 1000 population, delivering an average of 5·9 outpatient visits per capita per year.

**PHC in India**

In 2018, the Government of India launched *Ayushman Bharat*, a two-pronged strategy for increasing access to quality healthcare and achieving UHC. The first component of *Ayushman Bharat* is the scale up of the *Pradhan Mantri Jan Arogya Yojana* (PMJAY), a health insurance scheme aimed at providing coverage for secondary and tertiary care to the most vulnerable and poor population in the country. The second component of the strategy aims to provide free, comprehensive, and quality PHC services through an upgrade of its existing public sector PHC network.

**PHC Costing Activity**

The objectives of the proposed PHC costing activity will be to:

produce an analysis of PHC network costs, develop an actual and normative cost model using the tool, and facilitate the further use of tool and results – e.g. to assess financing needs and gaps, mobilize domestic and external resources, plan and allocate resources for greater effectiveness, efficiency and equity; prepare budgets; and/or to calculate provider payment rates.

1. The activity will estimate the actual and normative costs of the public sector package of PHC services as defined by the government, which is likely be the HWC package provided across formal service networks comprising PHC, APHCs, and SHC levels.
2. Data on actual PHC services and costs will be collected from routinely collected facility-level data on financial flows, expenditures, resource utilization, and health service delivery,
3. This includes HMIS, expenditure reports, Programme Implementation Plans (PIP), among others.
4. Geographic scope of this activity has yet to be confirmed, the preference would be to focus on a sample of (~50-75) total facilities in Bihar, Punjab, and Tamil Nadu states. ADRI will lead the work for Bihar, while other partner institutions will take up responsibilities of other states.
5. Geographic scope of this activity has yet to be confirmed, the preference would be to focus on a sample of (~50-75) total facilities in Bihar, Punjab, and Tamil Nadu states. ADRI will lead the work for Bihar, while other partner institutions will take up responsibilities of other states.

Study to be conducted by CHP-ADRI in Bihar during the period August 2021 – December 2021.

1. The study will not involve patient interviews or the use of confidential or identifiable patient data.
2. CHP-ADRI will ensure appropriate government approvals necessary to conduct this study in Bihar. Such approvals when applicable may include, but not limited to, an Institution Review Board (IRB) approval, exemption, or non-human research subject determination.

**Objective of the Assignment**

1. The objective of the assignment is to conduct PHC costing study aimed at producing an analysis of PHC network costs, develop an actual and normative cost model using the tool, and facilitate the further use of tool and results – e.g. to assess financing needs and gaps, mobilize domestic and external resources, plan and allocate resources for greater effectiveness, efficiency and equity; prepare budgets; and/or to calculate provider payment rates.
2. The study will estimate the actual and normative costs of the public sector package of PHC services as defined by the government, which is likely be the HWC package provided across formal service networks comprising Community Health Centres CHC, PHC, and SHC levels.

**Proposed Scope of work**

1. Determine key stakeholders and participants of desired products from the work, including but not limited to key decision-makers in Bihar (at State, District and Block level); leading local experts such as those in academia; and any additional partner organizations needed for data collection;
2. Obtain the necessary buy-in, approvals, and supporting documentation required for data collection;
3. Develop State specific study design/methodology in collaboration with the ACCESS Health team;
4. Develop/customize State specific data collection tools in collaboration with the ACCESS Health team;
5. Develop detailed work plan and standard operating procedures for data collection, validation, and reporting;
6. Constitute a technical advisory panel to provide guidance;
7. Identify general data sources – e.g., policies, plans, norms and standards, service packages, incidence and prevalence rates, health information system, financial records and reports, medicines and supply records, staffing records;
8. Select facilities to be included in the sample in consultation with the Health Department, Government of Bihar;
9. Collect sample actual data (e.g., disaggregated numbers of inpatient and outpatient services, facility equipment, labor costs, and above-service delivery costs, financing flows [budget and allocations], and costs of medicines, supplies and reagents); Populate sample models with actual data;
10. Collect normative data (e.g. population of tool with normative data (e.g., standard treatment protocols for each PHC service package, incidence/expected utilization of each service);
11. Populate the tool with normative data;
12. Produce aggregated network, sub-national results, and national results;
13. Review findings with stakeholders;
14. Produce and present final state report; and
15. Hand-over of report and models and training in use of tool and approach and in updating of models to the state Health Department.

**Methodology (Sampling)**

ADRI shall conduct the study in Bihar. Three districts and one Municipal Corporation will be selected for the study. In each district one rural administrative block will be selected.

Under each rural block, the following seven sample health facilities will be selected:

* 1 Community Health Centre (block CHC, or equivalent)
* 2 Primary Health Centres (PHCs)
* 4 Health Sub Centres (2 SCs under each of the 2 selected PHCs)

Under the Municipal Corporation the following seven sample health facilities will be selected:

* 1 Urban CHC (or equivalent)
* 2 Urban Primary Health Centres
* 4 Urban Health Sub Centres (2 HSCs under each of the 2 selected UPHCs)



Stage 1: Sample State

* Bihar

State 2: Sample Districts

* All the districts in each state will be stratified into good, average and poor based on pre-decided parameters viz. health system performance, availability of health system infrastructure/ human resources and service utilization.
* One district from each stratum will be selected purposively ensuring to cover geographic variations (if any). It will also be important to take a decision in consultation and agreement with the respective State Health Department. See table below at the end of this section.

