

Policy and practice of human resource management in the  
Indian public health system at district level and its effects on  
health workers

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## Abstract

Human resource management (HRM) policies and their effective implementation are expected to influence the attitude and behaviour of health workers favourably in providing effective health services to the people. However, within the Indian public health system, it is unclear which HRM policies are implemented effectively and how these influence health workers, especially at district level. This study aimed to explore how HRM policies and practices affect health workers in the Indian public health system. The state of Odisha was purposively selected. Four relevant HRM functions were examined: 1) posting and transfer, 2) in-service training (IST), 3) supervision and review and 4) performance appraisal (PA). Documents including human resources (HR) policies and plans were reviewed to identify intended HRM practices. In-depth interviews of policy makers, managers and health workers were conducted. Using the framework developed by Purcell and Hutchinson, (2007), we identified the relevant intended practices, the practices as reported by the managers and the health workers and their effect on the attitudes and behaviour of health workers. Qualitative data analysis used a 'framework approach'.

An in-depth analysis of four HRM functions within the overall human resource management system, as operated at district level within Odisha, has shown that although there may be a weak positive effect on the attitudes and behaviour of public sector health workers, there remain many missed opportunities. Although the design of the majority of HRM systems is logical to achieve the objectives, there are problems in their implementation. The major issues are that either HRM sub-systems are not being operated as designed – with some elements totally missing; or the sub-system is inadequately implemented. Implementation is affected by three major factors: 1) insufficient autonomy of district and facility level managers, 2) lack of resources and skills of the managers and 3) contextual factors including geography, gender and sector reforms.

In addition to the inadequate implementation of the HRM system, there are issues in the way the systems are organised and operated, leading to the limited effect of HRM on the attitudes and behaviour of health workers. For instance, the HRM sub-systems are being implemented in isolation, with no connection between the sub-systems of all HRM functions and different 'system owners' at state and district level. With no overall coordination and significant oversights including the monitoring of the system as a whole, opportunities to make this system more efficient are missed.

However, the findings from this study provide a very useful starting point for improving the four HRM functions of posting and transfer, in-service training, supervision and review and performance appraisal. Considering these together should help to promote the view of HRM as an overall system, with co-ordinated sub-systems. Therefore, the study concludes that HRM systems can be made more effective to ensure that there is an effective health workforce to deliver the required health care services, and in turn, to contribute to the achievement of the goal of Universal Health Coverage.



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## Abbreviations

ADMO(FW)	Assistant District Medical Officer (Family Welfare)
ADMO(PH)	Assistant District Medical Officer (Public Health)
AHS	Annual Health Survey
ANC	Ante Natal Care
ANM	Auxiliary Nurse Midwife
BPHEO	Block Public Health Education Officer
BPM	Block Programme Manager
CCR	Confidential Character Roll
CDMO	Chief District Medical Officer
CHC	Community Health Centre
CIPD	Chartered Institute of Personnel and Development
DC	District Collector
DFW	Director Family Welfare
DH	District hospital
DHS	Director Health Services
DOHFW	Department of Health and Family Welfare
DPH	Director Public Health
DPM	District Programme Manager
DSMO	District Surveillance Medical Officer
DTO	District Tuberculosis Officer
FLM	First Line Manager
GAD	General Administration Department
GOI	Government of India
HR	Human Resource
HRM	Human Resource Management
IIPH	Indian Institute of Public Health
IMR	Infant Mortality Rate

IST	In-service Training
KBK	Koraput Bolangir Kalahandi
LMIC	Low and Middle Income Countries
LSTM	Liverpool School of Tropical Medicine
LT	Laboratory Technician
MD	Mission Director
MO	Medical Officer
MOHFW	Ministry of Health and Family Welfare
MOIC	Medical Officer In-Charge
MPHS	Multi-Purpose Health Supervisor
MPHW	Multi-Purpose Health Worker
NHM	National Health Mission
NRHM	National Rural Health Mission
OPSC	Odisha Public Service Commission
PA	Performance Appraisal
PAR	Performance Appraisal Report
PHC	Primary Health Centre
PHEO	Public Health Extension Officer
PHFI	Public Health Foundation of India
RCH	Reproductive and Child Health
SC	Sub Centre
SHRMU	State Human Resource Management Unit
SIHFW	State Institute of Health and Family Welfare
SN	Staff Nurse
TNA	Training Needs Assessment
VHND	Village Health and Nutrition Day
WHO	World Health Organisation

## **Chapter 1: Introduction**

This chapter presents the introduction and a brief background to this research. The first section provides the background discussion along with a brief rationale. The second describes how I have arrived at the research question. The third section defines the research aim and objectives and in the fourth, the structure of the thesis is explained. In the final section, I have made my statement of contribution.

### **1.1 Background to the research**

Human Resource Management (HRM) is defined as ‘the way an organisation manages its staff and helps them to develop’ (McCourt and Eldridge, 2003). This can also be explained as ‘an approach that defines how the organisation’s goals will be achieved through the people by means of HR strategies and integrated HR policies and practices’ (Armstrong, 2009).

One of the main aims of human resource management is to increase the performance of organisations towards achieving strategic goals. McGregor emphasises a need for a balancing approach of fulfilling the needs of individual employees and achieving organisational goals (McGregor, 2006). The quest for the link between human resource management (HRM) and organisational performance has been underway for the last three decades (Guest, 2011; Purcell and Kinnie, 2007). However, several researchers working on the link between HRM and performance preferred to differentiate between performance at various levels of an organisation and HRM outcomes such as: financial outcomes, organisational outcomes and human resource (HR) outcomes (Boselie et al., 2005; Dyer and Reeves, 1995; Paauwe, 2009; Paauwe and Boselie, 2005). For example, Boselie et al., (2005), categorised them as financial outcomes: (profits, sales, market share), organisational outcomes: (productivity, quality and efficiency), and HR-related outcomes: (attitudinal – trust, commitment, motivation, satisfaction; and, behavioural – turnover, absence). Proximal HR-related outcomes are easier to link with HRM practices than the distal outcomes, such as financial outcomes, which can be directly influenced

by other factors such as business strategy (Boselie et al., 2005; Paauwe and Boselie, 2005). Thus, the effect of HRM practices at workforce level is the proximal outcome of the HRM practices in terms of employee attitude and behaviour, whereas at the organisational level is a more distal outcome in terms of productivity and quality of services (Paauwe, 2009).

Within the general HRM literature, there is enough evidence to demonstrate a strong association between HRM practices and HR outcomes leading to improved organisational output, however the causal link is yet to be convincingly established (Armstrong, 2009; Delery and Doty, 1996; Guest, 2011; Purcell and Kinnie, 2007).

In the health sector within high as well as low and middle income countries, such evidence is fairly scant, with a few systematic reviews showing some effect of HRM on health workers ultimately resulting in better health outcomes (Campbell et al., 2013; Dieleman et al., 2009; Patterson et al., 2010; Rowe et al., 2005). However, within most of the health sector-related literature in LMICs there is little knowledge available on the mechanisms through which the HRM practices influence the HRM outcomes in a given context, therefore further research is needed (Dieleman et al., 2009; Gile et al., 2018; Rowe et al., 2005). There is lesser evidence available in the health sector, particularly in India, because HRM for health is under-researched for two reasons: 1) the main “business” of health researchers is about looking at the effectiveness of clinical interventions, and 2) there are few researchers available to carry out research related to HRM, which is typically a non-clinical area (Aashima Agarwal et al., 2011a). Thus, in the health sector there is still a knowledge gap in fully understanding how HRM practices affect health workers in terms of their attitude and behaviour, which ultimately influence HRM outcomes.

Armstrong, (2017), emphasised the importance of taking into account HRM as a system that describes the overall values and guiding principles adopted in managing people and specific HRM activities. Such an HRM system incorporates: 1) HR policies: ‘how specific aspects of HR should be applied and implemented’ and, 2) HR practices: ‘which consists

of the HR activities involved in managing and developing people' (Armstrong and Taylor, 2017). Furthermore, it is important to consider how HRM practices could be made more effective in changing the attitude and behaviour of the employees. In this regard, the configurational framework explains that there are synergistic effects amongst HRM practices that need to be combined together and linked with business strategy (strategic configuration). This approach requires both *horizontal fit* amongst the various HRM practices, as well as *vertical fit* with the organisation's business strategy. Horizontal fit can be achieved by selecting the appropriate HRM practices and combining together, so that these practices have a mutually-reinforcing effect; whilst vertical fit can be achieved by integrating HRM practices with the outcomes that the business or organisation wishes to achieve (Armstrong, 2009). MacDuffie referred to this configurational framework as a 'bundled' approach as early as 1995, in which combined HRM practices were found to be more effective than any single HRM practice. Therefore, he emphasised the consideration of HRM as a system of interdependent elements (Macduffie, 1995).

Even if organisations identified the best HRM approaches and developed strategic configurations of these policies, these might not be put into practice for various reasons. Hence, there is a need to differentiate between HRM policies and practices, the former being the stated intention of the organisation about various 'employee management activities,' whereas the latter are *de facto*, functioning or non-functioning, observable and experienced by the employees (Paauwe and Boselie, 2005). Additionally, the role of line managers and supervisors who actually implement the HRM practices is significant, because the perception of the employees about HRM practices depends on how managers apply HRM practices and what support they provide to the employees (Purcell and Kinnie, 2007).

In addition to identifying and integrating HRM practices, it is essential to know their 'presence' as experienced by employees (how many HRM practices are actually implemented), their 'coverage' (for how many employees, i.e. the proportion of employees covered) and 'intensity' (the degree to which individual employees are exposed to such HRM practices) (Boselie et al., 2005). They found that it was only the

'presence' that was taken into account by many studies but not coverage and intensity. Furthermore, there is the possibility of disagreement between managers and employees on the 'presence' and 'intensity' of particular HRM practices (Boselie et al., 2005).

Purcell and Hutchinson, (2007), provided a framework to explore the link between HRM and its effect on employees. They defined 'intended practices' as those HRM policies designed by the organisation, and 'actual practices' as those implemented by the managers that would influence employee perception and their attitude and behaviour, ultimately leading to organisational outcomes (Purcell and Hutchinson, 2007).

It is observed that within the health sector, the introduction of new HRM practices may not achieve the intended results, because of multiple unforeseen factors such as health workers being sceptical towards the transparency of their implementation, not agreeing with the performance indicators, not receiving additional benefits or rewards as well as structural and operational issues connected with implementation (Rowe et al., 2005; Songstad et al., 2012). Hence, health workers may not necessarily change their behaviour based on a new policy or guidelines, but may instead modify their actions to incorporate these fully, partly or not at all (Rowe et al., 2005).

The majority of HRM literature on the health sector in India, and more specifically related to Odisha, is about making human resources available through policies for attraction, recruitment and retention (Ramani et al., 2013; Rao et al., 2012). In addition, efforts are made to look into the coherence of health workforce policy with health strategy (Martineau et al., 2013); as well as issues in developing HRM practices (Agarwal et al., 2011) and the linking effect of HRM practices on HRM outcomes, especially organisational commitment (Bhat and Maheshwari, 2005; Maheshwari et al., 2007). These studies looked mainly for policy alternatives to address the issues related to shortages of health workers; and to a more limited extent at exploring the effect of HRM on health workers.

The studies conducted in the public health systems of Odisha's more developed, neighbouring states have observed that there are problems in the HRM policies

themselves. For instance, transfer and placement practices are not transparent, there are inadequate incentives for posting in hard-to-reach areas and a lack of any policies to provide opportunities for professional development (Kadam et al., 2016; La Forgia et al., 2015; Purohit and Martineau, 2016a, 2016b). In addition, there are problems in the implementation of HRM policies, leading to an absence of supportive supervision, a mismatch between training and job profile, a lack of follow-up mechanisms after training, ineffective performance appraisal systems and inadequate systems for monitoring the performance of health workers (Aashima Agarwal et al., 2011b; Maheshwari et al., 2007; Nandan et al., 2007). Odisha may not be an exception to these experiences. However, the studies refer simply to the presence or absence of HRM practices and do not explain the linkages between such practices and their effect on health workers.

Since 2010, I have been based at the Indian Institute of Public Health (IIPH), Bhubaneswar, Odisha. This is one of four academic and research institutes under the Public Health Foundation of India, which is an organisation founded in 2006, on a public/private partnership basis. From 2010 to 2013, in close collaboration with the Department of Health and Family Welfare (DOHFW), I have undertaken three major studies on HRM: 1) retention of health staff in remote areas, 2) career progression of doctors working in the government health sector and 3) utilisation of doctors belonging to the Indian System of Medicine (ISM) within the state. In addition, I am working closely with the State Human Resource Management Unit (SHRMU), a separate unit under the DOHFW to manage human resources for health in the state, the only unit of its kind in the country.

Because I am working in close collaboration with the Government of Odisha, I was aware that they invest much money and time in HRM policies and practices, and there is a high demand for research from policy makers and state level managers to explore what is the effect of HRM policies and practices on health workers. Considering this, along with my

own personal work experience, I have purposefully selected the state of Odisha for this study, out of the 29 states in India.

In India and accordingly in Odisha, the district is a composite unit health system, with a clearly defined administrative and geographical area. Recently, more and more of the responsibility for human resource management has been shifted to the district level. After the year 2000, the paramedical staff within Odisha were changed from state cadre to the district cadre, meaning that responsibility for recruitment, posting and transfer and performance appraisal was shifted from state level to district level authorities. In addition, after 2005, the NRHM introduced the concept of developing district-specific annual project implementation plans that should include the planning and resourcing of all activities for the year within the district. Therefore, I have undertaken the study at district level, since most of the HRM work is expected to be carried out at district and facility levels (Gupta, 2002; NHM, 2014a, 2014b).

This study aims to explore the effect of HRM policies and practices on health workers, in the context of the Indian public health system. In HRM literature, including that relating to the health sector, four major domains can be identified: staff supply (recruitment and deployment), training and development and performance management (Absar et al., 2012; Aladwan et al., 2015; Dieleman et al., 2009; Martinez and Martineau, 1996; Sial et al., 2011; Wang et al., 2002). Similar are the priorities of the Government of Odisha, as posting and transfer is aimed at achieving the equitable distribution of staff, capacity building and supervision of staff for better service provision and performance appraisal for evaluation and also for promotion. Therefore, taking into account the literature, I selected four HRM functions: posting and transfer, in-service training, supervision and review and performance appraisal for this study. The literature has also suggested the development of linkages between these HRM functions. Thus, the result of my exploration will be new knowledge about these linkages, which policy-makers and managers could use to appropriately choose and more effectively implement HRM practices, in order to have the desired effect on health workers.

## **1.2 Research questions**

Based on the research background presented in the previous section, my main research question is *'how does human resource management affect health workers in the context of the Indian public health system at district level?'*

There are four interconnected questions related to HRM and its effect on health workers in the government health sector in Odisha at district level. These questions are: 1) what are the major intended HRM practices planned by the state? 2) How are these HRM practices implemented by the managers? 3) How are HRM practices and their implementation perceived by the health workers? 4) How do these HRM practices affect health workers' attitude and behaviour? Answers to these questions can explain the logical chain of: intended practices – actual practices – employee perception – employee attitude and behaviour; as conceptualised in the HRM literature (Hutchinson, 2013; Purcell and Hutchinson, 2007). In addition, it can help in understanding the interplay, influence and integration between HRM practices and the health system context. This new knowledge will help policy-makers to develop context-specific HRM policies and inform the development of strategies to implement these policies. For example, what are the HRM practices identified for the capacity-building of the staff, how are these intended practices perceived to be implemented and to what extent, and what is the effect of these HRM practices on staff attitude and behaviour? Similarly, what are the intended HRM practices for the supervision of health workers? How are they put into practice by supervisors? How are supervision practices perceived by the health workers? How does supervision affect the attitude and behaviour of health workers?

## **1.3 Research aim and objectives**

### **1.3.1 Aim of the study**

The aim of this study is to explore how human resource management policies and practices affect health workers, in the context of the Indian public health system at district level. This is comprised of three components: HRM policies, HRM practices and

the effects upon health workers. The policies constitute several intended HRM practices that the district and facility-level managers are expected to implement. The next step is to examine how health workers perceive these intended HRM practices and their implementation by managers, before looking at how these implemented practices affect health workers and what could be changed to improve the achievement of the policy objectives. Therefore, in order to address this aim, the following objectives for the study have been developed.

### **1.3.2 Objectives of the study**

1. To describe intended human resource management practices at district level within the public health system in Odisha, India.
2. To describe the implementation of human resource management practices as reported by health workers and managers.
3. To assess the effects of current human resource management practices on health workers, in terms of their perception, attitude and behaviour.

### **1.4 Structure of the thesis**

This thesis consists of 11 chapters. The Introduction (Chapter 1), has described the background to the research, the key research questions and the aim and objectives of the study. Background to the study (Chapter 2), presents the relevant information about India and the study state of Odisha, consisting of a brief history, geography, demography, health indicators and health systems within India and Odisha. In addition, this chapter describes the sociocultural background and the information on human resources for health and their management in the public sector. In order to gain a thorough understanding and identify knowledge gaps, international, national and local literature is reviewed and presented in Chapter 3. The literature review is presented according to the study objectives, and is arranged using the domains of: what HRM is, how HRM policies are put into practice, how HRM practices are perceived by the health workers

and managers and how these practices affect health workers in terms of their attitude and behaviour. In addition, this chapter includes contextual factors affecting the health workers and the role of district level managers in HRM. Chapter 4 provides details of the methods used in the study, the process of data collection, data analysis, ethical considerations, mechanisms to assure the quality of the data and the limitations of the methods used.

The results are divided into five chapters, one on each of the four HRM functions that were studied and the fifth chapter presenting the analysis of the findings of these four chapters from a systems perspective. These are Chapter 5: posting and transfer, Chapter 6: in-service training, Chapter 7: supervision and review, Chapter 8: performance appraisal and Chapter 9: HRM as a system in the public health sector in Odisha. The results for each of these chapters are divided into sections matching with the three study objectives, i.e. intended practices, reported practices and the effect on the health workforce. At the end of each chapter, there is a summary and conclusion of results.

In Chapter 10, the study findings are discussed in comparison with the existing literature, based on which the conclusions of the study are drawn. In addition, this chapter provides an analysis of the advantages and disadvantages of the conceptual framework that was used for the study, including the study limitations. Finally, in Chapter 11, conclusions are drawn, and recommendations are made for policy makers, managers and future researchers.

## **1.5 Statement of contribution**

My thesis is composed of my original work. I designed the study, developed the data collection tools, conducted most of the interviews, collected most of the policy documents and analysed and interpreted the data. A research assistant collected a few policy documents and conducted some interviews in my presence. Independent consultants carried out transcription and translation that I then double-checked, by simultaneously listening to the recorded interviews and reading the transcribed files. The

India and UK-based supervisors provided their technical and operational inputs at every step of the research activities. In addition, the supervisors reviewed the entire thesis and gave their inputs to improve the analysis and the write-up of this thesis. Finally, the UK-based agency did the proof reading that I then checked once again, to ensure the original content of the thesis.

## **Chapter 2: Background to the study**

### **2.1 Introduction**

This chapter describes the background information regarding India and the state of Odisha where this study was carried out. The purpose of this chapter is to describe the context in which the study has been conducted, which may have implications on the human resource management practices and their effect on health staff. The chapter describes in brief the background to India and to Odisha. The health system context is then presented in terms of the history of the development of the public health system in India, health outcome indicators, health system designs for management and health service delivery. Regarding management functions, these are described in terms of structure and function at central, state, district and facility levels, in order to effectively analyse the implementation of intended HRM practices and the resulting impact upon health workers. The final section describes the management of public sector health staff in Odisha, in terms of employment practices for the different cadres of health staff and how NHM has brought in changes in the management of human resources.

### **2.2 Background to India**

This section describes the brief history, geography and demography of India, followed by the economic situation and progress. This is followed by a description of the social context in terms of caste and gender, as a similar landscape also prevails within the state of Odisha.

#### **2.2.1 Brief history, geography, and demography of India**

India is a country of South Asia, which was under British rule until 1947. Following independence from British rule and with its boundaries redrawn, India is now the world's seventh largest country by area. It is a federal republic governed by a parliamentary system, consisting of 29 states and seven union territories (Government of India, 2014).

India, with an estimated population of 1.3 billion, is the second most populated country and the largest democracy in the world. Over 65% of its people are below the age of 35, with an expected dependency ratio of just over 0.4 by 2030. Between them, the people of India represent almost all of the world's main religions, specifically with 80% Hindu, 14% Muslim (Islam), 2.5% Christian, 2% Sikh, 1% Buddhist and 0.5% Jain. In addition to these six religious groups, there are also many tribal faiths.

### **2.2.2 Economic situation and progress**

Since 1991, India has become part of the worldwide phenomenon of globalisation following economic liberalisation. It is presently one of the fastest growing economies, and is now the third largest by purchasing power parity (The World Bank, 2015). India has been a member of the World Trade Organisation since 1995, with a labour force that is the second largest in the world. The service sector makes up almost 50% of India's Gross Domestic Product (Government of India, 2017).

Despite poverty alleviation initiatives by the union and state governments, around one-fifth of the population remains below the poverty line. There are wide regional variations, with the eastern part of the country, including Odisha, having a higher percentage of people living below the poverty line (Planning Commission, 2013a). In addition, these states have lower human development indices: for instance the health morbidity and mortality indicators are lower compared to the southern states of India.

### **2.2.3 Social context: caste system and affirmative action**

Caste has a major impact upon social diversity in Indian society and therefore within Indian organizations. Kavita Meena (2015) has described the caste system in India and explained its implications and the affirmative actions taken by the government (Meena, 2015). Indian society is broadly divided into four *varnas* based on occupation, and this determines the scope of an individual's access to wealth, power and privilege. The four *varnas* are: *Brahmins* (priests and scholars), *Kshatriyas* (political rulers and soldiers), *Vaishyas* (merchants) and *Shudras* (labourers, farmers, artists and servants). The castes

belonging to the first three *varnas* are considered to be the upper castes, and *Shudras* are the lower castes. Historically, the latter have fallen victim to discrimination with regard to most social matters. They were considered to be untouchables, with their right of entry to social areas restricted. Socially, *Shudras* had for a long time been facing inhuman treatment, which has also percolated into their role as employees.

The Constitution of India has classified these socially discriminated groups as Scheduled Castes (SCs). Colloquially, they are also termed as 'Dalit,' meaning 'oppressed' or 'broken.' Furthermore, the Constitution identifies people of tribal origin as Scheduled Tribes (STs). Socially, these groups are called 'Adivasi,' which is derived from Sanskrit and denotes 'original inhabitants'. They do not fall within the scope of the four *varnas*; identified instead as people who have a primitive way of life and live in remote and less accessible areas. In an effort to uplift disadvantaged sections of the population, the Constitution of India takes affirmative action through positive discrimination (reservations) in education and employment, which is based on caste plus socioeconomic backwardness for STs and SCs. This was subsequently extended to cover other backward castes (OBCs). These reservations are restricted to government-run or government-aided institutions and do not apply to the private sector. The central government has fixed reservations at 15% for scheduled castes (SC), 7.5% for scheduled tribes (ST) and 27% for other backward castes (OBC). States can distribute reservations based on their proportion ratios and remaining within a limit of 50%.

Despite the measures taken through such affirmative action, the present Indian healthcare service delivery system is discriminatory (George, 2015). Based on the National Sample Survey Organisation (NSSO), Sobin George (2015) observed that only the middle and upper-level castes have adequate or over-representation amongst all health-related professionals including general medical practitioners, specialist doctors, trained nurses, technicians and associated health staff. Whilst this group constitutes a little less than 24% of the population of rural India, their share of the occupational category of health professionals stands at 40%. On the other hand, while STs and SCs

have a population share of 11% and 21% respectively in rural India, they are represented within the health professional category at just 1.3% and 16.5%. In short, the data indicates that there is a visible overrepresentation within the middle and upper caste groups, alongside an underrepresentation of the lower castes and scheduled tribes in the most important categories of care providers, such as doctors and nurses (George, 2015).

As a result of affirmative action taken during the past 65 years, human resources for health within the government health sector now represents a combination of all caste groups. Although the SCs, ST,s and OBCs may be represented in government jobs as per their quota, it is not necessarily guaranteed that they experience equal opportunities in terms of education and employment. Such a context of social discrimination could have an influence on HRM practices, depending on which categories of people are employed as staff and who is undertaking HRM functions such as deployment, in-service training, supervision and review or performance appraisal.

#### **2.2.4 Social context: gender**

In addition to discrimination based on the caste system, the traditional Indian society is characterized by the inferior status of women, who are not encouraged to work outside the home; with their role defined instead as that of care taker and home maker (SRIVASTAVA and SRIVASTAVA, 2010). Although such practices are gradually disappearing and women now have more opportunities in terms of professional jobs and growth due to social and economic development, the Indian mind-set has not been totally changed. The traditional religious and socio-cultural demands, along with the patriarchal attitude towards women in India, are still in existence to a great extent. This can be particularly challenging for potentially working women. Indian women have to handle the dual responsibility of managing the home and their career, with the latter often suffering in order to maintain a balance between work and family responsibilities. Moreover, many female professionals in India are the first generation to work, and

families may therefore not fully understand their efforts in managing both their careers and their homes.

In the Indian public health sector, women dominate two categories of health care staff. Firstly, (and by designation), the Multi-Purpose Health Worker Females (MPHWFs) are, as the name suggests, all female. Even if there is no female-only category by designation, almost all of the staff nurses are in fact women. These two categories dominated by female staff represent the major chunk of health staff responsible for providing RCH services (especially in rural areas), as well as for all nursing services in hospitals located in urban areas. It is expected that among all other categories of staff: doctors, pharmacists and LTs; 50% should be women, however, a very low proportion of these staff are in fact female. Such an unbalanced representation of women could have an influence upon HRM practices, especially in the context of relationships between health staff and managers.

### **2.3 Background to Odisha**

The social context described above prevails in Odisha too. The following section describes the context within Odisha regarding descriptions of its brief history, geography and demography. This is followed by the description of the two groups of districts within Odisha, which differ significantly from one another in terms of geographical terrain, population subgroups and overall socioeconomic development. Such differences within the state itself could have significant influence upon HRM practices and the effect on the health staff.

#### **2.3.1 Brief history, geography, and demography**

Odisha, one of India's 29 states, was formed in 1936 and consisted predominantly of Odia language-speaking people. It is the ninth largest state by geographical area and the 11<sup>th</sup> largest by population. It is situated on the eastern coast of India and is bordered by the states of West Bengal to the north-east, Jharkhand to the north, Chhattisgarh to the west, Andhra Pradesh to the south and the Bay of Bengal to the east.

According to the Census that was carried out in 2011, Odisha has a population of 41.9 million, representing about 4% of India’s total population (Table 1). There was an increase in literacy rates, from 64% to 73% from 2001-2011. There was also a slight increase in the urban population as compared to the rural population. A considerable proportion of the total population (40%), belongs to Scheduled Caste (SC) and Scheduled Tribe (ST), which are traditionally disadvantaged groups with issues surrounding access to and utilisation of health services (Census of India, 2011).

Table 1 Demographic profile of Odisha

<b>Demographic Profile</b>	<b>Census 2001</b>	<b>Census 2011</b>
Population in millions	36.8	41.9
Male (%)	50.7%	50.5%
Female (%)	49.3%	49.5%
Rural (%)	85%	83.36%
Urban (%)	15%	16.69%
Scheduled caste (%)	16.5%	17%
Scheduled tribe (%)	22%	23%
Population density per sq km	236	269
Literacy rate in %	64	73

Source: Census 2011

### **2.3.2 Economic situation and progress**

Odisha has reduced its poverty level substantially, especially over the past decade, by enhancing economic growth. However, around 32.6% of its population was still living below the poverty line as compared to the national average of 21.9% during 2011-2012 (Government of Odisha, 2015). The situation is even worse among the SC and ST population within the state, who remain deprived of most socioeconomic privileges, including access to and utilisation of basic health services. Similar to the Indian scenario, the distribution of poverty is skewed towards certain geographical regions of the state

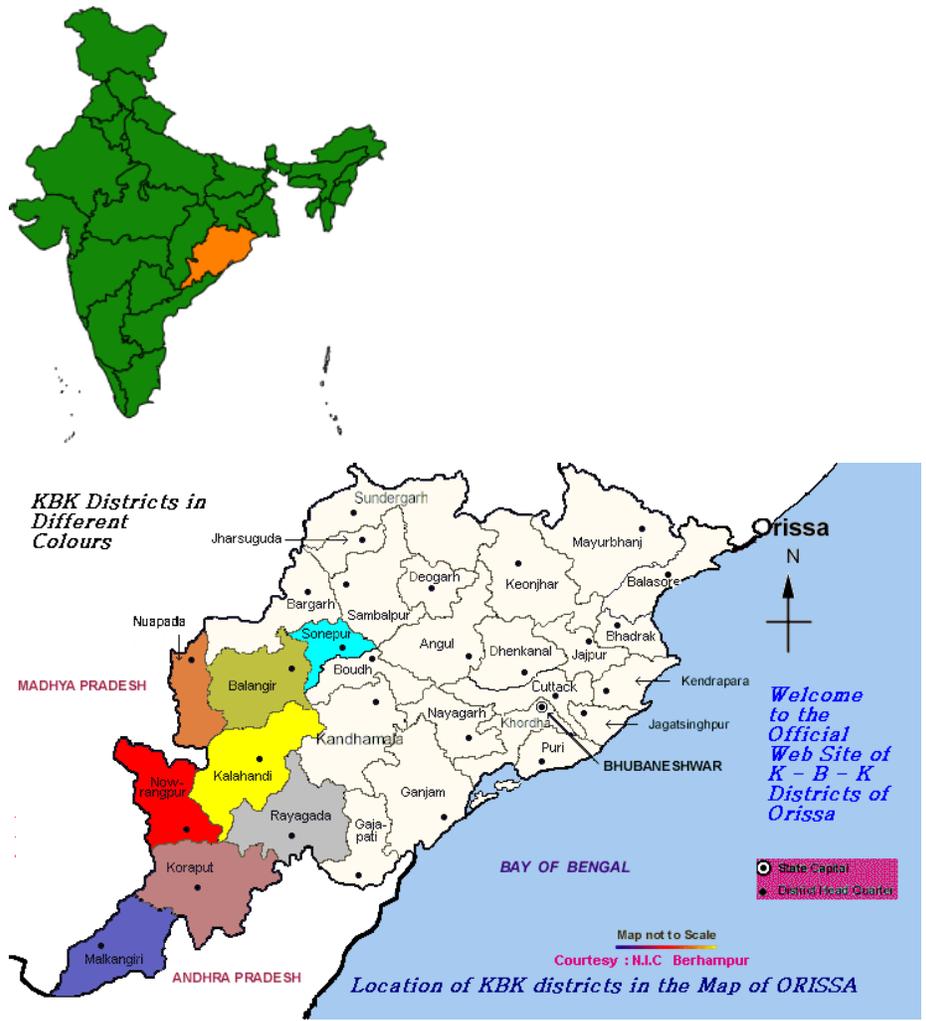
(Government of Odisha, 2015). Hence, the people may face financial constraints in accessing health services and this could be the reason why the majority of the population depend upon public sector health services.

### **2.3.3 Classification of districts of Odisha: KBK versus non-KBK**

Based on their geographic and socio-economic indicators, a total of 30 districts in Odisha are categorised into “KBK districts” and “non-KBK districts” (Figure 1), (Government of Odisha, 1993).

The formerly undivided districts of Koraput, Bolangir and Kalahandi (popularly known as “KBK districts”) are divided into eight different districts that share 19.8% of the state’s population and cover 30.6% of its geographical area. The KBK districts represent the southern part of Odisha and are characterised by poor living conditions and an underdeveloped economy. For instance, the proportion of people living below the poverty line is 48% for the southern region which includes the KBK districts; compared to 40% for the northern region and 22% for the coastal region (Government of Odisha, 2015).

Figure 1 Map of India showing Odisha and map of Odisha showing KBK and non-KBK districts



In the KBK districts, a major portion of the land is covered with hilly areas and forest, with a more limited network of all-weather road surfaces and rail connectivity. Tribal communities dominate this region and 80% of the population lives in rural areas. Furthermore, the educational level of tribal children is alarmingly low. For example, until 2012, the school dropout rate amongst tribal students at primary school level (up to the 4<sup>th</sup> standard) was as high as 65%, which means that only 35% were entering upper primary school level (5<sup>th</sup> standard and above) (Government of Odisha, 2011; Government of Odisha, 2015). The “non-KBK districts” are comprised of 19 districts

spread across the central, coastal and western regions of the state. These areas are made up of flat landscapes with better road networks and rail connectivity. The non-KBK districts are also more economically developed, with better facilities for education.

There is also vast disparity between the KBK and non-KBK districts in terms of the availability of medical and paramedical educational facilities. All three government and an equal number of private medical colleges are situated within the non-KBK districts. There is some balance with regard to government institutions producing paramedics, with nine facilities located in the KBK districts and 21 in non-KBK districts. In contrast, a majority of 203 private institutions providing training to paramedical staff are located in the non-KBK districts, with only 28 in the KBK districts (DMET, 2015; ONMC, 2015).

With less number of children completing formal schooling coupled with lower opportunities of professional education within the KBK districts might have implications regarding the availability of a pool of health care professionals to get into the job in the government health sector.

Both the state and central governments have developed region-specific strategies with regard to the KBK districts, with a view to improving both socio-economic conditions and the health care scenario.

Since the geographic and socio-economic situations differ across the KBK and non-KBK districts, the decentralised approach of managing human resources at district level might have different influences within these contrasting district groups. For instance, the posting and transfer of staff within and between the KBK and non-KBK districts could be very different, because of geographical terrain and overall socio-economic development, which in turn may influence the preferences of the staff when it comes to posting. The districts within the KBK region are situated far away from the state capital, which could impact upon access to training and supervision.

## **2.4 Development of the Public Health Care System and Human Resources for Health (HRH) in India**

Saini and Budhwar (2004) described in detail the historical context of the development of human resource management in India, during both the colonial and post-colonial periods. In colonial rule, the hierarchy and supremacy of bureaucracy were of utmost importance. As a result, there was a huge power gulf in place between the elite classes and the common people; and this system prevailed within most organisations. Saini and Budhwar further observed that such a value system strengthened hierarchical superior-subordinate relationships, which acts as a kind of mechanism of social control upon the subordinates. This also falls in line with the social culture of Indians that exists through the caste system, which has been discussed in detail in the previous section 2.2.3. Thus, in terms of general human resource management, even the present context reflects the historical background of power resting with people who belong higher within the hierarchy of bureaucracy or to those of greater social status.

India's modern public health care system began its journey from the pre-independence era with the constitution of the Health Survey and Development Committee, popularly known as the Bhole Committee (Health Survey and Development Committee, 1946). The committee report placed emphasis upon the setting up of a comprehensive and structured primary health system and medical institutions in the country, to develop human resources for health (Patel et al., 2011). Thereafter, the first democratically-selected government of independent India established the Planning Commission in 1950 through a constitutional mandate, to enhance socio-economic development across the nation. The Planning Commission of India put forward and executed the idea of a five-year planning system for the holistic development of the country, including health as one of its integral chapters (MOSPI, 2014).

The first four five-year plans until 1974 focused upon: 1) expanding training, education and research on health and allied domains (Indiran, 2015); 2) upgrading and strengthening public health centers, district hospitals and the deployment of mobile

health teams for rural areas (Ministry of Health, Government of India, 1961); 3) developing combined cadres of health staff, no-private practice, equal pay for equal work, special pay packages for specialized work and the appreciation of higher qualifications (Ministry of Health and Family Welfare, Government of India, 1967) and; 4) organizing health services in rural areas with one male health worker for every 6,000-7,000 of the population and one female health worker for each 10,000-12,000, establishing one PHC to cater for each 50,000 population heads and training for all health workers on health, family planning and nutrition (Ministry of Health, Government of India, 1973).

During the fifth five-year plan (1974-79), the focus was on vulnerable groups such as expectant mothers, lactating mothers and children. By this time, the policy-makers had realized that health and the course of development are complex domains (Duggal, 2002). This resulted in the formulation and adoption of the first National Health Policy (NHP) of the nation in 1983.

The first NHP recommended a decentralized system of health care to promote low-cost services, the involvement of volunteers and enhanced community participation, as well as setting down the scope for the expansion of the private health care sector. For the first time, 'health for all' was envisioned within the seventh five-year plan. The tenure of this plan began in 1985, indicating an obligation to ensure health for all by the year 2000. To materialize this vision, an expert review committee carried out the first ever comprehensive review of HRH availability in India and recommended a competency-based curriculum, refresher and bridging courses, in-service training, career structures for all existing categories of HRH and a uniform pay scale across the country (Bajaj, 1986).

The second National Health Policy was formulated and adopted in 2002, towards the end of the ninth five-year plan. It focused upon the expedite achievement of public health goals within a stipulated socio-economic context. This edition of the NHP further expanded the scope of the contribution from the private sector, as well as from non-profit organizations in health care service delivery (Agarwal, 2002). In-addition, during

2005, the National Rural Health Mission (NRHM) was initiated, in continuation of the adoption of the strategies outlined in the second NHP.

The aims of the NRHM were structural and functional reforms in the health care system, in order to deliver equitable, accessible, affordable, accountable and good quality health care services to the rural population of India (National Secretariat on Community Action-NRHM and Centre for Health and Social Justice, 2006). Primarily, the NRHM focused on the optimization of HRH, the decentralization of health programs, improving community participation and augmenting managerial outcomes by introducing management and financial personnel at district and block levels. In this regard, the state health directorates had adopted fully-fledged HR, administrative and finance sub-departments for the improved direction of the state's public health system (Sharma et al., 2016). There were many prominent state-specific reforms adopted under the NRHM within the context of HRH management, including: financial and non-financial incentives to improve staff retention; the location-specific appointment of staff; weightage in admission to specialization and super-specialization courses for those who had served in rural areas; contractual appointments of health staff to meet shortages within the health work force; in-service training for health staff; and the expansion of the public-private partnership in service delivery (Husain, 2011). Additionally, an incentive-based community health worker role known as the Accredited Social Health Activist (ASHA) was introduced under the NRHM, which has further represented an instrument of community mobilization to meet demands for health services at village level (Bajpai and Dholakia, 2011).

The 11<sup>th</sup> and 12<sup>th</sup> five-year plans further emphasized increased government spending on health, infrastructural development and the decentralization of the health care system to achieve the vision of universal health coverage (Planning Commission- Government of India, 2013). The major change was the merging of the NRHM with the National Urban Health Mission (NUHM). The National Health Mission (NHM) was formed, in order to up-scale the healthcare infrastructure and service delivery and effect the better maneuvering of health-related programmes (Nath, 2014). The 12<sup>th</sup> five-year plan

conceptualized the umbrella framework of the National Health Mission, to focus on service delivery and the development of the health care system in rural as well as urban areas (Pandey, 2017).

With a change of government in 2014, the Planning Commission was dissolved. It was replaced by a new institution named the National Institution for Transforming India, universally known as NITI Aayog, with the mandate of transforming India to achieve targets envisaged under the Sustainable Development Goals (Ministry of Health and Family Welfare, 2017). NITI Aayog, entrusted the vision increasing resources for health; expanding the role of the government as a strategic purchaser of health care services from both public and private actors; provisioning equitable and integrated health services and using technology optimally for health system development (Press Information Bureau - Government of India, 2018).

Despite such efforts and developments, India has continued to face a chronic shortage of skilled health workers, irrespective of an ambitious health policy, improved fiscal initiatives, renewed management practices and the contribution of private actors within the health sector. India's composite HRH (doctors, nurses and midwives) density (high level expert group (HLEG), 2011) is estimated at 19 per 10000 of the population, against the critical HRH threshold (World Health Organization, 2016) of 23 per 10000 of the population, set down by the WHO Global Atlas of the Health Workforce (Motkuri, 2018). Therefore, there is a need for the adoption of innovative practices in the management of HRH, an optimized information system, evidence-based sustainable plans for improving access to health care services and appropriate policy reforms for the holistic transformation of the health care system in India (Nandan and Agarwal, 2012).

Throughout the journey of the public health system in India, although efforts were aimed at developing a comprehensive health care delivery system, the focus always remained on ensuring the provision of health services for the specific, vulnerable group of mothers and children. The initial emphasis was firmly upon family planning services, which then expanded to providing comprehensive reproductive and child health services. This was

carried forward even throughout the recent reforms within the NHM, which have once again focused around RCH. When the major objective of the government health sector in India is restricted to ensuring RCH services rather than general, comprehensive health services, this will have implications for the production and management of human resources for health.

## 2.5 Health care delivery outcomes

As per the third round of the National Family Health Survey (NFHS) carried out in 2005-2006, the Infant Mortality Rate (IMR) per 1000 live births for India and Odisha was 57 and 65 respectively (MOHFW, 2008a). Following the introduction of the NHM, there was increased investment by the Government of India in public health systems, particularly for improving reproductive and child health services (RCH) across all states. As a result, there was a considerable decline in these mortality indicators. As per the Sample Registration System survey conducted in 2012-2013, the IMR for India has reduced to 40 per 1000 live births and 51 for Odisha during the same period (Registrar General and Census Commissioner, India, 2014a). Despite these achievements, there is a wide gap between the infant mortality rates for urban and rural areas, with significantly higher incidences occurring in rural locations.

Although there has been a significant decline in the IMR of Odisha, it remains significantly higher than the national average. Similarly, the Maternal Mortality Ratio (MMR) per 100,000 live births is also significantly higher in Odisha than the national average (Table 2).

Table 2 Health indicators of Odisha 2014

Indicators	India			Odisha		
	Urban	Rural	Total	Urban	Rural	Total
IMR per 1000 live births	27	44	40	38	53	51
MMR per 100,000 live births	167			222		

Source: Sample Registry System (SRS) 2014

With the introduction of the National Rural Health Mission in 2005 with a specific rural focus on improving RCH services, there has been a significant increase in the utilisation of these services (Table 3). When the data of NFHS-3 (2005-2006) is compared with the Annual Health Survey (AHS) (2012-2013), the proportion of mothers who received three or more antenatal care (ANC) increased from 61% to 82% (MOHFW, 2008a; Registrar General and Census Commissioner, India, 2014b). There was a similar increase in institutional deliveries and full immunisation of children aged 12-23 months during the same period. In addition, the utilisation of these services was somewhat equal in both urban and rural areas.

Table 3 Utilisation of maternal and child health care services in urban and rural areas of Odisha

Indicator	Urban	Rural	Total (NFHS-3)
Mothers who received three or more antenatal care (%)	88	81	82 (61)
Institutional delivery (%)	87	80	81 (36)
Children aged 12-23 months fully immunised	68	69	69 (52)

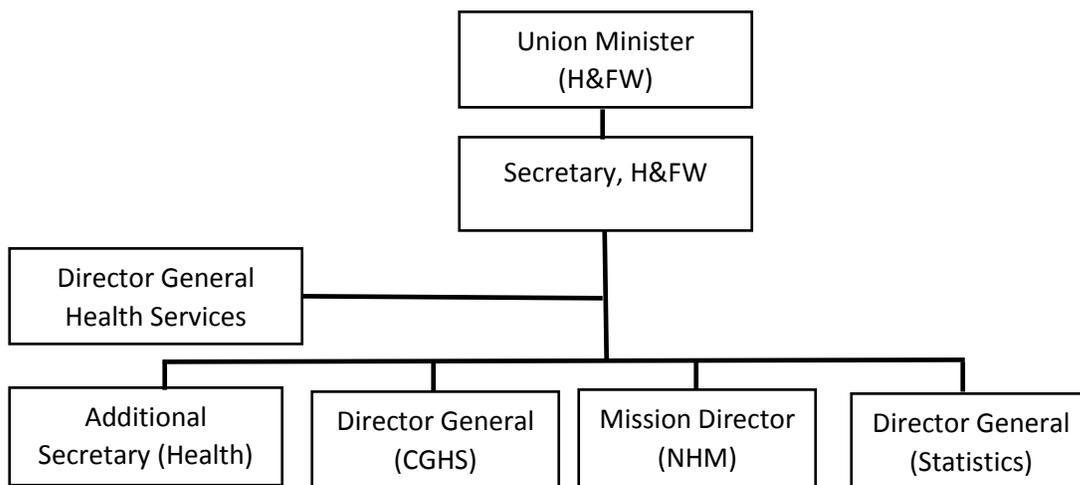
Source: Annual Health Survey, 2012-2013.

## 2.6 Health system: management structure at central level

The Ministry of Health and Family Welfare (MOHFW), Government of India, is led by a Union Minister of Cabinet rank. The Ministry functions through its two main departments: 1) Department of Health Research, and 2) Department of Health and Family Welfare (MOHFW, 2014a). The Department of Health Research undertakes research activities with its research institutions across India. The Department of Health and Family Welfare is the major component of the MOHFW, with the Secretary belonging to the Indian Administrative Services (IAS) cadre as administrative head, supported by

the Director General of Health Services, a medical professional as technical head (Figure 2) (MOHFW, 2014b).

Figure 2 Organisation Chart of the Ministry of Health and Family Welfare, Government of India



The Department of Health and Family Welfare is primarily responsible for the planning and implementation of different national health programmes throughout the respective departments of state government. Under the Department of Health and Family Welfare, there are particular units looking after domain-specific activities, such as maternal and child health, immunisation, communicable diseases and other disease-specific programmes through the Additional Secretary (Health). The other section of the MOHFW that functions in close coordination with the state governments is the Mission Director, National Health Mission (MD, NHM), overseeing the functions of similar structures at state level. Since health is the responsibility of state governments, all aspects of human resource management are also carried out by the state governments. Although the production and supply of health staff is also a state government responsibility, the MOHFW provides guidelines for staffing norms in the form of the Indian Public Health Standards (IPHS). There are stipulated staffing norms for sub-centres, primary health centres, community health centres and hospitals, depending on the numbers of beds from 50 to 500 at district and sub-district levels (MOHFW, 2012).

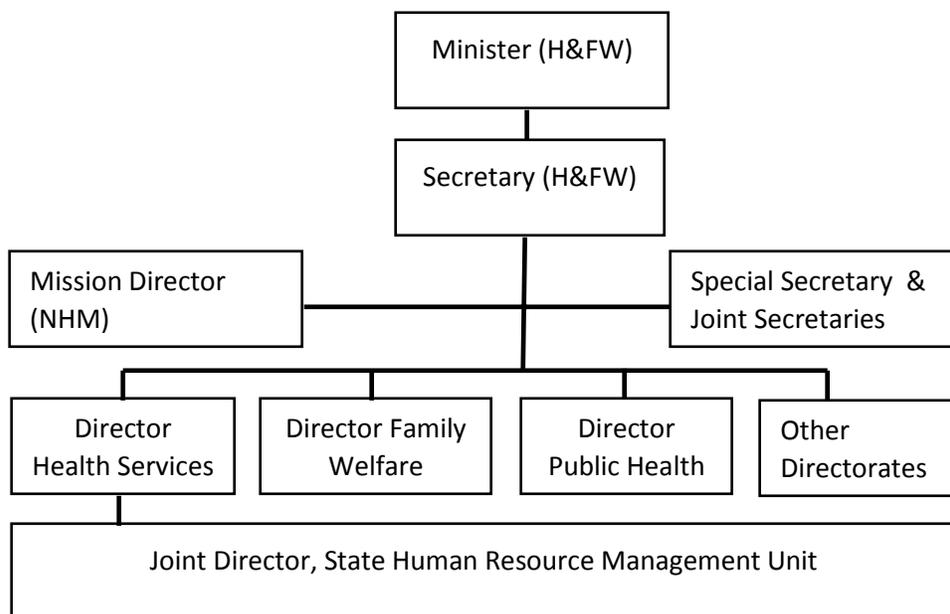
Furthermore, the federal government and corresponding state governments embrace the authority for health workforce production. The central government by its constitutional mandate has established various regulatory bodies for medical, dental, nursing, midwifery and paramedical education. Similarly, the state governments have also set up dedicated directorates to regulate the medical education and training within their states.

