#### **Problem Statement**

India faces critical human resource (HR) challenges in health sector especially in rural and underserved areas. Achievement of Universal Health Coverage is also highly dependent on availability of quality workforce in public health systems. National Rural Health Mission (NRHM) has initiated various policy measures to ensure availability of health workers in public health facilities. However there is limited information support available on Human Resources for Health (HRH). The HRH information is very dynamic and frequently changes with recruitment, transfer, posting and attrition. The currently available information is paper-based and is highly fragmented, where piece by piece information different kept in department files making it difficult to retrieve and use. This greatly reduces the ability of decision-makers to access and use accurate and timely data to improve the efficiency and effectiveness of the workforce, which is critical in order to meet national health objectives. An improved HR information system is an essential tool needed to improve HRH policies as well as workforce planning, development, and support.

A human resources information system (HRIS) not only works as repository of HRH data but also provides managers and decision-makers with information needed to effectively plan, develop, and support their health workforce.

### **Program Description**

State of Bihar faced similar problems and tried to solve this problem through use of information technology solutions. The State having earlier implementation experience with IT solutions took a decision to adapt to a system which is flexible, scalable and should support decentralized decision making. State Health Society, Bihar choose Integrated Human Resource Information System (iHRIS) among other systems and requested Intra Health International Inc, NHSRC & HISP India to conduct pilot in Bihar. iHRIS is an open source HRH solution that gives a lot of flexibility to the users and has the ability to adapt to the local information needs. The initial pilot was conducted in Siwan District in 2010 and after realizing the success the project was scaled to the whole state. For iHRIS implementation the State had set-up a committee and identified a nodal officer responsible for iHRIS development and implementation. The committee along development with team conducted stakeholder consultation, documented system requirements, designed and protocols for guidelines data collection, verification and entry in the application. The committee also crafted user manual, designed standard training plans and implemented them in the state. Arrangements were made for the local data entry and block and district were given ID & Passwords to access the application and conduct data entry.

Program managers from each of the district received training on the use of application. Up to January 2013, 47,729 employees' records were uploaded in the application of which 28267 records were of regular employees' and 19384 of contractual employees'. The SHS Bihar decided to upload all employees' records in the iHRIS application in the phased manner. It was decided that in the first phase medical officers' data will be uploaded and in the second phase staff nurses data will be uploaded. ANM, Other staff and ASHA data will be uploaded and verified in 3rd, 4th and 5th phase respectively. Currently up to third phase of data entry is completed and fourth phase is near completion.

The data in the iHRIS includes individual government employee record on cadre, posting location and qualification. However training and transfer history over a period of time have not been included in the first phase, due to lack of authentic data on these parameters. The system has the flexibility to add these attributes in the later stages.

### **Program Impact**

The system has become single source of information for HRH in public health system and is extensively used for district health planning, development of State PIP. In the State now all deployment decisions for transfers, postings are taken based on the iHRIS data. The System is also extensively used for contract renewal, management of contractual employees. System is also used to reply to the judicial query and for departmental proceedings. System provides flexibility to provide output reports in the forms desired by program managers and administrators. Multiple user-centric reports are now being generated from the system.

Currently the SHS Bihar is planning to integrate facility-based reporting system DHIS2.0 with the iHRIS for more integrated data analysis and use. In iHRIS additional modules like trainings are also planned to be added once the data is stabilized.

Cadre-wise Doctors Status-Bihar (Source-iHRIS, Jan 2013)					
Cadre Description	Regular Employees	Contractual Employees	Tenure	Total	
<b>State Health Services</b>	2771	0	0	2771	
<b>Medical Education Cadre</b>	1053	77	78	1208	
Ayush Cadre	272	1216	0	1488	
Ayush Medical	133	0	0	133	
Education					
<b>District Health Services</b>	0	2226	0	2226	
Total	4229	3519	78	7826	

Human Resources in Public Health System-Bihar (Source-iHRIS, Jan 2013)				
Designation	Total number	Regular	Contractual	Tenure

Doctor	7826	4229	3519	78
Nurse A Grade	3750	918	2832	0
ANM	16460	8333	8127	0
No. of Specialist	1233	1023	178	
Other Employees	18492	13764	4728	0
Total	47,729	28267	19384	78

# **Scalability**

The system has already been scaled to the whole of State and is also been implemented in the State of Jharkhand. iHRIS is very flexible, Open-source solution that can be implemented in any setting. It has the capacity to adapt to the local needs.

## For further details contact

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