Stage 3: Sample Rural Blocks and Municipal Corporation

* 2 Rural Blocks having functional Health and Wellness Centres (i.e., 2 Additional Primary Health centers – APHCs and 4 Health Sub Centres under these 2 APHCs) since 1st April 2019 will be selected.
* 1 Rural Block having 2 APHCs and 4 Health Sub Centres which are not HWCs and are functional since 1st April 2019 will be selected randomly.
* A corporation which has all the 7 facilities or their equivalent in its jurisdiction will be selected in consultation with the State Health Department. If one corporation does not have all the 7 health facilities within its jurisdiction, remaining facilities will be selected from a different corporation.

See table below at the end of this section.

Stage 4: Sample Health Facilities

1. Rural Blocks (3)
   1. Primary Health Centre – 1 PHC/ block (Bihar mostly has PHCs at the block level, that are gradually being upgraded to CHCs)

* Usually there is only one PHC in each rural block in Bihar and the same will be selected.
  1. Additional Primary Health Centre (APHC) and Health Sub Centres (HSC) – 2 APHCs + 4 HSCs per block
* Convenience based, sticking to the inclusion criteria
  1. Additional Primary Health Centre and Health Sub Centres (non-HWC) – 2 APHCs + 4 HSCs
* Convenience based, sticking to the inclusion criteria See table below at the end of this section.

1. Municipal Corporation
   1. Urban Community Health Centre (Municipal Corporation)

* Convenience based, sticking to the inclusion criteria
  1. Urban Primary Health Centre and Health Sub Centres
* Convenience based, sticking to the inclusion criteria

Note: Health facilities in urban areas do not follow a standard hierarchical structure and it varies from state to state. A Health Dispensary would be selected as a replacement for any missing facility.

Suggested districts, blocks and facilities are as follows:

This is tentative and will be finalised in consultation with the Health Department.

Selection process will be purposive in nature after due consultation with the state and district health authorities. Also, the proximity of study blocks from the State capital and District Hospitals will be considered during sample selection.

Data Sources

|  |  |  |
| --- | --- | --- |
| Level | Data Sources | Key Stakeholders |
| State | State Budget; State Program Implementation Plan; HMIS Reports; Annual Health Statistics; Drug Intent and Supply details for facilities from Medical Supplies Corporation; Fund Utilisation and Expenditure data under Plan, Non-Plan and NHM heads | Director of Health Services; Additional Director Planning; State Program Manager, NHM, State Finance/Accounts Manager, State Demographer/Statistician |
| District | District Health Allocation and Expenditure, HMIS reports; Facility wise HR details; Drug supply to facilities | District Medical Officer, District Program Manager, NHM, District Finance Manager/ Accounts Manager; District HMIS Manager; District Manager Medical Supplies  Corporation; Cold Chain Manager |
| Block Health Office (CHC/Block PHC) | Salary details of regular employees at CHC, Service Delivery details, Transport vehicle contract details, Drug supply - programme-wise, (Health Information Management System (HMIS) data for outcome indicators | Block Health Officer and Team: Administrative Officer/ Clerk; Block Program Manager, NHM |
| Facility (PHC) | List of staff (Regular/Contractual), Accredited Social Health Activist (ASHA) incentives, Financial Management Report (FMR), Statement of usage of untied funds/maintenance grant, Drugs and Consumable supply, Utilities expenses | Medical Officer; Staff Nurse, Pharmacist, Laboratory Technician, Facility Clerk |
| Facility HSC | Service Delivery details, Statement of usage of untied funds/maintenance grant, Drugs and Consumable supply, Utilities expenses | Mid-Level Health Provider), Auxiliary Nurse Midwife (ANM), ASHA, Multi- Purpose Health Worker (MPHW |

\*Though not specified in the scope of work, we believe that primary care is also provided at the District Hospital. Therefore, the district hospital of the district in which the study block is located will also be included.

Table: Activity Plan, Timelines, Responsibility matrix for costing study

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| --- | --- | --- | --- | --- | --- |
|  | | Activities | | Time Frame | Key Stakeholders / Additional Points /  Remarks |
| A. Planning and Preparation Activities | | | | | |
| 1 | | Securing permissions from the State and District Health Authorities and selection of facilities for the study.  Coordination with districts and selected facilities for the study | | August 2021 | * Letter from CHP-ADRI to State and District Health Authorities * Follow up Calls * Finalization of selected facility list |
|  | |  | |  | Key Stakeholders / Additional Points /  Remarks |
|  | |  | |  | - Letters from Civil Surgeons to selected facilities |
| 2 | Selection of field investigators and field August 2021 supervisors | | | | - To be recruited as per sampling plan |
| 3 | Training and Planning Session for the field team | | September 2021 | | - will be done in coordination with partners and AHI |
| B. Data Collection Activities | | | | | |
| 4 | Collection of State Level Secondary Data | | September 2021 | | -Coordination with Directorate of Health Services, State Health Society of National Health Mission, State Medical Supplies Corporation and other stakeholders |
| 5 | Collection of District Level Secondary September Data 2021 | | | | - Coordination with Civil Surgeons, District Health Society of National Health Mission, District Warehouses of Medical Supplies Corporation and other stakeholders |
| 6 | Data Collection from first block (4 HSC, 2 APHC, 1 PHC | | October 2021 | |  |
| 7 | Review and Analysis of Data from Block October 2021 I  Feedback to data collectors and customization of the tool if required | | | |  |
| 8 | Training session for the field investigators based on the review of  the data collected from first block | | November 2021 | | To be coordinated by AHI |
| 6 | Data Collection from the subsequent December four blocks in three states 2021 | | | | - |