The government of India manoeuvres the quality and quantity of the production of human resources for health through independent institutions at central and state level. In the case of doctors, the Medical Council of India (MCI), is the statutory body overseeing the standardization of medical education, the recognition and de-recognition of medical institutions and the registration of doctors practicing within the country (Medical Council of India, 2017). Similarly, the Indian Nursing Council (INC) is an autonomous body that is deemed to be the regulatory body for the recognition of nursing qualifications for the purpose of the registration and employment of nurses and midwives in India (Indian Nursing Council, 2018). The Pharmacy Council of India (PCI) regulates pharmacy education, educational institutions, profession and practice in the country (Pharmacy Council of India, 2018). Professional laboratory technicians are under the control of the All India Council for Technical Education (AICTE), with similar councils at state level for all staff cadres. In the case of Odisha, there is a separate Directorate of Medical Education and Training under the Department of Health and Family Welfare that controls the quantity and quality of production within both government and private educational institutions.

## **2.7 Health system: management structure at state level**

At the state level, the structure is somewhat similar to the MOHFW. The Department of Health and Family Welfare is led by a Minister. The administrative head of the department is an officer from the Indian Administrative Services who is responsible for overall administration of the whole public health system in the state (Figure 3) (DOHFW, 2014a).

Figure 3 Organisational Chart of the Department of Health and Family Welfare, Government of Odisha



Within the DOHFW there is a Special Secretary - a doctor promoted from the doctors' cadre, and three-to-four joint secretaries from the Odisha Administrative Services. Within the Department, there are three main directorates, namely the Director of Health Services (DHS), the Director of Family Welfare and the Director of Public Health. Of the three Directors, the DHS is responsible for all issues related to the human resource management of health staff belonging to the state cadre; i.e. mainly doctors and supervisory cadres of paramedical staff. For instance, he/she is responsible for recruitment, deployment and reviewing the performance of all doctors working within Odisha's government health system. The other two directors function mainly as technical heads, rather than managing human resources. In addition, there is the State Institute of Health and Family, headed by a Director who is responsible for the induction and in-service training of all categories of health staff. Each directorate is also supported by additional and joint directors. All such officers have risen from the doctors' cadre on a promotional basis. In addition, there is a separate office of the NHM at the state level, headed by a Mission Director who is an officer from the Indian Administrative Services

cadre. The state NHM office functions in close coordination under the MOHFW at central level, and the DOHFW at state level. At the latter, almost all officers and staff under various Directorates are regular employees paid by the state government, whereas all officers and staff under the NHM are employed on a contractual basis and paid by the NHM, Government of India, through a state-level society. In Odisha, the Directorate of Health Services, Family Welfare and Public Health (original offices under the DOHFW funded by the Government of Odisha) is located in the same building. Conversely, the NHM (newly-formed division under the DOHFW but funded by the Government of India) office is located in a separate building that is situated over one-kilometre away. Therefore, there are opportunities to meet with officers located within the same building but not between the buildings.

In addition, the Directorate of Medical Education and Training (DMET), Odisha was established as the Head of Department in 1975, with the vision of improving the landscape of medical and paramedical education in the state. The directorate monitors the medical and paramedical educational institutions in the capacity of supervising head of the department. (Director Medical Education and Training, 2018). The Directorate operates under the Department of Health and Family Welfare headed by the Principal Secretary, Government of Odisha, and is located within the same building as the Directorate of Health Services, Family Welfare and Public Health.

### **2.7.1 State Human Resource Management Unit**

The Department of Health and Family Welfare established the State Human Resource Management Unit (SHRMU) as a separate unit in 2009 (DOHFW, 2015a). This is unique within the national context, since only the state of Odisha has such a separate unit of human resources for health within the DOHFW. The stated objective of the SHRMU was to develop institutions and systems that would ensure an uninterrupted staff supply, the effective management of staff posting, improved staff motivation and better retention. The unit was charged with ensuring the adequate supply of skilled health staff to meet both current and future needs through appropriate policy development, planning,

management, capacity development, monitoring and evaluation. Although placed within the Directorate of Health Services, the unit functions under the guidance of a steering committee chaired by the Commissioner/Secretary of the DOHFW. The unit is headed by a medical doctor of the rank of Additional Director, with three support staff who mainly undertake data management and routine office work. From 2008 to 2012, this unit carried out certain HRM reforms; mainly around restructuring the cadres of doctors, nurses, pharmacists and laboratory technicians, and has streamlined the processes for recruitment and promotion. In addition, the unit created a database of doctors that was used in decision-making related to posting, transfer and promotion. However, the unit has neither mandate nor powers in relation to in-service training, performance management or personnel administration. It has also put in efforts to develop a comprehensive, web-based, human resource management information system (HRMIS). However at present, the data of individual doctors and the aggregate data of paramedical staff is available in MS Excel format. More recently in 2016, the unit coordinated with the DOHFW to develop a web-based HRMIS of all staff; but has yet to complete this.

Although the objective for developing the SHRMU was to manage all functions of HRM, there were no powers transferred to this unit to undertake the comprehensive HRM function. However, over a period of seven years it has made developments relating to the coordination of recruitment, posting and transfer, the promotion of doctors and database management in relation to paramedical staff. The unit is lacking the staff required in terms of both adequate numbers and the necessary skills to manage all HRM functions.

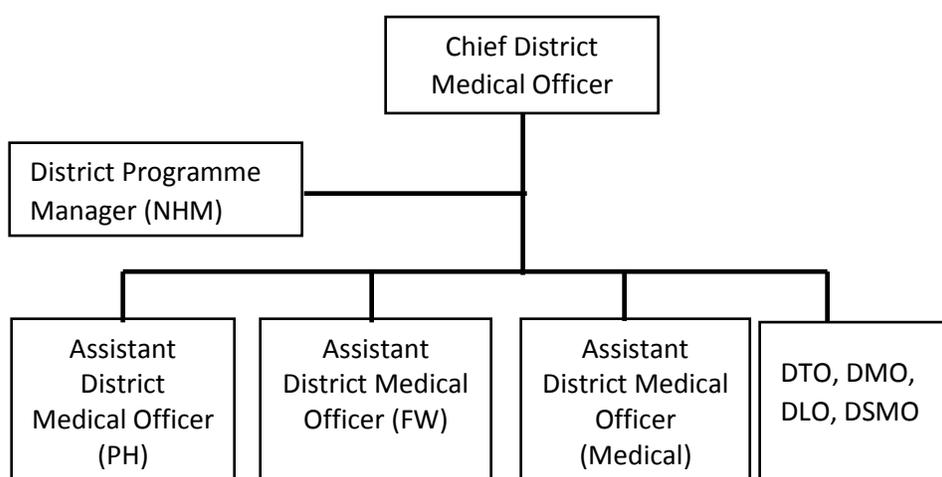
## **2.8 Health system: management structure at district level**

Unlike state level structure with multiple Directorates, each district is headed by a single authority, namely the Chief District Medical Officer (CDMO). The CDMO is supported by Assistant District Medical Officers for public health and medical and family welfare (Figure 4). In addition, there are separate managers for national health programmes, i.e.

the District TB Officer, District Malaria Officer, District Surveillance Medical Officer and District Leprosy Officer, all of whom have been promoted from the doctors' cadre. Under the state NHM, there is a separate set-up for the district, with one District Programme Manager (DPM) and other supporting staff recruited and paid by the NHM. The team of NHM officers and staff is under the control of the state NHM and operates under the CDMO at district level.

Since the year 2000, most human resource management of health staff has been decentralised to district level, which is described later in this chapter under section 2.11. For instance, the CDMO is the authority for recruitment, deployment and performance management for all paramedical staff within the district.

Figure 4 Organisational Chart of Structure at District Level, Odisha



## 2.9 Three-tier system of health services delivery in Odisha

The public health care system in Odisha is similar to other states, and has a three-tier structure encompassing primary, secondary and tertiary levels (MOHFW, 2012). The primary health care services are provided by sub-centres (SCs) and primary health centres (PHCs). Community health centres (CHCs) situated at block level provide both primary and secondary health care. District hospitals (DH) and sub-divisional hospitals (SDH) deliver secondary and tertiary health care. A CHC caters for a population of 100,000 to 150,000, with around four or five PHCs under each CHC that cater for a

population of 30,000. Under each PHC, there are four-to-six sub-centres, serving a population of 5000. There is one district hospital and one-or-two sub-divisional hospitals in each district.

According to the level of care, there are sanctioned staff posts for each type of health facility (Figure 5). There is one multi-purpose health worker female (MPHWF) and one multi-purpose health worker male (MPHWM) for each sub-centre. Each PHC has sanctioned posts of one doctor and one pharmacist to provide clinical services. In addition, there is one multi-purpose health supervisor female (MPHSF) and one multi-purpose health supervisor male (MPHSM), supervising the activities of MPHWs at sub-centres. Each CHC at block level is headed by a medical officer in-charge (MOIC), with one-to-four posts for specialist doctors, one-or-two posts for lab technicians, one post for a pharmacist and four-to-six posts for staff nurses, to provide clinical referral services. In addition, at CHC level, there is one post for a public health extension officer (PHEO), to support the MOIC in public health activities, along with one block programme manager and a block accounts and data assistant, who are recruited and paid by the NHM.

### **2.9.1 Management of the three-tier system of health services delivery**

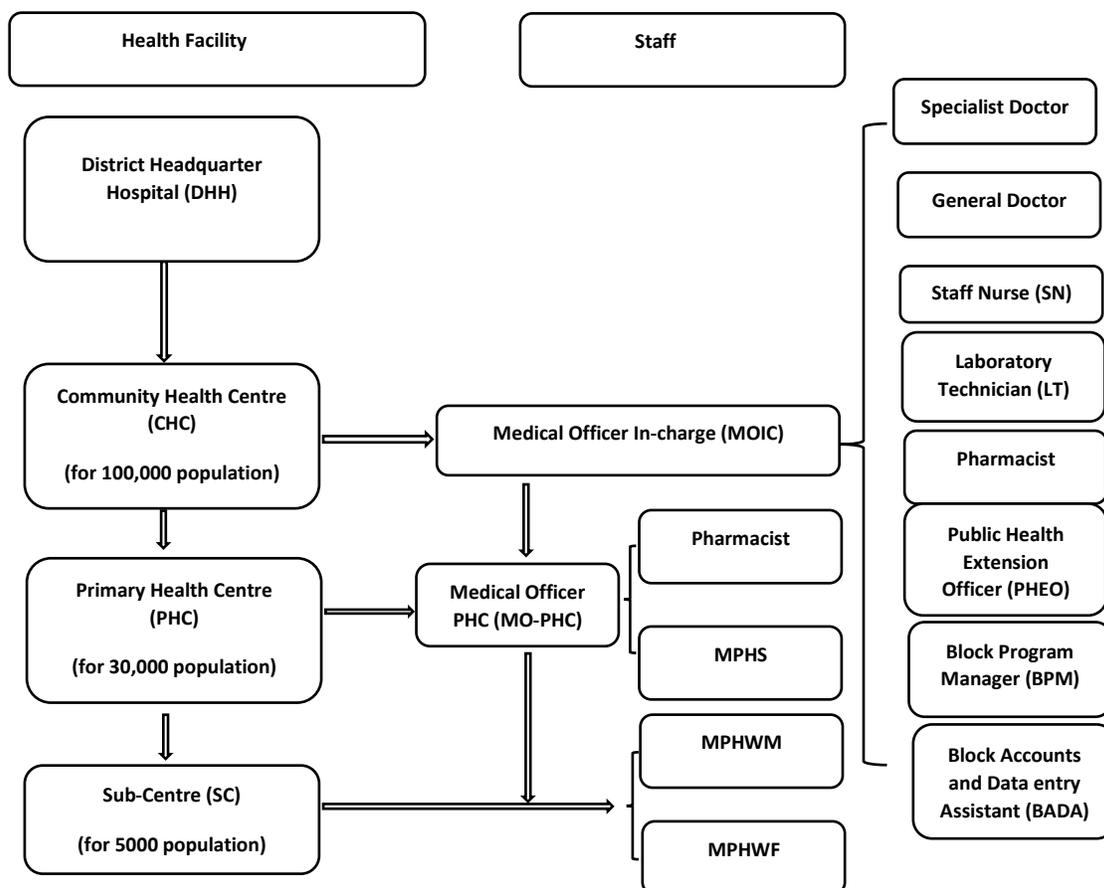
The PHC is the lowest level of management unit at village level. The doctor posted here (also known as a Medical Officer [MO]) is a junior class 1 officer, holding the responsibility of managing the entire functioning of the PHC and the sub-centres under its jurisdiction. He has the authority to supervise and review the activities of the staff at the PHC: i.e. the pharmacist, staff nurses, multi-purpose health supervisors (male and female) and support staff. At sub-centre level, he has the same responsibilities in relation to the multi-purpose health workers (male and female), and reviews their activities at regular meetings scheduled every Saturday. In addition to supervision and review by the MO, the activities of MPHWs should be supervised and reviewed by MPHS (male and female). The MPHS (F) is a former MPHWF, who has progressed to this supervisory cadre through promotion and stipulated compulsory training. The case is similar for the MPHS (M,) who is a former MPHWM (M) and has been promoted to the supervisory role,

although without any stipulated training. The MO also has the responsibility of supervising and reviewing the work of MPHs (male and female). Every Saturday, the MO must submit a health management information system report to the Community Health Centre (CHC), which represents the next level in the infrastructure.

The CHC is a 30-bed hospital headed by a medical doctor who is also known as the Medical Officer In-charge (MOIC). The MOIC has the responsibility of managing this hospital, as well as all PHCs and SCs under its jurisdiction. The MOIC has to manage two types of staff at the CHC: 1) doctors, staff nurses, lab technicians and pharmacists providing clinical services, and 2) supervisory staff such as PHEO and BPM. In addition, he/she has to oversee the management of the PHCs and SCs that fall under the CHC and take a monthly review of all institutions and staff within this category. Every month, the MOIC must send a health management information system report to the next stage of the hierarchy - the Office of the Chief District Medical Officer at district level.

The Chief District Medical Officer (CDMO), as head of the district, oversees the functioning of all CHCs and PHCs within the designated area. In addition, various district level officers for different state and national health programmes supervise and review the activities of the CHCs and PHCs. Such major national health programmes are: the National Vector-Borne Disease Control Programme, the Revised National TB Control Programme, the National Leprosy Control Programme, the Integrated Disease Surveillance Programme as well as certain other programmes dedicated to reproductive and child health. Thus, at PHC and CHC level, there is one authority (the Medical Officer) who is charged with managing the activities without any programme-based input. Conversely, the management at the district level is mainly health programme-based, with multiple controlling authorities. The CDMO undertakes a review of all CHCs on a monthly basis, in which only the CHC level managers and supervisors participate, without including any employees from the PHCs or any clinical staff from the CHCs. Therefore, the review at district level takes place mainly for programme-based activities, rather than for clinical services.

Figure 5 Level of health facility and health staff



## 2.10 Staffing norms, existing staff strength of sanction and filled posts within the government sector

As per the staffing norms prescribed by the Indian Public Health Standards (IPHS), Government of India (MOHFW, 2012), there is a 39% shortage of sanctioned posts across all categories of staff in the state of Odisha, as of 31 December 2015 (Table 4). The greatest shortfall is that of staff nurses, followed by laboratory technicians, MPHWFs, MPHWMs and doctors. Against sanctioned posts, 31% of MPHWM posts remain vacant, followed by laboratory technicians (29%) and doctors (22%). To address this shortage,

NHM has provided additional staff in the tune of 33% of staff nurses, along with 10% respectively of MPHWFs and laboratory technicians of the total staff

Table 4 Existing sanctioned posts of staff and shortfall against requirement by IPHS within the government sector, Odisha, as at 31 December 2015

Staff cadre	Number of posts requirement as per IPHS (a)	Number of current sanctioned posts (b)	Percentage shortfall of sanctioned posts as per IPHS (a-b)*100/a	Number of in-position against current sanctioned posts (c)	Number of staff provided by NHM (d)	Total staff in-position (c+d)	Percentage vacancy against current sanctioned posts [b-(c+d)]*100/b
Doctors	5974	4842	19	3761	0	3761	22
Staff nurses	6754	2949	56	2287	1110	3397	0
Pharmacists	1950	1945	0	1862	0	1862	4
Laboratory technicians	2143	1141	47	732	74	806	29
MPHWF	16679	9240	45	8188	1035	9223	0
MPHWM	7655	4944	35	3435	0	3435	31
Total	41155	25061	39	20265	2219	22484	10

Source: SHRMU, 2015

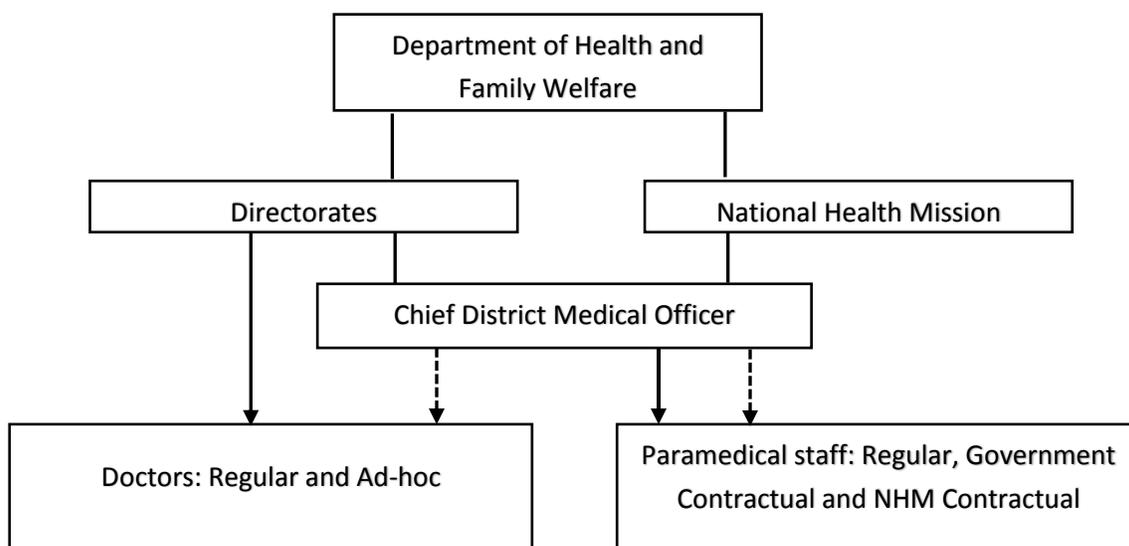
## 2.11 Human resource management of public sector health staff in Odisha

### 2.11.1 Staff cadres and employment contract

Public sector health staff in Odisha can be categorised in a number of different ways: by professional cadre, by state or district cadre and by type of employment contract. There are two main professional cadres: doctors and paramedical staff. The doctors' group consists of general doctors holding MBBS qualifications and specialist doctors with additional post-graduate qualifications in any clinical speciality. The paramedical category includes staff nurses, laboratory technicians, pharmacists and MPHWFs (male and female). These professional cadres are also categorised as state and district cadre, depending upon the level, recruitment authority and place of posting and transfer. The doctors belong to the state cadre, meaning that they are recruited at state level and can be posted and transferred between any of the 30 districts within the state (Figure 6, solid

arrow). The paramedical staff are of district cadre, meaning that they are recruited at district level and can be posted and transferred only within the district where they were recruited (Figure 6, solid arrow). Before 1999, all health staff were classed as state cadre, but at that point the paramedical staff were changed to district cadre, whereas the doctors have remained state cadre staff. Regarding performance management through in-service training, supervision and performance appraisal, this is managed by the CDMO at district level for both doctors and paramedical staff (Figure 6, dotted arrow). In addition, the CDMO can authorise the temporary transfer of all categories of staff within the district as 'deputation'. Accordingly, it appears that the majority of HRM functions have been decentralised to the district level, with the CDMO being the authority with regard to control and management.

Figure 6 Employment and performance management of health staff



There are two types of employment, namely regular and contractual. In regular service, the appointment is made on a permanent basis, with a salary structure of basic pay and allowances, which are then upgraded after each 10 years of service or upon promotion. In contractual service, staff receive consolidated fixed pay on a monthly basis and the service contract is agreed for one year only, and must be renewed on an annual basis. There are two types of employment within the contractual category. 'Government contractual' means that staff are employed and paid by the state government on a yearly

contract basis for six years, after which time they are regularised and made permanent staff. The second is known as 'NHM contractual', and applies only to paramedical staff recruited and funded by the NHM, meaning that the employees in this group are never regularised or made permanent. Hence, there are two separate employment contract mechanisms within the same category of staff, resulting in colleagues undertaking similar work at the health facility, however with very different employment contracts and management policies.

### **2.11.2 Cadre and employment of doctors**

The Odisha state government engages doctors as regular, ad-hoc or contractual employees. The Odisha Medical and Health Services, Rules of Recruitment of Doctors on Regular Posts (DOHFW, 2012a); Odisha Public Service Commission (OPSC), are detailed guidelines, dealing with the recruitment of all public servants above the level of Group B, including all doctors. Since Odisha faces a chronic shortage of doctors and recruitment through the OPSC is irregular, the Department of Health and Family Welfare (DOHFW) recruit doctors directly on ad-hoc contracts, which are then regularised through the OPSC (DOHFW, 2012b). In addition, the Chief District Medical Officer (CDMO) can engage doctors on a contractual basis as and when required (DOHFW, 2001).

### **2.11.3 Cadre and employment of paramedical staff**

In contrast, the Public Service Commission is not involved in the recruitment of paramedical staff, who are recruited directly by the DOHFW. In 1999, this staff category was changed from state to district cadre, meaning that they can be recruited and retained in the same district, with the limited option of inter-district transfer based on certain conditions. In the same year, the appointing authority was changed from the Director of Health Services at state level to the Chief District Medical Officer (CDMO) of the respective districts, so that recruitment can be carried out simultaneously across each district without depending on the state (DOHFW, 1999). During this transition, the existing state cadre paramedical staff had the option to choose their district, according

to their seniority and the number of posts available in each area, so that they could opt to work in their native homes (DOHFW, 1999). According to the guidelines for recruiting paramedical staff provided after the declaration of district cadre, 'candidates of the concerned districts should be given preference for appointment' (DOHFW, 2005). This means that candidates who are native to a district would get preference in recruitment over people from other districts, and thereafter may only be transferred within that district. This arrangement was put in place to enable staff to remain in their native homes and avoid the hardship of transferring from one place to another.

This transition of changing the paramedical staff from state to district cadre took around six years to complete, during which time the Government of Odisha had stopped the recruitment of new paramedical staff. Finally, during 2005, there were instructions given by the DOHFW at state level to all CDMOs, to fill the paramedical posts in their respective districts. At that time, there was a major change in the policy of engaging staff, as employment shifted from regular to yearly contracts. Instructions were given to CDMOs to abolish the regular posts of all paramedical staff that stood vacant, and to create an equal number of contractual positions, to be recruited afresh. In addition to this recruitment of paramedical staff as 'government contractual', the state unit of the National Health Mission (NHM) began the recruitment of paramedical staff separately as 'NHM contractual,' from state as well as district level. A committee under the chairmanship of the Chief District Medical Officer was appointed the recruiting authority by categorising all paramedical staff as district cadre (DOHFW, 2005).

In 2013, the Government of Odisha announced a policy relating to the regularisation of the services of staff appointed on a contractual basis (GAD, 2013a, 2013b). Accordingly, contractual staff across all sectors (including health) would be regularised following the satisfactory completion of six years of service, and a formal order of regular appointment would be issued by the appointing authority (GAD, 2013b). On such a regular appointment, staff would be entitled to draw the basic salary with allowances as admissible within the corresponding pay band, to be increased every 10 years. Notably,

this rule relating to the regularisation of service does not apply to contractual appointments made by the NHM. However, employees appointed on a contractual basis prior to the commencement of these rules, who are below 45 years of age, will be allowed to participate in the fresh recruitment process, and a relaxation of the upper age limit will be allowed for entry into government service (GAD, 2013b). As a result, the NHM contractual staff would not be regularised and would not receive the benefits of regular service, although they could still make fresh applications for 'government contractual' posts. Thus, the system has created two parallel opportunities for employment under a fixed-term contract: one that is funded by the NHM which will remain a fixed-term contract; and another that is funded by state government with the additional opportunity of becoming regularised to a permanent post with more job security.

## **2.12 National Health Mission and changes to HRM after its introduction**

The Indian government launched the National Rural Health Mission (NRHM) during 2005. The aim was to strengthen the primary health care system, especially in the rural areas of India. In order to achieve universal health coverage (UHC), in the 12<sup>th</sup> five-year plan, the Planning Commission of the Government of India transformed the NRHM into the National Health Mission (NHM), covering both rural and urban areas (Planning Commission, 2013b). The objective of this transformation was to extend coverage to include urban areas. The NHM has 11 specific goals, including four that are related to reproductive and child health (RCH): concerned with IMR,MMR, total fertility rate and anaemia (NHM, 2013a). In addition to these, the Mission has further goals to reduce the burden of five specific diseases, namely: TB, leprosy, malaria, filaria and kala-azar. Finally, there are two overarching goals: to reduce the burden of communicable and non-communicable diseases, and to reduce out-of-pocket expenditure by households on health care. Thus, as reflected in nine out of the 11 listed goals, the focus of the NHM has been on RCH and disease control for specific communicable diseases.

The NHM has a set of core strategies including increasing public health funding, decentralising village and district-level health planning and management, strengthening the public health service delivery infrastructure - particularly at village, primary and secondary levels, and promoting the non-profit sectors to increase social participation and community empowerment (NHM, 2012).

Human resources for health has been an area of focus for the NHM since its inception. However, its initial emphasis was upon creating a network of community health volunteers called Accredited Social Health Activists (ASHA), rather than intervening in the issues related to human resources for health (HRH) within the state. The NHM initially focussed mainly on the capacity-building of existing health staff and partially on performance management through supervision to improve the quantity and quality of health services. Furthermore to expand the reach of RCH services, they developed outreach programmes on fixed days each week, with immunisation sessions every Wednesday and Village Health and Nutrition Days on Tuesdays and Fridays. They developed new training programmes with all financial resources provided, with a view to developing the infrastructure at state, district and facility level. In addition, they amended the system of supervision, making this more systematic and structured, with additional resources available for travel. However, the focus of these interventions in the areas of training and supervision were primarily aimed at reproductive and child health (RCH) services, and with newer programmes related to this area, the NHM also started supplying staff to manage these activities. To this end, they recruited and paid for additional Auxiliary Nurse Midwives (ANMs) and staff nurses, whose main activities were related to RCH services. In addition, they further recruited and met the costs of laboratory technicians and pharmacists, who were linked to specific national health programmes for the control of TB and malaria.

Following the introduction of the NHM in 2005, there was an associated increase in the demand for health staff. In response, the NHM made three major changes to recruitment practice: 1) employment on a yearly contract basis instead of regular contracts; 2) equal

opportunities for candidates from public and private sector institutions; and 3) no fixed quota of reservation for economically and socially “backward” classes. Simultaneously, employment within the government system was also changed to a contractual basis for candidates from both public and private sector institutions, although the reservation rules remained unchanged. Thus, the NHM created a parallel system for the employment of health staff in its own system with the influence of the regular government system. However, the NHM had no role in the production of any categories of staff.

Performance appraisal is a crucial component of performance management within Indian public service, and the NHM developed a separate performance appraisal system that applied exclusively to its own category of staff, featuring a performance-based incentive system. However, they have made no efforts to influence routine performance appraisals for staff working under the existing health system. Thus, the NHM once again created a parallel system of staff performance management.

With regard to personnel administration, human resource management information system (HRMIS) has been developed for the health staff working for the NHM, but no similar efforts were made for those working under the existing health system. The NHM also plays no role in the recruitment and deployment of regular staff working within this system. Thus, with its own HRMIS, the NHM could update its HR data, however there was no such system developed for staff employed by the routine government health system. This represents a further example of the parallel and fragmented system of HR data.

In summary, the NHM put in efforts to modify recruitment and employment, in-service training and supervision, to improve staff performance for those working under both the NHM and the existing health system, with the aim of strengthening RCH-related services. However, the organisation remained at a distance with regard to intervening in other HRM functions such as performance appraisal and deployment (posting and transfer) of staff working in the existing health regime, creating a parallel system for the management of human resources for health care.

### **2.13 Summary of the background to the study**

Odisha is a state of India with poor health indicators in comparison to the national average. There is a high proportion of underprivileged groups within the population, and certain districts have difficult terrain, that may cause problems with regard to access to health care. The state faces challenges in terms of shortages in human resources for health, as well as problems in effectively managing the existing health staff. Despite such issues, most of the population still relies on the public health system for access to health care services.

The management structure at national and state level is somewhat similar. It is led by a Minister, headed by the Secretary - an officer from the Indian Administrative Services - and supported by technical and administrative support from a range of doctors and civil servants. These functionaries at national and state level are generally involved in developing policies and plans, as well as providing the resources required. The management structures at district and facility level are responsible for the actual management of the health care staff through a three-tier system, within which the basic services are provided at the SCs by the MPHWS as the health care staff at village level. The main bulk of primary health care services and to some extent the secondary services are expected to be provided at PHCs and CHCs, where most doctors and paramedical staff are posted. Doctors belong to state cadre and are posted and transferred from the state level. In contrast, the majority of HRM relating to the paramedical staff is expected to be undertaken by the district management.

There are three types of employment contract; based upon the duration and the funding source. The first category represents staff employed on regular contracts, that are permanent and paid for by the state government. The second category covers staff employed on fixed term contracts, who are then regularised after six years of service. This group is known as 'government contractual' and is paid for by the state government. The third category is called 'NHM contractual,' where again, the fixed term contracts are paid for by the NHM, however these staff are never regularised. The three different types

of employment contract could produce different outcomes in how they are managed, due to the various durations and the different sources of funding.

In addition to differentiation by geography, staff cadres and the employment contract, the staff differ in terms of their caste and gender. Against the backdrop of discriminatory Indian society, such characteristics might have different influences on human resource management.

Since its introduction, the NHM has created parallel structures in addition to the existing health systems at national, state, district and block levels, by recruiting and funding through central government. The NHM focussed on changing some of the HRM functions - mainly recruitment, employment contracts and performance appraisals - for the staff belonging only to the NHM. This has contributed to mitigating staff shortages by supplying staff nurses, MPHWs and laboratory technicians, with a focus on improving the quantity of services related to reproductive and child health. Conversely, the NHM did not make any interventions towards the recruitment processes and appraisal system relating to regular staff, however, it has invested in building their capacities and carrying out supervision.

Therefore, the factors that may influence human resource management are: whether the districts are accessible or more remote; the cadre of doctors and paramedical staff; whether employees are state or district cadre; the type of contract (regular, government contractual or NHM contractual) and the place of posting, i.e. at a SC, PHC or CHC. The HRM might also be influenced by the level of management structures that are actually undertaking HRM functions, and the powers and capabilities involved.



## **Chapter 3: Literature review**

### **3.1 Introduction**

The purpose of the literature review was to gain a thorough knowledge of the existing literature about human resource management (HRM) practices and the effect on employees. The overall aim of the research is to explore how human resource management policies and practices affect health workers in the context of the Indian public health system at district level. In this regard, the role of the line managers or district level managers is crucial because they are involved in the implementation of HRM policies, especially in the Indian context. The literature around this was searched to explore the difference between intended versus actual or reported HRM practices. Before I searched for links between HRM and its effect on health workers, I explored general literature about what is HRM in general, what are the theories behind HRM practices and the theories of motivation and job satisfaction? I used the review of the literature to develop a framework and to design the content and methodology of this research.

To identify published literature, I carried out database searches including PubMed, Biomed Central, Google Scholar and the websites of the Government of India and Odisha. To address the aim of the study, I searched for answers to several sub-questions: what is HRM? Why are HRM policies sometimes not implemented as planned? What is the effect of HRM practices on health workers? What are the HRM practices that are implemented (or not)? And why? How do HRM practices influence health workers? I used the following search terms: 'human resource management,' 'human resources health,' 'employee perception,' 'employee attitude', 'employee behaviour', 'health worker,' 'health staff,' 'performance appraisal,' 'health sector,' 'policy and practice,' 'lower and middle income countries,' 'India,' 'decentralisation,' 'motivation,' 'posting and transfer,' 'in-service training,' 'performance appraisal,' 'supervision' and 'job satisfaction.' I used these search terms either independently or in combination to locate the intended literature. Additional relevant articles were hand-searched using a snowball

technique. In addition, I used standard textbooks on HRM, organisational behaviour and health systems, as well as the relevant resources available from the websites of the Chartered Institute of Personnel Development, the HRH Global Resource Centre and the World Health Organisation.

The results of the literature review have been arranged based on emerged themes in the following sections. In each section, I have looked at general HRM literature followed by literature from the health sector, particularly from LMICs.

In order to understand the link between ‘what is human resource management?’ and ‘how does it affect health workers?’ this chapter first describes the concepts of human resource management. The following sections describe the HRM policies (intended HRM practices designed by the senior management) based on theories of HRM. This is followed by the description of implemented HRM practices as reported by managers and employees and the importance of line managers in the implementation of HRM practices. In addition, there are explanations of the effect of HRM practices on employees. Thereafter, there is specific literature described in relation to the four HRM functions selected for the study: posting and transfer, in-service training, supervision and review and performance appraisal. This is followed by a summary of the conceptual framework used in this study by Purcell and Hutchinson (Purcell and Hutchinson, 2007).

### **3.2 What is Human Resource Management (HRM)**

Human Resource Management (HRM) can be defined as ‘the way an organisation manages its staff and helps them to develop’ (McCourt and Eldridge, 2003). In addition, HRM involves developing a coherent HR approach, with alignment between human resources and organisational policy (Bach, 2003a). Armstrong, (2009), defined strategic HRM as ‘an approach that defines how the organisation’s goals will be achieved through the people by means of HR strategies and integrated HR policies and practices’ (Armstrong, 2009).

### 3.2.1 Theories of HRM

The theories of HRM can be classified as *strategic, descriptive, normative and strategic* (Guest, 1997a). The descriptive theories detail out the content of HRM of various options, the normative theories provide prescription of certain HRM practices, whereas the strategic theories are concerned with the relationship between external contingencies and HRM policies and practices. Guest, (1997), described external contingencies as the choices made by the organisation on how to respond to and interact with the external environment, which then becomes the organisational strategy. According to Guest, strategic HRM is about how HR practices are matched with the organisational strategy. For example, how processes of HRM are linked to performance and are then matched with the financial outcomes of the organisation. He cited innovation, quality and HR costs as HR strategies, whilst classifying selection, training, appraisal etc. as HR practices.

The normative theories provide a list of prescriptive HRM practices that can be adopted by organisations. A systematic review carried out by Boselie et al., (2005), found that three theories dominated the HRM field, namely: contingency (HRM is influenced by organisational context and circumstances); resource-based view (HRM delivers added value through the strategic development of the organisation's rare, difficult-to-imitate and non-substitutable human resource); and the Ability, Motivation and Opportunity to participate, termed as AMO theory (organisational benefits are better achieved by serving the interests of employees by enhancing their abilities, motivation and opportunity to participate) (Boselie et al., 2005).

Delery and Doty, (1996), described and tested three theoretical frameworks in strategic HRM: universalistic, contingency and configurational (Delery and Doty, 1996). A universalistic framework takes the view that some HRM practices are universally effective (best practices). The contingency framework emphasises that the effectiveness of HRM practices is contingent on business strategy (best fit). The configurational framework explains that there are synergistic effects amongst HRM practices and that

consistency within the configuration of HRM practices and between these practices and business strategy are necessary for better performance of the organisation (strategic configuration). The latter approach requires both *horizontal fit* amongst the various HRM practices, as well as *vertical fit* with the organisation's business strategy. Horizontal fit can be achieved by selecting the appropriate HRM practices and combining together so that these practices have a mutually-reinforcing effect; whilst vertical fit can be achieved by integrating HRM strategy with the outcomes that the business or organisation wishes to achieve (Armstrong, 2009). For example, a combination of in-service training, supervision and feedback on performance can have a synergistic effect (horizontal fit) more than each practice alone. Similarly, if the organisation's main emphasis is more on client satisfaction than on maximising the profits, then HRM strategies that improve the responsiveness of the workers (vertical fit) will be more appropriate than merely increasing productivity.

In health sector literature, Dubois and Singh, (2009), emphasised that effective HRM requires horizontal fit amongst the HRM strategies that are interconnected and interactive, and vertical fit with the organisational policies, goals, structures and context (Dubois and Singh, 2009).

MacDuffie, (1995), taking the case of automotive assembly plants, demonstrated the effect of 'horizontal fit' of HRM practices on firm performance, and termed such a fit as a 'bundle'. The author concluded that the HRM practices affect performance not individually but as interrelated elements in an internally consistent HRM 'bundle' (Macduffie, 1995). Similarly, Buchan, (2004), argued that within the health sector, there must be 'fit' between HRM practices and the characteristics, context and priorities of the organisation, and when HRM practices are linked and coordinated into 'bundles', this will have an increased effect on performance. Review of literature by other researchers in the health sector emphasised the importance of strategic configuration or 'bundles' in improving health workers' performance more than any single HRM intervention (Dieleman et al., 2009; Rowe et al., 2005).

Armstrong, (2017), emphasised the importance of taking into account a HR system that describes the overall values and guiding principles adopted in managing people. Such a HR system incorporates: 1) HR policies: 'how specific aspects of HR should be applied and implemented' and, 2) HR practices: 'which consist of the HR activities involved in managing and developing people' (Armstrong and Taylor, 2017).

In addition to identifying and integrating HRM practices, it is essential to know their 'presence' as experienced by employees (how many HRM practices are actually implemented), their coverage (for how many employees, i.e. the proportion of employees covered) and intensity (the degree to which individual employees are exposed to such HRM practices) (Boselie et al., 2005). They found that it was only the 'presence' that was taken into account by many studies but not coverage and intensity. Furthermore, there is possibility of disagreement between managers and employees on the 'presence' and intensity of particular HRM practices (Boselie et al., 2005).

Apart from best practices, best fit and configurational, there are other concepts used to describe HRM practices such as 'high-performance work system', 'high-commitment management' and 'high-involvement management' in all HR literature (Becker and Gerhart, 1996; Becker et al., 1997; Boxall and Macky, 2009; Combs et al., 2006; Godard, 2004; Paauwe and Boselie, 2005; Whitfield and Poole, 1997). All these publications emphasise that the bundled approach of more than one HRM practice has a greater influence on employee performance than any single practice. Boxall and Purcell, (2003), described that performance is a function of Ability + Motivation + Opportunity to participate. HRM practices impact on individual performance by encouraging the development of skills, motivating discretionary behaviour and providing people with the opportunity to perform (Armstrong, 2009). For instance, some HRM practices improve the abilities of employees whilst others motivate them to use their abilities to improve their performance. In such instances, when these two HRM practices are combined (as a bundle), they will be more effective than any individual HRM practice.

In summary, the theories on HRM describe what constitutes HRM strategies, what are HRM practices and how the latter affect employee attitudes and behaviour. Based on literature, it can be concluded that to be effective, the HRM practices should be aligned with the organisational strategy, also called *vertical fit*. Even though some of the HRM practices are considered as *best*, there is no single one that could be effective. As a result, several practices should be integrated with one another, also called *horizontal fit*.

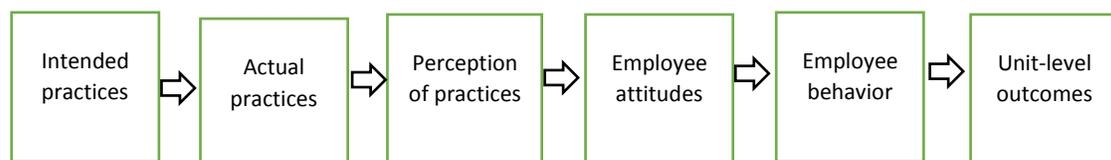
### **3.3 Frameworks to study the effect of HRM on employees**

There are various models of HRM effectiveness in terms of achieving organisational goals. Budhwar and Khatri (2001) investigated five dominant models in the literature applying to the context of Indian manufacturing sector (Budhwar and Khatri, 2001). The five dominant HRM models were namely the 'Matching model', the 'Harvard model', the 'Contextual model', the '5-P model' and the 'European model'. The 'Matching model' emphasizes the strategic fit between HR practices and organisational strategy to use the HR as resource more efficiently. The 'Harvard model' stresses the 'soft' variant of HRM with more concern for employer-employee relationship. The 'Contextual model' takes into account inner organisational context (structure, culture and leadership) and outer environmental contexts (socio-economical, technological and political) as important factor for HRM to be effective. The '5-P model' is mainly concerned with integration and adaptation of HR practices (philosophies, policies, programmes, practices and processes) in relation to strategic needs of the organisation. HRM to be effective, the 'European model' stresses to consider national, economic environment, role of the state and trade unions. When Budhwar and Khatri analysed these models in Indian context and concluded three important aspects to look for HRM effectiveness namely 'context-specific' nature of HRM, pattern of HRM systems and the reasons why some aspects of one or more model are more prevalent in Indian context.

To know the effect of HRM practices on employees, Purcell and Hutchinson, (2007), submitted that the process of HRM is actually a chain of links in which *intended* HR practices are expected to result in *actual* HR practices. The intended practices are the

HRM interventions decided by the top management, which might be in the form of explicit policy or may be embedded implicitly in the organisational culture. Next, the actual practices are expected to be implemented by the HR managers or by the line managers or immediate supervisors of the staff. Such actual practices would then invoke employee reactions towards these practices, based on their experiences. Such employee reactions would include employee attitude that in turn invokes employee behaviour, finally resulting in unit-level outcomes (Purcell and Hutchinson, 2007), (Figure 7). The unit-level outcomes are the ultimate productivity of the organisation. They argued that employee perception and reaction to HRM practices depend on not only the HRM practices, but also the way in which they are implemented by first line managers (FLM).

Figure 7 Chain of links between HRM policies and actual practices leading to unit level outcomes



Source: (Purcell and Hutchinson, 2007)

Based on the perceived utility of and satisfaction with HRM practices, the employee reactions are developed in terms of attitudes (job satisfaction and organisational commitment) and behaviours, which lead to organisational effectiveness (Purcell and Hutchinson, 2007). However, in this model, the authors do not clearly explain the final link between employee behaviour and unit-level outcomes, although they have referred to previous evidence of this link. Hence, it is essential to put the employees at the centre of this chain, because their attitudes and behaviour are crucial for HRM practices to be effective, which once again emphasises the role of the line managers who actually implement such policies (Purcell and Kinnie, 2007).

One of the authors (Hutchinson), further modified this framework with the addition of explanations at each step. She explained that the intended practices are anticipated to improve the ability, motivation and opportunity to perform by employees. Actual

practices would depend upon the line managers' implementation of HR practices and their leadership behaviour. Perception of practices would be the employee perspective experienced as per psychological contract, trust and perceived fairness by them. Employee attitudes towards HR practices would be constituted of affective commitment, satisfaction and engagement. Employee behaviour would include discretionary or organisational citizenship behaviour, turnover and attendance (Hutchinson, 2013).

In the following sections, we have further explored each component of this framework in Figure 7 by analysing existing literature to understand its usefulness in our study.

### **3.3.1 Intended HRM practices**

Purcell and Kinnie, (2007), described intended HRM practices as 'those designed by senior management to be applied to most or all of the employees and concern employees' ability, motivation, and opportunity to participate' (Purcell and Kinnie, 2007). Furthermore, they mentioned that these practices also include the ways that work is structured and organised, because it would have an influence on employee attitude and behaviour. Hutchinson, (2013), described intended practices as 'the HRM policies and practices designed by the organisation and contained in strategy and policy documents, and concern employees' ability, motivation and opportunity to participate' (Hutchinson, 2013). These intended practices are influenced by the nature of the business, the organisation's strategy and its articulated values (Hutchinson, 2013; Purcell and Hutchinson, 2007; Purcell and Kinnie, 2007). To achieve the organisational objectives, the management may select intended practices related to staff supply, capacity-building of existing staff or modifying performance management approaches such as supervision and performance appraisal.

In HRM literature, there is no consensus on what constitutes 'HRM practices' from a list of many (Paauwe and Boselie, 2005; Purcell and Kinnie, 2007). Delery and Doty, (1996), had considered internal career opportunities, training, participation/voice, employment security, job descriptions, profit-sharing and results-oriented appraisals as HRM

practices in a study relating to the banking sector (Delery and Doty, 1996). Boselie et al., (2005), reviewed 104 studies and identified 26 general categories of HRM practices, the top four being: training and development, contingent pay and reward schemes, performance management (including appraisal) and careful recruitment and selection (Boselie et al., 2005). Paauwe and Boselie, (2005), concluded that the major HRM practices are: identifying and recruiting strong performers, providing them with the abilities and confidence to work effectively, monitoring their progress towards achieving targets and rewarding staff for this (Paauwe and Boselie, 2005). The HRM practices quoted by the above authors are mainly from High Income Countries (HIC), and organisations within private-for-profit sectors. In the following sections, we describe the HRM practices in LMICs, particularly in the health sector.

Gile et al., (2018), through a systematic literature review compared HRM literature in Sub-Saharan Africa with the general HRM literature mainly from HIC and found that there is an overlap of the majority of HRM practices (Gile et al., 2018). In their systematic review of HRM literature in Sub-Saharan Africa, they categorised HRM practices as: 1) training and education, 2) salary and compensation, 3) rostering and scheduling, 4) task shifting and, 5) managing employees. They pointed out that research in LMICs focusses more on staffing, rostering and scheduling and less on selection, diversity, equal opportunities and exit management (Gile et al., 2018).

In line with the HRM practices identified from the systematic review, there are other studies from LMICs, which have identified similar groups of HRM practices. For instance, a study in Bangladesh analysed four HRM practices: recruitment and selection, training and development, performance appraisal and salary and benefits (Absar et al., 2012). Aladwan et al., (2015) studied the impact of HRM practices on organisational commitment of the front-line employees working in Jordanian multi-national companies. They selected four HRM practices: recruitment and selection, training and development, performance appraisal and rewards and benefits (Aladwan et al., 2015). There are also other studies in which different sets of HRM practices are analysed. Sial et al., (2011),

studied the effect of HRM practices, namely: compensation, performance valuation and promotion on organisational commitment of university faculties in Pakistan (Sial et al., 2011). In a study in the Turkish health sector, Top et al., (2015), found that operating procedures and communication were common practices in the public sector, whereas providing individualised support, fostering acceptance and contingent rewards were present in the private sector (Top et al., 2015).

The HRM practices can also be grouped as HR planning and staffing, education and training, working conditions and performance management (Martínez and Martineau, 1998). Furthermore, based on these groupings, Wang et al., (2002), have described HRM practices as HR planning and staff supply: staff needs assessment, recruitment, deployment and retention, staff mix and employment pattern; personnel administration and employee relations: staff salary and authority over staff and performance management: supervision, performance appraisal and education and training) (Wang et al., 2002). Other specific HRM practices include continuing education and training, supervision, performance appraisal and incentives (Dieleman et al., 2009; Wang et al., 2002). Human resource management practices can also be classified into two broad types, that is work practices and employment practices (Boxall and Macky, 2009; Godard, 2004; Whitfield and Poole, 1997). Work practices are related to how work is organised and its structure, to include flexibility, team working, problem-solving and decision-making. Employment practices include the environment in which actual work is carried out, including recruitment, deployment, motivation, negotiation, development and retention of employees.

### **3.3.2 Actual HRM practices**

Even if organisations identified the best HRM practices, these might not be put into practice for various reasons. The role of the line managers and supervisors who actually implement the HRM practices is significant, because the perception of the employees about HRM practices depends on how managers apply such practices, and what support they provide to the employees (Purcell and Kinnie, 2007). Actual HRM practices are those

which are actually applied or implemented, usually by the line managers, with a frequently-occurring gap between intended and actual HRM practices (Hutchinson, 2013; Purcell and Hutchinson, 2007; Purcell and Kinnie, 2007).

Khilji and Wang, (2006), further specified that the intended HRM practices refer to those formulated by policy-makers such as HR managers and senior management, whereas implemented or actual practices refer to those operationalised in the organisation and experienced by employees (Khilji and Wang, 2006). Gratton and Truss, (2003), in addition to vertical alignment of business and HR strategies and horizontal alignment between individual HR strategies, emphasised the importance of the implementation of HR practices. They suggested a third dimension, in terms of the degree to which HR strategies are put into practice through the day-to-day experiences of the employees and the behaviours of the line managers who implement these (Gratton and Truss, 2003). They observed the inconsistencies in intended and implemented HR practices and suggested the need to differentiate between the 'rhetoric' and the 'reality' of HRM.

It is also observed that the line managers had been given greater responsibilities in implementing HRM practices (Gratton and Truss, 2003; Hutchinson, 2013; Purcell and Hutchinson, 2007). Instead of having a central and crucial role, there are actually gaps in the actual implementation of intended practices by the line managers (Hutchinson, 2013; Khilji and Wang, 2006; Purcell and Hutchinson, 2007; Purcell and Kinnie, 2007). These gaps can be due to the problems that line managers face in implementing HRM practices, such as work overload, a lack of HRM skills, being unwilling to take up or prioritise HRM work and inadequate support by senior management (Hutchinson, 2013).

Moreover, there are dimensions of how far HRM practices are implemented, such as their presence (how many HRM practices are actually implemented), their coverage (for how many employees, that is the proportion of employees covered) and their intensity (the degree to which the individual employee is exposed to such HRM practices) (Boselie et al., 2005). The authors found that it was the presence that was taken into account by many studies, however there is the possibility of disagreement between managers and

employees on the presence, coverage and intensity of particular HRM practices (Boselie et al., 2005). Therefore, there is a need to collect information on the actual implementation of HRM practices from different stakeholders, both managers and employees (Khilji and Wang, 2006).

#### *3.3.2.1 Role of district level managers in the implementation of HRM practices*

Districts in LMICs, with clearly defined administrative and geographical areas, provide an opportunity for interface between policy and actual implementation of interventions (Kalita et al., 2009). Decentralisation of HRM could give more scope for district managers to control their staff and can play a crucial role in improving the attitude and behaviour of health staff through various HRM practices and tools, leading to better health service delivery (Dieleman et al., 2006; Kolehmainen-Aitken, 2004, 1998). Likewise, the inappropriate use of HRM actions can lead to adverse health service provision (Liu et al., 2006).

District level managers play a key role in appropriately selecting HRM tools to motivate and improve the attitude and behaviour of health workers (Dieleman et al., 2003). They are responsible for creating enabling environments, by providing the necessary resources and tools for the health workers to effectively carry out duties. (Kolehmainen-Aitken, 2004). For example, frontline health workers are motivated by the recognition and appreciation of their work by their managers (Dieleman et al., 2006).

Despite increased autonomy due to decentralisation, in the majority of low and middle-income countries, the local managers face challenges in performing these duties because of low resources, the complex nature of the job and weak management competencies (Kolehmainen-Aitken, 2004). For example, district level managers are expected to use supportive supervision as an effective tool for improving the performance of peripheral health workers, but they are not able to do the supervision because of their different priorities, huge administrative responsibilities and the fact that supervision is not a priority (Rowe et al., 2005). Additionally, it is observed that the content of supervision mainly focusses on technical topics and priority programmes, but lacks attention towards

general planning and management (Dieleman et al., 2006). Health managers also lack understanding about the context and processes in which HRM interventions can be effective (Dieleman et al., 2009). Furthermore, a lack of clear job descriptions, poor team work and a lack of direction by senior-level officers lead to poorly functioning district health managers (Muchekeza et al., 2012). It is also important to understand the formally decentralised authorities (de jure) and actually exercised practice (de facto) of using decision space by district level managers (Bossert and Mitchell, 2011). Thus, ineffective management strategies and poor management competencies might lead to poor HRH policy formulation and subsequent implementation (Marjolein Dieleman et al., 2011).

#### *3.3.2.2 Contextual factors affecting the implementation of HRM practices.*

The importance of contextual factors in implementation of HRM practices and their influence on employee has been confirmed in general international HRM literature particularly from high income countries (Boxall, 2012; Jackson and Schuler, 1995; Morishima, 1995). These literatures emphasise HRM to be effective it is essential to consider the context because the HRM systems are influenced continuously by organisational context from within and by larger social and institutional context from outside of the organisation.

The contextual factors in the given health system have consequences on both the actual implementation of HRM practices and their effect on health workers, which may vary from one context to another. The health sector literature in low and middle income countries enlists the contextual factors: HR management capacities, resources and power relations (Wang et al., 2002), and materials and equipment (Dieleman et al., 2006). In addition, place of contact (outpatient, inpatient, community setting), type of health worker (doctor, pharmacist, nurse), area (rural, urban) and type of disease (acute, chronic) can considerably influence and modify the effect of the same HRM intervention on the performance of health workers (Rowe et al., 2005).

Another important contextual factor in the health sector, especially in public sector organisations of LMICs, is the decentralisation of HRM practices by which decisions can

be made closer to the area of need, and therefore may be more relevant and more responsive. Decentralisation in the health sector brings important changes, sets new challenges and can provide opportunities in terms of appropriate management of human resources (Wang et al., 2002). The literature on decentralisation in LMICs shows that in comparing before and after decentralisation, there were differences in HRM policies and their actual practices, partially or fully. Even after policies were in place for decentralisation, HRM functions were being performed by both centralised and decentralised authorities (Abdullah and Shaw, 2007; Heywood and Harahap, 2009; Martineau et al., 2003a; Men et al., 2005; Wang et al., 2002). For example, in some countries HRM practices such as contracting, salaries, hiring and firing and the creation or abolition of posts were not decentralised (Bossert and Beauvais, 2002; Heywood and Harahap, 2009; Kolehmainen-Aitken, 2004; Martineau et al., 2003) whereas in other places hiring and firing, decisions of staff requirement, the creation or abolition of posts and deciding on performance-related incentives were decentralised (Bossert and Beauvais, 2002; Heywood and Harahap, 2009; Kolehmainen-Aitken, 2004; Liu et al., 2006; Martineau et al., 2003). Overall, in the LMICs where this was studied, it is observed that HRM was found to be weak in a decentralised system (Marjolein Dieleman et al., 2011; Liu et al., 2006; Wang et al., 2002).

In addition, the resources available and the competencies of the managers are crucial to the implementation of HRM practices. For instance, Agarwal et al., (2011), observed that in the Indian public health care system, the in-service training is inadequate and of poor quality as there was insufficient budgetary allocation for in-service training, the training skills of trainers were not adequately developed, the quality of training was poor and the training domains were not matched with the actual job responsibilities of the health staff (A. Agarwal et al., 2011). In a study in Pakistan, the university teachers reported that they do not receive any feedback after their performance review so they do not get any clues for improving their performance (Ahmad and Shahzad, 2011). In Ghana, Bonenberger et al., (2014), concluded that the district managers influence the motivation and job satisfaction of health workers, because they have powers to depute health workers for

courses (after the completion of which there are chances of getting higher salaries), and also have powers to decide intra-district posting, select for in-service training and undertake performance appraisal (Bonenberger et al., 2014). However, the district level managers are generally clinicians lacking the capacity of management and are not adequately supported to undertake HRM work; and are thus unable to leverage the advantages of their power. Marchal et al., (2010), with their research in Ghana, emphasised that it is not the number of HRM practices but the process by which the HRM practices are put in place that would affect staff attitudes, such as their commitment, job satisfaction and procedural justice (Marchal et al., 2010).

Thus the contextual factors influence the design of HRM practices and enable or constrain their implementation, whilst the overall work climate influences employee perception, attitude and behaviour. In LMICs however, there are weak capacities of these decentralised units towards managing human resources for health, where the role of district level managers is crucial in implementing HRM practices.

Once it is agreed by both managers and employees that the HRM practices were actually implemented as intended, the next step is to understand the factors and mechanisms through which HRM practices affect employees, how much and in what context.

### **3.3.3 Effect of HRM practices on employees**

It is necessary to understand how HRM practices affect employees and the mechanisms through which this happens and in which context and conditions. For instance, HRM practices influence attitude and behaviour at individual employee level, and this can have an aggregate behavioural effect at workforce level, for example for a specific cadre or gender or type of employee, or in a specific geographical area, and ultimately have an effect at organisational level in terms of productivity and quality (Paauwe, 2009).

Dyer and Reeves, (1995), placed the effect of HRM practices into three categories or levels: HR outcomes: (absenteeism, turnover and individual or group performance), organisational outcomes: (productivity, quality and services) and financial outcomes:

(return on invested capital or assets) (Dyer and Reeves, 1995). Their framework was then used in subsequent works looking at HRM and its outcomes (Boselie et al., 2005; Paauwe, 2009; Paauwe and Boselie, 2005). For example, Boselie et al., (2005), preferred to categorise them as financial outcomes: (profits, sales, market share), organisational outcomes: (productivity, quality and efficiency) and HR-related outcomes: (attitudinal - trust, commitment, motivation, satisfaction; and behavioural – turnover, absence). Proximal HR-related outcomes are easier to link with HRM practices than the distal outcomes, such as financial outcomes, which can be directly influenced by other factors such as business strategy (Boselie et al., 2005; Paauwe and Boselie, 2005). Thus, the effect of HRM practices at workforce level is the proximal outcome of the HRM practices in terms of employee attitude and behaviour, whereas at the organisation level is a more distal outcome in terms of productivity and quality of services (Paauwe, 2009).

Similar recommendations have been made in the health sector for multi-level analysis of the effect of HRM practices at individual, team and organisational level (Patterson et al., 2010). Patterson et al., (2010), conducted a systematic review of general as well as health sector HRM literature and classified the effect of HRM practices in terms of 12 intermediate outcome categories, including employee motivation, job satisfaction, commitment, engagement and so on (Patterson et al., 2010). According to them, such intermediate outcomes actually constitute outcomes of intended HRM practices, which will have implications on final organisational outcomes in terms of productivity.

The World Health Organisation (WHO) illustrated four dimensions of the effect of HRM on health workers, i.e. availability, competency, productivity and responsiveness. They describe availability in terms of numbers of health workers, their distribution and actual presence at work. Competency encompasses the combination of knowledge, skills and behaviours of health workers. They consider productivity as the production of health services and health outcomes, and responsiveness as the expected behaviour of the health workers that should lead to patient satisfaction. In this framework, availability and competency are clearly the outcomes of HRM, however productivity also depends

upon factors that may be beyond HRM, for example the availability of general resources (e.g. equipment and drugs), and the context within which the health workforce is operating. Furthermore, staff responsiveness, which is exclusively important in the health sector, is considered as one of the dimensions of HRM outcomes, that is affected by motivation and job satisfaction, accountability and the working conditions of the health workers (Dieleman and Harnmeijer, 2006).

Dieleman et al., (2009), expanded the WHO framework, in which HRM interventions related to job and system support are considered as processes, including staff numbers, skill mix, distribution, motivation, job satisfaction and skills. Knowledge and attitudes are considered as outputs, whereas availability, productivity/responsiveness and competence are considered outcomes. Service delivery is seen as effect, and health status as impact (Dieleman et al., 2009). Patterson et al., (2010), classified effect of HRM into 12 intermediate outcome categories such as employee motivation, job satisfaction, commitment, engagement and so on; and into seven final outcome categories including patient safety, patient-centred care, waiting times and patient satisfaction (Patterson et al., 2010).

Once the concepts about HRM practices and their effect on employees are clear, the most challenging task is to explain the link between HRM and their effects. This is mainly because of limited research that is longitudinal, related to HRM implementation and studying the link between HRM and its effect (Guest, 2011). The Purcell and Hutchinson model explains the link between HRM and its effect on employee, which are mediated through employee perception about the HRM practices upon which depends the attitudes and behaviour of employees. For instance, a study in NHS, UK confirmed that the attitudinal HR outcomes which mediates the link between HR systems perception and the clinical service delivery (Baluch et al., 2013). The next three sections discuss in detail the issues of perception, attitude and behaviour of the employees, with regard to HRM practices in both HIC and LMIC.

### *3.3.3.1 Employee perceptions about HRM practices*

Bowen and Ostroff, (2004), described employee perception towards HRM practices as their interpretation of work climate and termed it as 'psychological climate' – individual level perception; and, 'organisational climate' – shared perception at firm level (Bowen and Ostroff, 2004). They further explained that the employees at individual and collective level make sense of their environment in terms of HR management and what employee behaviours are expected, supported and rewarded by the organisation. The perception of HR practices by the employees is also be dependent on visibility, continuity, fairness and consistency of implemented HR practices (Piening et al., 2014).

Taking forward the concept of Bowen and Ostroff, (2004), that the employee perception precedes the employee attitude and behaviour, Nishii et al., (2008), demonstrated that employee reactions (attitude and behaviour) depend upon their perception of why specific HRM practices were implemented (Nishii et al., 2008). For example, they demonstrated that the employees' attitudes were positive when they had a perception that the HRM practices were implemented for improving service delivery and employee wellbeing. However, employees were negative when they perceived that HRM practices were meant for cost reduction, which they perceived as employee exploitation. They concluded that in addition to the implementation of HRM practices, employee perception of those HRM practices is important to improve performance. A longitudinal study in NHS, UK found that perception of health staff about HR system is linked to the patient satisfaction which is mediated through the job satisfaction of the staff, however, the perceptions are generally short-lived (Piening et al., 2013).

Purcell and Hutchinson, (2007), showed that it is the actual HRM practices that employees perceive and react to, depending on utility and satisfaction and through the angle of fairness and legitimacy (Purcell and Hutchinson, 2007). Research shows that positive perceptions of HRM practices will elicit positive employee attitudes and behaviours, leading to improved organisational performance (Hutchinson, 2013; Khilji and Wang, 2006). Similarly, the employee commitment (which is employee attitude

towards the job and the organisation) can be enhanced through improved employee perception about HRM practices. For example, employee retention can be improved through better employee perception about job security, fair pay and procedural justice or fairness in the organisation (Boxall and Macky, 2009).

More recent studies in LMICs have highlighted the importance of the perception of managers and employees about the HRM practices. For instance, in a study in Bangladesh, the researchers used the HR managers of 185 publicly listed manufacturing companies to fill out the questionnaires, because they believed that perceived and self-reported HRM practice is a more reliable source of information (Absar et al., 2012). A study in Pakistan in 261 establishments of three sectors, banking, ICT and pharmaceuticals, involving general managers through face-to-face questionnaires, noted that such an approach of single source information can bring in bias for analysing the effect of HRM on employees, and the experiences and perceptions of the employees about HRM practices could be different than reported by the managers (Ahmad and Allen, 2015).

In LMICs, there is evidence that the perception of employees towards HRM practices is crucial in developing their attitudes and behaviour, which may be positive or negative. For instance, a study in Malaysia by Zumrah, (2015), within public sector organisations, found a positive and significant relationship when employees perceive positive organisational support, and they tend to use training in their actual work which ultimately leads to improved quality of service (Zumrah, 2015). Bhatti et al., (2011), found that Pakistani employees perceived it positively when they were involved in organising and implementing HRM practices, resulting in their emotional attachment with their organisation (affective commitment), their obligation to their organisation (normative commitment) and higher cost and risk of leaving their current job (continuance commitment) (Bhatti, 2011). Whereas, in a study in Ghana, Bonenberger et al., (2014), found that health workers were least satisfied with their remuneration in spite of the fact that health workers in Ghana are the best paid, as compared to other

Western African countries, which implies that it is the perception of health workers about HRM that truly matters. (Bonenberger et al., 2014).

### *3.3.3.2 Employee attitudes to HRM practices*

The majority of HR literature considers employee commitment, job satisfaction and motivation as attitudinal HRM outcomes that contribute to employee behaviour (Boselie et al., 2005; Boxall and Macky, 2009; Brief and Motowidlo, 1986; Godard, 2004; Guest, 2011, 2001, 1997a; Guest et al., 2003; Jiang et al., 2012a; Judge and Kammeyer-Mueller, 2012; Kell and Motowidlo, 2012; Nishii et al., 2008; Patterson et al., 2010; Purcell and Hutchinson, 2007; van Knippenberg and Sleebos, 2006; Wright et al., 2003).

Arthur, (1994), described commitment as a match between organisational and employee goals reflected through employee attitudes and behaviours. Boselie et al., (2005), consider commitment along with satisfaction and intention to quit as HRM outcomes, resulted as employee attitude and behaviour. Boxall and Macky, (2009), observed that higher employee commitment can be achieved through improving employment practices rather than work practices (Boxall and Macky, 2009). For example, employee retention can be improved through offering higher pay, improving perception about job security or enhancing perception about procedural justice and fairness.

Hutchinson, (2013), considered job satisfaction as employee attitude referring to extrinsic and intrinsic satisfaction related to various aspects of the job. For example, extrinsic satisfaction is related to pay, career opportunities and working conditions, whereas intrinsic satisfaction is about the job itself.

A lot of work has been done on organisational commitment in HRM literature (Boxall and Macky, 2009; Brief and Motowidlo, 1986; Hutchinson, 2013; Judge and Kammeyer-Mueller, 2012; Kell and Motowidlo, 2012; Patterson et al., 2010; van Knippenberg and Sleebos, 2006; Wright et al., 2003). Based on the work by Meyer and Allen, (1991), Judge and Kammeyer-Mueller, (2012), defined organisational commitment as 'an individual's psychological bond with the organisation, as represented by an affective attachment to

the organisation, internalisation of its values and goals, and a behavioural desire to put forth effort to support it' (Judge and Kammeyer-Mueller, 2012). Organisational commitment can be of three types, such as: 1) affective commitment: employees' perceptions of their emotional attachment to or identification with their organisation; 2) normative commitment: employees' perceptions of their obligation to their organisation, and; 3) continuous or continuance commitment: employees' perceptions of the costs or risks associated with leaving the organisation (Hutchinson, 2013).

Purcell and Hutchinson, (2007), in their model of the HRM performance chain, separated employee outcomes as attitudinal outcomes (affective organisational commitment and job satisfaction) and behavioural outcomes (task behaviour, discretionary or organisational citizenship behaviour and attendance or turnover or absence). This is because they believe that these behavioural outcomes ultimately influence the organisational performance.

Gile et al., (2018), through their systematic review of literature, categorised performance outcomes as: 1) employee outcomes in terms of employee performance, job satisfaction, turnover intention or retention and motivation; 2) team performance outcomes; 3) organisational outcomes in terms of quality of care, waiting time, efficiency, patient safety/error reduction, and; 4) patient outcomes in terms of their experience and clinical outcomes (Gile et al., 2018). They observed that research in Africa explored more about the effect of HRM on employee outcomes in terms of job satisfaction, motivation and organisation commitment than organisational outcomes, and believed that such distal outcomes are mediated through the employee outcomes (Gile et al., 2018). There are other evidences that in LMICs, the effect of HRM practices has been mainly analysed in terms of their effect on employee outcomes as attitudes and behaviour than organisational outcomes as profits (Ahmad and Allen, 2015; Bonenberger et al., 2014; Gile et al., 2018; Presbitero et al., 2016). This is because the employee outcomes are more related to HRM practices than more distant outcomes such as profits, which can be influenced by non-HRM factors (Ahmad and Allen, 2015; Gile et al., 2018).

Bhatti et al., (2011) analysed the effect of the direct participation of employees in HRM on the organisational commitment of bank employees from Pakistan and the USA (Bhatti, 2011). They considered direct participation as consultative participation in regular meetings of supervisors with employees, attitude surveys and employee suggestions. They found that when involved in organising and implementing HRM practices, Pakistani employees perceived their emotional attachment with their organisation (affective commitment), their obligation to their organisation (normative commitment) and higher cost and risk of leaving their current job (continuance commitment). Whereas in the case of American employees, direct participation had an impact on affective commitment but not on normative and continuance commitment. Similarly, a study of the front-line employees working in Jordanian organisations found that recruitment and selection and training and development had a positive effect on all three types of organisation commitment (Aladwan et al., 2015). Top et al., (2015), in their study of the Turkish health sector, found that for public sector employees organisational trust is the most significant predictor of affective commitment, whereas in the case of private sector employees, the most significant predictor is individualised support (Top et al., 2015). The authors concluded that operating procedure was the most significant predictor of continuance commitment for public sector employees, whereas in the case of private sector employees, fostering the acceptance was the most significant predictor of continuance commitment (Top et al., 2015).

Employee attitude in terms of their job satisfaction and motivation influence intention of employees to leave the organisation they work. For instance, in a study in Ghana, Bonenberger et al., (2014), found that health workers who had lower levels of job satisfaction and motivation had higher turnover intentions (Bonenberger et al., 2014). They found that overall motivation was good mainly because of intrinsic job satisfaction rather than extrinsic. They also found that the health workers aged over 39 years with more than five years' service at a health facility had lower turnover intentions, and those living away from their families, particularly working in remote districts had higher turnover intentions, especially in the absence of any incentives for working in remote

places. Similarly, Delobelle et al., (2010), in a study in South Africa, found that job satisfaction among nurses was inversely proportional to their turnover intent and thus a strong predictor. It is the intrinsic satisfaction of work itself which is keeping nurses in the job, even with high levels of dissatisfaction with extrinsic factors such as remuneration and work conditions (Delobelle et al., 2011). In addition to HRM practices, the contextual factors of the organisation in which they work has an effect on turnover intentions. For instance, Presbitero et al., (2016), through a study in the Philippines concluded that the employees are less likely to leave the organisation when their own values, norms and beliefs are closely aligned with those of the organisation for which they work. (Presbitero et al., 2016).

In LMICs, there are also studies that looked for which HRM practices influence the attitude of the employees. For instance, in a study in Pakistan on employees of the banking sector from within both the public and private sector, training, appraisal and empowerment had a positive impact on employee satisfaction and loyalty to the organisation (Hassan et al., 2013). In another study, the compensation was being perceived by university faculties in Pakistan as more valuable than performance evaluation and promotion, as the latter two do not result in any significant financial gains (Sial et al., 2011). In the case of nurses in South Africa, the financial rewards and job satisfaction had a positive effect on retention, however, there was no significant effect of financial rewards on job satisfaction, which indicates that the latter is influenced by other factors (Terera and Ngirande, 2014). In the Turkish health sector, training and development was the most important factor for public sector employee satisfaction leading to their loyalty towards the organisation (Ozkan et al., 2011).

#### *3.3.3.3 Employee behaviour to HRM practices*

HRM literature and literature on organisational behaviour in particular, divides employee behaviour into task (or job or in-role) behaviour, organisational citizenship (or discretionary or contextual or extra-role) behaviour and withdrawal (or counterproductive) behaviour (Bergman et al., 2008; Boselie et al., 2005; Brief and

Motowidlo, 1986; Hutchinson, 2013; Judge and Kammeyer-Mueller, 2012; Kell and Motowidlo, 2012; Motowidlo et al., 2013; Nishii et al., 2008; Paauwe and Boselie, 2005; Patterson et al., 2010; Purcell and Hutchinson, 2007; Purcell and Kinnie, 2007; Schleicher et al., 2015; Wright et al., 2003).

Task behaviour is the formal, expected employee behaviour to carry out duties as per the job description of the given job. It is the role that the employee must undertake for which they are hired. In other words, it is the content of a given job. Organisational citizenship behaviour is discretionary in nature, and is not directly or explicitly expected by the organisation. It goes beyond formal job expectations and is contextual or interpersonal in nature. Such behaviour includes, for example, helping other staff, making suggestions and participating in activities that help to improve the work and image of the organisation. Withdrawal/counterproductive behaviour is that behaviour which goes against the interests and norms of the organisation.

In the literature on HRM and organisational behaviour, there is agreement and evidence that the employee reactions in terms of their attitude and behaviour are at the centre of the link between HRM and performance. For example, there is certainly a relationship between job satisfaction (attitude) and job performance (behaviour), but the causal association is not well-established (Judge and Kammeyer-Mueller, 2012).

As explained by various researchers (Boselie et al., 2005; Paauwe and Boselie, 2005; Patterson et al., 2010; Purcell and Hutchinson, 2007), there is agreement that employee attitudes and behaviours are at the centre of the HRM-performance link and are crucial to understanding this link. The theories of motivation and staff behaviour can explain the mechanism through which HRM influences performance.

Mcgregor, through his theory X and theory Y emphasised the need of an integrated approach of fulfilling individual needs of employees and achieving organisational goals. According to him, the organisations should create such an environment that its members

can achieve their own goals by directing their efforts towards the success of the organisation (McGregor, 2006).

In LMICs, there have been efforts to demonstrate the mechanisms through which HRM is linked to performance in terms of employee behaviour. For example, Dieleman et al., (2009) analysed that HRM interventions such as continuing education, supervision, payment of incentives, decentralisation of HRM functions and combinations of such interventions produced change through improved knowledge and skills, critical awareness of the functioning of health services, empowerment to implement change, sense of belonging, mutual respect between supervisors and health workers, improved staff motivation and job satisfaction and feedback on performance (Dieleman et al., 2009).

Supervision can also be effective as an intervention and can act as a mechanism for providing professional development and improving health workers' job satisfaction and motivation (Rowe et al., 2005). Supervision and feedback on performance are equally as important as salaries and allowances to improve performance (Songstad et al., 2012). Recognition, responsibility and training were found to be motivating factors for performance (Dieleman et al., 2006). However, low staffing levels, heavy workload and poor work flow structures also influenced health workers' responsiveness, leading to poor service delivery and the poor distribution of health workers between rural and urban areas, along with poor availability of health staff, affecting quality of care and waiting times (Lutwama et al., 2012). Similarly, a study in Zambia concluded that the behaviour of the health staff had an impact on the delivery of health services (Mutale et al., 2013).

However, there is limited research undertaken on performance management in LMICs (Dieleman et al., 2006).

### **3.4 Specific HRM practices and their effect on employees**

In the earlier sections, there is general discussion about the theories of HRM, intended HRM practices, their actual implementation and their effect on employee attitude and behaviour. In the following sections, four identified HRM functions are described in detail in terms of intended HRM practices and their components, their actual implementation and their effect on employees. The four selected HRM functions are: 1) posting and transfer; 2) in-service training; 3) supervision and review; and 4) performance appraisal. These four HRM functions have been commonly cited in HRM literature, particularly health literature of LMICs (Absar et al., 2012; Aladwan et al., 2015; Dieleman et al., 2009; Gile et al., 2018; Wang et al., 2002). Another rationale for choosing these four HRM functions is that in the HRM literature, the AMO theory has been the basis for explaining the linkage between HRM and its effect. The four functions cover all three aspects of the AMO theory, that is, ability (in-service training and supervision); motivation (supervision and performance appraisal); and opportunity (posting and transfer).

#### **3.4.1 Posting and transfer**

##### *3.4.1.1 Objectives and intended practices*

Workforce planning, that is getting the right people at the right place at the right time, is an important HRM function, of which posting and transfer are crucial components (Schaaf and Freedman, 2013; Sheikh et al., 2015). Posting is the first placement of staff after recruitment and transfer is the further rotation of staff across the regions or level of health facility, depending upon the need and demand for health services. Campbell et al., (2013), adapting from the framework for Universal Health Coverage (UHC), provided a framework on human resources for health (HRH), making HRH central to the idea of UHC. Like the concept of UHC, they applied four dimensions of effective coverage of HRH: availability, accessibility, acceptability and quality. They emphasised that in addition to employing more staff, it is essential to ensure appropriate geographical and sectoral distribution of health staff, with appropriate strategies to retain them and motivate them to perform (Campbell et al., 2013). This makes posting and transfer an

important HRM function, to ensure health staff are equitably distributed and remain motivated.

There are different objectives of transfer and posting which drive the process. La Forgia et al., (2015), classified the drivers of posting into three types. First, transfers driven by employees to get into desired places; second, management-driven posting for filling vacancies in remote places or as punishment; and third, politician-driven posting for getting preferred candidates (La Forgia et al., 2015).

The system for the posting and transfer of the staff and managers which actually influences the health system and delivery of health services remained unattended particularly in public sector organisations, because of its complex nature and the taboo attached to it (Schaaf and Freedman, 2013). This area is complex because posting and transfer is influenced by the preferences of staff and external pressure (La Forgia et al., 2015). There is a body of literature available on what are the determinants of staff preferences to be posted in certain places, for instance, rural versus urban or geographically accessible against hard-to-reach areas. However, there is less knowledge available on how these preferences are negotiated in the broader, socio-political context of the health system (Schaaf and Freedman, 2013).

A study in Gujarat state, India, found that there are no explicitly written rules for the posting and transfer of medical doctors in the government health system (Purohit and Martineau, 2016b). The authors found that according to civil services rules, officers of rank class I and II could not be posted in their native districts but that the health department is exempted from this rule. As a result, exception was made for the health department to post medical doctors in their native districts, which might be to address a particular issue.

#### *3.4.1.2 Actual practices*

Actual practice of posting and transfer is influenced by the objectives of the transferor and the preferences of the transferee. As a result, the outcome is dependent on the

negotiation between them, which is part of the larger political and social dynamics of the health system (Schaaf and Freedman, 2013). Although the formal rules about transfer can be changed, the informal mechanisms remain the same, therefore, it is essential to understand the nature of such informal mechanisms or unwritten rules, to understand why formal rules are not respected and implemented as intended (Schaaf and Freedman, 2013). In Gujarat, the doctors after their graduation were posted arbitrarily, some in their native districts and some others far away, because there were no written rules for the posting and transfer of doctors (Purohit and Martineau, 2016b). In the Indian state of Odisha, even though there is a written rule that after graduation, the medical doctors will be first posted in the hard-to-reach districts, in the majority of cases this rule was not implemented (Kadam et al., 2016).

Although the mechanism of posting and transfer through counselling is more transparent, it might not be as effective as intended because there is a chance that the management strategically would not open up lucrative places in the counselling (La Forgia et al., 2015).

Several researchers have found political pressure and corruption to be one of the common mechanisms in posting and transfer in public sector organisations, particularly the health sector which is spread over a large geographical area (Aitken, 1994; Blunt et al., 2012a; La Forgia et al., 2015; Schaaf and Freedman, 2013). La Forgia et al., (2015), in their study in India termed such mechanisms as 'parallel systems', as follows: 'Parallel systems refer to well-known and widely-practiced informal processes that deviate significantly from formal policies and rules governing HRM' (La Forgia et al., 2015 p.373). They explained that such mechanisms are operated through political connections and side payments. For example, the researchers found that in a sample of 539 medical officers interviewed, it was observed that more than 85% of interviewed staff reported that political connections were most effective in getting a transfer to their desirable place or to avoid transfer to undesirable places (La Forgia et al., 2015). Besides using parallel systems to gain transfers of choice, there are also reported instances of staff

buying protection by paying bribes to avoid transfer from their desired, current places of posting (La Forgia et al., 2015). Similar instances were reported in Indonesia where transfers were made not on the basis of organisational need but based on staff preferences and their loyalty to bosses or politicians. In such cases, they had to pay bribes to get their preferred locations or even to avoid transfer from their current place of posting (Blunt et al., 2012b, 2012a). Aitken, (1994), observed that the managers find such powerful staff difficult to manage and seek intervention from higher authorities for transferring such individuals. There is evidence from other studies that after decentralising, the practices of posting and transfer created more opportunities for corruption and system distortion by the local politicians (Blunt et al., 2012a). However, others (Liu et al., 2006) found that political patronage was present before and after decentralisation.

Weiner (1989), used the term 'source force' to describe the phenomena of using patrimonialism within a bureaucratic structure in Nepal, by the people having access to power and money (Weiner, 1989). According to Weiner, medical professionals use this *source force* for getting a desired place of posting. The health professionals without any *source force* are posted in rural and remote areas.

#### *3.4.1.3 Effect on health staff and service delivery*

According to Collins et al., (2000), frequent transfers bring instability in the system, distort resource management and disturb work relations amongst the staff, particularly demotivating those who could not succeed in getting their desired locations (Collins et al., 2000).

A literature review found evidence that inconsistent posting and transfer practices weaken effective and equitable health service delivery, however, there is not enough information available on how and to what extent such practices contribute to the weakening of health services delivery (Schaaf and Freedman, 2013).

Several studies have observed the influence of posting and transfer on staff attitudes and behaviour. For example, researchers have found that staff prefer transfer from rural and hard-to-reach areas to urban areas, and they use official and unofficial channels to obtain a posting at their preferred places (Aitken, 1994; Collins et al., 2000; La Forgia et al., 2015; Lagarde and Blaauw, 2009; Mullei et al., 2010). Lagarde and Blaauw, (2009), observed that people with urban backgrounds have greater motivation to work in urban areas than their rural counterparts (Lagarde and Blaauw, 2009). However, some others found that it is not necessarily true that the people from rural backgrounds would always prefer to work in such areas (Mulley et al., 2010). People may be ready to work in rural areas because of low costs of living and more work autonomy, but may not continue there for longer periods because of poor infrastructure and inadequate educational opportunities for their children (Mulley et al., 2010). In a study within one of the states of India, it was observed that the inconsistency in the policy and practice of posting and transfer had a negative influence on the attitude and behaviour of the medical doctors in terms of performance and turnover (Purohit and Martineau, 2016b).

Furthermore, when there is no system of rational posting and transfer, the staff rely on parallel systems that involve corruption through bribery. In such situations, the staff tend to earn more money from unethical practices so that they can pay for a transfer (La Forgia et al., 2015). If staff could not manage to avoid the transfer they may go on leave after being transferred to undesirable places (Aitken, 1994; La Forgia et al., 2015).

### **3.4.2 In-service training**

#### *3.4.2.1 Objectives and intended practices*

Amongst all the HRM practices, in-service training is very commonly quoted for improving staff competencies to perform (Bartel, 1994; Macduffie and Kochan, 1995; Raghuram, 1994).

In-service training itself is a system with its own constituents, such as training need assessment, planning training programmes, their implementation and finally their

evaluation, to assess the impact on individual and organisational performance (Armstrong and Taylor, 2017; McCourt and Eldridge, 2003). Finally, the effect of in-service training would depend upon its vertical alignment with organisational objectives and horizontal integration with other HR practices such as supervision and review, performance appraisal and posting and transfer. In HRM literature, the researchers have emphasised that for training to be effective, it has to be strategically aligned with the overall organisational objectives and strategies (Chow et al., 2013; Chow and Liu, 2009; Darwish et al., 2013; Singh, 2003).

#### *3.4.2.2 Actual practices*

Furthermore, the majority of literature suggested that to make the training effective, it is essential to put into actual practice all four components of the training system, that is training need assessment, development of the training programme, its implementation and evaluation. (Armstrong and Taylor, 2017; Pineda-Herrero et al., 2011). Of these, the first step of undertaking training needs assessment is the most important, because it influences the three steps that follow (Aagnaia, 1996; Al-Khayyat, 1998; Gray and Hall, 1997; Holton III, 2000; Legare, 1999; Selmer, 2000).

In addition to influencing the design, delivery and evaluation of training, there are other reasons why training need assessment should be carried out. For instance, the training need assessment gives specific information about the content of training, the cadre of staff to be trained, the training techniques to be used and provides specific data for measuring the impact of training on staff (Brown, 2002; Eerde et al., 2008). Comprehensiveness of training need assessment was significantly and positively associated with organisational effectiveness, emphasising the fact that training need assessment helps to identify the training required, what the content should be and to whom the training should be provided, so as to effectively use the resources available for human resource practices (Eerde et al., 2008). Another reason why in-service trainings should be designed based on training need assessment is that the staff cannot acquire sufficient knowledge and skills merely through their work experience. There is

the need for new skills to meet the changing demands of service, the tasks to be performed are complex and there can be common learning needs among the staff (Armstrong and Taylor, 2017).

It is evident that the companies that have conducted more trainings are more profitable than those that do not conduct trainings (Castellanos and Martín, 2011). However, it is observed that most of the organisations do not evaluate trainings, due to which their effect on organisational performance is not known (Davidove and Schroeder, 1992). The reason for not conducting training evaluation is that the managers consider it to be time-consuming and expensive (Buckley and Caple, 1991). There are also challenges related to accurately measuring the impact of training on organisational performance. Another reason for not undertaking training evaluation is that in the absence of training need assessment there is no baseline data available to compare (Aagnaia, 1996). As the evaluation of training outcomes is not done, the organisations do not know the economic impact of training on organisational performance, due to which the investment by the organisations in training is still low (Aragón-Sánchez et al., 2003).

#### *3.4.2.3 Effect of in-service training on employees*

Training has been found to have a positive impact on productivity (Bishop and Waring, 2011; Black and Lynch, 1996; Holzer et al., 1993; Huselid, 1995; John M. Barron et al., 1999, 1997; Klein and Weaver, 2000; Murray and Raffaele, 1997). The in-service training can also have a positive association with quality and reduced errors by employees in their work (Kidder and Rouiller, 1997; Murray and Raffaele, 1997). In addition, there are several studies which demonstrated that the training has an impact on business profitability with a sustained effect (Aragón-Sánchez et al., 2003; D’Arcimoles, 1997; Delaney and Huselid, 1996; McGahan and Porter, 2003; Raghuram, 1994; Schuler and Jackson, 1987). It is also evident that the in-service training has a positive impact in terms of employee attitude (Arthur, 1994; McEvoy, 1997), and behaviour (Delery and Doty, 1996; Osterman, 1995), that leads to the achievement of distal outcomes such as productivity and profitability of the organisations. The AMO theory explains the link

between HR practices and staff performance based on the ability, motivation and opportunity of the staff. In-service training is considered as primarily influencing the ability of the staff. The researchers explained the effect of HR practices on organisational performance by using the AMO theory, in which training can develop the ability of the employees to perform (Boselie et al., 2005; Guest, 1997b; Jiang et al., 2012b).

However, some researchers have noted that for the effect of training to be observed, it takes time and depends upon whether the employees put the competencies developed in training into actual practice (Aragón-Sánchez et al., 2003; Bartel, 2000, 1994; Black and Lynch, 1996; D'Arcimoles, 1997; Murray and Raffaele, 1997). For example, it was observed that the training had little effect on the performance of the staff trained when they were not putting into practice what they learnt from the training (Aitken, 1994).

The effect of training also depends on the training techniques used. A systematic review conducted by Bluestone et al., (2013), found that case-based learning, clinical simulation, repetitive interventions and practice and feedback were more effective than a traditional didactic approach of lecture and of reading printed material (Bluestone et al., 2013). In addition, the quality of trainers has an influence on training effectiveness. For instance, the poor quality of trainers leads to no effective gain in the competencies of the staff (Aitken, 1994). In such instances, although the staff had already received training they would still want more, preferably at the places where the quality of training is believed to be better (Aitken, 1994).

Besides the content of the training programmes, another important factor is how these programmes are developed. For example, the training programmes found to be less effective include those that were developed for vertical health programmes without consulting the district administration (Dieleman et al., 2003). The authors found that such centrally sponsored trainings offered high per diems, without any certificates to add to career development, in which case the staff participated simply to receive the allowances, as income-generating opportunities. The literature shows that using a participatory approach, developing course contents based on local problems, adapting

material to the local situation and involving local stakeholders in developing and implementing the training programme were found to be more effective (Dieleman et al., 2009). These authors also found the training to be more effective when the staff could get the opportunity to practice the learnings under the supervision of experts and discuss their experiences after training. More recently, a study in Malaysia by Zumrah, (2015), in public sector organisations, found a positive and significant relationship in that when employees perceive positive organisational support, they tend to use training in their actual work, which ultimately leads to improved quality of service (Zumrah, 2015). In summary, training can be an effective HRM practice towards improving staff performance, when the design is appropriate in meeting the objectives, there is effective implementation of all the components of the design and the system provides the opportunity for staff to put the learning into practice with appropriate follow-up afterwards.

### **3.4.3 Supervision and review**

#### *3.4.3.1 Objectives and intended practices*

Although there is extensive literature available on supervision, there is little clarity on what constitutes the most effective approach to this, including its design and implementation (Vasan et al., 2017). For instance, in the literature there are no clear answers on two pertinent questions – what type of supervisions (clinical or managerial) are essential for improving staff performance; and, what should be the optimum frequency of supervision so as to get its effect (Vasan et al., 2017). However, policy-makers and managers consider supervision as an important strategy to improve staff performance (Bosch-Capblanch and Garner, 2008; Dieleman et al., 2003; Wang et al., 2002). Supervision brings people and resources together to achieve organisational objectives, assess the achievements and identify and solve problems by developing a relationship of trust and responsiveness amongst the managers and staff (Marquez and Keen, 2002). According to a systematic review, supervision has three main intended functions, i.e. educational, supportive and administrative (Kilminster and Jolly, 2000).

Some others emphasise that supervision should assess the quality of services provided by the staff, monitor their work output, have an effective dialogue with the staff to solve their problems and assist them in improving their performance by visiting them at the actual work site (Bosch-Capblanch and Garner, 2008). Therefore, it is essential that both supervisors and staff should clearly understand the objective of the supervision with their respective roles, and that the system for supervision should be systematic, structured and adequately resourced (Bradley et al., 2013; Kilminster and Jolly, 2000).

The World Health Organisation, (2008), in its training module on supportive supervision, suggested four steps in planning and carrying out supervision. First, setting up a supportive supervision system that includes the identification and training of supervisors, developing supervisory checklists and learning materials and ensuring that adequate resources are available for conducting supervisory visits. Second, planning regular supervisory visits that should include identifying the places to visit, fixing the date and time to visit and deciding the activities to be undertaken during the supervisory visit. Third, conducting the actual supervisory visit in which the supervisor should collect information, help in solving the problems of staff and give feedback, provide on-the-job training and record the results or outcome of the visit. Fourth, undertaking the follow-up activities that were discussed and decided during the visit and also planning further follow-up supervisory visits (WHO, 2008).

However, it is observed that the systems for supervision are poorly defined and developed and are introduced as an isolated intervention or parallel system (Marquez and Keen, 2002; Wang et al., 2002). Hence, the majority of the literature suggested that supervision should be integrated with other HRM strategies such as performance appraisal and in-service training to form an integrated performance management system (Dieleman et al., 2003; Marquez and Keen, 2002; Wang et al., 2002). Such an integrated system can be further improved through training, supervision and providing appropriate tools and guidelines for the managers to implement the system, with appropriate

decentralisation of authority to the managers who carry out the supervision (Dieleman et al., 2003; Marquez and Keen, 2002).

#### *3.4.3.2 Actual practices*

Although policy-makers and managers consider supervision to be one of the effective HRM strategies to improve staff performance, several researchers observed problems in the actual implementation of intended practices of supervision.

Most of the literature reported that the supervisors did not carry out supervisory visits as planned for several reasons (Iles, 1997). For instance, in a study in Tanzania, it was observed that around 50% of health facilities were visited by the supervisors once or twice in six months (Manzi et al., 2012). Similar findings were observed in Ghana where around 50% of staff reported a recent visit by their supervisors (Frimpong et al., 2011). Even in a well-coordinated project of supervision, it was observed that only one-third of planned supervisory visits could happen (Rowe et al., 2010). There are several reported reasons why the managers did not carry out supervisory visits. For example, the district level managers were involved in several programmes leading to overlap of activities, in which case other aspects were prioritised over the task of supervision (Bradley et al., 2013). Moreover, supervision activities were adversely affected because of the shortage of senior-grade staff such as doctors and staff nurses, who are expected to undertake the supervision of their staff (Bradley et al., 2013). Rowe et al., (2010), listed the top four reasons for the failure of making supervisory visits as poor coordination, lack of management skills, dysfunctional management teams and the lack of motivation of both the supervisors and staff.

In several studies, the researchers observed that the supervisors are few in number as compared to the staff to be supervised and, in addition, they are constrained with time and money. Therefore, it is not possible to supervise every staff member by visiting their work site. Hence, the managers use a combination of supervisory visits to the staff at their places of work as well as conducting meetings at the health facility to review

performance and support the staff (Bosch-Capblanch and Garner, 2008; Bradley et al., 2013).

When the supervision is not carried out regularly, there is a greater chance that the most remote areas will be left out. For instance, it was found that the staff working in remote areas were less frequently supervised with no opportunity of getting feedback from their managers, and had to depend on the communities for feedback about their quality of services (Dieleman et al., 2003). A more recent study also reported similar findings of the remote places being less frequently visited, leading to staff absenteeism and poor performance (Bradley et al., 2013).

Competent supervisors and funds for transport are the important resources for carrying out effective supervision. There is evidence that the training of supervisors can have a positive impact on supervision (Kilminster and Jolly, 2000). However, several studies found that the supervisors lacked the technical capacities required for carrying out the supervision as expected (Iles, 1997; Kilminster and Jolly, 2000; Wang et al., 2002).

Regarding funds for transport, there were shortages in the logistics for conducting the supervision, particularly for transport, and sometimes the supervisors had to use their own vehicles or spend money out of their own pockets for fuel, which was reimbursed late and insufficiently (Dieleman et al., 2003; Wang et al., 2002). There were also instances when due to financial constraints for transport, supervisors cancelled or rescheduled their field visits (Bradley et al., 2013). On other occasions, supervisory activities were hampered because of delays in the release of funds from central level, and there were no funds available for fuel or the breakdown of vehicles (Manzi et al., 2012). One study found that the budget for the supervision is allotted as per the programmes and not for each facility, leading to supervisory activities skewed towards the programmes rather than the routine activities of the health facilities (Aitken, 1994).

Even though the managers carry out supervision, there are several shortcomings related to its content. For example, a systematic review by Bosch-Capblanch and Garner, (2008),

reported that during supervision, administrative activities such as data collection were more common than problem-solving, providing clinical support and giving feedback to the staff. In addition, most studies mentioned providing on-the-job training during supervision but referred less frequently to using checklists and taking feedback from the service users or the community (Bosch-Capblanch and Garner, 2008). Furthermore, this may be carried out as an inspection with an objective of taking punitive action against staff; there is a lack of authority for the supervisors to reward or sanction performance; the supervisory visits are irregular due to a lack of required resources and there is a lack of strategic direction and accountability in the overall health system (Marquez and Keen, 2002).

There are instances reported when the supervisors carry out supervision simply to report to their higher authorities about staff attendance, without any efforts made towards solving the problems of the field staff (Aitken, 1994). In a study in Benin and Kenya, it was observed that around half of the staff reported that the supervisors did not give them feedback about their work (Mathauer and Imhoff, 2006).

It was also found that the managers supervised those activities which are more visible and countable, placing more emphasis on achieving targets than on the quality of services (Aitken, 1994).

Rowe et al., (2010), observed the following from their study: 'unlike building clinics or treating patients, supervision is generally an invisible business. Overall, there needs to be a greater recognition that supervisors are health workers too, and they might need as much support (including supervision) as front-line clinicians' (Rowe et al., 2010).

#### *3.4.3.3 Effect on employees*

Supervision is one of the mechanisms that helps in motivating staff and making them more competent to perform (Bradley et al., 2013). In a study in Tanzania, most staff reported that supervision was helpful in identifying problems, providing solutions and for getting on-the-job training. In the same study, some of the staff had negative

experiences, including that the supervisors were not competent, they spent little time at the facility, they were not supportive, they did not provide feedback and were accusing the staff rather than providing moral support (Manzi et al., 2012). A study from Benin and Kenya found that around 50% of the staff perceived supervision as unhelpful rather than supportive (Mathauer and Imhoff, 2006). For example, the authors observed that the staff felt negative about low-frequency and irregular supervision, its hierarchal approach and were demotivated when the supervisors discussed their shortcomings in the presence of patients. It was also noted that when the next supervision was not planned, the staff commitment to improving their work was low. However, in the same study, staff did report that supervision improves their personal performance, helping them to update their knowledge and to avoid mistakes in their work. The majority of staff desired for their supervision to be more supportive, to be oriented towards needs and to provide feedback about their problems (Mathauer and Imhoff, 2006).

Direct supervision has a positive impact on patient outcomes, through the mechanism of the skill development of the supervisee and by specific feedback by the supervisors, in which the relationship between the supervisor and supervisee is of utmost importance (Kilminster and Jolly, 2000). Some other authors also found that supervision could bring about positive change in staff performance, due to increased skills and knowledge. In addition, change was positively influenced by mutual respect between supervisors and health workers (Dieleman et al., 2009).

Supportive supervision was associated with the productivity of health staff in terms of patient care, which was associated with the positive perception by the staff that the supervision was supportive (Frimpong et al., 2011). However, in the same study, only a few staff felt that their supervisors supported them. Thus, the authors concluded that the supervision was effective only when it was perceived to be supportive by the staff.