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| --- | --- | --- | --- |
| C. Analysis & Report Development | | | |
| 1 | Review of actual data collected from all blocks  Finalization of the costing data set from all three states |  | * Reviews of report section on Skype * Discussions on report section may be included with the meetings on Block I data * AHI, IHSC and Partner Institutions |
| 2 | Analysis of costing data from three states |  | * Populating Sample Models with Actual Data * Populate the tool with normative data. * Produce aggregated network, sun- national and national results * AHI, IHSC and Partner Institutions |
| 3 | Review findings with stakeholders |  | * Sharing & Discussions on Data Analysis Outputs – Tables, Graphs etc. and Report Structure * AHI, IHSC and Partner Institutions |
| 4 | Development of the final report |  | -MSH AHI, IHSC and Partner Institutions |
| 5 | Submission of final report  Hand-over of report and models and training in use of tool and approach and in updating of models. |  | -Presentation off final report finding to all stakeholders   * Review comments from incorporation * MSH AHI, IHSC and Partner Institutions |

Gantt Chart:

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **No.** | **Activities** | **Month 1** | | | | **Month 2** | | | | **Month 3** | | | | **Month 4** | | | |
|  |  | W1 | W2 | W3 | W4 | W1 | W2 | W3 | W4 | W1 | W2 | W3 | W4 | W1 | W2 | W3 | W4 |
| 1 | Permission from the DoH |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | Study tools\* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | Recruitment of investigators |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | Training of investigators\* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | Collection of state level secondary data |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | Collection of district level secondary data |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 | Data collection from the first block |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 | Review & analysis of data from the first block\* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 | Customization of tool, if required\* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 | Additional training of investigators, if required\* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| 11 | Data collection in remaining blocks |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 | Data analysis |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13 | Report |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14 | Dissemination |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

*Effective date for calculation of timelines will be within one week of the award of the sub-grant*

*\* timeline dependent on AHI scheduling these activities and providing technical back-up support*

**Grant Value**

The total budget approved is USD 26,600 (US Dollars Twenty Six Thousand Six Hundred Only) inclusive of all applicable taxes and this will be reimbursing against expenses incurred as per the timelines mentioned in the deliverable schedule.

**Budget**

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| --- | --- | --- | --- |
| **Financial Proposal** | | | |
| **No.** | **Budget heads** | **Budgeet (US$)** | **Comments** |
| **1** | **Fees** | **4,860.00** |  |
| (i) | Principal Investigator - State Lead: Rajesh Jha | 0.00 | Costs to be shared by CHP-ADRI |
| (ii) | Research Assistants (RA) / Consultants | 4,860.00 | Two RA/Consultants for three months @ USD 810 per month |
| **2** | **Expenses** | **19,340.00** |  |
| (i) | Cost of Survey, Experiment and Field work | 18,500.00 | Includes Investigator's fee, Transportation, Accomodation, Food  etc. |
| (ii) | Miscellaneous expenses | 840.00 | (like Printing & Xerox, Communitcation, Internet Data,  Stationery etc.) |
|  | **Sub-Total** | **24, 200.00** |  |
| **3** | **Overhead cost (not to exceed 15%)** | 2,400.00 |  |
|  | **Total** | **26,600.00** |  |

**Bank Account Details**

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| --- | --- |
| Name of the Beneficiary | Asian Development Research Institute |
| Bank Name | State Bank of India |
| Bank Address | FCRA Cell, 4th Floor, State Bank of India, New Delhi Main Branch,  11, Sansad Marg, New Delhi – 110001 |
| Account Number | 40126664983 |
| IFSC Code | SBIN0000691 |
| Swift Code | SBININBB104 |

**Payment Terms**

This is a cost reimbursable grant. An initial advance will be made to initiate the activities and subsequent tranches will be paid against the deliverables mentioned below along with audited utilization report. Please refer to the Format for Utilization Certificate.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Grant Instalment no.** | **Deliverable** | **Percentage of grant amount disbursed** | **Payment Due** | **Amount in USD** |
| 1 | Inception Report  Data from the first block | 25% |  | 6,650.00 |
| 2 | Data from all four blocks of three study states | 25% |  | 6,650.00 |
| 3 | Draft report on the data analysis for three states  Final Report | 50% |  | 13,300.00 |
|  |  |  |  |  |
| **Total** | | | | **26,600.00** |