Supervision is more effective through helpful supervisory behaviour such as guidance on clinical work, problem-solving, linking theory with practice, feedback and support. Negative supervisory behaviour includes rigidity, low empathy, not providing support,

not being able to understand the concerns of the supervisee, not teaching and the emphasis on evaluation and fault-finding (Kilminster and Jolly, 2000). Similarly, in a systematic review, it was revealed that the staff motivation was influenced positively when supervisors trusted them and gave them more responsibilities, recognition, appreciation and respect, whereas the relationship was poor and stressful when supervisors did not appreciate their efforts, blamed them without understanding their context and intended just to find faults without any support (Okello and Gilson, 2015). The authors concluded that such an effective relationship of trust between managers and staff provides intrinsic motivation to the staff to provide good quality of care. A large-scale study in Malawi, Tanzania and Mozambique observed a significant relationship between supervision with intention to leave and job satisfaction. The researchers observed that not receiving any supervision or supervision with negative feedback was linked to intention to leave and diminished job satisfaction (McAuliffe et al., 2013). Thus, supervision can have a wider impact which emphasises the importance of a bundled approach, in which several HRM practices are strategically integrated. Well-planned, supportive and regular supervision has a positive impact on the job satisfaction of the staff and such workers are less likely to leave the organisation (McAuliffe et al., 2013). Supervision was more effective when supervisees were provided with clear feedback on their errors, and corrections were clearly conveyed so that they understood their mistakes and weaknesses (Kilminster and Jolly, 2000).

However, there are others who recently conducted a systematic review and concluded that there is no high-quality evidence available to suggest the implementation of any form of supervision, because the existing evidence suggests a small impact on employee behaviour and more intensive supervision is not necessarily beneficial (Bosch-Capblanch et al., 2011). Some authors believe that for supervision to be effective, it is essential to ensure the timely disbursement of funds, sufficient staff, better planning of visits, training of supervisors and regular supervision by higher-level supervisors (Manzi et al., 2012).

In summary, it is found that supervision has a positive effect on employees when the system is effectively designed with the appropriate training to supervisors, adequate resources for travel, content of supervision intended to support and build the capacities of the staff and follow-up carried out by the supervisors on agreed action points. However, in actual practice, particularly in LMICs, it is found that the supervision system is not adequately developed, the supervisors are not well-trained, supervision is not a priority activity for the managers, the resources for travel and allowances are not adequately provided and the content of supervision is more about data collection than staff support.

### **3.4.4 Performance appraisal**

#### *3.4.4.1 Objectives and intended practices*

Performance appraisal is considered to be one of the crucial human resource management strategies towards improving staff performance for providing quality health services (Dieleman et al., 2003; Wang et al., 2002). This has further gained importance in the context of decentralisation, in which the responsibility of performance management through appraisals was given to the decentralised units (Manafa et al., 2009; Wang et al., 2002).

The ideal performance appraisal system should have specific objectives, mechanisms and outcomes (Hutchinson, 2013). The same author placed the objectives of the performance appraisal into two groups - evaluative and developmental. In the evaluative approach, the appraiser needs to look backwards and make a judgement on employee performance, whereas in the developmental approach, the appraiser needs to look forwards and make suggestions for support (Hutchinson, 2013). Similarly, McCourt and Eldridge, (2003), concluded that organisations have multiple and competing purposes of performance appraisal and there should be separate procedures for each main purpose. For instance, the effective performance appraisal system can facilitate communication between managers and staff about reaching optimum performance targets by the staff to achieve organisational objectives. The principal outcomes of an ideal performance

appraisal system can be identifying the training and development needs of staff, providing career counselling and making decisions on providing rewards linked to staff performance. The appraisal system can be driven by the line managers, self-appraisals, by peers, by subordinates, by service-users or by a combination of all these, also called the 360-degree appraisal system (Hutchinson, 2013).

McCourt and Eldridge, (2003), described two main traditional approaches for performance appraisal: annual confidential report and management by objectives. As its name indicates, the annual confidential report is written by the manager once a year, the content of which is not discussed with the employee. The management by objectives approach is driven by the objectives set by the organisation. Both of these approaches have the common features that they are highly centralised with minimal employee involvement.

The Chartered Institute of Personnel and Development (CIPD) described five main components of the formal appraisal system, i.e. measurement, feedback, positive reinforcement, exchange of views and agreement (CIPD, 2011). Measurement is the assessment of performance against the agreed targets and objectives. Feedback is the information provided to the staff on their past performance and directions for the future. Positive reinforcement is appreciating the good work done and inputs for further improvement. Exchange of views is an open discussion on how staff can improve performance and what support is needed. Finally, agreement relates to the plan of action for future performance.

In their comprehensive literature review, Levy and Williams, (2004), argued that the context plays an important role in the effectiveness of the performance appraisal process and the reaction of participants to the performance appraisal. They grouped the factors influencing performance appraisal into proximal and distant. The proximal factors regarding the structure of the appraisal system include the purpose, frequency and mechanism for giving feedback to the staff. The distal factors include organisational goals

and culture, human resources strategies, external economic factors, technological advances and workforce composition (Levy and Williams, 2004).

#### *3.4.4.2 Actual practices*

Although the system of performance appraisal may be in place, there can be variations between the policy and its actual implementation in terms of frequency, staff participation, authorities and the link to rewards (Hutchinson, 2013). The frequency of undertaking performance appraisal varies across the research conducted. In a study carried out in Mali, although according to civil service rules the performance appraisal should be carried out annually, only half of the staff received their appraisal over a two-year period (Dieleman et al., 2006). In a study conducted in Nepal, it was observed that the appraisals were not conducted regularly and were carried out only when the staff were expected to achieve promotion after a certain period of service (Jean Marion Aitken, 1994). The authors noted that this was the only opportunity for staff to look for their performance review reports. Qian et al., (2016), in a study in Lao People's Democratic Republic, found that there was no uniformity in conducting performance appraisal of the staff across health facilities. For instance, some settings took feedback from communities, some developed their own criteria whilst some did not conduct appraisals (Qian et al., 2016). In Vietnam, there are systems in place of taking community feedback by using a suggestion box at each health facility, however, such a system was found to be used by the community very rarely (Dieleman et al., 2003).

When the outcome of performance appraisal is linked to rewards or punishments, there are more chances of its implementation. For instance, Suciu et al., (2013), observed that the performance appraisal of more than 95% of Romanian civil servants was carried out annually as per the stipulated law, in which there were instances when the performance was 'unsatisfactory', and some civil servants lost their jobs based on poor performance (Suciu et al., 2013). In Vietnam health sector, based on the performance appraisal, the best-performing staff receive awards in the form of money, certificates or other tokens. (Dieleman et al., 2003).

Regarding the role of managers and the content of performance appraisal, the evidence from the health sector of LMICs suggests that the system is not fully developed. For instance, the staff in Mali were not aware about the criteria used for performance appraisal and felt that the managers use their own criteria (Dieleman et al., 2006). There are similar observations in another study from Nepal, in which the staff do not know about the remarks made by their managers in their performance review (Jean Marion Aitken, 1994). In another study from Malawi, it was observed that there are limited opportunities for career progression and the system of performance appraisal is almost non-existent (Manafa et al., 2009). In some cases, the performance appraisal is done by the immediate supervisors and then has to be endorsed by a higher-level officer than the supervisor (Jean Marion Aitken, 1994). Some researchers detected potential bias in performance appraisal in assessing the ethical and non-ethical behaviour of the staff, and reported that the managers are not always able to observe the routine performance of staff, in which case they tend to rely on other sources of information about their performance. (Selvarajan and Cloninger, 2011). In a review of literature on HRM and decentralisation in LMICs, it was also observed that there is a lack of capacity amongst managers, particularly at local level, who are expected to undertake the performance appraisal of the staff (Wang et al., 2002).

#### *3.4.4.3 Effect on employees*

The effect of an appraisal system on employees depends on the objectives of this system and how employees perceive these. In Vietnam, rewards in the form of money and certificates are given to the best-performing staff. Although the value of such awards is not high and decreases over time, they are appreciated by the workers (Dieleman et al., 2003). In contrast, a study in Uganda and Bangladesh found that the staff looked at the appraisal system as a tool that was being used for punishment, particularly for the staff in rival groups, reflecting a huge distrust in the appraisal system (Ssenooba et al., 2007).

The most important factors that would decide the effect of an appraisal system on employees are the perceptions and experiences of the employees about its link with the

rewards that are given to them. For instance, the staff in Malawi in the absence of an appraisal system and with limited opportunities for career progression did not appreciate the link between the two (Manafa et al., 2009). It was also observed that the appraisal system had very little influence on the staff for two reasons: firstly, although the best-performing staff could get a promotion, such opportunities were not very common, and secondly, the staff who performed poorly faced only minor consequences (Qian et al., 2016). With such limited promotional opportunities for career progression, the staff felt demotivated and lost interest in doing good work (Jean Marion Aitken, 1994).

It was observed that financial incentives had a positive influence in increasing the productivity of staff in particular activities. In addition, such incentives can increase job satisfaction and staff motivation leading to patient satisfaction (Dieleman et al., 2009; Liu et al., 2006). In such interventions, the mechanism that enabled the link was staff motivation leading to proactivity in providing quality services with a greater presence at the work places (Dieleman et al., 2009).

The feedback after performance appraisal is crucial for the employees towards developing their attitudes and behaviour. For instance, Lambrou et al., (2010), concluded that mere measurement of performance was not useful, but rather self-assessment; and professional learning and job motivation were positively influenced when the staff received sufficient feedback in their performance appraisal (Lambrou et al., 2010).

There are several studies in which researchers tested the expectancy theory to analyse the effectiveness of performance appraisal (Chiang and (Shawn) Jang, 2008; Chun-Fang Chiang et al., 2008; Fudge and Schlacter, 1999; Nimri et al., 2015; Pavett, 1983; Sloof and van Praag, 2008; Suciu et al., 2013; Tien, 2000). For instance, Pavett, (1983), applied the expectancy model to the staff nurses in a large hospital and found that performance feedback by the managers, clients and co-workers had a positive impact on both the motivation and the performance of staff nurses.

Accuracy and precision in the measurement and rating of staff performance is of vital importance in the appraisal system particularly where rewards may be provided, as it would have implications on the perceived fairness of the system by staff. For instance, it was observed that because of bias in appraisal, the unethical means by the staff in improving performance were rewarded (Selvarajan and Cloninger, 2011). The authors concluded that the failure to reward ethical behaviour and punish unethical behaviour would have negative implications on the morale of the staff and in such instances, the unethical behaviour may spread to other staff.

In a review article on HRM in the Indian public health care system, Agarwal et., (2011), observed that the system of performance appraisal is ineffective, because: 1) rewards are not linked to the staff performance, 2) the process is just a subjective routine without any objective output indicators, 3) the reviewer is not intimately associated with the actual work of the officer or staff, 4) the PA system is not effectively linked with the promotions of the staff which rather is based on just seniority and, 5) PA systems fail to identify and differentiate between best performers and poor performers (A. Agarwal et al., 2011).

Ahmad and Shahzad, (2011), studied the relationship between performance appraisal and the promotion of University teachers in Pakistan and found that there is no impact of performance appraisal on promotion, since promotions are made based on length of service and not on performance (Ahmad and Shahzad, 2011).

In a study in Pakistan, the university teachers perceived that performance evaluation through annual review has no relationship to their promotion. The teachers also reported that they do not receive any feedback after their performance review so they do not get any clues for improving their performance (Ahmad and Shahzad, 2011). In summary, there are two major objectives of performance appraisal: evaluative and developmental. The evaluative objectives focus more on achieving targets and contributing to the organisational goals, whereas the developmental objectives are more concerned with developing and supporting employees to improve their performance.

The traditional approaches of having annual confidential reports and management by objectives are generally intended to meet evaluative objectives. Another characteristic of these traditional approaches is that they are centralised without the involvement of the employees. The ideal system of performance appraisal consists of balancing both evaluative and developmental objectives with a greater involvement of the staff. However, such a system is not well-developed, particularly in LMICs. As a result, performance appraisal is not regularly carried out in LMICs, and when it does take place, there are often problems with the measurement of performance, the lack of a system for giving feedback to the employees and the absence of a link between performance and rewards or sanctions.

### **3.5 Strategic configuration of HRM practices and their effect on employee**

As described in section 3.2.1, there are three dominant theoretical frameworks in strategic HRM: universalistic, contingency and configurational (Delery and Doty, 1996). The concept of strategic configuration of HRM practices and their effect on employee behaviour is based on these three theoretical frameworks. Of these, the configurational framework approach requires both *horizontal fit* amongst the various HRM practices, and *vertical fit* with the organisation's business strategy. The concept of horizontal fit has evolved based on the universalistic approach, in which HRM practices are expected to influence the Ability, Motivation and Opportunity to participate. Because of such configuration of best practices, there are synergistic effects amongst HRM practices that increase the possibility of greater performance more than one single HRM practice (Armstrong, 2009). The contingency framework is the basis for achieving vertical fit, in which HRM strategies and organisational strategies are aligned together.

In addition to these HRM theories, the configurational framework is in fact the approach of systems thinking. To make systems effective, it is essential to use systems thinking whilst designing and evaluating a health system (De Savigny and Adam, 2009). A system consists of many interconnected and interdependent elements, and the resulting response occurs due to the interactions between these elements rather than merely the

change in one component (Atun, 2012). It is therefore essential to understand the linkages, relationships, interactions and behaviours amongst the various elements of any system (Agyepong et al., 2012). In Zambia, the researchers asserted that it is essential to apply a systems approach when assessing health systems, because there are elements of the sub-systems which are linked to each other (Mutale et al., 2013).

In the case of HRM literature, such systems thinking was applied by McDuffie, (1995), taking the case of automotive assembly plants, to demonstrate the effect of configurational or the 'horizontal fit' of HRM practices on firm performance and termed such fit as a 'bundle'. The author concluded that the core principle of such an approach is that HRM practices affect performance as interrelated elements in an internally consistent HRM 'bundle'. Similarly, in the case of the health sector, Buchan, (2004), argued that HRM practices that are linked and coordinated into 'bundles' will have a greater effect on performance. Reviews of literature by other researchers in the health sector also emphasise the importance of strategic configuration or 'bundles' in improving health workers' performance over any single HRM intervention (Dieleman et al., 2009; Rowe et al., 2005).

### **3.6 Knowledge gap and conclusion**

The preceding sections 3.1 to 3.5 elaborated on the existing knowledge about HRM and its effect on employees. Two main domains cover such literature, one covering typical human resource management and the other looking at organisational behaviour. The HRM literature mainly focusses on the HRM policies and practices, whereas the effect on employees in terms of their attitude and behaviour is mainly covered by literature on organisational behaviour.

With regard to the theories of HRM, Guest, (2011), put forward three unresolved questions: 1) what HRM practices would have greater impact on employee behaviour? 2) Under what conditions are certain HRM practices likely to be more effective? 3) what combination of HRM practices can be effective in given circumstances? Such a lack of clear theoretical conceptualisation might be the reason why there is no consensus on

what should constitute the intended HRM practices. There are studies that tested several HRM practices that influence the ability, motivation and opportunity of employees. However, there is a knowledge gap regarding which components of HRM practices influence employee attitude and behaviour.

There is also agreement by several researchers that the HRM practices should be aligned with one other (horizontal fit) and with organisational objectives (vertical fit), to get a synergistic effect on employee attitude and behaviour. However, there is no clear evidence to identify the mechanism by which the components of HRM practices interact with one another within an HRM system and between the HRM systems. For example, training need assessment could be a component of in-service training as well as the performance appraisal system, however, it is not clear how this component is contributing to meeting the objectives of these two HRM systems.

There are a few studies on how contextual factors influence the implementation of HRM practices. Generally, these studies have looked at how resources and competencies and the interests of managers influence the implementation of HRM practices. However, there is limited knowledge available on how different contextual factors influence different HRM systems and sub-systems, ultimately leading to the positive or negative attitude and behaviour of the staff.

There are several studies that describe which HRM practices are implemented, for which staff and the reasons for implementing or not implementing the intended practices. However, the researchers have considered a list of HRM practices but not all of the components of a particular HRM system. For example, there are separate studies on training need assessment, training implementation and training evaluation. However, there is a gap in the knowledge wherein all these components are studied together.

Theories of motivation describe that employee performance is linked to HRM practices through motivation and job satisfaction. However, there are few studies that explain the clear-cut pathways demonstrated through which motivation and job satisfaction lead to positive attitude and behaviour. Some of these studies mainly used the expectancy

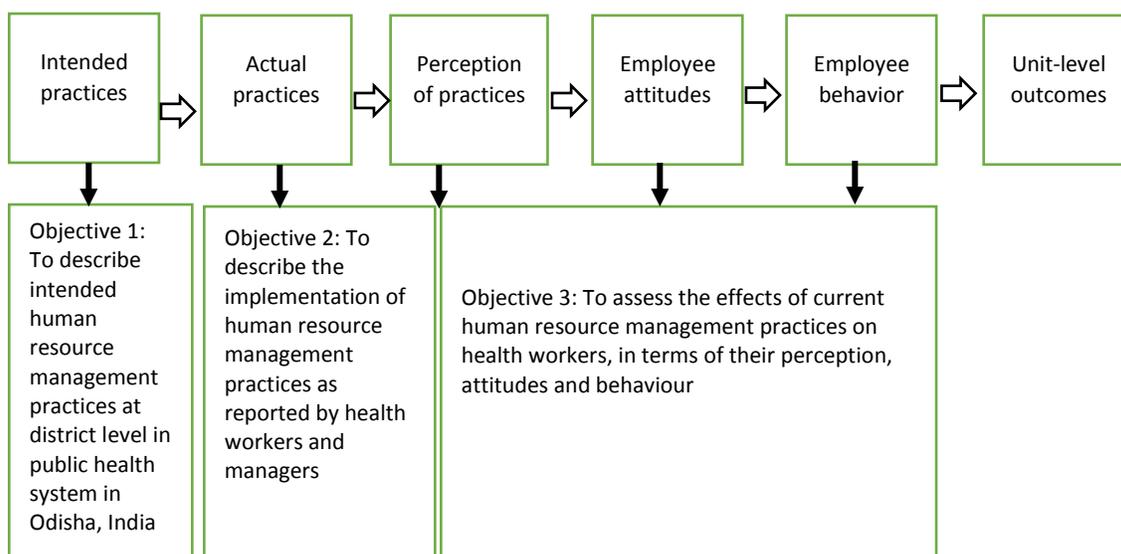
theory to demonstrate the motivation-job satisfaction-performance link. However, there is a knowledge gap on why there are different reactions amongst employees exposed to the same HRM practices.

As compared to the HRM literature on all sectors, there are very few studies on the health sector in which the links between HRM and its effect on employee attitude and behaviour are systematically explored. There are several studies on in-service training, supervision, posting and transfer and performance appraisal, that mainly looked at whether these HRM practices are implemented or not, and to some extent their effect on health workers. However, there is no study that has looked at all of the components of these HRM practices, their interplay and the effect on health workers.

### 3.7 Conceptual framework

Based on my experience of working with policy-makers, managers and employees within the health sector in Odisha, I was already aware that they are interested in how the existing human resource management practices influence health staff, as well as what can be done to improve this further. In this context, I used the framework developed by Purcell and Hutchinson, (2007), which is more suitable for meeting the study objectives (Figure 8).

Figure 8 Use of conceptual framework to meet the study objectives



Source: adapted from (Purcell and Hutchinson, 2007)

I used this framework to examine intended HRM practices, their implementation as reported by health workers and managers and their effect on health workers. I explored the plausible mechanisms of effect in this logic chain about the HRM practices related to posting and transfer, in-service training, supervision and review and performance appraisal. Using this framework, the first objective of the study was to describe intended HRM practices, followed by the second objective of describing the actual implementation of these intended practices as reported by the health workers and managers. The third objective of the study was to assess the effect of HRM practices in terms of the staff attitude and behaviour, the next three components of the framework.

I have not carried out the analysis of unit-level outcomes in terms of health service delivery outcomes, because those might be influenced by other factors beyond the scope of HRM. However, I explored the mechanisms through which employee attitudes and behaviours might contribute to unit-level outcomes in the given context.



## **Chapter 4: Methodology**

### **4.1 Introduction**

The purpose of this chapter is to describe the research methods used in order to meet the objectives of this study. To begin, I have provided a brief description of ontology, epistemology and paradigms, and the reasons why these are important for research. Based on the research philosophy that I have adopted, I have then explained the justification for selecting the qualitative research method. There follows a description of the HRM functions selected for the study. Furthermore, I have described the research setting in order to fully understand this, as well as the context in which the study has been conducted. To understand the scope of the research, I have described the process of the development and use of the study tools, which are of particular significance since this study involves qualitative research. Thereafter, I have described in detail the sampling of the study participants, the data collection process and the data management and analysis, as these are important steps in ensuring trustworthiness in qualitative research. This chapter also includes a detailed description of the ethical considerations to maintain confidentiality. Finally, I have described the steps taken for the quality assurance of the data collected under the sections on trustworthiness and reflexivity.

### **4.2 Epistemological approach**

The ontology and epistemology are important considerations because the philosophical assumptions by the researchers and the methods they adopt would have implications on the quality and relevance of the research in a given context (Ritchie and Lewis, 2003). This is of particular importance, because there is no single correct or accepted way of doing qualitative research and the methods adopted are influenced by a mix of philosophy, research objectives, the participants and the potential users of the research findings. Ritchie and Lewis (2003), offer the following description of ontological and epistemological stances.

Ontology is the science about the nature of the social world and what we can know about it. Realism claims that an external reality exists that is independent of our beliefs or our

interpretation of the world. In contrast, constructionism claims that reality is only knowable through the human mind and socially constructed meanings, and there is no external reality that is independent of our beliefs (Ritchie and Lewis, 2003; Slevitch, 2011).

Epistemology refers to a science of how it is possible to know about the world. There are two main epistemological stances, namely positivism and interpretivism (Ritchie and Lewis, 2003). Positivism holds that the world is independent, and that facts and values can be measured objectively, without the influence of the values of the researcher. Positivism also believes that human behaviour is governed by law-like regularities, and often uses methods of the natural science of hypothesis testing, causal explanations and modelling. In contrast, interpretivism asserts that the researcher and the social world impact upon one another. Therefore, facts and values are not distinct, and findings are inevitably influenced by the researcher's perspectives and values. Furthermore, the social world is not governed by law-like regularities, but is an interpretation made by humans themselves, due to which it is not possible to conduct objective and value-free research using the methods of natural sciences (Ritchie and Lewis, 2003; Slevitch, 2011). Therefore, the researcher has to declare and be transparent about his or her assumptions, and the social researcher seeks to explore and understand the social world using the participant's understanding as well as their own.

The researchers who work from realist-positivist perspective tend to use quantitative research methods to explain how variables interact and cause outcomes. In contrast, researchers with constructivist-interpretivist stance often use qualitative research methods to explain the world as constructed, interpreted and experienced by the people through interactions with each other and in the social system in which they live (Slevitch, 2011; Tuli, 2010).

In this thesis, I have used qualitative research methods to obtain the answers to my research questions: 1) What are the major intended HRM practices and how are they perceived by health workers and managers to be put into practice? 2) How are HRM

practices perceived by the health workers? 3) How do these HRM practices affect health workers' attitude and behaviour?

Qualitative research methods were more appropriate because amongst the various ontological and epistemological stances, I believe in that reality is only knowable through the human mind and socially constructed meanings. Therefore, such a reality can be known through health workers' and managers' interpretations of the realities of human resource management and its effect on the attitude and behaviour of health workers. Furthermore, I believe that to know the reality, the methods of natural science are not appropriate, because the social world of health workers and managers in the given health system context is complex, and is not merely governed by law-like regularities. I also believe that the researcher and the social world impact upon each other, and that findings are inevitably influenced by the researcher's position, perspectives and values. Therefore, it is not possible to conduct objective and value-free research (Goertz and Mahoney, 2012; Ritchie and Lewis, 2003; Slevitch, 2011). That is the reason I declare my stance as interpretivist and am transparent about my philosophy and assumptions. In addition, I have given thick explanations of the context in which I have conducted this research, and explained the details of the qualitative data collection and the steps involved in its analysis.

### **4.3 Study design and justification of methodology used**

The aim of my study is to explore how human resource management policies and practices affect health workers in the context of the Indian public health system at district level. To achieve this aim, I adopted an interpretivist research paradigm and designed a qualitative study. The use of qualitative, explanatory research is useful in describing the factors that underline the specific attitudes and behaviours of the people in a particular context (Ritchie and Lewis, 2003).

In qualitative research design, there are several methods of data collection. These can be categorised as methods for collecting naturally-occurring data and generated data. The methods for collecting naturally-occurring data are observation, document analysis,

conversation analysis and discourse analysis; whereas the methods for collecting generated data are in-depth interviews and group discussions (Ritchie and Lewis, 2003).

I used document review and in-depth interviews as methods of data collection, taking into account the conceptual framework and the objectives of this study. Document review involves the analysis of existing documents to gain an understanding of their content, and in-depth interviews provide an opportunity for the detailed investigation of people's personal perspectives about the subject of inquiry (Ritchie and Lewis, 2003).

The document review provides information about the context and historical changes over time, and also suggests questions to be asked for more detailed enquiry, and this is the reason that it is often combined with other qualitative methods such as in-depth interview (Bowen, 2009). In this study, the document review was used to identify and describe the HRM policy that is the intended HRM practices, adopted by the DOHFW and the GAD related to improving the performance of health staff. Moreover, the in-depth interviews were used to assess the implementation of these intended practices by the managers and their effect on the health staff. The document review was useful in understanding the context and the changes made to HRM policies over time, as well as in drafting the topic guide for the in-depth interviews. As described by Bowen, although the document review is a less time-consuming and efficient method for data collection, it may not provide the details required for the research. This was the reason why, in addition to the document review, I conducted in-depth interviews with policy-makers and state level managers, to fill in gaps in the information gathered from the document review.

Using the framework provided by Purcell and Hutchinson, a combination of document review and in-depth interviews were used to describe 'intended practices', 'reported practices', and the effect on health workers in terms of the 'attitude' and 'behaviour' of the staff interviewed towards HRM practices. Table 5 shows the aspects of conceptual framework, research objectives and the methods used to meet the research objectives.

Table 5 Research methods adopted to meet the research objectives

Aspects of conceptual framework	Research objectives	Methods used
Intended HRM practices	Objective 1: To describe intended human resource management practices at district level in the public health system in Odisha, India	Document review. In-depth interview of policy-makers and state level managers
Reported HRM practices	Objective 2: To describe the implementation of human resource management practices as reported by health workers and managers	In-depth interview of managers at state, district and facility level. In-depth interview of health staff working at facility level: doctors, staff nurses, laboratory technicians, pharmacists and multi-purpose health workers
Effect on health workers (attitude and behaviour of health staff to HRM practices)	Objective 3: To assess the effects of current human resource management practices on health workers in terms of their perception, attitudes and behaviour	In-depth interview of managers at state, district and facility level In-depth interview of health staff working at facility level: doctors, staff nurses, laboratory technicians, pharmacists and multi-purpose health workers

To address the aim, the first objective of the study is to describe intended human resource management practices. Using the framework provided by Purcell and Hutchinson, the ‘intended practices’ were drawn from the review of the documents related to each HRM domain available from the Government of Odisha, and the interview of policy-makers and state level managers. The information on intended practices includes the policies, guidelines and plans that are expected to be implemented at district or sub-district level, in order to influence health workers.

The second objective of the study is to describe the implementation of human resource management practices as reported by the health workers and managers, and to identify factors influencing their implementation. The information on ‘reported practices’ was

collected through the in-depth interview of state, district and facility level managers and the health staff. This encompasses the information on implementation of the intended practices in terms of both content and process, including deviation from the intended practices.

The third sequential component of the framework of Purcell and Hutchinson is the effect of HRM practices on employees in terms of their attitude and behaviour. In a similar vein, the third objective of this study is to assess the effects of current human resource management practices on health workers in terms of their attitudes and behaviour. I have considered the effect of HRM practices on health workers in terms of the attitude and behaviour of the staff and managers towards HRM practices, which was captured through the interviews of both groups. The responses of the health staff interviewed towards intended and implemented practices such as their satisfaction, trust, motivation, engagement, commitment, and morale are included as their attitudes. Whereas, their work participation/avoidance, intention to leave, absenteeism, efforts made to accomplish tasks, use of alternate approaches rather than intended practices and discretionary behaviour are included as staff behaviour towards HRM practices. I triangulated the information provided by both the managers and health staff.

#### **4.4 Description of the HR functions included the study**

Using the framework by Purcell and Hutchinson (2007), I decided to analyse the HRM policies (intended HRM practices), their implementation (reported HRM practices) and the effect on health workers in terms of their attitude and behaviour. I selected four HRM practices with a potential effect on health workers, which are: 1) posting and transfer, 2) in-service training, 3) supervision and, 4) performance appraisal. These HRM practices were selected based on the literature review from lower and middle-income countries (LMICs) where these HRM practices were quoted as commonly used for changing the attitudes and behaviours of health workers (Dieleman et al., 2009; Rowe et al., 2005). In addition, I have considered my own experience of working in Odisha where these are the HRM practices upon which policy-makers and managers rely for changing

the attitudes and behaviour of health workers. I assumed that the appropriate implementation of the policies related to these domains would positively affect the attitudes and behaviour of health workers.

As described in the Introduction section, doctors belong to the state cadre and can be posted and transferred across all districts in the state. In contrast, the paramedical staff, being district cadre, can be posted and transferred only within the district where they were appointed and posted in the first instance. In this study, I included the analysis of policies and their implementation for first posting and subsequent transfers. In addition, I analysed the effect of posting and transfer on the availability of health staff and their attitude and behaviour towards these policies and their implementation.

Following the introduction of the NHM, the national and state level agencies develop the policies on in-service training, to be implemented by the district level agencies. All categories of staff providing clinical services are expected to receive in-service training, due to which I have included all such staff in this study, which takes into account only the in-service training offered by the government after each employee has been selected for the job. The state NHM develops a yearly plan to include the resources, programme, place of training and monitoring and evaluation of the training. All of these aspects are included in this study.

The existing system of supervision consists of designated supervisors, supervisees, resources, and programme, which are included in the study. As described in the Introduction section, the staff at the sub-centres, PHCs and CHCs are supervised by the supervisors at these facilities. In addition, there are district and state level supervisors, who also supervise the activities of staff and managers. I have included all such facility level staff and the respective supervisors and managers in this study.

There are separate procedures for the performance appraisal of doctors, regular paramedical staff, government contractual paramedical staff and NHM contractual paramedical staff. I have included all four of these aspects of performance appraisal in

this study. Within the system of performance appraisal, there are those authorities carrying out the appraisals, and included in the study are both the managers conducting performance appraisals and the staff who are the subjects of these. In addition, I have included in the study the process, frequency, content and actions taken after appraisal.

Furthermore, in order to understand the appropriateness of the design of the intended HR practice and the subsequent implementation of the 'actual practice' (see Fig 7 in literature review) a systems approach was applied. More specifically, the systems approach used was 'process mapping' (Cobos Munoz and de Savigny, 2017), to map out expected components of a process and compare with what components are implemented and how. This has been applied to HR in LMIC in the health sector (Vujicic et al., 2009) and more recently for the broader process of deployment in Uganda (Mangwi Ayiasi et al., 2019). In addition, from the earliest expressions of systems thinking, the concepts of the context in which systems operate and the importance of feedback to enable the adaptation of the system in relation to that context have been promoted (Checkland, 1981). These core concepts of systems thinking have been used in the analysis of the findings.

## **4.5 Research setting**

### **4.5.1 Selection of the study state**

As described in Chapter 2 and summarised in the section 2.13, Odisha state faces challenges of health staff shortages and the management of existing staff. In addition, there are challenges due to the diverse geographical area, making it difficult to recruit and retain staff and leading to poor access to health care in the public sector. Although the NHM has provided additional resources in the health sector, it has created parallel systems of human resources management. I have spent nine years working closely with the public health system in Odisha. From 2001 to 2006, as a consultant for the World Health Organisation, I made extensive field visits and interacted with the health staff and managers at all levels, from villages to the state level. In addition, from 2010 onwards, I

have worked at the Indian Institute of Public Health, Bhubaneswar, and I have been involved in public health teaching, research and advocacy. Between 2010 and 2013, I carried out two studies related to human resource management, one on the retention of health staff and another on the career progression of doctors in the government health system in Odisha.

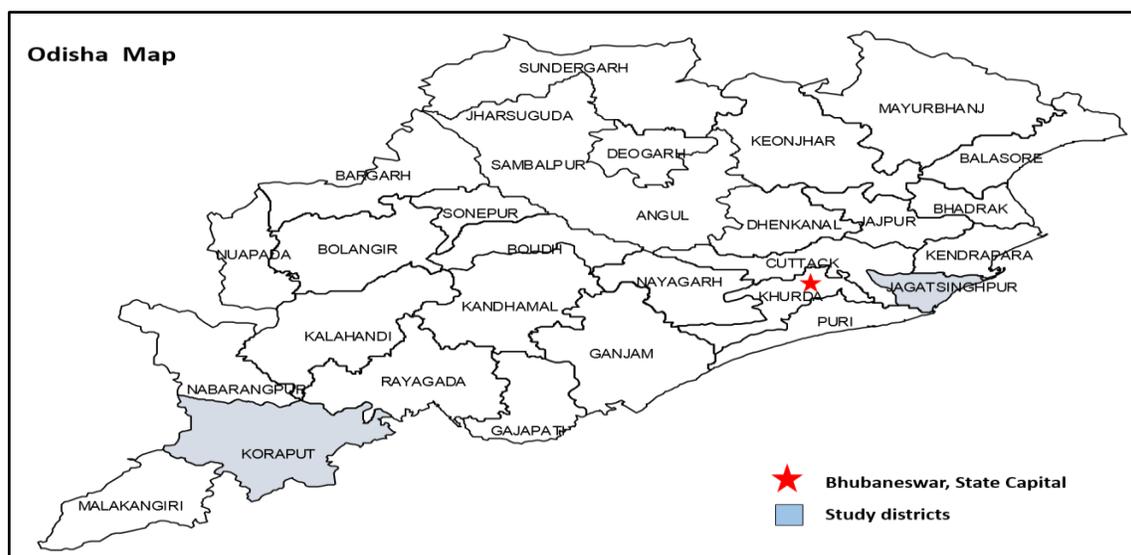
Because of these experiences, I have a better understanding of the context in which the health system functions. Currently, I continue to work closely with the Government of Odisha, as a member of committees related to human resource management. Due to this, there are good prospects that the findings of this study will serve to influence policy. The senior health officials in the Government of Odisha and particularly the officials at the State Human Resource Management Unit are keen to address these HRM problems in Odisha, which is another reason for selecting this state for the study.

#### **4.5.2 Selection of study districts**

Out of the 30 districts of Odisha two were selected, one with lowest performance and one with highest performance in terms of five key service delivery indicators. I used a composite index for the ranking of the districts. First, all the districts were ranked based on their performance, with rank one being the best performing and 30 being the worst performing, for five indicators separately, using the data of the Annual Health Survey conducted by the Government of India for 2012-2013. The indicators used were: proportion of full Antenatal care (ANC) coverage; proportion of ANC services utilised at government health facilities; proportion of deliveries conducted at health facilities; proportion of deliveries conducted at government health facilities and full immunisation coverage. The Reproductive and child health (RCH)-related indicators reflect the general performance of the districts, which are also dependent on how human resources were managed towards providing RCH services. Then the scores of ranks for each indicator were added together for each of the 30 districts. Finally, the districts having the lowest rank (highest performing) score and the highest rank (lowest performing) score were selected for the study. As described in the background section, within Odisha, the group

of KBK districts has a very different context from that of non-KBK districts (explained in section 2.3.3), which would have an influence on how human resources are managed between these two groups of districts. Considering this contextual difference, the other criteria was to select one KBK district and one non-KBK district. When I applied both these criteria, I selected Jagatsinghpur district, which was the highest performing from the non-KBK group; and Koraput, which was lowest performing and from the KBK group, meeting both the criteria (Figure 9). I have taken into account only public sector data about the performance indicators.

Figure 9 Study districts



The study districts of Jagatsinghpur and Koraput have almost equal populations, however, the districts are complete opposites in terms of geographical terrain and demography (Table 6). Jagatsinghpur district is situated in the eastern part of Odisha with plane land and is easy to reach, whereas Koraput is situated to the south of the state, with hilly terrain and is harder to reach. When the health facilities and staff deployed there are spread sparsely across geographical areas with difficult terrain, this would have implications for the movement between facilities and access for both managers and health staff. Jagatsinghpur has a higher population density, with only 0.69% of Scheduled Tribe population, whereas Koraput is sparsely populated, with half

of its population belonging to the Scheduled Tribe. The literacy rate in Koraput district is less than 50%, which would have implications for getting a pool of health professionals into the job, particularly in the context of district cadre for paramedical staff who will be recruited and deployed within the district.

Table 6 Demographic characteristics of the study districts

<b>Characteristics</b>	<b>Jagatsinghpur</b>	<b>Koraput</b>
Population	1.1 million	1.3 million
Population Scheduled Tribes	0.69%	50.6%
Population density	682 persons/km <sup>2</sup>	157 persons/km <sup>2</sup>
Literacy rate	86.6%	49.2%
Geographical terrain	Plane land and easy to reach	Hilly and hard to reach

#### **4.5.3 Selection of health facilities**

For the purpose of recruiting facility level managers and health staff for interview, I purposively selected health facilities. Under each selected district, two community health centres (CHCs) were purposively selected: one that was close to the district headquarter and one that was far away. This was based on the assumption that HRM policies may be practised differently or may have a different effect in the closest (close to urban areas) and furthest (rural and remote) places from the district headquarter. Under each CHC, one primary health centre (PHC) was randomly selected and from each PHC, two sub-centres (SC) were randomly selected. The PHCs and SCs were randomly selected because all of these facilities are in rural areas with possibly no significant differences in their distances from the district headquarter. In total, there are two districts, four CHCs, four PHCs and eight SCs included in the study.

## **4.6 Study tools**

### **4.6.1 Development**

Based on the literature review, study objectives and conceptual framework, separate topic guides for the interviews with policy-makers/state level managers, district level/facility level managers and facility health staff were developed (Appendix 1). Separate topic guides were used because the questions were different, based on the participants' level of authority and their role in HRM.

Certain revisions were made based on feedback by the supervisors and after piloting. These revisions were useful in the logical arrangement of questioning, to begin with simple and general questions, followed by those that were more specific, and related to particular HRM functions, before ending with more questions that were general in nature.

The final interview tool for health staff had two major sections: 1) job history and general information about their job activities, and; 2) specific information about the four HRM practices included in the study. First, we asked about their job history, such as their entry into the job, type of job contract, places of posting and length of service, followed by general questions about their routine activities. Then, we asked the specific questions about the four HRM practices: posting and transfer, in-service training, supervision and review and performance appraisal. We asked them about the effectiveness and usefulness of HRM practices for improving their work and in achieving their personal and professional goals. We also asked them about their motivation and job satisfaction arising from the work that they are doing.

The final interview tools for policy-makers and managers at state, district and facility level had two major sections: 1) general information about their designation and the HRM activities they carry out, and; 2) specific information about their role in the implementation of HRM practices, the health staff they manage and their perspectives on the effect of the four specific HRM practices included in the study on health workers.

The broad areas of exploration were the same, and I adapted the questions based on their level of authority and the types of staff that they manage.

In addition to the questions, there were notes made for asking probing questions. As I continued interviewing the study participants, there were some changes made in the interview schedule, particularly in adding the notes for probing and follow-up questions. These experiences were shared with the supervisors during regular supervisory visits, who gave their feedback and inputs for subsequent interviews.

For data collection from the document review, a separate study tool was used which was developed based on the inputs and examples given by the supervisors. This tool included the name and authority of the document, the year of publication, the content of the document, the gaps (if any) and final remarks.

#### **4.6.2 Piloting**

Piloting study tools by conducting a sample of interviews is a critical part of qualitative research, to assess the scope of the topic guide in generating the clarity and depth of the data sought (Ritchie and Lewis, 2003). In order to assess the scope of the interview guide, arrange the questions in a suitable manner, add or delete probing questions and assess the time required for each interview, I piloted the study tools. For this purpose, I interviewed one state level manager, three district level managers, two facility level managers and three health staff members. As I can speak English and Odia fluently, I gave options to the participants to choose the language for the questions and their responses. When I conducted pilot interviews, the state and district level managers preferred English, with a mix of English and Odia preferred by the facility level managers and Odia by the health staff, except for the doctors who spoke a mix of English and Odia. Prior to the interviews, I briefed all the interviewees about the purpose of the study and the purpose of the interview. During the interview, I noted the points about content and process and afterwards, I also received feedback from the participants themselves. In addition to comments from the interviewees, I shared the experiences of the pilot with the supervisors and took their suggestions. Based on the outcome of the pilot and the

contributions from the supervisors, I made the necessary changes to the study tools. For example, I arranged general questions about the job at the beginning, before more specific questions about each of the HRM practices, i.e. posting and transfer, in-service training, supervision and performance appraisal. I also estimated the time required to carry out each interview in order to inform participants about the time required in the final data collection.

#### **4.7 Preparation for the field visits**

Based on approval by the state research and ethics committee, I delivered a letter from the Director of Health Services at the state level, addressed to the Chief District Medical Officers of both the study districts. The letter requested the cooperation of the district authorities with the researcher in the field. In addition, the letter included the indicative categories of managers and staff to be interviewed at district and facility level.

In the data collection, I was supported by a research assistant. After selection and appointment, I briefed him in detail about his job responsibilities and the study itself; and provided training in all of the steps and processes involved in data collection and data management. In addition, we both undertook and qualified in the e-learning courses on Good Clinical Practice and Introduction to Informed Consent, undertaken by The Global Health Network which is recognised by the Liverpool School of Tropical Medicine, UK. The research assistant accompanied me during the period of data collection in both the study districts.

Following their receipt of the letter from the Director of Health Services, I contacted by telephone the Chief District Medical Officers (CDMO) of the study districts and briefed them about the study and the purposes of our visit. We began the field visits in Jagatsinghpur, meeting with the CDMO of the district in his office. I shared the letters from the state research and ethics committee and the Director of Health Services.

I then proceeded to describe the study objectives and the methodology of the study. I explained in detail the process of conducting interviews, confidentiality, data

management and the analysis and sharing of the findings with them. After this detailed briefing, the CDMO gave consent for carrying out the study in the district.

I then collected information about the numbers of facilities within the district and other demographic details. This information helped in the selection of the CHCs, PHCs and SCs. I also obtained the contact details of the medical officers in-charge of the two selected CHCs.

At the selected CHCs, I met the medical officers in-charge and followed a similar process of briefing about the study purpose and the process. I collected information about all of the managers/supervisors and the staff working at the CHCs, as well as at the respective PHCs and SCs.

At the selected PHCs, I met the medical officers, pharmacists and MPHWS who were recruited for the study and briefed them about it. Similarly, within the selected SCs, I met and briefed the MPHWS who were recruited to take part.

A similar process was followed in the Koraput district for the preparation of field visits.

#### **4.8 Sampling of study participants**

Purposive sampling is a non-probability sample in which people are deliberately selected to reflect particular features of the study subject, and to include the diversity of groups within the sampled population (Ritchie and Lewis, 2003). The present study aims to explore the effect of HRM practices on the health staff belonging to different districts, cadres and genders, with varying lengths of service and different employment contracts, i.e. regular or contractual. Therefore, purposive sampling based on predesigned inclusion and exclusion criteria was best suited for an in-depth understanding of the research topic, with the inclusion of diverse groups of health staff and managers/supervisors. There are four types of study participants: 1) policy-makers/state level managers; 2) managers at district level; 3) managers/supervisors at facility level, and; 4) health staff working at the peripheral health facilities. We did not include the

staff working at the district hospital, because the contexts of this hospital and the peripheral health institutions are very different. For example, all the district hospitals are situated in urban areas, with better working and living conditions and more opportunities for professional development. In contrast, most of the peripheral health facilities that we selected for the study are situated in rural areas.

The selection of the study participants in each group was purposive, to ensure the inclusion of those with relevant knowledge and experience. The policy-makers/state level managers who had been in post for less than three months, along with the managers/supervisors serving for less than six months and the health workers who had served for less than one year were excluded from the study, because they may not be able to provide the detailed information required to answer the research questions. I have considered this exclusion criterion based on how frequently the positions of policy-makers/state level managers, managers/supervisors and health staff are changed. Policy-makers occupy their positions for a shorter time than managers/supervisors, whilst health staff remain in post for a longer duration. Based on this, I have considered different durations for different groups, in order to recruit the required number of study participants, as well as to ensure they had sufficient work experience to provide adequate information.

#### **4.8.1 Sampling for interviews with policy-makers/state level managers**

In the selection of policy-makers/state level managers, I tried to cover the majority of directorates within the DOHFW and the key people who are experienced and responsible for human resource management. We selected eight policy-makers/state level managers as Special Secretary, Joint Secretary, Director of Health Services, Director of Public Health, Team Leader (State Health System Resource Centre), Team Leader (State Human Resource Management Unit), Joint Director of Public Health and Joint Director of Non-Communicable Diseases. The document review revealed that the General Administration Department is the only other department that is dealing with human resource management for all employees in the public sector. However, it was found that the actual

policies and practices in the health sector are dealt with by the DOHFW, due to which I selected policy-makers only from the latter and not from the General Administration Department.

#### **4.8.2 Sampling for interviews with district level managers**

In selecting the district level managers, I tried to cover the key programme officers who are involved in supporting the office of the Chief District Medical Officer. I selected 11 such officers from the two study districts. These officers were two Chief District Medical Officers, two Assistant District Medical Officers (Public Health), one Assistant District Medical Officer (Family Welfare), two District TB Officers, one District Malaria Officer, one District Surveillance Medical Officer and two District Programme Managers. In total, I interviewed six district level managers from Jagtsinghpur and five from Koraput district.

#### **4.8.3 Sampling for interviews with facility level managers**

At facility level, I have selected all types of managers/supervisors working at CHCs and PHCs. I selected a total of 20 such managers/supervisors from the two study districts. These are the Medical Officer In-Charge, public health extension officers and block programme manager from each of the four CHCs selected. At PHC level, I selected three medical officers and five multi-purpose health supervisors.

#### **4.8.4 Sampling for interviews with health staff**

In addition to the minimum one-year of work experience as a criterion for health staff, I took into account all types of professional cadres working at the CHCs, PHCs and sub-centres, namely; doctors, staff nurses, pharmacists, laboratory technicians and multi-purpose health workers. In addition, whilst making the selection, I considered their type of service contract as regular, government contractual or contractual under the NHM, as well as seeking an appropriate number of both male and female staff amongst those available. I also considered their length of service, by selecting some who had less than 10 years of service and others with over 10 years, to record the changes in human

resource management over a period of time, particularly after the introduction of the NHM in 2005. I also ensured the appropriate representation of staff employed within the general health care system and the NHM, because there were significant changes made in managing human resources after the introduction of the NHM, particularly for staff recruited and paid by the latter.

Out of the 34 health staff selected, eight are doctors, all of whom are in regular service. Amongst the staff nurses, three were selected from regular service, one is government contractual and two are contractual under the NHM. In the case of laboratory technicians, there are two from regular service and two from government contractual service. Regarding the pharmacists, eight are in regular service and one is in government contractual service. From the MPHWFs, I selected three who are in regular service and two in contractual service under the NHM. Of the MPHWMs, I selected one who is in regular service and two who are in government contractual service.

Table 7 District and facility level managers and the health staff interviewed

District and facility level respondents	Jagatsinghpur		Koraput		Total
	Regular (F)	Contractual (F)	Regular (F)	Contractual (F)	
District level managers	5 (1)	1 (1)	4 (0)	1 (0)	11 (2)
Facility level managers/supervisors	8 (3)	2 (2)	8 (2)	2 (0)	20 (7)
Health staff					
Doctors	4 (0)	0	4 (0)	0	8 (0)
Staff nurses	1 (1)	1 (1)	2 (2)	1 (1)	5 (5)
Laboratory Technicians	2 (0)	0	0	2 (0)	4 (0)
Pharmacists	3 (0)	1 (1)	5 (0)	0	9 (1)
MPHWs	2 (2)	2 (1)	2 (1)	2 (1)	8 (5)
Total	25 (7)	7 (6)	25 (5)	8 (2)	65 (20)

F = female

In the total sample of 65 interviewees at district and facility level, there are 20 female respondents. The proportion of female doctors in the public sector in Odisha is lower than males. Similarly, there are fewer female pharmacists and laboratory technicians as compared to males. All staff nurses are female and there are more posts available for

female MPHWs than males. Despite my efforts to select preferentially female respondents wherever available, I was not able to recruit any female doctors. I recruited all available female district and facility level managers, along with one female pharmacist, who was the only female postholder available in the selected block. There were no available female laboratory technicians in the selected blocks. All staff nurses and MPHWFs recruited in this study are females. In the total sample, there are comparatively more female respondents, particularly contractual staff in Jagatsinghpur district than in Koraput. As there were no females amongst the doctors and laboratory technicians and only one among the pharmacists, the gender related issues surrounding these types of jobs might not be fully covered. Furthermore, these staff provide facility-based services and not the outreach; therefore, the gender related issues within facilities might not be sufficiently recorded in the study. In the case of managers, again there are more males than females and as such, the experience of managing a majority of male staff by a female manager might be different, which may not be sufficiently represented in the study.

#### **4.9 Data collection**

Data collection took place from January 2015 to April 2016. Document review was carried out from January-to-June 2015. Pilot interviews were conducted during June and July of that year after I received the ethical approval. The final in-depth interviews of study participants were carried out from September 2015 to April 2016.

##### **4.9.1 Document review**

The objective of the document review was to describe the intended practices related to: 1) posting and transfer; 2) in-service training; 3) supervision, and; 4) performance appraisal. For this purpose, we collected policy documents, guidelines, circulars, orders, training materials and other documents on the four HRM functions. In addition, I searched the websites of the Department of Health and Family Welfare, the Government of India, the Government of Odisha, the National Health Mission of India and Odisha, the State Human Resource Management Unit, the Directorate of Health Services, the

Directorate of Family Welfare, the Directorate of Public Health, the Directorate of SIHFW and the Odisha Public Health Service Commission. In addition to the documents from the DOHFW, I collected service rules and related government orders by the Department of General Administration.

I used a separate study tool in the form of a pre-designed template for data collection from these documents. This pre-designed template included the subject, content, issuing authority and date. As described in the Background section, there were major changes to HRM policies in the year 2000, towards changing paramedical staff from state to district cadre, which was followed by the introduction of the NHM in 2005. I collected the documents published between 2000-2015, along with any document referred to within these that was issued before the year 2000.

From the review of these documents, I collected the information on the plans for providing in-service training to health staff. What are the intended practices to supervise and review the work of health staff? Who is intended to carry out the performance appraisal of health staff and how should this be done? Finally, what are the mechanisms for the posting and transfer of health staff across health facilities and the districts?

I read and extracted the information from the documents and websites and compiled this in the pre-designed template. I then described the information as summaries of the intended practices for each HRM function.

#### **4.9.2 Interview of policy-makers/state level managers**

I interviewed all of the eight selected policy-makers/state level managers, accompanied by the research assistant to take notes. All interviews were voice recorded.

I arranged a convenient time for the face-to-face interviews, most of which lasted for two hours. The interviews were conducted either in their offices or at their homes, as requested by the participants.

During the interviews, I asked them about the intended practices relating to the four HRM functions selected for the study, their perspectives about their implementation and their views on the effect of these HRM practices on health workers. I referred to some of the policy documents wherever relevant and necessary. During interview, they also referred to some of the new policy documents that I had not collected, so that I could locate these afterwards. I used the topic guide to structure the interview but also included the follow-up and probing questions.

#### **4.9.3 Interview of district level managers**

I interviewed 11 district level managers, conducting all the interviews myself as they are senior level officers. The research assistant accompanied me and took notes.

Like the state level officers, I made appointments over the telephone or met personally with these managers and informed them that the interview would take around 60-90 minutes, so that they would be prepared to spend that amount of time. I began with the CDMO at an agreed date and time for the interview as per his convenience. I followed a similar process for all selected district level officers in both the districts. I interviewed them in their offices, at a time convenient for them so that it would be less likely to interfere with their work.

I asked these participants about the intended practices for the selected HRM functions for the study, their implementation, the factors that influence this implementation and their perspectives about the effect of HRM practices on health workers. Since I interviewed some of the district level officers after already interviewing certain health staff, I asked some additional questions relating to implementation at sub-district level and the views of facility level managers and health staff.

#### **4.9.4 Interview of facility level managers/supervisors**

I interviewed 20 facility level managers/supervisors posted at CHCs and PHCs, following a similar process as for the district level managers. I interviewed most of the facility level

managers, with a few conducted by the research assistant in my presence. I asked the facility level managers similar questions that were posed to the district level managers. However, the main difference was that in the case of facility level managers, I asked them questions related to the staff they supervise, based on the level of health facility that they manage. For instance, I asked the medical officer in-charge at the CHC about all the staff who are posted there, as well as within the PHCs and SCs, since he has the authority to supervise and appraise all such staff. To the medical officers at the PHCs, I asked about the pharmacists at the PHCs and the MPHWs at the sub-centres, as they supervise these staff only.

#### **4.9.5 Interviews of health staff**

Initially, I allowed sufficient time to develop a rapport with the staff to be interviewed. For example, on the first day of visiting the health facility, I and the research assistant made a round of visits to all health staff at their workplaces. We introduced ourselves and briefed them about the study, the interview process and the approximate timeframe required for this. At this first meeting, we made it clear that the purpose of the study is not to evaluate their performance, and that we would neither collect data about their service delivery outcomes nor check the records and reports that relate to them. Then we requested an appropriate date, time and place to conduct the interview. In most cases, appointments for interviews were made for the same day or within the following two days.

In total, we interviewed 34 health staff, 16 from Jagatsinghpur district and 18 from Koraput. The objective of the interview was to gain information about the experiences of the health staff on the implementation of HRM practices, and what they think about the effect of these practices on their work and their job. At the end, we asked them about their overall suggestions towards modifying the existing system of HRM and for any feedback to the officers at district or state level.

Although the topic guide was written in English, we offered flexibility to the staff interviewed to choose English, Odia or both languages for the interview, and they could

switch to Odia language if they wished to at any time during the interview. I conducted most of these interviews as I can speak and understand both languages. Some of the interviews, particularly for staff using different local dialects than are commonly spoken, were conducted by the research assistant in my presence. Accordingly, I was present for all the interviews of the health staff.

## **4.10 Data management and analysis**

### **4.10.1 Qualitative data from interviews**

#### *4.10.1.1 Data management*

All 73 interviews were voice recorded. On the same day, the voice files were shared with the external consultant for translation and transcription from Odia language into English. The consultant transcribed both the English and Odia audio files directly into English. After receiving the transcripts from the consultant, the research assistant cross-checked these by simultaneously reading them and listening to the voice recorded files, making any necessary corrections. After this first round of cross-checking, I once again repeated the same process of listening to the recordings and reading the transcripts. Separate folders were prepared for maintaining the transcripts that were checked and finalised by both myself and the research assistant. Thus, I simultaneously carried out data collection, transcription and the cross-checking of transcripts. The corrected transcripts were sent to the consultant to provide feedback and improve quality in the following of transcripts. This process was also helpful for me in data familiarisation.

#### *4.10.1.2 Data analysis*

I used the thematic framework approach to analyse the data. A thematic framework is used to classify and organise data according to key themes, concepts and emergent categories. It facilitates rigorous and transparent analysis (Ritchie et al., 2003). This approach is made more robust by combining deductive coding derived from research questions and philosophical framework and inductive coding in which themes emerge from the participant's discussion (Fereday and Muir-Cochrane, 2006). In any analytical

approach, the initial step involves deciding upon the themes under which the data will be labelled, sorted and compared (Ritchie and Lewis, 2003). A theme can be defined as follows: “themes are meaningful patterns in the data, which researchers use to interpret that data for an audience” (Morgan, 2018 p. 340). In order to decide the themes, it is essential to become familiar with the data. I therefore undertook the following steps for the data analysis, going back and forth through the data.

Step 1: I read the transcripts repeatedly for data familiarisation, identifying the themes to help with developing a coding framework.

Step 2: As suggested by Fereday and Muir-Chochrane, I used both deductive and inductive approaches in developing a thematic framework. For instance, based on the research objectives, I developed three main codes: intended practices, reported practices and effect on health workers; separately for all four HRM functions included in the study for deductive coding. In addition, emerging codes from the data were added and grouped, such as the changes following the introduction of the NHM, contextual factors and work environment as inductive coding. With inputs from the supervisors and after four revisions, I finalised the coding framework as shown in Appendix 3.

Step 3: After constructing such a coding framework, the next step is to apply this to the raw data, which some researchers refer to as ‘indexing’ (Ritchie and Lewis, 2003). Using NVIVO, with the coding framework developed in Step 2, I coded all 73 transcripts. Appendix 4 denotes the report generated for coding under the main theme of performance appraisal with a subtheme on reported practices. Using NVIVO software, I generated such reports for every theme and subtheme. However, such reports were large with huge qualitative data, making it difficult to undertake further analysis of generating descriptive and explanatory narratives. Therefore, it was essential to prepare charts to compare and contrast between themes and the characteristics of the respondents.

Step 4: After I completed the coding for all raw data using NVIVO, I prepared theme-based charts for each HRM function (Appendix 5). Then I shared and discussed these charts with the supervisors. Based on their inputs, I prepared summaries for all four HRM functions separately. The objectives of preparing charts and summaries were to examine the two districts and the types of respondents, in order to compare and contrast the responses.

Step 5: Using the data from summaries and simultaneously revisiting charts and transcripts, I then developed descriptive and explanatory narratives. For instance, I developed results for each of the four HRM functions studied. Each of these results sections has three main themes: intended practices, reported practices and effect on health workers. Under each of these main themes, there are different sub-themes for the four different HRM functions studied based on the explanatory themes. For example, for posting and transfer, the state cadre (doctors) and district cadre (paramedical staff) have different authorities, therefore the intended and reported practices are arranged based on these cadres. The implications of posting and transfer on health staff is very different for the staff working in KBK and non-KBK districts (geographical context), therefore the findings related to this are arranged according to the explanatory themes of such context. The results for in-service training and supervision have been arranged as per the logical systems and related explanatory themes taking into account systems approach and context. Performance appraisal is influenced by the nature of job contract that is regular or fixed yearly contract, therefore the results are arranged accordingly. These narratives were reviewed by the supervisors. Based on their feedback, I revisited the summaries, charts and transcripts where necessary, and revised the narratives and presented as empirical evidence in the results section from Chapter five to Chapter eight. Finally, I looked across all the HR function charts to identify overarching themes that show linkages between the functions and provide explanations of what is happening in each function. I shared and discussed these preliminary overarching themes with the supervisors to examine whether these themes are supported by evidence. The final

themes are presented in Chapter 9. Such an approach was useful to look and develop higher-level dimensions of organisational phenomena (Gioia et al., 2013).

## **4.11 Ethical considerations**

### **4.11.1 Ethical approval**

In March 2015, I submitted the study protocol, data collection tools, information sheet and consent forms to two research ethics committees at PHFI, India, and LSTM, UK separately. Based on these documents and taking into account my previous experience of conducting research, the Research Ethics Committee at PHFI, India (approval number TRC-IEC-260/15) and LSTM, UK (approval number 14.059) granted ethical approval for undertaking the research in the first week of June 2015 (Appendix 6). The Ethics Committee at LSTM gave ethical approval only after I was granted in-country approval from PHFI, India. After receiving ethical clearance from these two institutions, I took approval from the Department of Health and Family Welfare, Government of Odisha and consent from the Director of Health Services at state level and the Chief District Medical Officer at district level from Koraput and Jagatsinghpur to carry out the study.

### **4.11.2 Privacy and confidentiality**

I took measures to maintain privacy and confidentiality to safeguard the interests of the study participants. The main ethical issue was that some of the participants, especially health staff, might feel uncomfortable in giving their opinions on inefficiency or any possible malpractices concerning their superior officers. Accordingly, they may feel at risk of adversely affecting their careers by sharing their views. In addition, certain participants, because of the uniqueness of their positions, such as a policy-maker or head of district administration, may feel threatened if their identity is revealed.

In order to make the study participants feel more confident about privacy and confidentiality, on the day of the interview, I once again briefed them about the study and discussed and shared the information sheet and delivered informed consent. I described

to them the process of voice recording, transcription, data management and analysis, to enable them to fully understand how we maintain the confidentiality of the data.

We conducted the interviews of all the study participants at the places and times preferred by them. At district and state level, I interviewed managers in their offices and on some occasions in a separate room if their office did not have a separate space. At the CHCs, the staff preferred to be interviewed in the meeting-training hall, which was not in use during our visit. At the PHC, the interviews were conducted in a room where the records are kept which is separate and without interference from patients, who generally look for the room of the doctor or the pharmacist. At sub-centres, the interviews were conducted within the sub-centre buildings except in a few cases, when they were interviewed at their relevant PHCs. I conducted interviews before the daily routine work or in the evenings when the participants had finished for the day. Most of them preferred to be available for interview after their daily routine work had finished, generally after 2.00 PM following lunch. On a few occasions, I stopped the interview when sudden duties arose for the study participants, and in such cases, I took the remainder of the interview in the next sitting.

All interviews were labelled, with the names of the participants stored separately. All interviews were voice recorded and after these were transferred to the password-protected computer, the recordings were deleted from the recorder. In the results and discussion sections of this thesis, I have taken care that no personal identifiers are revealed. All paper data on which notes were taken and all consent forms remain with me and are stored in a locked cabinet. All interview transcripts are stored in my password-protected computer.

Apart from myself, only the research assistant and the supervisors at PHFI and LSTM had access to the data. The research assistant was trained on ethics, including on privacy and confidentiality. I have also signed the confidentiality agreement with the research assistant and the consultants who carried out the transcription, in order to maintain the confidentiality of the data.

#### **4.11.3 Recruitment and informed consent**

Based on predesigned inclusion and exclusion criteria, I recruited all the study participants, with no one else involved in this process. No state level officer was involved in the recruitment of district level managers, and no district level manager was involved in the recruitment of facility level managers. Likewise, no facility level manager was involved in the recruitment of health staff. The selection was made purposively to include diverse candidates within a group. We have taken informed written consent from all study participants. After the date and time for the interview was fixed, we first went through the consent process before asking any questions. I provided the participants with the information sheet and consent form (Appendix 2). As all the official communications are made in the English language, the information sheets and consent forms were also in English. I explained to the participants about the purpose of the study, the risks and benefits of participating in the study, the opportunity for withdrawal from the study, confidentiality, procedures, opportunities for questions and consent.

In addition to providing the printed information sheet and consent form to the study participants, I explained the content of these two documents orally in English or Odia language as preferred by them, and allowed them to ask questions. Finally, all the study participants signed the consent form to participate in the study. Both I and the research assistant had undertaken the e-learning courses on Introduction to Informed Consent and Good Clinical Practices offered by the Global Health Network before the research work commenced.

#### **4.12 Quality assurance**

I took the following steps to ensure quality in conducting the research and delivering the outcomes.

#### **4.12.1 Trustworthiness**

Lincoln and Guba (1985) coined the term trustworthiness in qualitative research. It has four major components as criteria to decide the quality of qualitative research (Lincoln and Guba, 1985). These criteria are credibility, transferability, dependability and confirmability. I have participated in three courses at LSTM UK to develop my technical understanding of this subject. These were: 1) Human Resource Planning and Management; 2) Organisation and Management, and; 3) Qualitative Research Methods. During the latter, in addition to developing specific skills in qualitative research techniques, I learnt to use NVIVO software for the management of qualitative data. Based on these learnings and my previous experience of undertaking qualitative research, I developed and pursued the following strategies to strengthen trustworthiness in our study.

##### *4.12.1.1 Process of data collection and data management*

All the study tools were piloted, and the necessary modifications were made before these were finalised. During the pilot, I assessed the time it took to conduct the interviews. After piloting, I removed repetitive questions, rephrased and combined some questions and also changed the sequencing of certain questioning.

After the pilot interviews, the voice recorded files were shared with the consultant with whom agreement was made for transcription. I cross-checked the transcribed files for quality purposes by simultaneously reading the transcripts and listening to the voice recorded files. There was around a 20% error margin in these transcriptions, which I shared with the consultant, the majority of which related to specific terms used in the health sector. Based on this, I provided a glossary of terms to the consultant for future transcriptions. Based on these efforts for quality assurance, the final agreement was made for the transcription of the final data collection.

I have conducted most of the interviews, with a few carried out by the research assistant during which time I was physically present. Although I am not native of Odisha, I can

speak and understand Odia language fluently, due to which I could give the option to all study participants to speak in Odia. This could enrich the quality of the data collected through the interviews, because the participants felt comfortable in speaking Odia. In addition, I gave flexibility to the interviewees to choose the place and time, and to conduct the interview in two parts if it was taking longer than expected. This was to allow sufficient time for the participants to express their views.

Both the research assistant and myself cross-checked the quality of translation and transcription by simultaneously reading the transcripts and listening to the voice recordings. I then gave feedback on the quality of the translation and transcription to the consultant doing this work, due to which quality improved for successive interviews.

In addition to the cross-checking of the transcripts by both of us, I shared the initial transcripts with the supervisors for their review and comments. During our regular meetings, the supervisors gave their inputs, especially on improving the questioning and probing. In addition, they identified the repetition of certain questions, and suggested altering the sequence to ask the simpler questions first, before follow-up and asking the more probing questions. Based on such inputs from the supervisors, I made some modifications to the interview tools.

During the phase of data management and analysis, I involved different perspectives with the help of my supervisors. For example, I shared the steps involved and the process of preparing the coding framework with my supervisors, and took their feedback to improve it further. We followed iterative process in data management and analysis so that at each step, I moved forth and back so that the quality of data management and analysis was improved.

#### *4.12.1.2 Credibility*

Baxter and Eyles (1997), based on a literature review, described credibility as the connection between experiences of the groups and the concepts the researcher recreates in a simplified manner. It is similarly referred to as the internal validity in

quantitative research. They observed three common strategies to strengthen credibility: selection process of respondents, interview practices and strategies for analysis.

Regarding the selection process of the respondents, I used purposive sampling to select doctors, staff nurses, laboratory technicians, pharmacists and MPHs for interview. This sampling method is particularly useful in ensuring that all sub-groups are given an opportunity to express their perspectives, so that comparisons can be made to compare and contrast interpretations across the groups (Baxter and Eyles, 1997).

In qualitative research literature, a triangulation technique is considered very effective in gaining credibility. In a literature review, Baxter and Eyles (1997), quoted that there are four major types of triangulation, which cover the use of multiple sources, methods, investigators and theories. In this study, I conducted the triangulation of information from multiple sources. In addition to having multiple groups of health staff, I interviewed managers and the supervisors of the staff at PHC, CHC and district level. Such an approach of obtaining information from multiple sources adds strength to gaining credibility.

Regarding interview practices, I spent a considerable amount of time in the field to develop a rapport with the study participants. I interacted with them spending some time at their workplaces and discussing aspects of their work. It was only then that I fixed the appointment for the interview. This helped me to develop a good rapport with the study participants.

I had another, unique advantage of being both an 'insider' and 'outsider' as far as the participants were concerned. Being native of another state of India, I was an outsider to them. However, being able to speak Odia fluently, they also considered me an 'insider,' and felt comfortable speaking to me in Odia language.

One of the strategies for analysis is peer debriefing. The research assistant not only accompanied me throughout the interviews but was also involved in the qualitative data analysis. He helped me in reviewing my approach to the data analysis so that there is no

misinterpretation or suppression of the facts. In addition, I had regular interaction with and feedback from my supervisors on qualitative data analysis.

#### *4.12.1.3 Transferability*

Transferability (termed generalisability in quantitative research) refers to the degree to which the findings of the study fit into the context outside the study. This is possible when the researchers provide a thick description of the context and research methods. In this study, I have described the context in detail, so that the reader can fully understand this and make a judgement regarding transferability. I have also described the study methods and all steps involved in the data analysis, so that our interpretations can be read in the given context and the readers, based on the details given by us, can make judgements.

#### *4.12.1.4 Dependability*

Dependability refers to the stability of research findings over time and space. To strengthen dependability, I used peer debriefing to reinforce credibility. As described in an earlier section, I shared and took feedback on data analysis from the research assistant and from my supervisors. In addition, I have collected data from different sources, i.e. health staff, managers and policy-makers, which serves to strengthen the dependability.

#### *4.12.1.5 Confirmability*

Confirmability refers to the degree to which the findings have emerged from the data of the respondents' interviews and not from the bias of the researcher's imagination. I have used data triangulation and reflexivity to strengthen the confirmability of the results. For example, I have interviewed health staff, managers and policy-makers to strengthen the capturing of reality, in the absence of my own imagination or bias. In addition, I have described the methods of data collection and analysis openly and in detail, avoiding any personal bias. During the field activities, myself and the research assistant would discuss the day's accomplishments, the content of the interview and the context of the

interviewee. In this process, I would link the perspectives of the interviewee to their context, rather than to my own judgement. Such a practice of reflexivity helped me to avoid any personal bias being reflected the study.

#### **4.12.2 Reflexivity**

As a researcher involved in data collection and analysis, I have three characteristics that may influence the research process. Firstly, being a male and a doctor by profession, I have more power within the Indian and the Odia society than the health workers, particularly the paramedical staff who are predominantly female, whom I interviewed. Secondly, I am working as Associate Professor at the Indian Institute of Public Health, Bhubaneswar, the organisation that provides technical support to the Department of Health and Family Welfare, Government of Odisha, which means that I often work closely with senior government officials at state level. Thirdly, since I originate from Maharashtra (another state of India) and am not an employee of the Government of Odisha, I am an outsider to the officials and staff of the latter. However, because I can speak local Odia language fluently, I might be perceived as an insider, particularly by the health staff.

Kuper et al., (2008), referred to reflexivity as the recognition of the influence that the researcher could bring to the research process. Therefore, it is important to reflect upon the researcher's characteristics such as gender, profession, ethnic background and social status, that could influence methods of data collection (Kuper et al., 2008). In the following section, I am explicitly stating my position, the possible effect on the research process and the steps taken to minimize the influence of my position as researcher upon the research process and the final outcome.

I myself, in the presence of the research assistant, conducted the majority of the interviews. Both of us being male, there might be some discomfort for the female participants, particularly with regard to mentioning the gender issues in their jobs. In addition, within the context of the male-dominated society in India, the women may not

have shared gender-related issues, particularly with unknown people. In order to avoid this possible discomfort, I spent sufficient time to develop rapport with them.

In the Indian context, any allopathic doctor such as myself has a higher informal power than the paramedical staff, possibly making them feel that I am evaluating their performance to report to higher authorities. Therefore, there were no questions asked related to medical knowledge so that the participants would not feel that I was checking their competencies.

As stated above, I am senior faculty at the local public health institute that provides technical support to the Government of Odisha. I am also a member of some of the state level committees related to the health system and human resources for health. However, I do not hold any position in the government health system, so there is no hierarchy in which I would hold more power than the study participants. However, there is the possibility that I would be perceived as a person of influence, particularly by the district level managers who are generally aware of the power relations at the state level. Against this background, there is the possibility that the district level officers might be cautious in giving their responses, especially to promote the image of their district administration. To avoid this from arising, I spent the first two days briefing the district level managers about the purpose and process of the research, which in no way was going to assess or rate the performance of the district. In addition, I informed them that I would be interviewing the managers and staff at facility level, to convey to them that I would be collecting and doing triangulation of qualitative information gathered from managers at district and sub-district level, and health staff at facility level.

There is another aspect of the researcher being an insider or outsider of the society of the study participants. Dwyer and Buckle (2009), analysed the advantages of a researcher being an insider and outsider. They concluded that the core factor is not being an insider or outsider, but the ability of the researcher to be open, authentic, honest, deeply interested in the experiences of the study participants and committed to accurately reflecting their experiences (Dwyer and Buckle, 2009). I neither belong to the

Odia community nor am I a manager in the Odisha public health system. However, I do speak Odia language fluently. During the interviews of the study participants, I realised that they consider me as both an insider as well as an outsider. I was an insider because I speak their language and an outsider because I do not belong to the Government health system. Being both, I had the advantage that the participants accepted me well and opened up to me. However, I observed some differences between the managers at district level and the staff at periphery. The former knew that I had good contacts with the state level officials, due to which they might not have been as open compared to the staff at periphery. However, considering me an outsider, both managers and staff expressed their emotions that someone had come to listen to them. I am very passionate to listen to the experiences of the study participants, which was reflected through the interviews. This might be the reason why most of the interviews lasted longer than the expected duration.

My position as a physician, as well as being staff of the Indian Institute of Public Health and my close relationship with the State Human Resource Management Unit, all have several implications for the analysis of the experiences and perspectives of the study participants. As described in the section 4.2 on the epistemological approach, I have chosen an interpretivist approach, which asserts that the researcher and the social world influence each other (Mauthner and Doucet, 2003). Therefore, I have tried to explore and understand the social world using both the participant's perspectives and my own interpretation of their perspectives. The data analysis is also influenced by whether the researcher is an 'insider' or 'outsider'. Being an 'insider' and researcher, there are chances that the perspectives of the researcher will dominate over those of the participants. In addition, there will be difficulties in separating out the perspectives of researchers from those of the participants (Dwyer and Buckle, 2009). To avoid such an effect of being an insider, I was conscious while interpreting the experiences and perspectives of the study participants. In addition, I have taken into account the perspectives of managers and those of the health staff and carried out triangulation of these, to minimise the impact of my own perspectives. Furthermore, the critical

feedback of my analysis by the supervisors was helpful for me in being reflective whilst interpreting the data.

Being 'outsider' and researcher, there are several advantages (Fay, 1996). Firstly, there is sufficient distance between the researcher and the participants, so that the researcher can better conceptualise the experiences of the participants. Secondly, usually the experiences and perspectives of the participants are complex, with a mix of thoughts, objectives and feelings, and the researcher being an outsider can see through these complexities. Thirdly, the researcher as an outsider can better interpret the connections and causal patterns of the experiences and perspectives of the participants (Fay, 1996). To take the advantage of being an outsider, I have used systems perspectives from literature to see through the complexities and link the connections between different groups of participants and the management.

The findings of this study are presented in the following five chapters: Chapter 5) Posting and Transfer, Chapter 6) In-service Training, Chapter 7) Supervision and, Chapter 8) Performance Appraisal. In addition, we have analysed the findings of all four HR functions (chapters 5 to 8) together, looking from systems perspectives and presented in Chapter 9.

## **Chapter 5: Posting and transfer**

### **5.1 Introduction**

As discussed in the chapter on Review of Literature, getting the right people at the right place at the right time is an important HRM function, of which posting and transfer are crucial components. It is also emphasised that the policymakers and managers have to ensure that the health staff are equitably distributed and kept motivated. The following sections describe the intended practices related to posting and transfer, their implementation as reported by the staff and managers and the effect on health staff in terms of their perception, attitude and behaviour.

I have compared the results separately with regard to the doctors and paramedical staff, because they belong to the state and district cadres respectively, with different rules relating to posting and transfer. There is further comparison between the study districts of Jagatsinghpur and Koraput, staff cadres, gender and whether the staff were native or non-native to the districts in which they were working. The major policy changes in relation to posting and transfer were made around the year 2000, therefore, I have captured the intended practices and their implementation before 2000 and the changes made thereafter until the time this study was undertaken. I have concluded this section with an analysis of whether and how the objectives of the intended practices were met, for which category of staff and in which district.

### **5.2 Intended practices of posting and transfer of doctors and paramedical staff**

This section describes the intended practices of posting and transfer drawn from the policy documents and validated through the interviews with policymakers and state level managers. Table 1 follows this, summarising the key findings about the intended practices on posting and transfer of both doctors and paramedical staff.

### **5.2.1 Intended practices of posting and transfer of doctors**

The posting and transfer of doctors is primarily governed by the rules and regulations for all state cadre public servants, by the General Administration Department (GAD) of the Government of Odisha. The main purpose was to balance the equitable distribution of doctors across the 30 districts within the state alongwith doctors' welfare (GAD, 1991). To meet this objective, there were three major intended government policies: 1) the compulsory posting of doctors in hard-to-reach areas, 2) the rotation of posting from such areas to their preferred places, and 3) incentives for attracting and retaining them in hard-to-reach areas. In adopting the first two policies of compulsory posting in hard-to-reach areas and the rotation of posting, there were three important policy statements issued about posting and transfer by the GAD in 1991. Firstly, no doctor should be allowed to remain in a particular district for more than six years. Secondly, they should 'ordinarily be transferred' after the completion of three years of service in a particular place of posting or 'station'(GAD, 1991 para 4). Thirdly, after completing six years of service within KBK districts, they may be posted in their 'home districts' where they were born (GAD, 1991 para 9). Thus, first posting in hard-to-reach areas with incentives for working in such places and fixed tenure of service can ensure equitable distribution, and the choice of posting after a certain number of years serving the difficult areas can address the welfare of doctors.

However, nine years after this policy was put into place, the Government of Odisha observed that its main objective of regulating posting and transfer to bring equity amongst the KBK and non-KBK regions was not being met. In 2000, the GAD issued a notification that upon recruitment, all doctors should be primarily posted in the KBK districts for a minimum of three years (GAD, 2000). After completing three years of service in the KBK districts, they should be allowed to request the location of their next posting as per their choice (GAD, 2001).

In 2014, the DOHFW constituted a committee for the effective implementation of policies on the posting and transfer of doctors (DOHFW, 2014b), which was comprised

of four senior officers at state level. The remit of this committee was to review the requests for transfers from the doctors and give appropriate suggestions, taking into account the rules prescribed by the GAD. This change was publicised through a letter from the DOHFW to all chief district medical officers, for submitting the requests for transfer by the doctors to the above committee (DOHFW, 2015b).

With regard to the third policy of providing incentives for attracting and retaining doctors in hard-to-reach areas, doctors were given INR 8,000 per month, worth 20% of their average salary of INR 40,000, for working in KBK districts. In 2015, the DOHFW revised the strategy for providing monetary and non-monetary incentives for attracting and retaining them in remote areas (DOHFW, 2015c). This revised strategy for providing incentives - also called 'place-based incentives' - stated that incentives should now be given according to the degree of vulnerability of the specific place of posting. Vulnerability was assessed based on parameters such as the difficulties in reaching the location, tribal dominance, political extremism, train communication, road and transport facilities, social infrastructure and distance from the state headquarters. The peripheral health institutions are grouped as Vulnerable 1 to Vulnerable 4, with an increasing degree of vulnerability. Therefore, the doctors working at such institutions should receive rising levels of incentives from Vulnerable 1 to Vulnerable 4: that is INR<sup>1</sup> 10,000 to INR 40,000 per month respectively, in addition to their average salary of INR 40,000 for a new entrant. The specialist doctors with postgraduate qualifications should get double the incentives of the MBBS graduates.

In addition to the monetary incentives for working in vulnerable areas, there is also the provision of an additional weight of marks in the entrance examinations for postgraduate courses for doctors working in these regions. Accordingly, doctors received an additional 10 marks per year of service, up to a maximum of 30%, which was added to their entrance examination scores for admission onto postgraduate specialist courses. As stated in the official circular by the DOHFW in 2016, this policy has now been revised

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<sup>1</sup> 1 GBP = 84 INR as per the rates on May 2017.

according to vulnerability (DOHFW, 2016). Instead of giving an additional 10% score for each year of service in remote areas up to a maximum of 30%, the additional marks should now increase according to the degree of vulnerability, that is 2.5% per year for the health facilities grouped as Vulnerable 1 to 10% for Vulnerable 4.

### **5.3 Intended practices of posting and transfer of paramedical staff**

The intended practices for the posting and transfer of paramedical staff are primarily governed by the DOHFW following the general principles provided by the GAD. The major changes in intended practices were made around 2000, when the paramedical staff were changed from state to district cadre. The key difference compared to doctors is that the authority for the posting and transfer of paramedical staff within the district lies with the CDMO, however this is at state level in relation to inter-district transfers.

#### **5.3.1 First posting**

The first posting of paramedical staff depends on the recruitment process used. For example, before the year 2000, all paramedical staff were recruited at state level as state cadre and as such, their first posting could have been given in any of the 30 districts of Odisha. Following the year 2000, they should be recruited by a district and posted within that district with their initial posting authorised by the chief district medical officer. This is similar to the process for NHM contractual staff, who should be recruited and posted within the same district.

#### **5.3.2 Subsequent transfer**

Staff should be given a one-time option to be transferred to their home district, based on their length of service and the vacancies available within their preferred district (DOHFW, 2000).

In 2013, the DOHFW, quoting the rules of the GAD regarding the inter-district transfer of paramedical staff, sent instructions to all chief district medical officers with the following guidelines (DOHFW, 2013):

1. the staff requesting such a transfer from one district to another must have at least three years of service in the district in which he/she was appointed,
2. there should be a vacancy of the same type and the same category of reservation in the district to which the transfer is sought,
3. the staff would lose the seniority of past service after such a transfer.

The NHM contractual staff, once posted at a health facility, should not be given any choice of subsequent transfer.

Unlike doctors, there is no policy or provision of additional monetary or non-monetary incentives for attracting and retaining the paramedical staff in hard-to-reach areas.

#### **5.4 Reported practices of posting and transfer of doctors and paramedical staff**

In this section, the implementation of the intended practices are described as reported by the health staff and the managers. The findings are arranged against each of the intended practices separately for the doctors and the paramedical staff, as the intended practices are different in each instance. Table 2 summarises the key findings about the implementation of intended practices as reported by the health staff and managers.

##### **5.4.1 First posting after recruitment of doctors and paramedical staff**

With regard to the intended practice of the compulsory first posting of doctors in hard-to-reach KBK districts, one of the eight doctors interviewed was recruited through Odisha Public Service Commission (OPSC) in 2012 and reported that all those selected through OPSC were posted in KBK districts without having any choice.

*After selection through Odisha public service commission, we around 376 doctors were selected. All were posted in KBK districts. (R55, doctor, non-native, Koraput)*

The majority of paramedical staff interviewed who were recruited after the year 2000 reported that they had applied for two-to-three districts, were selected in one of these and were then posted within that district.

*Now, it is district cadre. I was given posting here first. I am staying here and I am working. (R27, MPHWM, native, Jagatsinghpur)*

#### **5.4.2 Choice-based first posting after recruitment of doctors and paramedical staff**

A few doctors reported that in 2015, after the selection of doctors on an ad-hoc basis, the DOHFW gave them the option to select the place of posting from the vacant posts. They also said that many doctors joined the government service because of this change in policy.

*Now the Government of Odisha has taken a good step. The posting is now given through counselling [choice-based posting]. Different choices for different places are given. Accordingly, they [doctors] are choosing. That is why many people are joining. The counselling process has become more effective. There was no counselling during our posting. It has just started in 2015. (R55, doctor, non-native, Koraput)*

The majority of paramedical staff interviewed who were recruited before the year 2000 reported that when their cadre was changed from state to district, they were given the option of choosing their native district. The majority of staff interviewed in Jagatsinghpur reported that they came to their native district during this transition from state to district cadre. However, some of the staff interviewed in Koraput district reported that they could not go to their native district because at the time of this transition, their period of service was less than three years, so they did not meet the eligibility criteria.

*As per state cadre, they posted me in Nabrangpur district. Then district cadre posting was being given, according to that you will be posted in*

*your own district. There I applied and was posted in Jagatsinghpur in 2005. (R23, pharmacist, native, Jagatsinghpur)*

*It was state cadre. After one year of my joining it changed into district cadre therefore, I could not get out of here. (R57, pharmacist, non-native, Koraput)*

#### **5.4.3 Temporary transfer and posting (deputation) of doctors and paramedical staff**

Although the CDMOs do not have the power to transfer the doctors, even within their district since they belong to the state cadre, some doctors interviewed reported that the CDMO has deputed them from PHC to district hospital and CHC, because of the shortage of doctors within these settings. In one example, the specialist doctor interviewed reported that he is deputed from PHC to district hospital to provide specialist services. The other doctor is deputed from PHC to CHC to provide the services because there was no doctor posted there.

*Two days [a week] I am deputed from PHC to district headquarter hospital because I have done post-graduation in medicine. I have not been declared as specialist but whenever I go to Jagatsinghpur district hospital, I work there as specialist. (R26, doctor, native, Jagatsinghpur)*

*I was appointed as medical officer at PHC and I am deputed to this CHC due to shortage of doctors. There is only one doctor in CHC. (R55, doctor, non-native, Koraput)*

Similar to the doctors, although to a lesser degree, some of the paramedical staff reported that they were placed on deputation through the CDMO. Some female staff said that they moved from one urban area to a rural setting within the same district to take care of their young children, as there was accommodation facility available in rural area within the health facility campus, which was not available in urban area.

*My posting is actually at Jagatsinghpur district headquarter hospital. Here there was no staff nurse. So I am here on deputation by the CDMO. My baby is small and I have a quarter here to stay. (R8, staff nurse, native, Jagatsinghpur)*

#### **5.4.4 Process of transfers and the posting of doctors**

Most doctors reported that they are posted and transferred by the state level authorities. Some of the junior doctors reported that those wishing to transfer had to make the application and meet the Health Secretary on the day of grievance management at the Department of Health and Family Welfare, Bhubaneswar. They were not sure about the implementation of the recent policy on choice-based transfers after six years of service in KBK districts.

*I don't know about process. But you have to go to grievance cell. You have to talk to secretary about your problem. If he agrees then transfer will be made. Government is making a plan that after six-seven years they will give transfer option to two to three places. I don't have idea whether actually it is working or not working. (R55, doctor, non-native, Koraput)*

Some of the senior doctors interviewed were aware of the recent policy in 2015 of choice-based posting and transfer, requiring them to submit an application to the DOHFW through the CDMO. However, the majority were doubtful about how the CDMO would be able to allow the doctors from his/her district to be transferred somewhere else, within the context of staff shortages within the district.

*Now days for transfer, Health Secretary is not directly meeting the candidates. They have maintained a procedure. A pro forma is given to our CDMO. That pro forma will be filled up by candidate and provided to the CDMO. It is not possible that CDMO will allow it to go the Secretary. In this district, out of 150 posts, almost 70-80 are vacant.*

*How will CDMO allow this candidate to go to other district? (R21, specialist doctor, native, Jagatsinghpur)*

#### **5.4.5 Transfer and posting of doctors based on rotation**

Regarding the implementation of transfer and posting on rotation after six years of service in KBK and 10 years of service in non-KBK districts, some doctors reported that certain specialists left the KBK districts and moved to Bhubaneswar. One of the doctors specifically wanted to transfer under this policy from a KBK district to Bhubaneswar for the education of his children. However, he was transferred to another non-KBK district and not Bhubaneswar, which according to him did not meet his objective of getting the transfer.

*Actually, last year the government told that you can apply if you are having more than five years' or 10 years' service in KBK, I had applied. I requested for the Bhubaneswar and nearby places. But they put me in Jagatsinghpur. They had told us to give four options, so I gave Bhubaneswar, Khurdha, Cuttack, and Jagatsinghpur. They transferred me to Jagatsinghpur. I don't know how they have selected. They have not considered my 1st, 2nd, or 3<sup>rd</sup> but considered the 4th option. Out of approximately 15 specialists four specialists went. All except me are transferred to capital hospital, Bhubaneswar. (R66, specialist doctor, non-native, Koraput)*

#### **5.4.6 Process of transfer and posting of paramedical staff**

The majority of the paramedical staff from Koraput district reported that despite their efforts, they are not obtaining inter-district transfers. They said that although they have submitted applications for transfer, they are neither successful nor do they receive any information regarding action taken by the management. However, some of them reported that there were instances when transfers had taken place, although they were unaware of the process that was followed. All the NHM contractual staff reported that

there are no transfers carried out under the NHM, and that an individual will remain at their place of posting.

*Getting transfer from one district to another is not possible, but if Government changes it to state cadre then transfers can happen. As long as it is district cadre, getting transfers is not easy. Now it's 2015, my file has been lying in office since 2013, but till now transfer is not being given. (R57, pharmacist, non-native, Koraput)*

*Some from Nabarangpur, Koraput have gone to coastal area. Last year colleagues of my wife got transferred. Three of them have gone. Last year one of my colleagues has also gone. They have gone on their own efforts. I have not asked. If CDMO and Director want the transfer can be made. (R46, pharmacist, non-native, Koraput)*

*There is no transfer. In NHM wherever anyone is posted, she stays there. (R8, staff nurse, native, Jagatsinghpur)*

#### **5.4.7 Role of managers in the implementation of practices in posting and transfer**

Both state and district level managers who are responsible for posting and transfer reported that although there are no formal guidelines in place for posting paramedical staff to their native regions, they do try to post staff nearer to their home towns. The reason they quoted was that most of the recently-recruited paramedical staff are on fixed yearly contracts and receive a lower salary, so it may not be possible for them to meet the expenses of being posted away from their homes.

*It is not formal. It is not mandatory. But we give the intimation that the paramedical staff should be posted nearer to their home. As they are contractual staff and they are getting less remuneration, it will not be feasible for them to go to distant place and stay there with a rented*

*house. Preferably, we post them in their community and near to their home. (R4, state level manager)*

*No, there is no criterion, we have devised a very clean method of posting where nobody will complain that there is partiality in posting. For doctors we give by choice and for paramedics we decided to give them in their native blocks. (R4, district level manager, Jagatsinghpur)*

The district level manager in Jagatsinghpur reported that they post the staff where more vacancies exist and where there is a greater workload. For example, they post more staff nurses to those places that are designated for conducting normal deliveries.

*We are giving first priority to heavy [in terms of workload] stations and where there is more vacancy and if more is available then post to other stations. (R4, district level manager, Jagatsinghpur)*

In contrast to Jagatsinghpur district, the district level manager of Koraput district reported facing constraints in posting and transfer because of the peculiar local context. He reported that most of their staff are actually native to the area near Koraput town and are reluctant to go to the remote areas of the district. He wanted to implement a scheme of posting on a rotational basis between remote regions and the areas near Koraput town but could not do so because of political pressure.

*There are very few educated girls from remote areas like Narayan-Patana and Bandhugaon. There are very few ANMs from these areas, almost nil. Most of the ANMs are from Jaypur and Sunabeda which are near to district headquarter. Their educational status is better so they are entering into the service but they are not willing to go to Narayan-Patana, and Bandhugaon. They [native staff around Koraput town] are pressurising the CDMO through political pressure. Why will I enter into this sort of problem? These political people come and shout and do this sort of things. I will not enter into that problem. That is why actually*

*most of the ANMs are coming to work nearest to their houses through political pressure and they are staying at their home actually. (R38, district level manager, Koraput)*

#### **5.4.8 Use of political pressure and bribing by health staff in posting and transfer**

Whilst most of the staff stated that there are no transfers effected from the management side, the majority also reported there are transfers instigated by the staff themselves, using unofficial channels such as paying bribes and applying political pressure. Most of them reported that the clerks handling the files regarding transfer are the main channels of corruption. The majority of female staff were not willing to pay bribes because they said that it is not worth spending large amounts for a transfer.

*The government has declared that after five years everybody has to get transferred. But from the day I am doing job, I have not seen it is being implemented. People are getting transferred on their own interest. Some get transferred by giving money, some by giving representation, I have not seen there is any transfer done by government on its own. (R7, LT, native, Jagatsinghpur)*

*There is no transfer procedure. One can go using the channel. If three people will try, then one may get. Now this is not done. We also think why to spend lot of money. We have to spend lakhs [100,000] of rupees for transfer. (R44, staff nurse, non-native, Koraput)*

*If one has known people or political influence, he gets transferred easily. Everywhere, the main person for transfer and posting is clerk. All corruption is at clerical level. They are the ones who are exploiting everybody. (R7, LT, native, Jagatsinghpur)*

There were some instances reported by the health staff in which the local community had played a role in posting and transfer. In some cases, the local public put pressure on

the administration to cancel a transfer. In another case, an individual used community pressure to remove another staff member so that he could move into that post.

*My transfer happened once. Local people here came to know that I have been transferred. They said 'no, he should stay here, he is serving us, he is well placed, we are also benefitted'. Everybody requested CDMO and get cancelled my transfer. (R15, pharmacist, native, Jagatsinghpur)*

*That pharmacist took writings from public and submitted in the district office. He gave petition from public side. Public wrote against me and that made easy for CDMO to transfer me. (R22, pharmacist, native, Jagatsinghpur)*

The district level managers from both the districts reported that they try to avoid accepting requests for transfers and posting as much as possible, because such requests come through political pressure.

*If somebody has genuine problem I am responding otherwise I avoid [transferring staff]. (R4, district level manager, Jagatsinghpur)*

*Now days the transfer is a very difficult job because there is political interference. If we enter into that transfer business we will not be able to work properly. Better we should not do that. (R38, district level manager, Koraput)*

#### **5.4.9 Incentives for attraction and retention of doctors in remote areas**

With regard to the intended practices of providing monetary and non-monetary incentives to doctors, the majority of the doctors interviewed knew about the recently-introduced place-based incentives, and some of them had been in receipt for an initial four months (June to September 2015), from the declaration of this policy. They received

this amount in a single payment for the four-month-period, deposited into their bank accounts.

*This [place-based incentives] was enforced from June. June, July, August and till September, I have got. Our PHC is Vulnerable 2, I got 20,000 rupees per month, one time for four months that was deposited in my bank account. After that till now I have not received. They said that fund allotment is not there. (R35, doctor, non-native, Koraput)*

## **5.5 Effect of posting and transfer on doctors and paramedical staff**

This section describes the effect of posting and transfer practices on health staff in terms of their perception, attitude and behaviour. The effect on health staff is described separately for doctors and paramedical staff. The section also looks at how these effects are different for natives and non-natives working in both districts of Jagatsinghpur and Koraput. Table 3 summarises the key findings about the effect of posting and transfer practices on doctors and paramedical staff.

### **5.5.1 Effect of posting and transfer practices on the perceptions of these practices by doctors and paramedical staff**

Most of the doctors interviewed from both districts said that the process is unfair, unclear and non-transparent. They reported that there are no clear-cut criteria for posting and transfer, and that those who have power and backing get the choice of posting.

*It [posting and transfer] is totally unfair and totally unclear. (R26, doctor, Jagatsinghpur)*

*There are no criteria. Those who have no power they will come to this place. Those who have no backing force they used to join here. (R41, specialist doctor, non-native, Koraput)*

The majority of paramedical staff interviewed in both the districts were disappointed with posting and transfer and opined that the system is neither fair nor equitable. They said that staff who pay bribes or have political support can obtain transfers more easily and are posted within their areas of preference. In such circumstances, the staff who do not pay bribes or who have no political connections are transferred to areas that are not desired by anyone else.

*If they want, they can do politically through MLA [member of legislative assembly]. I will not ever know but I will be transferred suddenly. These days these things are done. It is really shocking to us. We are not doing any corruption but we are suffering because of corruption. (R7, LT, native, Jagatsinghpur)*

*My point is that those who have contacts in higher office they are getting good places but those who do not have backing, they don't get in good places. (R47, staff nurse, non-native, Koraput)*

### **5.5.2 Effect of incentives for attraction and retention of doctors in remote areas**

The doctors interviewed were not found to be very satisfied with place-based incentives as some of them said that the amount is still not very lucrative, because the doctors posted in non-vulnerable areas could still earn more through private practice. Some of the senior doctors also said that this would create problems because the medical officer in-charge at the CHC who is superior would receive fewer incentives than the junior doctors. This is because the majority of the CHCs fall within the Vulnerable 2 category, and the PHCs under them where junior doctors are posted are classed as Vulnerable 4.

*Actually these place-based incentives have been implemented six-seven months back. Earlier we were getting eight thousand rupees per month for KBK district. Our counterpart those who are in coastal side they get around 30,000-40,000 rupees monthly in private practice. But here we don't have that opportunity. Tribal people are here. We cannot*

*do private clinic. We cannot earn more money. I don't think this will be more effective. That amount of money one can draw by doing private clinic is more than these incentives. (R55, doctor, non-native, Koraput)*

*For example, I am medical officer in-charge. I am staying in XYZ CHC. It is Vulnerable 2. There are three PHCs. Two are Vulnerable 4. There the doctors who will join recently will get more than 100,000 rupees per month including incentives. It gives negative feeling to medical officer in-charge and other senior doctors. You see a doctor who is most junior will get more than 100,000 rupees per month. A most senior doctor who is working as an administrator or everything, shouldering all the responsibility will get 60,000 rupees per month. This problem is there. (R41, specialist doctor, non-native, Koraput)*

Amongst the doctors interviewed, most of the junior doctors said that the non-monetary incentives in the form of additional marks for postgraduate entrance examinations that are awarded for working in KBK districts are more effective in attracting doctors to these areas than the monetary incentives.

*For working in KBK districts, there are additional marks for PG entrance. Total three years of service in any place. Contractual or regular or ad-hoc, you must serve for three years. Out of these three years it is 10% for one year, 20% for two years and 30% for three years. It has major effect. Doctors are coming to KBK for getting PG seat only. (R55, doctor, non-native, Koraput)*

### **5.5.3 Effect of posting and transfer practices on the attitude and behaviour of doctors**

The majority of the doctors interviewed in both districts wished to transfer from their present places of posting. However, the reasons quoted for obtaining a transfer were different between Jagatsinghpur and Koraput districts. Most doctors interviewed in

Jagatsinghpur district wanted to be transferred to a higher level of health institution such as the district hospital or medical college. The main reasons given for this were to have the opportunity to utilise their skills, learn new skills and engage in private practice.

*I want to shift to any district head quarter. So that there will be anaesthesia facility. There I can do my surgery practice in private set up. I can go and improve my skills. I am thinking how I can transfer from this area. (R21, specialist doctor, native, Jagatsinghpur)*

In contrast, the major reason for seeking transfer as quoted by the doctors interviewed in Koraput district were about the educational opportunities for their children in and around the state capital, Bhubaneswar.

*I wanted Bhubaneswar (state capital) for the education for my children. I want to go for two to three years. Then I am interested to come back also, that thing government is not listening. I have served more than 18 years in the remote places. (R66, specialist doctor, non-native, Koraput)*

Most doctors reported that there were instances during their time of service when the transfer was initiated from the management side. They said that with such a transfer, it was not always their preferred place of posting to which they were sent. In such circumstances, a common approach used by them was to remain on leave for some time, obtain a posting elsewhere and then finally return to their preferred place of posting.

*At that time, I was transferred again to the Kandhamal district due to some political issue. I was transferred through our local politician. But I had not gone there. I stayed on leave for three-and-half months. Then I modified it [transfer order]. Then I went back to a PHC in this district. I was there for four months. After that they declared the specialist list. I was transferred to this CHC and posted as specialist. (R21, specialist doctor, native, Jagatsinghpur)*

*There was some problem. I was transferred to my native place, Mayurbhanj. I wanted to remain in this area. Hence get posted to CHC, XYZ. I denied and reposted. That is my native place but mentally I have fixed myself to serve in this area. (R41, specialist doctor, non-native, Koraput)*

#### **5.5.4 Effect of posting and transfer practices on the attitude and behaviour of native paramedical staff working in Jagatsinghpur**

The majority of the health staff on regular contracts (particularly females), in Jagatsinghpur district did not want to transfer from their current place of posting. As reported by them, their reasons for wishing to continue at their current place of work were: that their native home is close to the health facility where they are working; that their children have good educational facilities available nearby; that they can take care of their parents who are staying nearby; that they have quarters in which to stay and a safe working environment, since they are well-adjusted with the local people. Similar to the staff on regular contracts, the majority of contractual staff wanted to continue at their present place of posting because most of them are close to their native homes and would consider a transfer if their service was regularised.

*My village is near to this place. There is facility for my children's education. That is why I have chosen this sub-centre. My father and mother-in-law's house is just 18 kilometres away from this place. That is why we are here. And my children will get better education here. I came on transfer for my problems. I will not go anywhere because children are studying here. (R24, MPHWF, native, Jagatsinghpur)*

*I am not trying for transfer now. Now without public contact you cannot do work. I have stayed here for years. All village people all are now known to me. One will take two-to-three years to get acquainted*

*with the people. That is why I don't want to go. (R25, MPHWF, native, Jagatsinghpur)*

*I have not thought of taking transfer. If I will be regularised, then I will try. (R29, MPHWF, native, Jagatsinghpur)*

Some staff, particularly male, who are posted at the CHC far from Jagatsinghpur district headquarters, wish to be transferred to preferred locations within the district. For example, some of them said that they wish to move to a town with better educational facilities for their children. A few said that they wished to move somewhere that is more accessible and closer to district headquarters.

*I want to go to township. My girl children are studying and living in hostel. I want to stay in CHC, Paradeep as there are good schools in Paradeep. The tutorial facilities are also available there. (R22, pharmacist, native, Jagatsinghpur)*

*From Jagatsinghpur it is about 80 kilometres up and down. It is other side of river. I want to come to this side of the river. It is because of the distance place. We don't get house allowance. That is why I wanted to come this side. (R27, MPHWM, contractual, native, Jagatsinghpur)*

#### **5.5.5 Effect of posting and transfer practices on the attitude and behaviour of non-native paramedical staff working in Koraput**

In contrast to the health staff in Jagatsinghpur district, the majority of whom did not wish to transfer, most of the health staff interviewed within Koraput district did want to be transferred to their native districts or to urban areas. The reasons as reported by them are similar to those given by the staff from Jagatsinghpur for staying at their current place of posting. These include better education facilities for their children, taking care of their parents and staying at their native homes. Most of them have already made an application for transfer.

*My child is small. My father is 69 years old. I am the only girl child to my parent. Nobody is there to support them except me. If I get transferred to Cuttack, Bhubaneswar I can take care of them. We want to go to our nearby place of our native. I have given the representation. My file is still on the table. (R47, staff nurse, non-native, Koraput)*

*Now I am interested to go to my parents in coastal area. Because nobody is there with my parents. I have already served 15 years in KBK. It will be better if I will be with them for another 10-15 years. I gave application many times but it was rejected as there is no-one to come here on mutual basis. I will take another chance. (R46, pharmacist, non-native, Koraput)*

Most of the staff seeking transfer have put in efforts to this end, however some of them, particularly female staff, have not. As reported by them, the reasons for this were that they believe they would have to pay a bribe for the transfer, and they do not wish to spend the money. Some do not want to lose their seniority after a transfer on request. The contractual staff who are not natives of Koraput said that they cannot be transferred because they are in service on a contractual basis, however, they also said they will resign from their current roles whenever there is the opportunity for new recruitment within their native districts.

*Other staff nurses are trying for transfer. One is there in SNCU. She is telling that she is trying for transfer. It has been one year now. This has not been done yet. Money has to be spent. One has to go to Bhubaneswar and follow up. I want transfer but I will have to spend lots of money for that. I don't want to spend money. (R44, staff nurse, non-native, Koraput)*

*CDMO said me to get transfer on mutual basis. But nobody will be willing to come to Koraput on mutual basis. Further, CDMO told that*

*after transfer I will lose my seniority. If after working for many years if I will lose my seniority, then what is the benefit of going? So I did not go. I did not take any interest. This rule of government of losing the seniority after transfer should be removed. (R47, staff nurse, non-native, Koraput)*

*As I am not regular I cannot be transferred. If there is an advertisement in my own district, then I have to give resignation and apply there. I will give resignation here and I will apply that side. (R33, LT, non-native, Koraput)*

#### **5.5.6 Effect of posting and transfer practices on the attitude and behaviour of native paramedical staff working within Koraput district**

Similar to some of the native staff of Jagatsinghpur district posted at CHCs situated far away from district headquarters, the native staff working in Koraput district who are posted in faraway locations wish to be transferred closer to urban areas, where there will be better educational opportunities for their children.

*My opinion is that those who are working in towns should be asked to work in rural areas. Why will they be privileged to work always in town areas? So what if this is our native place? We also want to stay in town for our children's education. Since I am here in this place I have sent my children to Visakhapatnam [town place in the neighbouring state] for education. But if I would have been in Koraput, would have I sent my children outside? (R52, pharmacist, native, Koraput)*

## 5.6 Summary of findings on posting and transfer of doctors and paramedical staff

Table 8 Key findings about intended practices of posting and transfer for doctors and paramedical staff

Intended practices	Doctors	Paramedical staff
Posting and transfer rules until 2000	Not allowed to stay at one station for more than six years and should be transferred every three years	Being state cadre staff, they were recruited at state level and the first posting should be given to any of the 30 districts of Odisha.
Changes in posting and transfer rules in 2000	First compulsory posting in KBK district for three years and then choice based transfer to preferred place	One time chance to be transferred to their home district. After recruited as district cadre staff, first posting within the same district with the CDMO being the authority for posting and transfer within the district.
Change in subsequent posting and transfer rules in 2013-15	Options for transfer and posting who have completed 10 years of service in non-KBK districts and six years in KBK districts. The selection committee at state level should take the decision on transfer.	Staff requesting inter-district transfer must have at least three years of service in the district in which he/she was appointed; there should be a vacancy of the same type and the same category of reservation in the destination district and the staff <del>would</del> lose the seniority of past service after such a transfer.
Incentives to doctors for attraction and retention in remote areas	Monetary and non-monetary incentives for posted at identified remote places based on the degree of vulnerability.	There are no incentives for the paramedical staff.

Table 9 Key findings about reported practices of posting and transfer for doctors and paramedical staff

<b>Reported practices</b>	<b>Doctors</b>	<b>Paramedical staff</b>
First posting after recruitment	All the doctors were first posted in KBK districts	After 2000, all are posting within the same district in which they were recruited
Choice-based first posting	In 2015, after the selection, the DOHFW gave doctors the option to select the place of posting from the vacant posts.	During the transition from state to district cadre staff were given the option of choosing their native district.
Temporary transfer and posting by CDMO	The CDMOs transferred them temporarily within the district as they do not have powers for permanent transfer	To a lesser degree than doctors, the CDMOs transferred staff temporarily from one area to another within the same district.
Subsequent inter-district transfers driven by management	Inter-district transfer by the management is very infrequent.	After 2000, inter-district transfer by the management is very rare.
Subsequent inter-district transfers driven by staff	Given the choice of posting after six years of service, some of the specialist doctors from KBK districts were transferred to non-KBK districts.	During transition from state to district cadre, most of the non-natives from Koraput transferred to non-KBK districts, whereas the majority in Jagatsinghpur district, already being native, remained there.
Role of managers in implementation of practices	The state level committee formed to take up this responsibility	Jagatsinghpur district having plain land did not face difficulties in transfer; in contrast, Koraput district faced constraints in transferring staff in difficult areas. District authorities avoid making transfers, even if the management requires them to do because transfer requests come through political pressure

<b>Reported practices</b>	<b>Doctors</b>	<b>Paramedical staff</b>
Processes of implementation of practices	None of the CDMOs submit the request for transfers by the doctors to the state level committee to avoid losing them.	The staff from Koraput district reported that despite their efforts, they are not obtaining inter-district transfers. The choice-based inter-district transfer did not work because staff are not available for mutual transfer, or do not wish to forgo their seniority.
Use of political pressure or bribery for transfers	There are reports that political pressure is effective in getting transfer to a desired area.	Some staff got transferred by using unofficial channels, such as paying bribes and/or applying political pressure. The majority of female staff were not willing to pay bribes because they said that it is not worth spending large amounts for a transfer.
Incentives for posting in remote areas	Doctors knew about the recently-introduced place-based incentives, and some of them had been in receipt for an initial four months.	As per the policy, there are no incentives provided for the paramedical staff posted in remote areas.

Table 10 Key findings about the effect of posting and transfer on doctors and paramedical staff

<b>Effect on health staff</b>	<b>Doctors</b>	<b>Paramedical staff</b>
Perception of health staff about posting and transfer practices	Perceived to be unfair, unclear and non-transparent, which can be exploited by some people through corruption.	Perceived to be unfair, unclear and non-transparent, which can be exploited by some people through corruption.
Effect of incentives on attraction and retention of doctors in remote areas	Non-monetary incentives, in the form of additional marks for postgraduate entrance examinations more effective than the monetary incentives.	Not relevant.
Effect on attitude and behaviour	Most doctors in Jagatsinghpur district wanted to get transferred	The majority of staff in Jagatsinghpur district did not want to transfer from their current place of posting, due to

Effect on health staff	Doctors	Paramedical staff
	<p>for professional development and to engage in private practice. In contrast, the doctors in Koraput district wanted to transfer for better opportunities for the education of their children in and around the state capital, Bhubaneswar. Upon a transfer remained on leave for some time, obtain a posting somewhere else and then finally return to their preferred place of posting.</p>	<p>having good educational facilities for their children, taking care of their parents and staying at their native homes. In contrast, most of the health staff from Koraput district did want to be transferred to their native districts or to urban areas, for the same reasons (to have better educational options for their children, to take care of their parents and to stay at their native homes).</p>

## 5.7 Conclusion on posting and transfer

The elements of the intended practices are interdependent in the sense that when the doctors are posted mandatorily in remote areas, they should get both monetary and non-monetary incentives as part of the package. In addition, when they complete the stipulated period of service in these areas, they should have the opportunity to be transferred back to their preferred region, as per the intended practice of rotation of posting. The system of intended practices provides choices to doctors about posting and transfer between identified remote places and all other remaining areas. However, it does not guarantee posting and transfer to preferred locations within and between the districts. Thus, the system of intended practices is designed mainly to achieve the equitable distribution of doctors, rather than to look after their welfare. The system also appears to be a mix of control (compulsory first posting in remote areas) and incentive mechanisms (the other three intended practices) to control and manage the attitude and behaviour of doctors to achieve the objectives.

Managers and staff reported that three of the intended practices: compulsory posting, monetary incentives according to the degree of remoteness and non-monetary incentives, were implemented. These are relatively easy to implement, because once the doctors are posted, it is in the control of the system to implement the other two elements of intended practices of providing monetary and non-monetary incentives. This is evidenced by confirmation from the doctors interviewed that the government posted all doctors selected through the latest Public Service Commission and they were receiving both monetary and non-monetary incentives for working in designated remote areas. The implementation of the rotation of posting was more complex, as this takes into account the wishes of the doctors for being posted in their preferred places, which differs, based on personal choice. For example, the doctors working in Jagatsinghpur district preferred places of posting at urban locations within the district for their professional growth and private practice, whereas the doctors from Koraput district preferred to be within or near to the state capital for educational opportunities for their children. Thus, the contextual factors influenced the choices of the doctors, which then made it difficult to satisfy everyone's wishes. The implementation of rotation of posting is also influenced by the district authorities not allowing rotation from one district to another. It was evident that some of the doctors could obtain transfers from Koraput to other districts around the state capital, however, some were blocked by district authorities and some could not get their specific choice of the districts.

Thus, the system of posting and transfer was focused more upon the equitable distribution of doctors across geographical areas, particularly ensuring availability within designated remote areas through both the mechanisms of control and incentives. Whilst the system was successful in retaining doctors in remote areas with few transfers made by the managers, it could not satisfy the majority of the doctors in providing their preferred places of posting. Therefore, some tried the use of corruption and political pressure, and this appears to have been successful in certain cases in obtaining their transfer of preference.

In the case of paramedical staff, the main objective of the system for posting and transfer was to ensure their welfare. Therefore, the system has four main elements as intended practices: 1) first posting within the district in which they were recruited, 2) subsequent transfers within the district, 3) choice of posting in own district after the change from state to district cadre and, 4) transfer upon request between the districts, with the conditions of mutual transfer and the loss of seniority thereafter. Regarding the first two elements of the system of intended practices, the district level officers have full authority in relation to posting and transfer within the district. In the case of the latter two elements, the agreement of the state level authority is required, as this takes place between districts. These elements are also dependent on the varying choices of the paramedical staff.

The first element of this system relating to first posting within the district of recruitment was fully implemented, as the guidelines were clear-cut, with the district level officer as the only authority involved in this decision. Regarding the implementation of subsequent transfers within the district, the district authorities were found to be very reluctant to make transfers because the majority of paramedical staff preferred locations close to the district headquarter, so it was not possible to accommodate the majority. The third element of transferring staff to their own district following the change to district cadre was also fully implemented, since there were stipulated and clear-cut rules in this regard. The fourth element was the least implemented, because it was more complex due to the involvement of authorities at two different levels: district and state. In addition, it was made even more complicated by the rules of matching for mutual transfer between the districts, and the condition of losing service seniority after transfer, which was not acceptable to the staff. Thus, the system of posting and transfer for paramedical staff was easier to implement when there were clear-cut and implementable rules to be followed with management by one authority; whereas the system faced difficulties in its implementation when multiple authorities were involved in decision-making, as well as due to some complex staff choices that were difficult to meet for the majority.

The perception of the paramedical staff about the design and implementation of the posting and transfer system was very different between those working in Jagatsinghpur and Koraput districts. The main reason for this was that the majority of staff working in Jagatsinghpur district were born and still living there, whereas most of the staff working in Koraput district belonged to other regions. Therefore, the staff in Jagatsinghpur perceived the system to be helpful to them, whereas those working in Koraput district perceived it as unfair. Therefore, the staff working in Jagatsinghpur district were satisfied with the system elements of posting and transferring staff within the district, and did not generally attempt to secure transfers, with a few exceptions who had been posted furthest away from the district headquarter. In contrast, most of the staff working in Koraput district were not satisfied with the system of inter-district transfer, and most had attempted to obtain transfers, although many did not succeed. Some had tried to achieve this through paying bribes and by applying political pressure, and a few did indeed succeed in getting an inter-district transfer. As a result, the contractual staff applied afresh whenever there were new recruitment opportunities within their native districts. However, the regular staff who did not have such an option lost faith in the system, which might have influenced their morale in carrying out their duties.

Therefore, the system was able to satisfy the majority of staff in Jagatsinghpur district, but this was not the case in relation to Koraput. As a result of the existing design and implementation of the system for posting and transfer, Jagatsinghpur could retain all of their paramedical staff within the district, however Koraput lost some contractual staff as well as a few of the regular staff.

Unlike in-service training and supervision, the NHM did not provide funding or guidelines for any of the elements relating to the posting and transfer of doctors and regular paramedical staff. The reason for this could be that these systems are predominantly governed by the rules and regulations of the General Administration Department of State Government, and would be difficult to manoeuvre by the Government of India through the NHM.

## **Chapter 6: In-service training**

### **6.1 Introduction**

The following sections describe the intended practices related to in-service training (IST), their implementation as reported by the health staff and managers and their effect on health workers in terms of their perception, attitude and behaviour. Literature suggests that for IST to be effective, it is essential to put into actual practice all four components of the training system, as follows: training need assessment, development of the training programme, its implementation and subsequent evaluation. (Armstrong and Taylor, 2017; Pineda-Herrero et al., 2011). Considering this and based on the emerging themes from the qualitative data, this chapter is divided into the following sections: 1) objectives of the IST, 2) planning, resourcing and coordination, 3) organising and conducting IST and 4) monitoring and evaluating staff performance after IST. Thereafter, the section analyses the effect of IST on the perception, attitude and behaviour of health staff. It will end with concluding remarks about the IST system.

### **6.2 Intended practices for the in-service training of health staff**

Document review analysis revealed the intended practices related to the in-service training of health staff, and what follows therefore describes such *intended practices* of in-service training.

#### **6.2.1 Objectives and strategy for in-service training**

There is a national strategy for in-service training developed by the Ministry of Health and Family Welfare (MOHFW), Government of India (GOI) (MOHFW, 2008b). This strategy has the following specific objective: 'to improve performance of Health and Family Welfare Programmes. It is imperative that all health functionaries in the district acquire the knowledge and skills (technical, communication and managerial capabilities) to provide the health care services effectively and efficiently' (MOHFW, 2008b p.1). This strategy has given broad directions to the states and districts for developing plans for in-

service training. It recommended three types of training: 1) induction training for newly joined health staff,

2) in-service training for all categories of existing staff and 3) refresher training for each staff member every two years.

In this regard, the strategy document has laid down the lists of skills required by all cadres of staff for delivering the health services at the facilities where they work. Based on this skills matrix, it suggests devising lists of training programmes, the duration and place of the training and the expected trainers and trainees. In addition, the strategy has recommended the undertaking of training needs assessments and the calculation of training load before the planning of training programmes, as well as the monitoring of health staff performance after the training programme is implemented.

Although the MOHFW has suggested that all states develop their own strategy for in-service training, in the state of Odisha there is no specific strategy in place.

### **6.2.2 Planning, resourcing and coordination for in-service training**

The national strategy for in-service training has outlined the roles of specific stakeholders and the mechanisms of coordination. At national level, the training division of the MOHFW should give broad direction for policy-making, and the National Institute of Health and Family Welfare should carry out the coordination within the states. At state level, the National Health Mission (NHM) and the State Institute of Health and Family Welfare (SIHFW) should coordinate together with every district in the planning and implementation of all in-service training. The SIHFW should provide the training of trainers (TOT), and coordinate with the state programme manager and the training coordinator of the NHM. At district level, the Chief District Medical Officer (CDMO), district programme manager and district training manager of the NHM should be responsible for the planning and implementation of all in-service training within the district.

The strategy stated that the district should be the unit of planning for in-service training, and the state NHM should compile all district training plans and submit these to the MOHFW as part of the yearly project implementation plan (PIP). The in-service and refresher trainings should be planned for all categories of health staff working at peripheral health institutions. The district should conduct the training needs assessment and calculate training load in terms of the categories and the number of staff to be trained in the coming year.

#### *6.2.2.1 Finances for in-service training*

The MOHFW has instructed the formation of a standing committee at state level for the planning of in-service training. This committee should be headed by the Mission Director of the State Health Mission, with other Directors under the Department of Health and Family Welfare (DOHFW) as members. Following this arrangement, the MOHFW has suggested that the states compile together all training for reproductive and child health and disease control programmes, as well as the special activities under the NHM, and send the budget requirements to the MOHFW.

Further to these arrangements, the Odisha state NHM had submitted a total budget of INR 12,808 million to the MOHFW in the PIP for the year 2013-14, of which 9,368 million (73%) was approved. Out of this total approved budget, INR 156 million (1.7%) was allocated for staff training (NHM, India, 2013). Similarly, for the year 2014-15, a total of INR 11,050 million (93%) was approved, against the proposed budget of INR 11,876 million. Out of this approved budget, INR 329 million (2.9%) was allocated for training (NHM, India, 2014).

#### *6.2.2.2 Trainers*

The national training strategy has given direction on the types of trainers recommended for each form of training (MOHFW, 2008b). There are principally two types of trainer: firstly, those who are subject experts such as obstetricians or paediatricians, and secondly, those who have undergone the training of trainers (TOT) called 'master

trainers'. These trainers are from within the system and have the responsibility of delivering health services routinely in their daily activities. The NHM Odisha has made available these guidelines on their website (NHM, 2014c). For example, in the guidelines for skilled birth attendance (SBA) training, the team of trainers should include an obstetrician, a paediatrician, a medical officer and a staff nurse (MOHFW, 2010). Most of the designated trainers are working medical doctors who would receive travel allowances and per diems for carrying out the training.

### **6.2.3 Organising and conducting IST**

#### *6.2.3.1 Operational guidelines*

The national training strategy has given broad operational guidelines on training various categories of staff for different training domains (MOHFW, 2008b). There are separate guidelines for each training programme, which describe the content of the training, methods for conducting training, duration, place of training, trainers and indicative categories of the staff to be trained (NHM, 2014c). For example, the operational guidelines for SBA training give directions to conduct the programme for a duration of 21 days at a designated district hospital or any other delivery point, for auxiliary nurse midwives (ANM), lady health visitors (LHV) and staff nurses (SN) (MOHFW, 2010).

#### *6.2.3.2 Training domains*

Based on the state training proposal for April 2014 to March 2015 by the NHM of Odisha, the main training domains approved by the MOHFW were related to RCH and disease control programmes (NHM, India, 2014). The majority of the training was actually clinical, and principally involved staff nurses and MPHWFs in the area of reproductive and child health.

#### *6.2.3.3 Training duration*

Training durations for specific training programmes have been prescribed by the MOHFW in the national training strategy, with guidelines for specific training

programmes (MOHFW, 2008b). However, there are no guidelines to monitor whether the training duration was actually followed as per these norms.

#### *6.2.3.4 Place of training*

There are prescribed norms in the national training strategy and specific guidelines for the various training programmes regarding the appropriate place of training. For example, the suitable location for SBA and intra uterine contraceptive device (IUCD) training is a designated centre at a district or sub-district hospital providing reproductive and child health services (MOHFW, 2013, 2010). However, there are no specific guidelines for the facilities situated in hard-to-reach areas, or for those affected by poor infrastructure. Furthermore, there are no guidelines to monitor whether the training was conducted at these designated places.

#### *6.2.3.5 Selection of trainees*

There are identified essential skills for all staff cadres in the national training strategy and specific guidelines for the various training programmes. For example, it is suggested that ANMs, staff nurses and LHVs are selected for SBA training; and that doctors, staff nurses, ANMs and LHVs undertake IUCD training (MOHFW, 2013, 2010). Although the national strategy suggested developing a skill matrix, there are no guidelines on how such a matrix should be used to select specific individuals for training.

### **6.2.4 Monitoring and evaluation of staff performance after training**

The MOHFW has suggested that states monitor the performance of all contractual and regular staff during and after the training (NHM, India, 2014, 2013). However, there are no specific guidelines or tools for the monitoring and evaluation of staff performance and the state has not planned or budgeted for activities relating to the monitoring and evaluation of in-service training.

In summary, the intended practices for in-service training are: training need assessment, planning, resourcing, implementation and the monitoring and evaluation of staff

performance during and after training. With all these necessary components included in the intended practices, it makes a logical system for training. The NHM at MOHFW level is the main source of funding for all training. There are three major departments involved in the planning of in-service training at state level, namely, the NHM, the SIHFW and Directorates operating under the DOHFW.

Each district should develop their yearly training plans that the state NHM would compile and obtain funding from the NHM at central level. There are detailed guidelines for the planning, resourcing and implementation of training. However, there are no specific directives or tools provided for training need assessment or for the monitoring and evaluation of training. The focus of most planned training is around RCH and mainly involves staff nurses and MPHWFs.

### **6.3 Reported practices of the in-service training of health staff**

#### **6.3.1 Planning, resourcing and coordination for in-service training**

As per the national training strategy, the state NHM and the SIHFW should coordinate all in-service training. However, the majority of the state-level policy-makers interviewed said that although the SIHFW should coordinate all in-service training, it is not in fact doing so. The district level managers interviewed said that the different Directorates, such as the NHM, the Directorate of Family Welfare, the Directorate of Health Services and the State Institute of Health and Family Welfare are responsible for training, however there is no coordination among them. Because of this, a great deal of time is consumed by the training activities, leaving less time for undertaking actual work.

*Actually, we are having one training institute, SIHFW. It should monitor all the trainings. Every training should be coordinated by that department. But it is not happening. (R70, state level manager)*

*There is no coordination of training management. Some trainings are conducted by the State Institute of Health and Family Welfare, some by*

*the Directorate of Family Welfare, some by the NHM, but there is no coordination, there is no central coordinating authority for all the trainings. I think most of the time my staff are attending training at Bhubaneswar [state capital city] organised by various directorates. So, there is no time for staff to work here. (R4, district level manager, Jagatsinghpur)*

In contrast to the approach suggested in the national training strategy, the district level managers interviewed from both districts reported that all planning of training, such as the selection of training topics, the selection of the type and number of trainees and the preparation of the budget is carried out at the state level. There is very limited scope for district authorities to decide on training for their health staff.

*All guidelines coming from state like number of participants, how much expenditure will be there, who are the candidates. The topic is given by the state, who are the participants is all given by the state, we are just conducting training. (R4, district level manager, Jagatsinghpur)*

*Are there any trainings that are planned by the district and conveyed to the state? Is there any such authority given to the districts? No. (R45, district level manager, Koraput)*

#### **6.3.1.1 Finances for in-service training**

The majority of district level managers and health staff interviewed reported that after the introduction of the NHM, there was a huge increase in the number of trainings conducted. In addition, they said that there is an increase in funding for conducting trainings, as well as for providing allowances to trainees.

*Before NHM we were not getting sufficient funds for imparting training. Now we have sufficient funds with us. That was the main*

*hindrance previously. But after NHM we have no short fall of any types of funds. (R39, district level manager, Koraput)*

*They are giving travel expense as extra allowance. Now all are interested to go for training. Earlier no one was interested. (R22, pharmacist, Jagatsinghpur)*

Although there were increases in the funding, there were also delays in approving the budget at each level. For example, as per the approved PIP documents for 2014-15, the MOHFW approved the budget on 30 September 2014 instead of in April, with a delay of six months (NHM, India, 2014). Furthermore, the state NHM communicated the approved budget to the districts on 7 November 2014, representing an additional delay of another month. (NHM, 2014a, 2014b). Funds were approved for both Jagatsinghpur and Koraput district at the same time.

Because of the delay in getting the approved budget, the district and facility level managers interviewed reported that they faced challenges in conducting the training programmes on time. In addition, they said that there was a problem in obtaining training materials ahead of schedule, particularly in Koraput district which is far away from the state capital. The CHC level managers interviewed reported that they were asked to conduct trainings at short notice and without any funds, in which case they would have to manage suppliers of food and other logistics on credit, or even spend money from their own pockets until the funding was received.

*We were getting budget directly from central TB division. We were following central TB division guidelines. Everything was running smoothly. After NHM involvement, we are facing problem in getting the budget. We are supposed to get approved budget in the month of April or May. Instead of April or May, we are getting it in September or October. Last year we got it in December. (R14, district level manager, Jagatsinghpur)*

*Funds do not come in time. Similarly, guidelines, books, resource material, there is a mismatch between supply of these things...at some time the human resources [trainers] are not there. (R45, district level manager, Koraput)*

*They don't send fund but ask to conduct the training. Some expenses are adjusted and some are kept pending. It is not their [district authorities'] fault. They can give if fund comes to them. Food is given on credit or spent from our pocket. Money comes after one month, two months or three months. (R19, CHC-level manager, Jagatsinghpur)*

#### **6.3.1.2 Trainers**

As reported by the district and facility level managers interviewed, the trainers were either master trainers who had received training of trainers, or they were particular subject specialists such as gynaecologists or paediatricians. Those who were trained at the state level worked as trainers at district level trainings and those who were trained at district level worked as trainers at block level. This is in line with the guidelines given by the MOHFW.

*Generally, the resource persons are the district level officers, regular MBBS doctors, gynaecology specialist, paediatric specialist and master trainers. (R5, district level manager, Jagatsinghpur)*

*Those who are district level trainer they give training at district level mostly. Those who are block level trainers like me give training at block level. (R30, CHC level manager, Koraput)*

As per the national training strategy, the district level managers tried to get appropriate trainers according to the criteria prescribed, however, the majority of those interviewed reported challenges in getting the required numbers of people for the time commitment required for carrying out training programmes. They said that because of inadequate

numbers of trainers coupled with insufficient time allocation by existing trainers, the quality of training is poor, resulting in the reduced development of skills for the health staff. For example, because obstetrics and gynaecology specialists are kept busy doing routine duties, they said that they cannot allot an adequate amount of time for practical demonstrations to the trainees, resulting in the insufficient development of their skills so that they are not able to conduct deliveries at PHCs and CHCs.

*The challenge is the availability of the resource persons. Obstetrics and gynaecology specialist is the resource person for the SBA training and there are no sufficient staff [such specialists]. To adjust even his one hour or two hours for training is very difficult. Because of lack of obstetrics and gynaecology trainers, we are not able to do quality training. (R5, district level manager, Jagatsinghpur)*

*The time given by trainer for training is very less. Due to lack of time, training is not given properly. Suppose one gets SBA training, she or he has supposed to conduct delivery at CHC or PHC independently. But this is not happening. (R62, district level manager, Jagatsinghpur)*

In addition to the challenges posed by the shortage of trainers, some of the district and facility level managers reported that the selection process of trainers was also not appropriate. For example, because of pressure from the Chief District Medical Officer, some of the people who attended the training of trainers were not actually interested in becoming trainers at all. Whereas some others who were trained as trainers were not available as resource persons because they were either retired soon after the training or transferred to different locations. The constraints in getting and involving appropriate trainers was reported more from within Koraput district, where one district level manager reported that they had to stop one training unit because the skills of the staff were not being fully developed through the training. This was because the local trainers did not take an interest in conducting the training. In addition, the state level managers observed that qualified trainers were not actually being used for the training, which was

being given by someone else who was not following the timing and curriculum as expected.

*Actually while sending the people to district level to become master trainer, some people are going who are not interested to take such type of training. Because persons are not available, Chief District Medical Officer is telling that you go and take the training. Some people who are at the verge of retirement or who are already received their transfer order to leave the district, they are being selected as a master trainer. (R6, CHC level manager, Jagatsinghpur)*

*The trainers are issues, for example we have stopped SBA training at sub-divisional hospital that has a very good labour room and so many delivery cases happening. However, the specialist doctors who are trainers are not taking interest and the people who come out after training do not have enough knowledge. We stopped that unit. (R45, district level manager, Koraput)*

*I have seen the training organised at state level and organised at district level and block level. There is hell and heaven difference. Reason is focus. We are organising five days' training programmes. District trainers train them all. We organise 10 to 5 o'clock and go topic by topic. When we go to district for training hardly we see that till 11 or 11.30 AM doctors have not come. They are not following the structured curriculum. The trainer who has been given five days' training here is not available [as trainer]. He has been given other responsibility. Other speakers are invited who are not conversant to the programmes. Lot of gap and challenges are there. (R71, state level manager)*

Some staff, particularly from hard-to-reach areas of Koraput district, reported that the good trainers were available at the training places in Bhubaneswar and nearby. However,

they could not go to these distant places to undergo training because their district headquarter is more convenient for them to travel to. Such problems were reported more by female staff than male.

*Koraput town is nearer to us. One can go and attend. We cannot go to other place for seven to eight days. Bhubaneswar training is also good. Those who have gone they have told. Some staff also went to Baripada [designated training centre in other district] for SNCU training. They were telling it was good. Trainers were coming from outside and they taught us well. We can do up and down to Koraput or can stay. But it is difficult to go to a distant place. (R44, staff nurse, Koraput)*

### **6.3.2 Organising and conducting IST**

#### *6.3.2.1 Training need assessment and training load*

As mentioned in the section on operational guidelines, the national training strategy emphasised that the trainings should be developed based on training need assessment. However, the majority of the managers at PHC, CHC and district level reported that the training need assessment of health staff is not carried out. Explaining their experiences regarding the relevance of the training conducted against the actual staff needs, the managers at PHC and CHC level said that because the trainings are planned at state level, the real training needs of the staff are not being taken into account. They further said that the NHM is doing a large number of trainings to show expenditure in order to secure a budget for the following year, and that job responsibilities and the usefulness of the training for the staff themselves is not being considered. Similarly, most of the district level managers from both the districts said that they were bound to conduct a large number of trainings, as they have to achieve the given training targets.

*It [planning for training] is never from lower level; it always comes from higher level that do this training. If it would have been better, as per*

*our requirement... I mean as per staffs' requirement. (R13, CHC level manager, Jagatsinghpur)*

*These repeated trainings are done hurriedly by NHM just because they have to show the expenses at the end of the financial year. Otherwise next year fund will not come. So they are bound to show the expenses irrespective of the people whether they are coming or not, whether they have already taken training or not, whether that is coming under the nature of their duty or not, whether the training will come into their use or not. They need head count. They just want to show that these people are given training. (R65, PHC level manager, Koraput)*

*Sometimes we are also bound to give training because we have to train 50 numbers of ANM this year. So sometimes even if we don't want to give that particular training, we have to give, because we have to achieve our target. (R42, district level manager, Koraput)*

#### **6.3.2.2 Cadres of staff trained last year**

Table 11 describes the district-wide cadres of health staff interviewed who received training at least once in the preceding 12 months of the date of interview. There was little difference between the numbers trained in Jagatsinghpur and Koraput districts during this period. Furthermore, the in-service training was provided equally to the male and female staff as well as to the regular and contractual staff, except for contractual MPHWMs and LTs who received less training than their regular counterparts did.

Table 11 At least one training received in the previous 12 months reported by the health staff interviewed

Category of health staff	Jagatsinghpur district		Koraput district	
	Interviewed	Reported training received	Interviewed	Reported training received
Laboratory technician	2	0	2	1
Pharmacist	4	4	5	4
Staff nurse	2	2	3	3
Multi-purpose health worker male	1	0	2	1
Multi-purpose health worker female	3	3	2	2
General doctor	2	1	2	1
Specialist doctor	2	2	2	1
Total	16	12	18	13

Most of the staff nurses (SNs), Multi-Purpose Health Worker Females (MPHWFs), and pharmacists interviewed reported that they had received training during the preceding 12 months.

*Training received refresher training on safe birth attendant and nabjat shishu suraksha karyakram [New born security programme] training. The staff nurses who are in delivery point they had been given these trainings. They are directly involved with delivery of mother and new born baby. (R20, staff nurse, Jagatsinghpur)*

*We have taken training on all new changes in immunisation, Copper T, Integrated Child Development Schemes. Many trainings are there. I have taken training on intra uterine contraceptive device last year. They are giving us training on the things that have been changed. (R25, MPHWF, Jagatsinghpur)*

*Report writing. Disease surveillance report. I took training on that. Before that we got training on stock register maintenance, training on how to manage it online. (R46, pharmacist, Koraput)*

In comparison with the staff nurses, MPHWFs and pharmacists, the majority of laboratory technicians (LTs), some of the Multi-Purpose Health Worker Males (MPHWMs), and a few doctors interviewed reported that they had not received any training during the preceding 12 months. The LTs, MPHWMs and doctors also said that the trainings they received were not matched to their job. However, they also stated that they were trained long before on disease control programmes relating to TB, malaria and HIV.

*We have not received basic training [training required for the job of multi-purpose health worker]. We have taken minor training, TB training for one to two days. We have taken malaria training for seven to eight days. Had we taken basic trainings we would have done much work. (R53, MPHWM, Koraput)*

*I have not been trained since last two years. I took training in 2013. One was on TB and another was on HIV. When we joined service, multi-drug resistant TB was not there. After two years of multi-drug resistant TB was suspected, we were given training on it. In 2013 we went for that training. (R56, LT, Koraput)*

*I have not gone for any training; I don't know anything about it. Since one or two years I have not gone for any training. They have not given me any training and I do not know anything about pentavalent vaccine. First it should be given to medical officer, after that the other staff because as a supervisor we have to monitor and supervise that programme. (R35, doctor, Koraput)*

### 6.3.2.3 Training domains

The majority of the district and facility level managers interviewed reported that in the last 12 months, they have provided training to the health staff on domains related to RCH care. The majority of these trainings match with the training planned in the district PIPs of Jagatsinghpur and Koraput districts.

*We are giving training to all health staff. We are providing SBA training to the regular ANM [Auxiliary Nurse Midwife] . State is providing training on emergency obstetric care, new born care training, MTP [Medical Termination of Pregnancy] training to doctors. (R5, district level manager, Jagatsinghpur)*

*Majority of training are in maternal and child health. Most of the trainings are for clinical staffs. (R42, district level manager, Koraput)*

### 6.3.2.4 Training duration

As reported by the health staff interviewed, the duration of the majority of the training was as per the norms prescribed for specific training programmes.

*The training on IUCD [Intrauterine Contraceptive Device] was for five days and SBA [Safe Birth Attendant] training for 21 days, routine immunisation for one day and IMNCI training was for seven days. (R58, MPHFWF, Koraput)*

### 6.3.2.5 Place of training

The majority of health staff and district and facility level managers interviewed reported that the majority of trainings were organised at the designated places as suggested in the guidelines.

*Along with programme, the state has planned that which type of training is to be conducted at which level. For that state has developed*

*a policy, who will be trained at district level and which category of staff will be trained at block level. Doctors, pharmacists and data handlers will be trained at district level. Multipurpose health worker male and female at block level. Whatever is there in the document of that program, accordingly we are conducting the training. (R6, CHC level manager, Jagatsinghpur)*

As prescribed in the national strategy, some of the trainings should be conducted at block level, however one district level manager from Koraput reported that they organised training mainly at district level, because the majority of the blocks do not have a training hall or hotel accommodation facilities.

*Most of the trainings are organised at district level. Because most of the blocks don't have the training hall. They don't have the hotel for accommodation. So most of the trainings conducted at district level. (R42, district level manager, Koraput)*

#### **6.3.2.6 Selection of trainees**

As reported by the health staff and facility level managers in the earlier sections on training domains and the duration of training, the selection of trainees was carried out as per the prescribed guidelines. For example, ANMs, staff nurses and LHVs were selected for SBA training, doctors were selected for MTP trainings and other TOTs, and pharmacists were selected for courses on IDSP and malaria. However, facility level managers said that, given the choice, they select trainees based on the work requirements of their job and by identifying the staff who are poor performers, which is in line with the objectives of the in-service training and therefore evidence that they are trying to make the system work. However, some of the managers reported that they select staff members who are more senior, which does not fit in with the objectives. One facility manager stated that they select equal numbers of trainees from all health institutions under their jurisdiction so as to have equal representation. Furthermore, one of the CHC level managers reported that when staff members show an interest they will

send those people first, and that they did not send those who were not interested in training, despite potential need.

*Those who will provide services in that particular program they are being selected as trainees. (R6, CHC level manager, Jagatsinghpur)*

*First, we will see who all require training, who are not able to do the work properly, first, we will track them and then send them for training but if they ask for more staff then we include others and send. (R13, CHC level manager, Jagatsinghpur)*

*Those who are more senior; we give them training first. (R18, CHC level manager, Jagatsinghpur)*

*Sector [PHC] wise. Suppose there are five sectors. We will send two from each sector not more than that. (R19, CHC level manager, Jagatsinghpur)*

*Those who are interested in training we send them first. Now RBSK training is going on. Staff nurses did not showed interest, and we did not send them. (R31, CHC level manager, Koraput)*

### **6.3.3 Monitoring and evaluation of staff performance after training**

As mentioned in the section on operational guidelines and staff performance monitoring and evaluation, a few CHC level managers interviewed mentioned the assessment of knowledge and skill development that is carried out during the training. However, they reported that the resource persons do not analyse the data relating to post-test assessment.

*There is a pre-test and post-test. We know what trainee staff scored in pre-test. During post-test, if the resource person does not review, does*

*he know how much his student learnt today, he will not be able to know. (R12, CHC level manager, Jagatsinghpur)*

Regarding the evaluation of training and the assessment of its impact on staff performance, the majority of district and facility level managers interviewed reported that such an evaluation is not carried out except for some assessment of knowledge that is done in the review meetings.

*Actually to be very frank we are not able to review this activity very closely. So basing upon the general achievement we think that there is some improvement. Because it is not possible for us also to go each CHC, to review each worker. We are getting little time to review all workers. Actually it should be monitored closely. Fault lies at our level also. We are not able to go to the field frequently. (R39, district level manager, Koraput)*

*The outcome of training is not being assessed during the supervision. (R48, district level manager, Jagatsinghpur)*

*What I have seen that there is no mention of specific training output. We have not evaluated this with indicators. In review meeting when we assess knowledge by asking questions, their answer shows that they are improving a bit. (R30, CHC level manager, Koraput)*

## **6.4 Effect of in-service training on health staff**

### **6.4.1 Perception of health staff about IST in competency development**

Most of the health staff interviewed reported that after training, there was an enhancement of their knowledge about the work that they have to do in their job.

*After getting trainings, we come to know many things, which we didn't know. We got to know everything about labour room. (R54, staff nurse, Koraput)*

*I got knowledge on TB, Malaria. During graduation in pharmacy, no vast knowledge was given. We were taught only about medicine. After training some knowledge was enhanced. How to give medicine, how to give malaria medicine? This type of knowledge was increased. (R9, pharmacist, Jagatsinghpur)*

In addition to gaining knowledge through training, the majority of health staff interviewed reported that they also developed their skills. They said that more practical demonstrations and the freedom to perform the tasks independently during training were more useful for skill development than mere theory.

*We were three in the training and sir [trainer] gave each of us one delivery case to handle. They gave training to handle it by our own. One can do it single-handed. Alone one can do. But IUCD training was a bit boring because of maximum theory and minimum practical. (R54, staff nurse, Koraput)*

*The trainer who was coming from outside was teaching us one by one. He asked us to do practical. If you do it alone then you can manage. (R29, MPHWF, Jagatsinghpur)*

#### **6.4.2 Attitude and behaviour of health staff about use of training in job activities**

Regarding the use of the training in carrying out their job activities, the majority of health staff interviewed reported that they could use certain aspects of the training that were appropriately matched to their job. For example, after training they began giving contraceptive devices to women and also started washing hands before immunisation.

*After attending trainings we knew the causes of infection. 60% of infections are due to improper hand washing practice only... so now we are washing hands before immunisation. (R37, MPHWF, Koraput)*

*I did not know how to insert IUCD. After training was given, and then we were taught in labour room, then I came here and inserted IUCD. (R8, staff nurse, Jagatsinghpur)*

*We had not known how to use post-partum intra uterine contraceptive device, how to insert it. After training we did it for one, two times. It has been done in the presence of supervisor. Then we have developed courage to give. Then we read its advantages and disadvantages. We knew about its reactions. We used them in work after we learnt. (R29, MPHWF, Jagatsinghpur)*

The majority of the health staff interviewed reported that some aspects of their trainings are useful to them in carrying out their duties. However, there were certain elements that could not be used, either because the training was not related to the actual job, or because individuals were not posted to the appropriate places or were not provided with the necessary infrastructure or instruments. They said that when they are not able to bring the training into practice, they lose the competencies developed through training.

*We had attended training on intra uterine contraceptive device but we don't have instruments, room and other facilities here. If we attend the training and then don't use it again and again, then we will definitely forget it. (R37, MPHWF, Koraput)*

*That [IMNCI] training if would have been given to the ICU staff, where ICU is there, it could have been useful. We have no ICU. Those lessons I will forget. I have already forgotten. (R8, staff nurse, Jagatsinghpur)*

Three cadres of health staff interviewed, namely MPHWMs, pharmacists and doctors, all demanded training that is appropriately matched to their jobs. For example, the MPHWMs required the basic training required for the role, and the pharmacists reported that since they manage patients in the absence of doctors, they should receive training in diagnosis and how to prescribe medication. The doctors reported that they should be trained according to their own expertise.

*If we will be given basic training, our interest for work will be improved. We will move forward to work. We are untrained. If we get training, we will improve and we will do more work. (R53, MPHWM, Koraput)*

*Actually they are not giving pharmacists training at all. Just we are there to see patients in OPD and give medicines. But if we are trained then only we will learn and can take care of the OPD. In the absence of doctor, pharmacist will give medicine but if a pharmacist doesn't know what is to be done then how will he be able to give medicines? We are doing it by learning from other sources but officially they are not training on it. We need training on the latest medicines... if a patient comes in the absence of doctor then we can treat them if we know the latest medicines. (R52, pharmacist, Koraput)*

*Actually, the training should be based on the interest of the doctor, the qualification of the doctor. Suppose I am a medicine specialist if the government decides to make me trained in labour. I am not interested in labour. (R26, doctor, Jagatsinghpur)*

Unlike the MPHWMs, pharmacists and doctors who demanded fresh training, the MPHWFs and staff nurses interviewed asked for refresher training at regular intervals. The reported reasons were to improve their knowledge and skills, to understand the changes made in the programme and to regain the knowledge and skills that are lost over time.

*It is related to delivery and mother and child care. If we are imparted more training, we can do delivery in better way. We can manage critical cases. If there will be refresher training in every three months, then it will be better. Our knowledge will be enhanced. (R20, staff nurse, Jagatsinghpur)*

*Trainings are good... we had learnt many things but we have forgotten so if some refresher trainings are given to us then it would have been better. We like practical more than theory. (R37, MPHWF, Koraput)*

The opinions of managers were mixed regarding the effects of training on health staff. Some of the managers at CHC and PHC level reported that the training could improve the performance of health staff. For example, after training on safe delivery, there was an increase in institutional deliveries by the health staff. In addition, the managers observed that following training, there were fewer mistakes made by the staff in maintaining records and reports.

*We observe the difference after training. For example, we were not inserting contraceptive devices to women here in CHC. When all staff nurses got training on inserting contraceptive devices, its being implemented well here. Earlier an obstetrics specialist was doing delivery. Now all are SBA trained. They [staff nurses] are now easily handling the deliveries. It [number of deliveries] has increased now to 30 to 40 per month than earlier when it was 10 to 15 deliveries per month. (R31, CHC level manager, Koraput)*

*Earlier our “didis” [MPHWF] were making mistakes but now after getting training it has been minimised a lot. For example, they were having a doubt on reporting. But after training it was cleared. Definitely after training a lot of things we all are getting. There is difference in performance, definitely. (R28, PHC level manager, Jagatsinghpur)*

Certain managers, particularly district and CHC level doctors, reported that the staff were not performing the tasks for which they had been given the in-service training. According to them, sufficient competencies were not developed by the staff, even after training. They attributed this to the poor quality of the training itself, and particularly the inadequate opportunities for staff to learn the practical aspects of the tasks.

*The time given by trainer for training is very less. Suppose one gets SBA training, she or he has supposed to conduct delivery at CHC or PHC independently. But this is not happening. They are purely theoretical. But practical it is not possible. But due to overload of delivery at district headquarter hospital and less number of doctors they are engaged in the delivery one after another. This is the problem. (R62, district level manager, Jagatsinghpur)*

## 6.5 Summary of findings of in-service training

Table 12 Key findings on intended and reported practices of in-service training and effect on health staff

Domain	Intended practices	Reported practices	Effect on health staff
Objectives	Objective was to improve staff performance of health and family welfare programmes.	Majority of trainings implemented were related to RCH programmes.	The staff related to RCH programme improved their capacities, although others did not.
Strategies	Three main strategies: Induction training for new staff, in-service training for all staff and refresher training at regular intervals.	Mainly in-service and refresher training conducted but not the induction training.	Optimum effect could be achieved only for staff nurses and MPHWFs who were provided with IST and refresher training on RCH but for other staff the effect was marginal.
Planning, resourcing	The SIHFW and the NHM should	There are multiple coordinators from the state level resulting in	Overcrowding of trainings, fewer skilled trainers with

<b>Domain</b>	<b>Intended practices</b>	<b>Reported practices</b>	<b>Effect on health staff</b>
and coordination	<p>coordinate all trainings.</p> <p>The districts to develop yearly training plans and the state NHM to compile them together and send to MOHFW for funding.</p> <p>The MOHFW to release funds to the state and the state to the districts.</p> <p>District to identify trainers, trainees and venues.</p>	<p>overcrowding in the number of trainings conducted over a short period.</p> <p>The districts are not involved in planning, instead the state NHM developed yearly plans for districts, with budget approved by the MOHFW.</p> <p>There was a huge delay in the release of funds from the MOHFW to the state NHM and then to the districts.</p> <p>Districts identified trainers, trainees and venues, however, they faced problems in getting skilled trainers to give up the time.</p>	<p>insufficient time for training, delays in releasing funds and constraints in organising training close to the staff resulted in the poor quality of training, leading to poor skill development among the staff.</p>
Organising and conducting IST	<p>Comprises all four components: training need assessment, planning and resourcing, organising and conducting IST and monitoring staff performance after training.</p>	<p>Planning and resourcing exclusively carried out by the state and not by districts.</p> <p>The districts implemented all trainings.</p> <p>Training needs assessment and monitoring staff performance after training not done because there are no specific guidelines or budget.</p>	<p>As TNA was not conducted, for some health staff the trainings they received were not connected to the actual job that they are doing. Staff lost the competencies developed because they could not use the knowledge from the IST in their actual job.</p> <p>The health staff demanded frequent ISTs at regular intervals to upgrade and maintain their skills.</p>
Geographical context	<p>There is no specific strategy, plan or</p>	<p>Koraput district with many hard-to-reach areas faced</p>	<p>The hard-to-reach areas already face the</p>

Domain	Intended practices	Reported practices	Effect on health staff
	resources identified for different geographical contexts (plain land and hard-to-reach areas).	constraints in getting skilled trainers because of the shortage of doctors and could not conduct training at remote sub district level because of poor infrastructure.	shortage of staff and in this context the staff here faced problems in accessing quality training.
Gender	There is no specific strategy, plan or resources identified for differentiation based on gender.	Implementation has omitted to address gender issues in ensuring access for women, particularly those working in remote areas.	The women from remote areas could not access good quality training organised at district and state level.
Staff cadres	There are listed training domains for each cadre of staff, the majority of which focus on RCH topics.	The staff cadres involved directly in providing RCH services were trained repeatedly, whilst other staff providing general health care services did not receive training related to their actual work.	The RCH-related staff were satisfied with the training which was useful in their job; whereas the staff providing general health care services at the health facilities perceived that they are being left out of the IST programme.

## 6.6 Conclusion on in-service training

The main objective of in-service training (IST) was to build the capacities of health staff to improve their performance in effective health service delivery. To this end, the system of IST incorporates four major elements as its intended practices: training need assessment, planning and resources, organising and conducting IST and monitoring staff performance thereafter. This intended system of IST is logical to be effective, with all necessary components included.

Although all four elements of IST were taken into account as intended practices, neither the state nor the district level managers implemented two important elements, namely: 1) training need assessment and 2) monitoring staff performance after IST. This is because there were no specific guidelines provided for implementation within these two

areas. Regarding the other two elements, planning and resourcing was undertaken at the state level without any involvement of district and facility level managers, whereas organising and conducting IST was entrusted to the latter group.

Since the planning of training including the decisions on selecting training topics was taken at the state level, and in the absence of any TNA, there was a mismatch between some of the trainings offered to the staff and the nature of their actual work. However, when the power of selecting trainees was decentralised to the district and facility level managers, there was some effectiveness in selecting appropriate trainees by the lower level managers. As the staff performance after training was neither monitored nor evaluated, there was no scope to assess the matching and effectiveness of training in improving staff performance. There would have been opportunities for connecting these two elements together by involving district and facility level managers, who are closer to the staff with an understanding of their real training needs, and could monitor and review staff performance following the training.

Whilst the planning of IST was centralised, its implementation was decentralised at district and sub district level. Such a mixed system, along with delays in releasing funds by the state level management, made it difficult for the district level managers to implement IST within short timeframes, with the added constraints of getting appropriate trainers and the overlap of multiple trainings. As a result, the quality of training was poor, with a limited effect on health staff in building their capacities for delivering effective and quality health services. The other adverse effect of the centralised planning was that they could not appreciate the accessibility issues surrounding some of the more remote and hard-to-reach areas, particularly in Koraput district. Therefore, they could not make such context-specific plans, especially given the constraints of the lack of availability of an appropriate infrastructure to conduct training and the limited availability of trainers at local level. Therefore, the district conducted the majority of training at district level, resulting in difficulties for the health staff, particularly for women based at facilities that were far away from the district headquarter.

Since the National Health Mission (NHM) at Government of India level provided all guidance and finances for IST to the state, the majority of the content of IST was planned for improving reproductive and child health (RCH) services, which is the priority area of the NHM. As a result, the health staff who are responsible for providing RCH services received the training and the staff who are not directly involved in these activities remained untrained.

The major consequence of providing funding by central government, then conducting planning at state level with the implementation carried out at district and facility level is the time that elapsed from when the funds were approved and sanctioned to when these were actually made available for use at district and facility level. This delay in releasing funds and the negligible role of district and facility level managers in IST planning has resulted in the accumulation and overlap of many training programmes in a shorter period of time, leading to the delivery of poor quality training.

The effect of IST on the perception, attitude and behaviour of the health staff was mainly influenced by how the training was actually conducted. Three major factors had a positive effect: 1) training content matching with the actual job of the health staff, 2) more practical demonstrations taking place during the training, and 3) the opportunity to practice in their routine job what they learnt during the training. The managers at CHC and PHC level opined that there was a positive impact of ISTs on the attitude and behaviour of the health staff; in contrast, the managers at district level felt that there is no impact of IST on the staff. This might be because the managers working closely with the staff could observe their attitude and behaviour directly, which was not the case regarding district level managers.

## **Chapter 7: Supervision and review**

### **7.1 Introduction**

The following sections describe the intended practices in relation to supervision and review, their implementation as reported by the health staff and managers and the effect on health staff in terms of their perception, attitude and behaviour. Supervision refers to one-to-one support provided by the manager to staff members within the workplace itself; whereas review is the assessment of work done by health workers based on which the managers give inputs to them in group meetings held at the relevant facility on a weekly and monthly basis. In this chapter, whilst the intended practices and their implementation are described separately, their effect on the health staff will be analysed collectively. The results include comparative analyses between the study districts of Jagatsinghpur and Koraput, staff cadres, gender, the nature of the job (contractual or regular), the place of posting and length of service.

### **7.2 Intended practices for supervision and review**

The Department of Health and Family Welfare (DOHFW) has published '*A Handbook for Field Officers*' with detailed technical guidelines for the supervision and review of the activities at field level (DOHFW, 2014c). This document describes the three main objectives of supervision and review: 1) to improve the provision of health services by ensuring the actual implementation of schemes and plans, 2) to achieve the optimum utilisation of human resources and, 3) to strengthen health care delivery systems in order to reach the most vulnerable populations. The handbook contains a detailed list of the components of health service delivery and identifies key processes and outcome indicators with regard to supervision and review in the field.

All activities that are funded by the National Health Mission (NHM) are compiled together as project implementation plans for each financial year from April to March. Each of the districts of Jagatsinghpur and Koraput, in their plans for the year 2014 - 2015 (NHM, 2014b, 2014a), emphasised that: 1) the system of supportive supervision should

be strengthened, 2) hand-holding support should be provided to the staff and, 3) the remote and hard-to-reach areas should be intensively supervised. There are checklists provided for supervision and review for both facility level and outreach activities, predominantly focusing on reproductive and child health services (NHM, 2013b, 2013c, 2013d). The main content of all checklists is to cross-check the number and type of staff present, the logistics available, the activities undertaken and the quality of the processes followed.

There are guidelines developed from the state level on who the supervisors should be, the frequency of supervision, the activities to be supervised and the appropriate places to visit. Such guidelines are communicated to the districts in the approved district project implementation plan for the year 2014-2015 (NHM, 2014a, 2014b). For instance, there are identified districts, as well as CHC and PHC level supervisors. There is a budget for transport and travel allowances at each level. For example, they have allotted a vehicle and provided funds for fuel for the district and CHC-level supervisors. This vehicle should be used between the district or CHC-level supervisors. Whereas, for PHC-level supervisors, there is no vehicle allotted instead money is earmarked for them as travelling allowances. Tables 13 describes the details of supervisors and supervisees, the expected frequency of supervision and review per month and the activities that should be supervised and reviewed (NHM, 2014b, 2014a; Public Information Officer, 2015).

The intended practices for supervision and review are similar for both the study districts. They relate to all types of staff cadres, to regular and contractual staff as well as to both male and female staff, with no differences between newly-recruited and long-serving staff.

In the case of multi-purpose health workers (male and female), in addition to their activities at the sub-centre, their outreach activities such as immunisation and village health and nutrition days (VHND) should also be supervised and reviewed.

Table 13 List of supervisors, frequency of supervision and review and the staff to be supervised and reviewed

Supervisors	Expected frequency of supervisory visits and review	Staff to be supervised and reviewed
District level: Chief District Medical Officer, Assistant District Medical Officers, District Programme Manager and district level officers for specific disease control programmes	Supervision: four days in a month  Review: Once a month at district level	Facility level managers at CHC and PHC
Block or CHC level: Medical officer in-charge  Block programme manager  Public health extension officer	Supervision: 10 days per month  Review: Once a month at CHC  Supervision: 10 days per month  Review: Once a month at CHC  Supervision: 10 days per month  Review: Once a month at CHC	All staff at CHC, PHC and sub-centre  MPHWM and MPHWF  MPHWM and MPHWF
Sector or PHC level:  Medical officer PHC  Multi-purpose health supervisor male and female	Supervision: not mentioned  Review: Once a week at PHC  Supervision: 16 days per month  Review: Once a week at PHC	Pharmacist, MPHWM and MPHWF  MPHWM and MPHWF

Source: Document review and interview of managers

### 7.3 Reported practices of supervision

Both supervisors and health staff reported that only some of the staff cadres providing RCH services were supervised more than the staff providing general health care services.

Moreover, the supervisors at lower level (PHC) carried out supervision more frequently than the supervisors at CHC and district level. Furthermore, they reported that mainly the outreach activities related to RCH were supervised but not the activities undertaken at the health facilities. The staff working close to the district headquarter were more frequently visited than those who worked at faraway health facilities. There was no difference in supervision and review based on gender, type of job contract (regular or contractual) or the length of service of the staff themselves.

### **7.3.1 Supervisors and their frequency of supervision: as reported by health staff**

All the multi-purpose health workers (male and female) interviewed confirmed that the medical officer in-charge of the CHC, public health extension officer, block programme manager at CHC level, the medical officer and the multi-purpose health supervisor (male and female) at PHC level were their supervisors. However, the majority of multi-purpose health workers (male and female) reported that the multi-purpose health supervisors (male and female) at PHC level (also called sector supervisors) visit them and supervise their work more often than any other supervisors. They said that the visits often took place on Wednesdays (immunisation days), as well as on Tuesdays and Fridays (village health and nutrition days). Therefore, the supervision is mainly based on RCH programmes, rather than general supervision of the staff providing general health care services. Regarding supervision by higher-level supervisors, MPHWs reported that CHC level supervisors visit once or twice per month and district level supervisors visit them only when there are national campaigns, for example, for polio immunisation, which is a programme based on supervision by higher-level supervisors.

*We have sector supervisors, medical officer, block programme manager and public health extension officer. They are giving visits and feedback. Our sector supervisors are coming every time to supervise. From CHC, people are coming to supervise for once or twice in a month. When there is pulse polio, national programme at that time,*

*supervisors come from district head quarter. (R27, MPHWM, Jagatsinghpur)*

*We have eight village health and nutrition day sessions in a month and four immunisation sessions a month. The sector supervisors are visiting us six to seven times a month. (R37, MPHFWF, Koraput)*

Unlike multi-purpose health workers who are supervised by their immediate superiors, most of the lab technicians interviewed reported that their supervision is carried out by the district level officers and staff. They reported that this relates only to the work that is linked to malaria and TB, by the district malaria and district TB officers, respectively, and is also the supervision to cover a specific disease control programme.

*For supervision, the people from district TB office come for supervision. For malaria, district malaria officer is coming and supervising. They come and collect report. They see the achievement. (R16, lab technician, Jagatsinghpur)*

*We don't have any supervisor from local level till date, I have not received any feedback. (R33, lab technician, Koraput)*

As reported by the pharmacists interviewed, their supervision depends upon their place of posting. The pharmacists working at CHCs in the blocks nearer to the district headquarters in both the districts reported that in addition to the medical officer in-charge, district and state level officers visit them to cross-check the records and reports once every two or three months. Therefore, the geographical distance between supervisor and supervisee has an impact on the frequency of supervision. Furthermore, since the activities of pharmacists are not directly linked to any vertical programme, they are less likely to be supervised by the higher-level supervisors.

*Medical officer in-charge does supervision. Chief District Medical Officer also comes to supervise. (R46, pharmacist, Koraput)*

*Monitoring team is coming from central, state, and district level. They come and visit us. They come for every two to three months. (R9, pharmacist, Jagatsinghpur)*

In contrast to the experiences of pharmacists in the blocks nearer to the district headquarters, the pharmacists working at CHCs in the blocks furthest away reported that their supervision is not done regularly at local level, and that district level officers only make supervisory visits once in a two-or-three-year period. This represents further evidence that the geographical distance between the supervisor and the supervisee impacts upon the chances of supervision being carried out.

*Supervision means doctor sometimes sees the store register. The district headquarter people come sometimes. Till now they have only come for supervision two years back, after that they have not come for supervision. (R52, pharmacist, Koraput)*

*Actually our work has to be supervised by the in-charge [medical officer]. He cannot see because he does not have time. We prepare records and go to Sir. Sir never comes voluntarily to us. (R22, pharmacist, Jagatsinghpur)*

Unlike the pharmacists at CHCs, most pharmacists working at PHCs said that the medical officers supervise the drug dispensing and stock management. This point yet again emphasises that the closer the supervisor, the greater the chances of actually being supervised.

*The medical officers keep an eye on everything, what we are writing and what we are doing. Suppose they are prescribing medicines and we are dispensing here. The patient will go and show it to him, he will see whether I have given correctly or not or whether I am cheating the patient. They do the direct supervision. (R57, pharmacist, Koraput)*

*Whenever the medicine stock comes. Every month we enter the stock. When stock comes, he checks the chart, cross-check the medicine stock and then certifies. (R23, pharmacist, Jagatsinghpur)*

The majority of the doctors interviewed from both the districts reported that their work is not being supervised. They said that the major aspect of their work is the diagnosis and treatment of patients at the outpatient department, however, this is not being supervised. Similar to the pharmacists, the everyday activities of the doctors are not directly linked to any specific vertical health programme, therefore they are less likely to be supervised.

*There is no supervision of OPD management. It is because it is about treatment. (R49, general doctor, Jagatsinghpur)*

*Generally, there is no process of supervision. There is nobody seeing and telling about my work. (R66, specialist doctor, Koraput)*

In a similar vein to the doctors, the majority of staff nurses interviewed from both districts also reported that their work is not being supervised. Although some of the activities of staff nurses are directly linked to RCH programmes, they provide services at health facilities and not as outreach. This confirms that only programme-based activities are supervised, which is the focus of NHM.

*Sir [doctor] is there for supervision. He should tell us what we do not know. But this does not happen. (R47, staff nurse, Koraput)*

### **7.3.2 Supervisee and frequency of supervision: as reported by supervisors**

With one exception, all the multi-purpose health supervisors (male and female) interviewed reported that they do supervise MPHWs, including on immunisation days every Wednesday and village health and nutrition days each Tuesday and Friday. This concurs with what MPHWs reported about their supervision by the multi-purpose health

supervisors. One multi-purpose health supervisor (female) reported that she does not supervise the field staff because she is posted at the CHC for conducting deliveries.

*I visit one immunisation session, one village health and nutrition day session of each multi-purpose health worker at least once so that I touch all my health workers at least once in a month. (R10, MPHSF, Jagatsinghpur)*

*I am at delivery point at CHC. I don't go for supervision. If the vehicle is there, then I go. If I don't have any work, then I go. (R51, MPHSF, Koraput)*

Unlike the multi-purpose health supervisors who regularly conduct supervision, of the four medical officers in-charge of CHCs interviewed, only one reported that he carries out supervision as per the prescribed guidelines. The other medical officers said that they interact with the supervisors and staff in weekly review meetings at PHC level and monthly review meetings at the CHC, and sometimes visit the field for supervision. One medical officer in-charge of a CHC located far away from district headquarters reported that he cannot do the supervision as he has to attend the outpatient clinic since he is a single doctor. Similarly, the majority of block programme managers reported that they cannot make the expected number of field visits because they are busy in various forms of administrative work. This confirms the experiences of the health staff that they are less frequently supervised by the CHC level supervisors.

*As a medical officer in-charge I am going 10 to 12 days or 15 days in a month to the field. Public health extension officer is also going more than 10 days in a month. Block programme is going around eight to 12 days in to the field. (R6, MOIC, Jagatsinghpur)*

*We meet the field workers on Saturday and Monday. We ask about the problems of the field and they speak us about their problems in the field. We know about the field. (R30, MOIC, Koraput)*

*Actually I am a single doctor at CHC. I look after here emergency cases. The block programme manager and public health extension officer do the supervision. If any complain is there they inform me and I resolve the problem. (R59, MOIC, Koraput)*

*For me I have to do ten days field visit. But most of the time we spend our time preparing report. Apart from this we have district meetings. Hardly we are going for seven days in a month. (R50, BPM, Koraput)*

Like the majority of medical officers in-charge at CHCs, most of the medical officers at PHC level reported that they cannot go for supervision because of their workload. Like other senior-level supervisors at CHC and district levels, they supervise activities during special campaigns such as pulse polio.

*We are not able to go for supervision as we have duty. When there is pulse polio programme, mass drug administration programme, there we go and do supervision. (R64, MOPHC, Koraput)*

*We are overburdened. We cannot do all activities. As per the reports received, we make assessment that they [multi-purpose health workers] are doing their duty. We cannot go there. (R69, MOPHC, Jagatsinghpur)*

### **7.3.3 Activities undertaken during supervision: as reported by health staff**

Most of the multi-purpose health workers interviewed whose work was being regularly supervised reported that the multi-purpose health supervisors generally check for the availability of instruments and materials, observe the activities, identify the errors, give feedback and do capacity-building whenever required.

*When we do routine immunisation, they [multi-purpose health supervisors] see whether cotton is there or not, syringe is there or not.*

*Bucket, towel, soap is there or not. They see whether immunisation is done in a proper way or not. (R27, MPHWM, Jagatsinghpur)*

*They [multi-purpose health supervisors] come to my session site and observe. They enquire about everything we do and if we miss anything they do let us know. When they come for supervision, they identify our mistakes, they teach us “don’t do like this, it should be done like this”. Because of that we are able to learn. (R58, MPHWF, Koraput)*

Some of the lab technicians and the pharmacists interviewed whose work was being occasionally supervised reported that the supervisors check the records and reports.

*He [medical officer in-charge] looks if stock is maintained properly or not. Report is sent or not. Everything is all right or not. (R46, pharmacist, Koraput)*

*They [district level supervisors] come and collect report. They see the achievement. (R16, lab technician, Jagatsinghpur)*

#### **7.3.4 Activities undertaken during supervision: as reported by supervisors**

In a similar vein to what health staff reported about the activities undertaken during supervision, all the medical officers in-charge of CHCs who were interviewed reported that the supervision generally covers two main activities. These are the immunisation sessions conducted every Wednesday and the village health and nutrition days that take place every Tuesday and Friday as outreach activities in the villages. Some of them reported that MPHWFs receive more supervision than MPHWMs and that the work of pharmacists and lab technicians is not being supervised regularly.

*Mostly supervision is done on Tuesday and Friday for village health and nutrition day and on Wednesday for immunisation sessions. (R30, MOIC, Koraput)*

*Health worker female are being supervised more than males at field level. Activities of pharmacists and LT's are not supervised regularly. (R6, MOIC, Jagatsinghpur)*

All the public health extension officers interviewed reported that as they are senior to multi-purpose health supervisors, they oversee the supervision carried out by them. Moreover, they visit the multi-purpose health workers in villages if there are any public health issues or problems. They also conduct the supervision of immunisation activities on Wednesdays and of village health and nutrition days on Tuesdays and Fridays.

*I supervise the supervisors; whether they are supervising properly or not. And see whether health workers (male and female) are conducting village health and nutrition day properly or not, doing immunisation or not. (R60, PHEO, Koraput)*

*We supervise male and female supervisors. We cannot deal with all health workers. We leave everything to the supervisors like records and reports and we collect report through them. After that we go for village health and nutrition day, immunisation, any kind of problem in the field like diarrhoea, dengue and we directly contact to the workers. (R19, PHEO, Jagatsinghpur)*

The majority of the public health extension officers interviewed reported that they use checklists provided for the supervision of immunisation sessions and village health and nutrition days. After the supervision is over, they submit these checklists to the CHC and district office, based on which their travel and daily allowances are calculated. They said that they look at the planning of these sessions and cross-check whether everything is being implemented as per the plans, rectifying any issues identified. During the visit they also check the tour diaries of health staff and records related to immunisation and VHND. However, they said that the ways in which supervision was being carried out have changed, because now they do not find fault and embarrass the health staff. Instead,

they provide support and do capacity-building during supervision, and then share these experiences at the review meetings.

*We have a format for immunisation supervision and VHND supervision. We supervise as per that format, whether same action plan is there or not. If so then they are working or not. Accordingly, we tick on Yes or No. In this way we check as per the format and we suggest them to rectify if some fault is there. We check the tour diary and register also. (R32, PHEO, Koraput)*

*Earlier we were going and trying to find lacuna [omissions]. Supervision was just to find out the fault. But the system has been changed. In public we do not insult staff. We solve their problems on the spot. (R19, PHEO, Jagatsinghpur)*

All the multi-purpose health supervisors (male and female) interviewed reported that they use the prescribed checklist for supervision. They submit this report to the CHC office. In addition, they reported that they observe the activities of multi-purpose health workers, identify gaps in their skills and provide on-the-job training.

*We have a supervision format. That will go as a supervision report and if something extraordinary has happened and it has to be written then we write it in a plain paper and add it. (R34, MPHSM, Koraput)*

*Suppose I have gone to a village health and nutrition day session and there I observe that she (multi-purpose health worker [female]) is not able to do an antenatal check-up or haemoglobin estimation properly, then I teach her on the spot. (R10, MPHSF, Jagatsinghpur)*

### **7.3.5 Frequency of review meetings and activities reviewed: as reported by health staff**

Regarding the review meetings that are conducted at the health facilities on fixed days on a weekly and on a monthly basis, all the multi-purpose health workers (male and female) interviewed reported that there is a weekly review meeting at PHC level every Saturday (also called a sector meeting), and monthly review meetings at CHC level. The supervisors check the records and reports and point out gaps (if any) during the sector meeting. The supervisors then attend a meeting at CHC level every Monday, and brief about the work in their respective PHCs to the medical officer in-charge, block programme manager and public health extension officer at the CHC. These officers then review and give feedback to the multi-purpose health workers (male and female) in the monthly review meeting at the CHC, mainly about the targets set and their achievements.

*On every Saturday there is a review meeting at PHC. Another meeting is conducted at CHC that is monthly review meeting. (R27, MPHWM, Jagatsinghpur)*

*What reports we have sent are reviewed in the monthly meeting. They [CHC level managers] tell 'this is your achievement and that was your target'. (R36, MPHWM, Koraput)*

*The review is done in the PHC and the CHC. We tell our work one by one. We take the copies of our report and they [reviewers] have copy of it. They ask me 'why is your target achievement low? Why has this happened? What is required to make it better?' (R29, MPHWF, Jagatsinghpur)*

Unlike multi-purpose health workers whose activities are being reviewed weekly at PHC level and monthly at the CHC, all the lab technicians interviewed reported that their work is being reviewed by the TB officer and malaria officer at district level, quarterly and

monthly respectively. They stated that they get feedback regarding their targets and achievements as well as the correctness of their examination of the slides for TB and malaria. Moreover, unlike multi-purpose health workers who receive feedback verbally, the lab technicians receive written feedback as prescribed by the programme in the form of a letter by district level officers as expected under the TB and Malaria control programme.

*The district TB officer do review meeting quarterly and see three months' target and the rise and fall in the target [achievement]. We get letter about the wrong diagnosis in the meeting. They are taking and cross-checking slides. They see them if there is any discrepancy then they write it. (R16, lab technician, Jagatsinghpur)*

*Malaria review is done there [district office]. It is done once a month. District malaria officer conducts those meetings. In that month, what is the performance, what is the target, how much is achieved, what is done, details are discussed there. (R7, lab technician, Jagatsinghpur)*

*A letter comes from district malaria officer. He gives instruction in the meeting that 'your report was wrong. You cross-check it. Tell us if you require any training'. (R33, lab technician, Koraput)*

The majority of the doctors interviewed reported that there are monthly meetings conducted at the CHC, however, either they cannot attend because they are too busy in the OPD, or their work is not being reviewed even if they do participate.

*Review meeting is conducted once in a month, but our work is not reviewed at all. (R66, specialist doctor, Koraput)*

*Though monthly meeting is conducted here [CHC], we have no staff here. Many times I have to stay in OPD and not able to attend the meeting. (R21, specialist doctor, Jagatsinghpur)*

Unlike multi-purpose health workers and lab technicians whose work is reviewed, all the pharmacists and staff nurses reported that they are not called for review meetings either at the PHC or the CHC, and that reviews are being carried out only for multi-purpose health workers.

*Sector meetings are conducted at PHC, but we don't have to go to sector meetings. Our health worker male and female, multi-purpose health supervisor male and female, all those have to attend. Block meetings are monthly once, but we don't have to attend those too. (R23, pharmacist, Jagatsinghpur)*

*We don't have review meeting. The meeting is conducted for multi-purpose health workers. (R44, staff nurse, Koraput)*

### **7.3.6 Frequency of review meetings and activities reviewed: as reported by the supervisors**

Similar to the reports by the health staff, the majority of PHC and CHC level supervisors interviewed reported that the review of activities is carried out weekly at PHCs where medical officers and multi-purpose health supervisors (male and female) review the activities of multi-purpose health workers. Next, multi-purpose health supervisors (male and female) meet at CHC level every Monday, where they brief medical officers in-charge about the work being done under their respective PHCs or sectors. The monthly review meeting is held at the CHC, and all the staff and supervisors participate. In these meetings, activities carried out during the relevant period are reviewed, the constraints are shared, feedback is given and appropriate action is planned for the future. They give feedback verbally and on a few occasions in writing.

*We have 19 sub-centres. They are coming under three sectors. In every sector there is a meeting on every Saturday. The multi-purpose health supervisors come to block level with all the report on every Monday. The compilation of three sectors is held on Monday. This is the*

*platform. We meet the field workers on Saturday and Monday. We ask about the problems of the field and they tell us about their problems in the field. (R30, MOIC, Koraput)*

*We collect data of the whole week from them [multi-purpose health workers] on Saturday. We collect reports and discuss with them and also plan the work for next week. We take all the data and reports and deposit it to CHC on Monday. There we have supervisor meeting with the medical officer. So we discuss on the various problems in the field wherever it may be and take decisions on it with the in-charge medical officer after that at month-end we have a staff meeting at CHC for all staff. (R10, MPHSF, Jagatsinghpur)*

### **7.3.7 Barriers and enablers of supervision and review**

The majority of the supervisors interviewed reported more major issues with the supervision than with the review. These issues were related to transport support, documentation and the competencies of the supervisors in relation to supervision.

#### *7.3.7.1 Transport support for supervision*

Regarding transport support, in a partial agreement with the medical officer in-charge, some of the public health extension officers, particularly from Jagatsinghpur district, reported that for supervision, they use the vehicle belonging to the CHC, however, sometimes this is not available, especially when matters arise such as the outbreak of disease. In such instances, they cannot go for supervision.

*Suppose today there is diarrhoea outbreak there, we cannot follow the planned route. We have to change the plan and go to that place. In such case, vehicle is not there. Like today is Indhradhanushya [outreach programme for immunisation] programme is there, if vehicle is not*

*given to me, even if I want, I am not able to go. (R12, PHEO, Jagatsinghpur)*

Besides the problem of the availability of vehicles, some public health extension officers reported that although there is a vehicle and funds are available for fuel, they have to spend from their own pockets initially before being reimbursed after one or two years. They said that when they share the vehicle, they can visit only one place.

*Some problems are there. Fuel is not there for the vehicle. You have to get fuel on your own and go. But it takes one year or two years to get the money reimbursed. Medical officer in-charge has to approve. Overall public health extension officer has to beg. (R19, PHEO, Jagatsinghpur)*

*Suppose we get the facility of a vehicle so two of us will go to one place. In that case, supervision report will come from one place only and not the other. (R12, PHEO, Jagatsinghpur)*

#### **7.3.7.2 Records and reports of the supervision**

The majority of the public health extension officers and the multi-purpose health supervisors interviewed reported that supervision work is overloaded with a huge, unnecessary burden of registers and reports. They said that there is repetition of the information, most of which is unnecessary. Because of this work burden, they are neither able to learn new things nor to carry out the capacity-building of multi-purpose health workers, which, according to them, is an important part of supervision and review.

*After NHM has been launched, unnecessary formats have been increased. All those are not essential. A child's name is to be written at 100 places, a mother's name is to be written at 100 places... these are unnecessary and unwanted burden. These are all not required.*

*Thousands of registers, thousands of reports they [district level officers] are expecting. (R60, PHEO, Koraput)*

*We have to write eight-to-nine page report. To write eight-to-nine pages, it takes three hours. We have to write a weekly report and their review report. For this we need five-to-six hours. Due to this we are not able to reorient our self or read anything. Although staff has been trained on TB, leprosy, pentavalent vaccine, we need to reorient them during sector meeting but it is not possible. (R34, MPHSM, Koraput)*

### **7.3.7.3 Competencies of the supervisors for supervision**

The multi-purpose health supervisors (female) interviewed opined that because they have worked in the past as multi-purpose health workers, they understand the role so they are able to supervise, which is not the case with regard to multi-purpose health supervisors (male).

*As she [MPHSF] had done work and know the procedure. These people [MPHSM] have not worked so they cannot say. This is technical thing. How polio will be given in mouth technically. In what degree should DPT injection be given? As MPHSF was earlier a female worker she knows this and she can do better. (R51, MPHSF, Koraput)*

Similar to the opinions of the multi-purpose health supervisors (female), the multi-purpose health supervisors (male) said that they can only supervise the work of female staff if they have been given similar training.

*We should be given time-to-time training. We are not given any training. Suppose a new thing has been formed and you are giving training to the field staff about it but not to the supervisor then what will supervisor know? Whatever trainings are given to the field staff,*

*the same training should be given to supervisor too. (R34, MPHSM, Koraput)*

Besides the need to develop the technical capacities of multi-purpose health supervisors, the public health extension officers opined that the former should be trained on the techno-managerial aspects of supervision. They said that the MPHWMs have been promoted from health worker posts but not trained as supervisors.

*I have observed a problem in our health sector that the ground-level workers are given training but those who will supervise them they are not given training. They are promoted from health worker post, so they should be trained on how to supervise but there is a gap in this regard. They should be told what they need to observe, what records they should check. If they don't know what reports a health worker (female) should make, then what they will supervise. This is a gap. (R60, PHEO, Koraput)*

## **7.4 Effect of supervision and review on health staff**

### **7.4.1 Perceptions of health staff about supervision and review**

The majority of the MPHWMs and MPHWFs interviewed reported that supervision is useful because the supervisors identify and correct any mistakes, as well as providing guidance and direction. For example, they said that they feel interested in their work because they learn from supervisors and feel satisfied because supervision and review helps them to improve their performance.

*I feel good. We learn something from them [supervisors] and we know something new as well. They are giving suggestion when something is not done. We feel interested in our work. (R53, MPHWM, Koraput)*

*Supervision is good. He tells when we do some mistake. (R27, MPHWM, Jagatsinghpur)*

*When supervision is done our performance increased. They ask why there is low achievement. They suggest how to improve. (R29, MPHWF, Jagatsinghpur)*

Like the MPHWs, the majority of lab technicians reported that supervision and review is a good opportunity to improve their performance by learning from error, as supervisors help them to correct their mistakes. They trusted that supervision can be an opportunity to be identified for training. They reported that their performance-level remained high, and that they did follow-up actions because of reminders given by the supervisors.

*Suppose a report has come wrong. This has come that out of five slides your report three slides are wrong. You retry it and try to examine it sincerely. If you want to go on training you will be sent for training. Those who feel that we will go then they will be registered and they will go for training. (R33, lab technician, Koraput)*

*The supervisor of TB sees the card and verifies whether the cards are filled up or not. He reminds me the follow-up work. We call the man and do the follow-up work. All these are benefits. (R16, lab technician, Jagatsinghpur)*

Unlike the MPHWs and laboratory technicians, the majority of doctors and staff nurses reported that they are missing the opportunity to improve the quality of their work because they are not being supervised and reviewed. They said that in the absence of supervision, they are not able to identify their mistakes (if any) and are not committed to the work as per their own expectations. They felt that supervision and review could be a good opportunity to improve their performance by learning from error and gaining in confidence, as supervisors would help them to correct their mistakes.

*In medical college you will always get a chance to learn. Professor will be there, assistant professor is there, they find your mistakes and they*

*will tell you that, no this diagnosis is wrong and you give this medicine, but here there is no one to supervise us. (R26, doctor, Jagatsinghpur)*

*If MOIC will be there for supervision, it would be good. We will get some knowledge. We will be confident. Now I don't know what mistakes I am doing. So somebody should be there to supervise. (R54, staff nurse, Koraput)*

#### **7.4.2 Perceptions of supervisors about supervision and review**

The opinions of supervisors were divided about the effect of supervision on the staff. Some of the supervisors, mainly doctors who rarely carry out supervision, said that the staff work better because of the fear that the supervisors may visit them.

*Supervision means, they [health staff] are having some fear I think. Without fear they will not work.... If there will be no supervision, then there will be no work. (R18, MOIC, Jagatsinghpur)*

*They will have fear in their mind. People will come for supervision. They perform according to that. They are getting sincerer because of supervision. (R30, MOIC, Koraput)*

In contrast, other supervisors, particularly on the paramedical side who are working closely with the staff, said that the latter appreciate supervision because it gives them the opportunity to learn and to correct their mistakes. They said that the staff are afraid of embarrassment in review meetings due to poor performance, and not of supervision per se. This group of supervisors felt that supporting and guiding staff can improve their performance better than scolding them.

*They [staff] like supervision based on how much we support them. If we only command them, they will not like. If there is a wrong in the report, if we say come I will tell you, they will definitely show the notebook. If we shout at them that why they did not give the report on time and if*

*we will not understand what their difficulty is, they will definitely feel bad. (R12, PHEO, Jagatsinghpur)*

*Why because they feel bad. If somebody's achievement is not that good, he or she has to stand up in the meeting in front of all staff. When they feel bad, they try to do well. (R28, MPHSM, Jagatsinghpur)*

*There are some people who like if we talk to them face-to-face directly. And some have a feeling that he [supervisor] will scold me [health staff] in front of everyone in review meeting. So with that fear they are working properly. (R34, MPHSM, Koraput)*

Most supervisors working at PHC and CHC level felt that supervision has certainly improved the staff performance, either through the mechanism of fear or due to the gain in the knowledge and skills of the health staff.

*Only because of supervision, performance is good, without supervision performance won't come. One thing, fear is there. (R64, medical officer PHC, Koraput)*

*Impact is there. Those staffs who are actively supervised are working on time. Whichever work is given to them, they are able to doing it properly, their PAR [Performance Appraisal Report] is quite better. (R13, CHC level manager, Jagatsinghpur)*

*Suppose they don't know something or they are doing it in a wrong way, after supervision and review, they know their mistake and hence don't repeat it again. They are trying to do it in a better way. (R10, MPHSF, Jagatsinghpur)*

Unlike the PHC and CHC level supervisors, the district level managers said that the quality of supervision that is carried out presently is not up to the standard they expect, therefore there is little improvement in the activities carried out by the staff.

*Supervision is done but not up to that standard what we expect. That is why our activities are not well. (R61, district level manager, Jagatsinghpur)*

*There are some issues in the field. Quality of supervision is not up to the mark. The supervisors are not interested to stay at the place of their posting. (R42, district level manager, Koraput)*

### **7.4.3 Effect of supervision and review on the attitude and behaviour of health staff**

#### *7.4.3.1 Use of supervision and review by health staff*

Almost all the MPHWFs and MPHWMs shared their experience that their work has improved because of supervision and review. For example, they said that they corrected their mistakes, they were reminded of missed duties, they learnt new methods of doing their work and their time-management skills improved so that they could achieve their targets.

*Once I did not keep bucket and mug during immunisation. He immediately told me to keep them before other staffs enter. It became a reminder. (R27, MPHWM, Jagatsinghpur)*

*We do some mistakes when we are in field. When they come for supervision and identify our mistakes, they teach us “don’t do like this, this is not done like this, it should be done like this”. Because of that we are able to learn. (R58, MPHWF, Koraput)*

Similar to the MPHWs and laboratory technicians, some of the pharmacists reported that their level of performance remained high because of direct supervision. However, they felt that it is the fear factor that improves performance and did not report any support, guidance or capacity-building being made by the supervisors.

*Since there is direct supervision on us, so definitely our performance is good; if there is no one to supervise you then your performance won’t*

*be good, because there won't be any fear or apprehensions. (R57, pharmacist, Koraput)*

Some of the health staff interviewed, particularly doctors, said that there was negative behaviour amongst them because their work is not being supervised and reviewed. For example, they reported that in the absence of any supervision and review, some doctors do not report on time to the health facilities, some are busy in their own private practice and there is no fair assessment of who is working and who is not.

*Some may go for practice to nursing home. Some will not come to OPD and will sit in his room and will take fees. Direct supervision will control it better. (R68, specialist doctor, Jagatsinghpur)*

*Some doctors, they are not at all working. Some doctors are there who are over-burdened with work. So by supervision and review you can know, who is working, who is not working. (R66, specialist doctor, Koraput)*

#### **7.4.3.2 Increases in workload, particularly relating to records and reports**

In contrast to the majority, some of the MPHWFs, particularly from Koraput district, were not satisfied when there was an unexpected increase in their workload because of sudden, extra demands made by the supervisors. For example, some of them, particularly those working in remote areas, said that they faced difficulties because the supervisors asked for reports at very short notice. Furthermore, they stated that more time is required to visit the field in hilly areas, and they did not get sufficient time to prepare the reports, so that mistakes were sometimes made. They said that with such a heavy workload of many records and reports that they must prepare and maintain, they are not able to recognise any mistakes. They felt that the gaps in records and reports should be identified and corrected on the spot during supervision by NHM staff, and that the frequency of supervision should be increased.

*Supervision is good but they say give us the report today itself, so we are not getting sufficient time. They ask us in the last moment, just before 1- 2 days. If we say no sir it's not possible as I have come for training today and give me 1- 2 days then they won't listen and say that "No, it's not possible. We will be there tomorrow and anyhow you have to give it". So that's a problem for us. (R37, MPHWF, Koraput)*

*It's a hilly area; by the time I go back home it's late. So when I write in a hurry there are mistakes, somewhere nine will be written as six or six will be nine. So the total figure changes and hence I hear scolding... there will be mistakes when we do in hurry. (R58, MPHWF, Koraput)*

*Actually what happens there are more record and report work. The register, report is given to NHM. If they do not supervise what is right and what is wrong, then how shall we know? All the reports go to NHM. How shall we know about our wrong and right without their supervision? It should be verified and checked in the field. Whether register is written or not. Supervisor from NHM should come. Then the report and register maintenance will be all right. (R36, MPHWM, Koraput)*

#### **7.4.3.3 Health staff preferences regarding supervisors**

Regarding ease of working with the supervisors, some of the MPHWs interviewed, particularly females, said that they can perform better if supervisors support them instead of being threatening. They reported that they feel more comfortable being supervised by the PHC level supervisors than by those at CHC level; and feel afraid of the district level supervisors because they may take some punitive action if mistakes are identified. They feel that the closer they are to the supervisor, the greater the chances of corrective action being taken rather than disciplinary measures.

*If we do any mistake then supervisor should not threaten us or scold us, he should explain us so that we can understand. Then only we can learn without being afraid and will have the interest to listen, we will also not feel offended. If they will come and shout, then we will be nervous and may commit some more mistakes. Block people at least take our side but we feel fear if district people will come. Whether they will take any action against us. Block people are like our own people, at least they excuse us for our mistakes. (R58, MPHWF, Koraput)*

*We are close to sector supervisor here. But there we will get afraid of Sir [MOIC]. Sir [MOIC] will ask why you have less performance. You should do it. I will have fear. I am doing wrong and I will correct it. (R29, MPHWF, Jagatsinghpur)*

Unlike the MPHWs, most of the doctors interviewed looked more for the technical competencies of the supervisors than the relationship. They said that there is no technically competent authority to comment on their work. They question how a doctor can supervise and review the clinical work of another, and feel that the work of a specialist cannot be supervised and reviewed by a general doctor.

*They will see whether any complain is coming from patient or not..... Who will supervise? He is doctor and we are doctors? (R49, general doctor, Jagatsinghpur)*

*Who will review? You can't just hold review. I am a specialist; a MBBS doctor can't review me? Can't be reviewed. Can a surgery specialist review me? Who will review? (R26, specialist doctor, Jagatsinghpur)*

*I am the senior officer. No one is there in the district to do my supervision. My quality can be supervised by the people from medical college. There is no one in the district. (R41, specialist doctor, Koraput)*

Some of the staff nurses interviewed reported that in the absence of supervision and review by appropriate supervisors, they take guidance from their colleagues from other cadres, for example, the pharmacists, who are not their formal supervisors.

*Pharmacist's help we are getting well. When I do delivery alone, that time I took help of pharmacist. Another thing is I can't understand the local language of this place. So he helped me in that regards. And in case where I can't infuse saline, that time also I called him and he helped me out. (R54, staff nurse, Koraput)*

*What I have done or what I have not done? My husband is here. He is pharmacist. If I cannot understand I take his suggestion and do. (R47, staff nurse, Koraput)*

## 7.5 Summary of findings on supervision and review

Table 14 Summary of findings on supervision and review

Domains	Intended practices	Reported practices	Effect on health staff
Objectives	To improve delivery of health services To utilise optimally human resources for health To focus on vulnerable populations in remote areas.	Outreach RCH services provided by MPHWs are supervised more than the facility-based general health care services provided by other staff. In contrast to intention, the remote areas are less supervised.	Perceptions of health staff:  The MPHWs found supervision to be useful for them in identifying and correcting their mistakes through on-the-job training by the supervisors.
Frequency of supervision and review	District level supervisors: 4 days a month and review once a month.  CHC level supervisors: 10 days a month and review once a month.  PHC level supervisors: 16 days a month and review once a week.	District level supervisors: once in two months  CHC level supervisors: four to six days a month  PHC level supervisors (MPHSs): 12 to 16 days a month but not by the doctors.	In contrast, the doctors and staff nurses felt they missed opportunities of learning and correcting their mistakes because of the lack of their supervision. Higher level supervisors believe staff work because of fear of supervision whereas lower level

<b>Domains</b>	<b>Intended practices</b>	<b>Reported practices</b>	<b>Effect on health staff</b>
Distance from district head quarter	The remote areas should be intensively supervised.	In contrast, remote areas were infrequently supervised by district and CHC level supervisors.	supervisors felt staff likes supervision as it helps them
Category of health staff and type of health care services to be supervised	All categories of health staff and all types of health services should be supervised.	The MPHWFs were the most supervised, followed by LTs and pharmacists. The doctors and staff nurses were not supervised. Outreach services were most frequently supervised followed by the activities of disease control programmes, but not the facility-based general health care services.	Attitude and behaviour of health staff: The health staff who were frequently supervised were found to be satisfied with the supervision and review and said that it improved their work. In contrast, the staff whose work was not supervised and reviewed were found not to be satisfied about these processes.
Activities undertaken in supervision and review	Hand-holding and on-the-job training is part of the supervision process. Ensure the availability of staff, logistics and the carrying out of the designated activities at each level of health care.	Only MPHs at PHC level fully implemented supervision for MPHws. In the cases of pharmacists and LTs, supervisors checked only the records and reports.  Supervision was not implemented for doctors and staff nurses as supervisees.  The work of MPHws was reviewed during weekly and monthly review meetings along with to some extent the work of LTs and pharmacists, but not the doctors and staff nurses.  For district level and CHC level managers, the supervision is not a priority activity; CHC level managers faced constraints in getting transport facilities, and the supervisors who are also doctors are busy providing clinical services rather than carrying out supervision.	Staff in remote areas were found to be dissatisfied about supervision because of the additional and unnecessary work related to records and reports. The doctors preferred more competent staff to supervise their work, whereas the paramedical staff preferred closeness with their supervisors rather than the technical competencies of the more senior supervisors.

## **7.6 Conclusion on supervision and review**

The main objective of the system for supervision and review of health staff activities is to improve health service delivery by optimally using the existing staff, especially in remote areas. To achieve this objective, the system for supervision should logically consist of four major elements: 1) setting up the system for supportive supervision (identify supervisors, train supervisors, develop checklists and ensure resources), 2) planning supervision (develop specific plans for visits, places, dates and activities), 3) conducting supervision (collect information, help to solve problems and provide on-the-job training), and 4) Follow-up activities (provide feedback and plan further supervision visits). Out of these four elements, the existing system has intended to take into account the first three components under the system for supervision, by visiting the place of work of the relevant health staff. The fourth element is intended to be implemented under the system for review, whereby weekly and monthly review meetings for health staff should be conducted by the managers at the health facility level. If both intended practices are taken into account together, the system appears to be complete as a system for supervision and review.

Although the design of the system of intended practices for supervision and review appears to be complete, its implementation was mainly influenced by the resources provided by the central NHM to meet the objectives of the programmes relating to their focus area, i.e. reproductive and child health. Crucial aspects, such as identifying supervisors, developing checklists and ensuring adequate resources were fully implemented, however the activity was limited to the areas related to RCH programmes. In contrast, the routine facility-based general health service activities were the least supervised, because the supervisees (doctors, LTs and pharmacists) were not directly involved in RCH programme activities. Therefore, only the staff who were involved in such programmes were frequently supervised and those involved in general activities were infrequently supervised.

The implementation of the element of conducting supervision was also influenced by the type of supervisors, their priorities, their distance from the supervisee, their competencies and the resources provided for supervision. The lower-level supervisors at PHC level who work closely with the staff made more frequent supervisory visits than the higher-level supervisors at the CHC and the district. The higher-level supervisors, doctors and managers at CHC and district level relied more on review meetings than on the supervision; the former also focussing mainly on assessing the work of health staff delivering RCH services, and not those involved in more general health care activities. The differences in the activities undertaken during supervisory visits also varied according to the level of the supervisor. The lower-level supervisors collected the required information, helped in solving the problems of the health staff and also provided on-the-job training where appropriate. In contrast, the higher-level supervisors mainly just collected the information, making supervision more of an administrative process than one of actually providing support to the staff.

Regarding the effect of the system for supervision and review on the staff in meeting its objectives, several contextual factors have made an impact. These include the source of funding and the focus area, the distance between the supervisor and the supervisee, competency issues and the closeness of supervisors to their supervisees. Although the system was intended to supervise and review the activities of all cadres of staff, because of NHM funding, only the RCH programme-based supervision and review was conducted. Therefore, the effect of supervision and review was observed only with regard to MPHWFs, who are involved in providing RCH services. The types of supervisors also influenced the effects of supervision and review. Those who are competent to supervise and are working closely with the staff were found to be more effective in positively changing their attitude and behaviour. Furthermore, this group of supervisors were better accepted by the health staff, as they found their input helpful in correcting their mistakes and carrying out capacity-building to help them improve their work. In contrast, the health staff who are involved in general health care activities at facility level neither received supervision nor did they have their activities reviewed. As a result, they felt left

out of the system and were not satisfied with how it works. There were contrasting perceptions from the supervisors about the attitude of health staff towards supervision and review. The lower-level supervisors who work more closely with the staff felt that the latter willingly accept and appreciate the system for their professional development. In contrast, the supervisors at higher level who hardly observe the activities of health staff believed that they dislike supervision and review, and they do the work due to a fear of the system.



## **Chapter 8: Performance appraisal**

### **8.1 Introduction**

The following sections describe the intended practices related to performance appraisal, their implementation as reported by the health staff and the managers and the effect on health staff in terms of their perception, attitude and behaviour. The results include comparison between the study districts of Jagatsinghpur and Koraput, staff cadres, gender, the nature of the job (contractual or regular) and length of service.

### **8.2 Intended practices**

There are guidelines for assessing the performance of all health staff given by the General Administration Department (GAD), which develops rules for the civil services in all departments under the Government of Odisha. The Department of Health and Family Welfare (DOHFW) should follow such rules as developed by the GAD. According to these guidelines, the performance appraisal of doctors should be carried out using a Performance Appraisal Report (PAR); (GAD, 2015). The performance appraisal of regular paramedical staff should be done by recording their Confidential Character Rolls (CCR); (GAD, 1982). There is a separate performance appraisal report format for the contractual staff working as government contractual and NHM contractual, involving a quarterly performance appraisal report (QPAR); (NHM, 2015). Each of these guidelines states the objectives of performance appraisal, which are described in the following paragraph. There are pre-designed formats that should be used for appraisal and suggested action points following the appraisal with specific timelines. The following section describes the details of the objectives, authority, content, frequency, process and action after performance appraisal for all three categories of employees within the Government of Odisha.

### **8.2.1 Objectives of performance appraisal**

The guidelines for the PAR for doctors state that the appraisal mechanism should provide inputs on the performance of staff and support them to 'identify their potential for further achievement in the career'. In addition, the guidelines instruct that the performance appraisal 'should not be mistaken to be a fault finding exercise' (GAD, 2015).

The guidelines for recording the CCRs of paramedical staff state that the supervising officers should carry out the continuous monitoring of staff performance so as to identify and immediately rectify any shortcomings in their work. The supervising officers should then keep records of such actions taken, and mention these in the CCR (GAD, 1982).

The main objective of the QPAR for staff on fixed yearly contracts is to determine performance-based incentives and to take decisions on the continuation of their services for the following year (NHM, 2015).

### **8.2.2 Authority, frequency and process**

In addition to the stated objectives of the performance appraisal, the guidelines include instructions on whom should carry out the appraisal of health staff. The immediate supervising officer of each staff member is known as the reporting authority, who should carry out the performance assessment and enter the grades and comments about performance. For example, the chief district medical officer is the designated reporting authority for all doctors working in the district, and should therefore carry out PAR. For all paramedical staff based at CHCs, PHCs and SCs including staff nurses, lab technicians, pharmacists and multi-purpose health workers, the medical officer in-charge at the CHC has been designated as their reporting authority, and should therefore carry out CCR for regular staff and QPAR for contractual paramedical staff (GAD, 2015, 1982; NHM, 2015).

The reporting authority should then submit performance appraisal reports to higher-level officers for review; known as the reviewing authorities. The reviewing authorities

should examine the assessments carried out by the reporting authorities and enter their own remarks. For example, the Director of Health Services at state level is a higher-level officer than the CDMOs, and therefore represents the reviewing authority of the appraisals of around 4,000 doctors across the entire state. For the appraisals of paramedical staff, the CDMO is the reviewing authority, as a higher-level officer than the medical officers. For NHM contractual staff, the district programme manager (DPM) is the reviewing authority (GAD, 2015, 1982; NHM, 2015).

Finally, the reviewing authorities should submit all such appraisal reports to the officer known as the accepting authority, who takes the final decision on performance appraisal reports. The accepting authorities should review the assessment carried out by both the reporting and the reviewing authorities and enter their own remarks about the performance of the staff. These remarks submitted by the accepting authority should be considered to be the final decision on the staff performance assessment. The accepting authorities are those officers who had appointed the staff into the service. For example, all doctors are appointed by the signature of the Secretary, Department of Health and Family Welfare at state level, who acts as an accepting authority of their appraisals. All paramedical staff, being district cadre, were appointed by the signature of the CDMO, who therefore acts as the accepting authority of the performance appraisals of all paramedical staff in the district (GAD, 2015, 1982; NHM, 2015).

The PAR for doctors and the CCR for regular paramedical staff should be conducted annually, whereas the appraisals of contractual paramedical staff would be carried out more regularly, on a quarterly basis every year (GAD, 2015, 1982; NHM, 2015).

### **8.2.3 Content**

There are prescribed formats for the performance appraisal of doctors, regular paramedical staff and contractual paramedical staff. The PAR has five parts, of which the doctors should complete parts I and II, regarding the activities carried out during the reporting year. Then the reporting authority should enter scores on performance in part

III of the report, based on the information provided in parts I and II. The reviewing authority should enter remarks in part IV and finally, the accepting authority should make final comments in part V of the report (GAD, 2009).

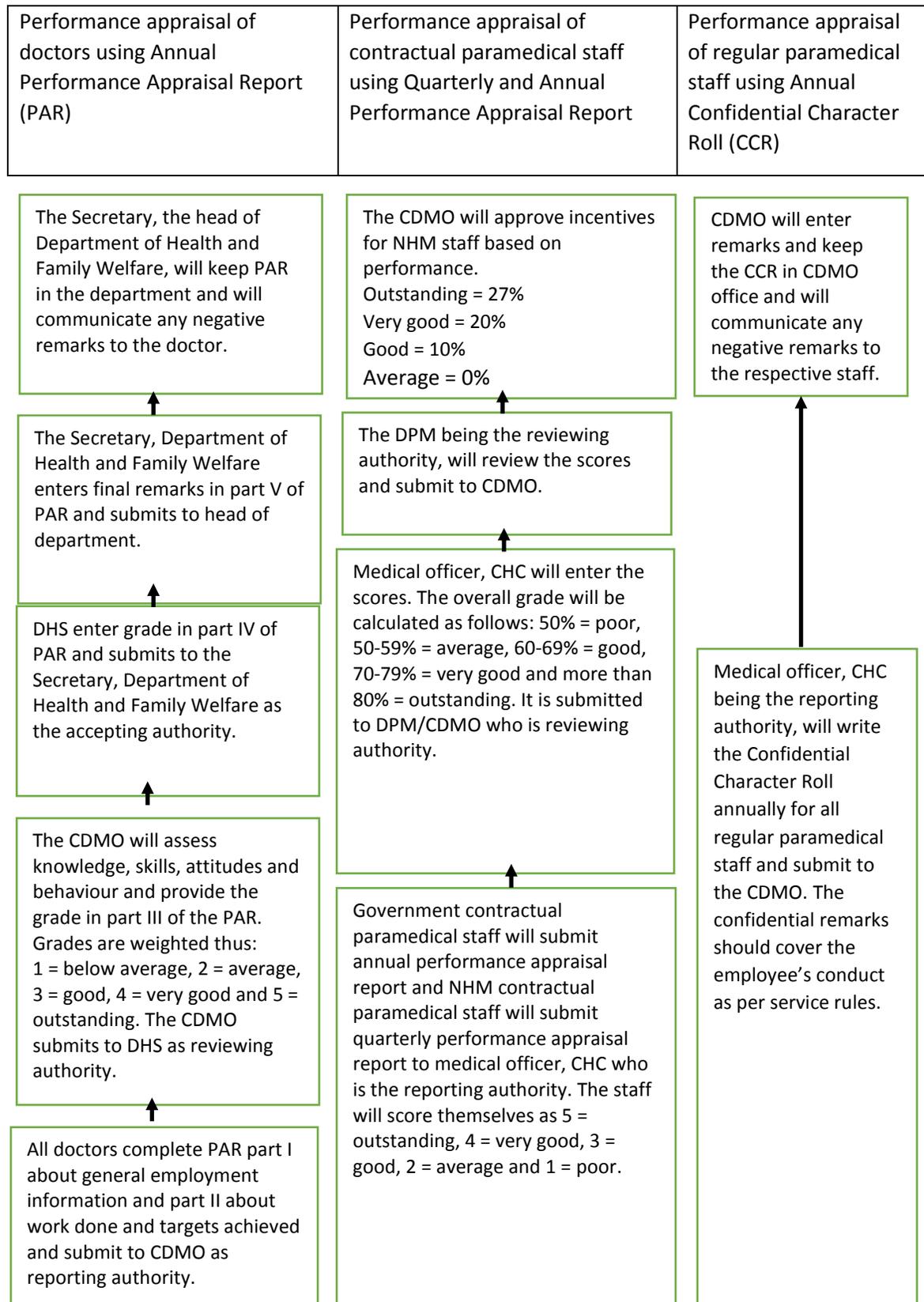
Similarly, there is a separate format of quarterly performance appraisal report for contractual paramedical staff. Within the QPAR, the staff members should score themselves on their performance against a listed set of activities. Then, the reporting authority should enter their own scores and calculate grades such as poor, average, good, very good and outstanding. The reviewing and accepting authorities should then enter their own assessment grades (NHM, 2015).

In contrast to the doctors and contractual staff, the regular paramedical staff should not have to submit any documents. The reporting authority should write about their conduct as per the service rules, which include their knowledge about rules and processes of work, sincerity, discipline, relations with colleagues and fitness for promotion or taking on additional responsibilities (GAD, 1982). The reviewing and accepting authorities should then enter the final remarks, based on the feedback given by the reporting authority.

#### **8.2.4 Action on performance appraisal**

With regard to the PAR and the CCR, after the appraisal is carried out, the accepting authority should communicate in writing any 'negative remarks' to the staff member concerned. In the case of the QPAR for NHM contractual staff, following the assessment the accepting authority should approve monetary incentives as per their performance. These monetary incentives range from 10% of consolidated salary for good performance to 27% for outstanding performance. Regarding the QPAR for government contractual staff, according to performance the accepting authority should take the decision on the continuation of their service for the following year and a 10% increment of their consolidated salary. (GAD, 2015, 1982; NHM, 2015).

Figure 10 Performance appraisal: Intended practices on authority, frequency, content and action after performance appraisal

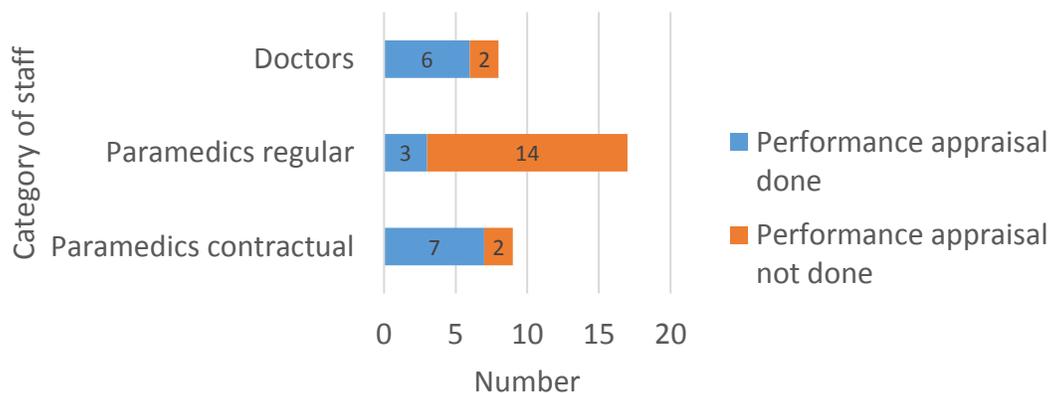


### 8.3 Reported practices related to carrying out performance appraisals of all staff

The staff interviews were conducted between September 2015 and March 2016, and participants were asked about their appraisal for the period from April 2014 to March 2015.

The majority of the doctors, regular paramedical staff and contractual paramedical staff interviewed knew that their performance appraisal should be carried out using the performance appraisal report (PAR), confidential character roll (CCR) and quarterly performance appraisal report (QPAR), respectively. Figure 11 depicts that the performance appraisals of most doctors and contractual paramedical staff interviewed were carried out for the relevant year in both of the districts. In contrast, performance appraisals for the majority of the regular paramedical staff from both districts were not carried out during this period. There was no difference amongst the staff based on the districts where they worked or their length of service in relation to the performance appraisals undertaken. However, for all four male contractual staff the appraisals were carried out, as compared to three-out-of-five contractual female staff, for whom appraisal also took place. All the regular staff nurses who are female were not even aware of the appraisal system.

Figure 11 Status of performance appraisal for the year 2014-15 of the health staff interviewed



## 8.4 Reported practices: performance appraisal of doctors

### 8.4.1 Authority, frequency and process

Most of the doctors interviewed knew that the CDMO is their reporting authority, and this was to whom they submitted the PAR for the year 2014-2015. Furthermore, they knew that the CDMO forwards this to the Director of Health Services who is the reviewing authority, before it is finally submitted to the Secretary, Department of Health and Family Welfare as the accepting authority. As depicted in Figure 11, most doctors interviewed have submitted their PAR for the year 2014-2015. However, two individuals did not do this, since they had not received any information about submission because they were working at a health facility located far away from district headquarters.

*We are giving our self-appraisal, PAR, once in a year, to the government. We are submitting it to CDMO. CDMO is submitting to Director health service [at state level] and that goes to Secretary, Department of Health and Family Welfare [at state level]. (R66, regular specialist doctor, Koraput)*

*It [PAR] goes from here. But we get information late. I have not submitted it for last two years. Our in-charge [medical officer, CHC] should do it and send. (R21, regular specialist doctor, Jagatsinghpur)*

The majority of the district and state level managers interviewed generally agreed that the present PAR system for the doctors is not effective, because of the huge workload placed upon the reviewing and accepting authorities. For example, some of the state level managers said that it is not possible for the DHS and the Secretary, DOHFW to review the PARs of 3000 to 4000 doctors.

*Someone submitting PAR to you and expecting that each performance is assessed by you. But there are around 3000 doctors. Their PARs are coming to the Secretary. Can Secretary have the time to verify and see*

*those 3000 PAR? PAR has no impact on the performance of the doctors. 90% have no impact. (R73, state level manager)*

*It is not possible for DHS to see PAR of 3000 to 4000 doctors. (R71, state level manager)*

#### **8.4.2 Content of the PAR**

As per the policy mentioned in Figure 10, most doctors interviewed said that they write on the PAR form about their daily routine work of administering patient treatment and any surgeries carried out, as well as the supervision of other staff as a medical officer.

*How many operations were done, what is our daily routine work, these all have been written there [in PAR]. (R21, specialist doctor, Jagatsinghpur)*

*In the PAR it is written all the work of OPD. It is about our patient treatment work and our supervision work as a medical officer. (R49, general doctor, Jagatsinghpur)*

#### **8.4.3 Action following performance appraisal and feedback**

Almost all the doctors interviewed reported that there is no feedback given on the PAR that they have submitted, hence it has no effect on their actual work. They said that when doctors are due for promotion, the PAR for the previous three years is required. If there are negative remarks about performance, then the promotion is not given. Some of them said that they are not even aware whether their appraisals are reviewed or not, because they do not receive any feedback.

*There is no influence on actual work at all. They ask how many operations you have done. We write but we do not get any feedback. No feedback. That [PAR] is kept only on pen and paper. There should*

*be some action on it. Feedback should be given. (R21, regular specialist doctor, Jagatsinghpur)*

*Promotion according to PAR they are doing. But they look only for any adverse remark; adverse comments are there or not. They are only seeing that in the PAR. Otherwise they are doing promotion based on whether previous three years PAR is there or not, that's all. (R66, regular specialist doctor, Koraput)*

*There is nothing good in it. We are just giving it. We don't know whether review is done or not? There is no feedback we get. (R41, specialist doctor, Koraput)*

## **8.5 Effect of performance appraisal on doctors**

### **8.5.1 Perception of doctors about performance appraisal**

#### *8.5.1.1 The PAR not assessing actual work*

Almost all the doctors interviewed reported that the system of performance appraisal is simply a ritual, and that it has no effect on their performance. They said that their actual work is not being assessed in the PAR, and that there is in fact no assessment of the work they have done or their achievements, how the work was carried out and how sincere they were in undertaking the activities. They said that all of their work should be supervised and linked to performance appraisal.

*It [PAR] is not judging anything, what he or she did in last one year, what was that work, and how it is done, and how far he or she has done, it is not mentioned. There should be supervision and PAR should be more strengthened and everything should reflect in PAR and it should be reviewed by the higher authority and they should give feedback. (R66, specialist doctor, Koraput)*

#### 8.5.1.2 Inability of the CDMO to provide accurate reports

Some of the doctors interviewed believed that the CDMO, as their reporting authority, is not effectively assessing performance. The reasons quoted by them were that as professional colleagues, doctors do not generally write negative remarks in this way; and that due to being based at district headquarters, the CDMO cannot actually observe the work done or not done by the doctors at peripheral health institutions.

*The CDMO who gives comment cannot give bad comment on that. How shall he write bad if someone works? Doctors do not write bad remarks. They are like that. Doctors do not write about wrong things happening. That is the problem. (R41, specialist doctor, Koraput)*

*Those who are involved only they can write proper PAR. Those who are not getting involved they just write. In periphery it happens. One does two days' duty then he goes away. CDMO cannot know about that. .... Direct supervision can do it better. (R68, specialist doctor, Jagatsinghpur)*

#### 8.5.2 Attitude and behaviour of doctors on performance appraisal

Regarding the outcome of the performance appraisal, the majority of doctors interviewed reported that having a PAR with no negative remarks is a precondition for promotion. However, promotion is not actually based on performance, but upon length of service. They said that they have to submit the PAR since this is mandatory, otherwise it has no benefits.

*I don't think there is anything in it [performance appraisal]. But government has made it compulsory. If PAR is not given your promotion will not be given. Your increment will be stopped if you do not have PAR. (R41, specialist doctor, Koraput)*

Some specialist doctors, particularly those posted at CHC level, reported that although they were specialists by designation, they were given general duties. For example, one surgeon said that without an anaesthetist he cannot perform surgery, and because of this he faces difficulty in recording specialist activities in his PAR.

*If you are doing your own duty, then you will like it. If a surgery man will do general duty, then what appraisal he will give. How many minor operations, how many major operations? What shall we write? You tell me. There is no anaesthetist here in CHC. How surgery cases will come? (R21, specialist doctor, Jagatsinghpur)*

### **8.5.3 Perception of managers about performance appraisal of doctors**

Most of the state level managers confirmed the doctors' perception that the present PAR system has no effect on their performance, because the performance assessment is not done properly. In addition, there is a lack of regular monitoring and supervision, during which the performance could actually be observed.

*Unless you have a good PAR your promotion is held up. I don't think by PAR method promotion will held on. PAR does not work. PAR does not improve the performance of the person because the performance is not assessed properly. Monitoring and supervision is there but it is not implemented. (R73, state level manager)*

### **8.6 Reported practices: performance appraisal of regular paramedical staff**

The majority of the regular paramedical staff interviewed such as lab technicians, pharmacists, staff nurses, MPHWMs and MPHWFs knew that their immediate supervising officer writes their confidential character roll (CCR) about their performance. However, they reported that for most of them, performance appraisal was not carried out for the year 2014-2015.

### 8.6.1 Authority, frequency and process

Most of the regular paramedical staff interviewed knew that the medical officer in-charge of the CHC is the authority who should write their confidential character roll (CCR). Some of them reported that even though the clerks who prepare pay bills for all staff have no role in appraisals, they were involved in writing their CCRs. In contrast, all of the regular staff nurses and one-of-three regular MPHWFs, all of whom are women, were not aware about the system of performance appraisal and CCRs.

*In our service book CCR is given. Medical officer in-charge had written good and signed. Office seal of in-charge [medical officer] is there. (R25, regular MPHWF, Jagatsinghpur)*

*Medical officer only signs. The clerk writes and medical officer signs. The clerk who deals pay bill work. (R36, regular MPHWM, Koraput)*

*I think probably medical officer writes CCR. I don't have knowledge on that. It is used in the service book. I don't know. It is called character certificate. (R24, regular MPHWF, Jagatsinghpur)*

*I don't know about that [performance appraisal]. Is there any form? We don't have PAR. This is for NHM staff. We don't get performance incentives. (R47, regular staff nurse, Koraput)*

Most of the regular paramedical staff said that their CCR is not written every year, because the CCR is required for assured career promotion and grade pay increments, which occur after every 10 years of service. A few of them shared their experiences of getting their CCR and reported that when they required this for their grade pay increment, they had to locate it from all the medical officers with whom they had worked during that 10-year service period.

*We are not able to know [about CCR]. When we went there [office of CDMO] couple of times, we came to know that it [CCR] is not done on*

*a regular basis. Those things [about CCR] are all confidential matter, so why would they make us known about it? (R15, regular pharmacist, Jagatsinghpur)*

*Our CCR is not written every year. The CCR is given when we ask for it. It is written when it is required. When it is not required then it is not written. For example, when my promotion to the post of supervisor will be due at that time Sir [medical officer] will send CCR. (R36, regular MPHWM, Koraput)*

Similar to the reports by the regular paramedical staff, all the CHC level managers reported that unlike contractual paramedical staff, the regular paramedical staff require their CCR at the time of the grade pay increase after every 10 years of service, due to which they do not send the CCR of these staff members every year.

*For regular staff there are no incentive based on performance. That is why it [appraisal] is not needed regularly. If there is promotion, if there is grade pay after 10 years, 20 years, and 30 years. Then it is required to give CCR. (R30, CHC level manager, Koraput)*

### **8.6.2 Content of the CCR**

Most of the regular staff interviewed reported that they do not know what is written in their CCR, and according to them this is at the discretion of the medical officer. A few said that it is written about their overall conduct, covering issues such as their sincerity, timeliness, irregularities and any allegations.

*That we can't say. It depends on the doctor what he wants to write in it [CCR]. Whether he will write that the person has good character or he is not working or does not know about the work, which depends on the doctor. It's his choice what he wants to write. (R37, regular MPHWF, Koraput)*

*There is a pro forma. In that pro forma it is written in the box. How is he working? Whether he is sincere or insincere. Whether he is doing duty in correct time or not. That in-charge [medical officer] will write himself. (R22, regular pharmacist, Jagatsinghpur)*

Regarding the content of the CCR for regular paramedical staff, most of the CHC level managers interviewed said that they neither discuss nor give feedback to the health staff on their performance. They said that the existing system of performance appraisal through the CCR has no impact on staff performance, because the appraisals are not being carried out based on the actual work done by the staff.

*Actually it should be written based on the actual performance. I don't think it is happening anywhere. The way the system is functioning now, in it CCR is not related to performance by any means. Actually if you will write CCR only on the basis of performance then very rarely anyone will get promotion (R60, CHC level manager, Koraput)*

### **8.6.3 Action following performance appraisal**

The majority of the regular paramedical staff interviewed said that the CCR is not being written every year, so there is no scope for action after performance appraisal except that the cumulative CCR for 10 years' service would be used to award the grade pay scale.

## **8.7 Effect of performance appraisal on regular paramedical staff**

### **8.7.1 Perceptions of regular paramedical staff about performance appraisal**

#### *8.7.1.1 Usefulness of performance appraisal for the staff*

Most of the regular paramedical staff stated that they do not have any use for or benefits from performance appraisal, because for them it is a CCR and not a PAR. They said that the NHM contractual staff receive incentives based on their PAR.

*Actually CCR is of no use to us. As in case of NHM health worker they get incentives based on their performance but in our case no such thing is there so it's of no use to us. (R23, regular pharmacist, Koraput)*

#### **8.7.1.2 Links to performance or career progression**

Most lab technicians and pharmacists said that because they are not promoted to higher levels in their service, the CCR is of no use to them. The staff nurses said that promotion is based on seniority rather than on performance, and all felt that there is no link between the CCR and performance or promotion.

*CCR is only required for grade pay after every 10 years. There is no link of it with performance. (R16, regular lab technician, Jagatsinghpur)*

*Does government give promotion seeing the performance of someone? Promotion is there on seniority basis. Government will never give promotion on the basis of performance. (R47, regular staff nurse, Koraput)*

### **8.7.2 Attitude and behaviour of regular paramedical staff towards performance appraisal**

#### **8.7.2.1 Trust of the regular paramedical staff in the appraisal system**

A few regular paramedical staff said that they were not sure whether their CCR is written at all. When asked about suggestions for changing the appraisal system, a few of them said that there is no need to change anything because it would be of no use anyway.

*When it is required they are writing and giving there. I don't know what is written. I don't know whether it is written or not. They don't write anything seriously. (R36, regular MPHWM, Koraput)*

*Why to change it? Anyhow it [CCR] is of not much use to us. Let it be the way it's going on. (R23, regular pharmacist, Koraput)*

### 8.7.2.2 Feedback and guidance

Some of the regular paramedical staff held the opinion that there should be guidance, supervision, review and feedback about their work. They said that the CCR could be done regularly, in order to monitor whether staff are working according to their job responsibilities.

*Whatever I heard, I did. Whatever I heard from this official, I did. You did not give guidance. So guidance is required. Feedback is required. Whether we are doing work or not, supervision is required. And whether work is done or not, it should be assessed in review meeting also. (R15, regular pharmacist, Jagatsinghpur)*

## 8.8 Reported practices: performance appraisal of contractual paramedical staff

As mentioned in the section on intended practices, there are two types of contractual paramedical staff, government contractual and NHM contractual. As described in Figure 7, of the nine contractual paramedical staff interviewed, the performance appraisals of seven individuals had been carried out for the year 2014-2015.

### 8.8.1 Authority, frequency and process

The majority of the NHM contractual paramedical staff did report that their performance appraisal is carried out by the medical officer at the CHC, before being submitted to the CDMO.

*There is form for it [performance appraisal]. We write in that form. Medical officer then writes. Then it goes to CDMO office. Then he writes his comments. (R20, NHM contractual staff nurse, Jagatsinghpur)*

Although the majority of the NHM contractual paramedical staff reported that their performance appraisals were done, there were differences in the frequency of the

appraisals carried out during the reporting period. For example, the NHM contractual staff interviewed in Koraput district reported that their appraisal was carried out once in three months, whereas their counterparts in Jagatsinghpur said that the appraisal was conducted once in six months.

*Performance appraisal is done quarterly using PAR. (R54, NHM contractual staff nurse, Koraput)*

*It [performance appraisal] is done once in six months. (R20, NHM contractual staff nurse, Jagatsinghpur)*

Similar to NHM contractual staff, the government contractual staff stated that their appraisal is done by the medical officer at the CHC, before being forwarded to the CDMO. However, in contrast to the former, the government contractual staff reported that their performance appraisal was carried out once a year.

*We have annual PAR. After we fill it, medical officer in-charge at CHC forwards it to CDMO. (R33, government contractual lab technician, Koraput)*

As reported by the contractual paramedical staff that their performance appraisal is done regularly, the CHC level managers interviewed said that because these contractual staff can receive performance-based incentives, they send their appraisals on time.

*NHM has performance incentives for contractual staff. That is why it is necessary to send their appraisal regularly. The quarterly performance appraisal has to be sent in every three months to calculate their incentives. (R30, CHC level manager, Koraput)*

### **8.8.2 Content of the appraisal forms**

In contrast to the regular paramedical staff who do not know the content of their CCR, the majority of both the NHM contractual staff and government contractual staff

interviewed reported that the activities they are doing are reflected in their PAR. For example, the NHM contractual staff nurses reported that the number of deliveries carried out and the number of immunisations given by them are noted in their PAR. Similarly, the NHM contractual MPHWFs said that even the extraordinary work done by them is recorded in their PAR, and the government contractual staff said that they note down their performance, on which the medical officer gives comments.

*In the performance appraisal form we write that what trainings we have taken. ....Then we write what activities we have conducted. What extraordinary work we have done this year. We write what achievement we have done. (R29, NHM contractual MPHWF, Jagatsinghpur)*

Regarding the content of the PAR for contractual paramedical staff, most of the CHC level managers interviewed reported that they are not putting down genuine observations of staff performance.

*Current situation is that whatever we are observing, we are not putting the exact observations in the PAR. That's why it is not putting any impact. If we will put it exactly then definitely it will give some impact. (R6, CHC level manager, Jagatsinghpur)*

Regarding the reasons for this, some of the district level managers said that medical officers, being the reporting authority, have to depend on the staff to manage the health institution. To avoid causing offence to these workers, they do not report genuine observations of their performance. They suggested that there should be a system for giving suggestions and feedback on the actual work done by the staff.

*Generally, what happens. Medical officers are not giving any negative appraisal for the clinical staffs. Because medical officer has to manage the whole hospital by depending on them. (R42, district level manager, Koraput)*

*In appraisal system there is no scope for suggestions or feedback we are just giving, good, very good or outstanding, (R4, district level manager, Jagatsinghpur)*

Whilst some state level managers reported that the reviewing of large numbers of PARs by one person is not possible, certain others opined that many district level officers assessing the PARs do not know how to carry out a performance appraisal. Another problem is that the present system does not keep performance records on a continuous basis, which makes it difficult for the officers to justify their remarks, particularly on the best and worst performances.

*Most of the district level officers do not know what to write and how to assess PAR or CCR. If I write some adverse remarks and I would not do documentation, then I cannot write that. Because I cannot substantiate that. If continuous assessment is there and I have documented that then I can put something there. Like outstanding also. Because it has impact on both bad people and good people. Suppose I would give somebody outstanding I have to give reasons. There should be continuous assessment. (R1, state level manager)*

### **8.8.3 Action following performance appraisal**

All of the NHM contractual paramedical staff interviewed stated that after their performance appraisals, they received additional money in the form of performance-based incentives. The government contractual paramedical staff said that if their performance is satisfactory, they have continuation of service for the following year and receive the 10% increment that the government introduced in 2014.

*Medical officer writes to district. Then CDMO will write. If only he [medical officer] writes, incentives cannot be given. They [district authorities] also have to write. If they write good or the best, then we*

*get additional 20% [of salary] incentives. It is based on the work. (R20, NHM contractual staff nurse, Jagatsinghpur)*

*We don't get any incentives. Based on performance appraisal, renewal is given after one-year completion of service. Recently in 2014, government has declared that if a staff has good performance, he should be given 10% increments. That we are getting. (R33, government contractual lab technician, Koraput)*

## **8.9 Effect of performance appraisal on contractual paramedical staff**

### **8.9.1 Attitude and behaviour of contractual paramedical staff towards performance appraisal**

Unlike the doctors and the regular paramedical staff who were not satisfied with the outcomes of their performance appraisals, the majority of both the NHM contractual and the government contractual staff expressed their satisfaction about such outcomes. For example, most NHM contractual staff said that their performance assessment is done based on their work, and accordingly they receive performance-based incentives. They said that they are ready to work more to gain more incentives, however the amount should be more than 20% of their salary.

*We have performance incentives. We will feel good if the work is more. (R29, NHM contractual MPHWF, Jagatsinghpur)*

*We get incentives as per our performance. One thing is good that they give marks as per the performance. So it creates interest to work. And nobody will want to reduce the performance incentive amount. (R54, NHM contractual staff nurse, Koraput)*

*We should get more than 20% that we get. We are doing a lot of work. Our salary is less. (R20, NHM contractual staff nurse, Jagatsinghpur)*

Paramedical staff on fixed yearly government contracts were satisfied with the process of appraisal, however they would like to receive incentives based on their performance as reported in the appraisal.

*It [performance appraisal] is only for continuation of service. It is not for incentives. If someone does good he will get the same salary. If somebody does very good he will get equal salary. (R56, government contractual lab technician, Koraput)*

### **8.9.2 Perceptions of managers about the effect of performance appraisal on contractual paramedical staff**

The majority of the district level managers believed that the contractual paramedical staff were motivated to do more work in order to get performance-linked monetary incentives, particularly to achieve an outstanding performance.

*They are encouraged to work because they will get the good incentives. NHM is giving that percentage of extra money if it is good. It is perfect. (R38, district level manager, Koraput)*

*Those who are outstanding they are feeling good; those who are good they try to improve their performance. (R5, district level manager, Jagatsinghpur)*

Most CHC level managers stated that the majority of staff get a performance rating of Good or Very Good. They believe that by rating the staff performance higher, they will work more.

*By giving them Good and Very Good for incentives their performance will automatically increase. They like this if we put Good. (R59, CHC level manager, Koraput)*

In contrast to the district and CHC level managers, many state level managers opined that the existing system of performance appraisal does not have an impact on performance. They said that performance assessment is not carried out accurately, and that all staff receive good grades, even if the actual performance by some of them is less than satisfactory. Moreover, they said that the system for regular monitoring and supervision is not effectively conducted by the doctors who are responsible for the performance management of the staff.

*No improvement in performance based on CCR or PAR. As we see everybody assess their CCR or PAR casually. Those who work they get the same PAR and those who do not work, they also get the same PAR. There is performance-based incentive in NHM. Maximum staff takes good incentives but their work is not satisfactory. (R3, state level manager)*

### 8.10 Summary of findings on performance appraisal

Table 15 Comparative summary of findings of PA system – doctors, regular paramedical staff and contractual paramedical staff

<b>Components of PA system</b>	<b>Doctors</b>	<b>Regular paramedical staff</b>	<b>Contractual paramedical staff</b>
Objectives	Provide inputs on performance and support in career development. Not achieved.	Continuously monitor performance to identify and rectify shortcomings. Not achieved.	Determine and provide performance-based incentives and decide on continuation of their service contracts. Partially achieved.
Type of PA system	Self-reported. Performance Appraisal Report.	Written by managers: Confidential Character Roll.	Self-reported Quarterly Performance Appraisal Report.
<b>Intended practices</b>			
Authority and frequency	Should be initiated by CDMO, reviewed by DHS and accepted by Secretary annually.	Should be initiated by MOIC, reviewed and accepted by CDMO annually.	Should be initiated by MOIC, reviewed by DPM and accepted by CDMO.

<b>Components of PA system</b>	<b>Doctors</b>	<b>Regular paramedical staff</b>	<b>Contractual paramedical staff</b>
Content of performance appraisal	Self-reported activities as per job.	Written comments by immediate supervisors.	Self-reported activities as per job.
Follow-up action after appraisal	Only negative remarks should be communicated.	Only negative remarks should be communicated.	Determine and provide performance-based incentives and decide on continuation of their service contracts.
<b>Reported practices</b>			
Authority and frequency	Most doctors submitted but no information available on action taken by CDMO, DHS and Secretary.	Not written for most of the regular paramedical staff.	Most contractual staff submitted QPAR and action taken by MOIC and CDMO.
Content of performance appraisal	Most doctors reported their job activities. No face-to-face meeting.	Not written for most of the regular paramedical staff. No face-to-face meeting.	Most contractual staff reported their job activities. No face-to-face meeting.
Follow-up action after appraisal	No follow-up action taken. No feedback given.	No follow-up action taken. No feedback given.	Performance-based incentives provided and continuation of service contract based on performance. Most of the staff received similar grades.
<b>Effect on health staff</b>			
Perceptions	Perceived by both doctors and managers as simply a ritual in pen and paper. Actual performance not reported. Not effective to improve performance. CDMO is not immediate supervisor so cannot assess performance effectively.	Perceived by both staff and managers as an ineffective system. Actual performance not reported. Not effective to improve performance. Even if MOIC was immediate supervisor performance was not assessed on a regular basis.	Perceived to be effective and useful to improve performance. MOIC is immediate supervisor so can assess performance effectively.
Attitude and behaviour	Not satisfied with PA system. No trust held in PA system.	Not satisfied with PA system. Neither staff nor managers	Satisfied with PA system. Staff put in efforts to improve performance to get extra incentives and the

Components of PA system	Doctors	Regular paramedical staff	Contractual paramedical staff
	Most doctors submitted PAR simply as a ritual.	participated on a regular basis.	continuation of their service contract. Managers implemented the PA system regularly and effectively as compared to doctors and regular paramedical staff.

### 8.11 Conclusion on performance appraisal

The overall objective of the system of performance appraisal of health staff is to monitor and improve their performance. Logically, in order to achieve this objective, there should be elements of measuring performance and of linking this with the rewards and feedback loops within the system for PA as well as with other HRM systems. Within the PA system for the doctors and the contractual paramedical staff, there is an element of self-reporting performance in the form of the PAR, which will then be assessed by the appraisers. In contrast, for regular paramedical staff, the supervisor must record the remarks regarding performance directly, in the form of the CCR. In the cases of doctors and regular paramedical staff, the higher authorities provide feedback to the staff only if there are adverse remarks about their performance. For contractual paramedical staff, the higher-level authorities have to take decisions regarding their continuation of service and provide performance-based monetary incentives. Although the contractual staff should get performance-based monetary incentives, which could be considered a form of feedback on their performance, the other two PA systems do not offer any feedback loops, and these are not incorporated within the design of the systems themselves.

The implementation of the system of performance appraisal has largely failed to achieve its objectives, because this constitutes an incomplete system with the absence of feedback loops. In the case of doctors, they submitted their PAR simply as a paperwork ritual because the PA system is not linked to any rewards or to their eventual promotion. The other factor that influenced the implementation of the PA system was that there are around 4,000 doctors in the health system, and it is obviously impossible for one state level officer to review the performance of so many individuals within the calendar year.

In the case of regular paramedical staff, the managers did not implement even the first element of the PA system that is recording the performance of the health staff, because they knew that this would not be used for any purpose. The other reason why managers did not implement the PA system was because they knew that no-one was checking that they were undertaking the performance appraisal of the staff. The PA system was implemented at least partially for contractual paramedical staff, because the element of measuring performance was linked to the payment of performance-based incentives and decisions relating to their continuation of service. Apart from the fact that the PA system was different for doctors, regular paramedical staff and contractual paramedical staff, there was no difference in the implementation of the system between the districts or according to length of service. However, the staff working in remote areas in both districts participated comparatively less than those working in areas nearer to the district headquarter, because of geographical disconnection. Some of the staff, predominantly women, were not even aware of the PA system, making it very difficult for the latter to start operating.

The other major problem in the design and implementation of the PA system is that it is highly centralised particularly for doctors. In the case of doctors, the Chief District Medical Officer assesses their performance, however this is not possible in practical terms, because he or she cannot physically observe or meet the doctors working at all the various health facilities. Even the existing PA system does not provide such opportunities. Such a highly-centralised PA system makes implementation difficult, and even if this does occur, it makes no positive impact upon the health staff in terms of their behaviour or improving health service delivery.

Since the NHM provided funds and specific guidelines for paying performance-based incentives to NHM contractual staff only, this has had an effect upon the design and implementation exclusively in relation to this group of employees, with no influence upon the system relating to doctors and regular paramedical staff.

Therefore, the doctors and regular paramedical staff perceived the system to be useless and were distrustful of this, resulting in no change to their behaviour. The contractual staff see a link between appraisal and bonuses, but there is no evidence from this study that this in turn leads to increased performance. One of the reasons for this is that all the staff get similar performance grades, even though they do not perform equally.

Furthermore, the present appraisal system is being implemented (if at all) as a stand-alone function that is not integrated with other HRM practices. For example, the managers who regularly supervise the work of staff are not involved in the process of their performance appraisals. Similarly, the managers who develop the training programmes are neither involved in the supervision of the staff, nor in their appraisals. Even though there is scope for the PA system to identify the training needs of the staff, this is not incorporated as an element of it. Thus, the present appraisal system, rather than supporting the staff in improving their performance, is actually serving to bring down the confidence of the majority of staff members.

## **Chapter 9: Human Resources Management as a system in the public health sector in Odisha**

### **9.1 Introduction**

Having examined each of the four selected HR functions to improve the effectiveness of the health workforce separately in the previous chapters, the wider 'HRM system' is now examined more holistically. This chapter begins by looking at the objectives of the four HR functions as a whole in relation to health workers. Next, the design and implementation of the systems and the interactions between these are examined. A number of facilitators and barriers to effective implementation that can be attributed to the context in which they operate are also examined.

### **9.2 The objectives of the HR functions**

The broad collective purpose of the four HR functions is to improve the effectiveness of the public sector health workers in Odisha state, and thereby improve access to quality services. The functions, which are underpinned by policy and guidelines, should: 1) enable managers to achieve the necessary behaviours from the workforce to deliver the health services in the state; and 2) address the needs of the health workers in order to ensure attraction to and retention within a competent and motivated workforce. Of the four HR functions, obtaining the balance between these two objectives is probably most difficult for posting and transfer, partly because of the complexity in meeting the needs of many health workers regarding choice of posting, and partly because the environment enables some health workers to get around the rules. The objectives of the other three HR functions seem more achievable, though the appraisal systems differ for the three groups studied. For doctors and paramedics on regular contracts, the objective is to monitor and provide support to improve their performance only when the system observes some shortcomings in their work, without any financial incentives. For staff on contracts through the NHM, the system has to provide financial incentives based on performance, and take decisions on the continuation of their service contract for the following year.

### **9.3 The design of the systems to realise the HR functions**

Process mapping of the systems to realise the HR functions – or the ‘intended practice’, shows the designs to be logical with regard to the stated objectives and mainly based on good practice. For example, the ‘system for in-service training’ includes a comprehensive set of steps, from needs assessment to the evaluation of staff performance during and after training (Armstrong and Taylor, 2017; Pineda-Herrero et al., 2011). The exceptions are the performance appraisal systems for doctors, as the appraisees are only meant to receive adverse remarks about their performance, with no reinforcement of good performance; and for paramedical staff on regular contracts, whose Confidential Character Roll (CCR) reports are submitted to higher authorities without being shared with the staff regarding good or poor performance. These processes do not help health workers to improve performance and seem to be a design fault within the system. A further fault in the design of the appraisal system for doctors is the process of approving the content of the Performance Appraisal Form, which is first done by the Director of Health Services and then the Secretary (see Figure 10); it is clearly not possible to do this in an effective way for the 4,000 doctors in the public sector in Odisha without the process becoming a mere ritual.

An interesting design feature of the supervision function is the review meeting. In addition to the planning, resourcing and implementation of supervision visits to facilities by managers, regular review meetings at the offices of these managers take place, at which facility in-charges report upon progress. These meetings have the potential to reinforce the supervision process, or compensate for it if managers are unable, for various reasons, to travel to the facilities.

Whilst there was some variation in the design of systems relating to cadre or type of contract (see below), from a review of the documentation, no account was made for the different needs of male and female staff – for example, relating to access to training, particularly for the staff working in remote areas which could have a more negative influence on females than males.

#### **9.4 The implementation of the systems to realise the HR functions**

There were numerous reported examples of the systems being implemented as intended. For example, all elements of the performance appraisal system for NHM staff were reportedly fully implemented by the managers on time and the health staff received the performance-based incentives. Similarly, the system of supervision by the PHC level supervisors was reportedly fully implemented for the health staff working at sub-centres. Whereas, there are also examples of the systems not being implemented, because the design of the system was incomplete with some of the essential elements missing. For example, the appraisal system for the staff on regular contracts has no scope for giving feedback on the performance of health staff.

On the other hand, the study found some basic problems with the implementation of other systems. For example, the system might only be partially implemented, with some elements neglected. Neither the element of training needs assessment, at least within the districts, nor the element of evaluation of training were carried out. With these two elements of the system missing, it is not possible to develop appropriate training courses or to verify that the courses have been conducted effectively. The implementation of systems may vary in different contexts. For example, some respondents in remoter parts of Koraput were unaware of the performance appraisal system.

Some elements of the systems were highly complex and therefore difficult for managers to implement. Although three of the elements of the system for the posting and transfer of doctors - compulsory initial posting, monetary incentives according to degree of remoteness and non-monetary incentives - were reportedly implemented fully, the subsequent posting (or rotation following first posting) of doctors was a more challenging element of the system. Subsequent posting is meant to take into account the choices of the doctors. The majority wanted to live in locations in the plains, such as Jagatsinghpur, for various reasons including access to good schools. CDMOs found this task particularly challenging.

Managers identified that there was no feedback channel in the systems and there would be no consequence for the lack of the successful implementation of an HR function in their situation. For example, the managers know that the process of undertaking performance appraisal is not being monitored and the outcome will not be used to reward or punish health staff, therefore, it is unlikely that they will put in efforts, since there is no purpose in doing so.

## **9.5 Coherent use of HRM sub-systems**

HR outcomes are best achieved using a combination of HRM sub-systems. A good example of this is that of MPHS(F)s, in supervision and providing in-service training for the MPHFW(F)s on the job. Upon examination of the four sub-systems separately however, there appear to be clear opportunities being missed for linking sub-systems and thus reinforcing their effectiveness. For example, in-service training is potentially linked to the other three HR functions. Performance appraisal is an excellent opportunity for identifying training needs for an individual. Supervision is often used as a way of consolidating new skills learned from in-service training courses, as mentioned above, and to identify further training needs; and appraisal is often used for confirming the acquisition of new skills. More complex to implement and less frequently found is the consultation of in-service training records to inform staff transfers; this can avoid the wastage of newly-acquired skills when someone is transferred to a new role or location where these skills cannot be used. Another apparent gap between the systems is the lack of any input from supervisors. For example, the multi-purpose health supervisor (female) at PHC level implemented fully the system of supervision for multi-purpose health workers, however, she was not involved in the planning and implementation of in-service training, although she can better understand training needs and can monitor staff performance after training. In addition, she is better placed in directly observing the staff performance by virtue of her close association with them; however, she is not part of the system for performance appraisal. One possible explanation is the lack of apparent co-ordination of the 'owners' of each of these systems, partly due to the different decision-

making levels and the lack of autonomy of district level managers, who are in some respects best-positioned to ensure the coherence of the systems.

## **9.6 The context in which the HR functions are operating**

Other explanations for how well systems were implemented were more complex, and relate to the context in which the system is being operated. These reasons are presented under thematic headings below: management – including levels of autonomy, management competencies; planning and resources; the nature of staffing and contracts; the nature of funding/reforms; geographical context and social context.

### **9.6.1 Management authority and competence**

Good management is essential for the implementation of the HR practices prescribed in the relevant policies or guidelines. An essential requirement is the authority and autonomy to make decisions. A second requirement is access to resources. A third and related requirement is competent and willing staff to implement the systems.

In spite of the change of paramedics from a state-controlled cadre to being managed by the CDMO at district level and his or her subordinate managers in 1999, there were areas where managers did not have the power to make decisions. For example, they cannot make decisions about which health staff are to be trained, upon which training topics and for improving which type of health services. Managers were not given the necessary authority and guidelines to carry out training needs assessments and evaluations. Had district managers been given full control over the provision of in-service training, they might naturally have carried out these two elements of the system due to the logical need. Even though there was funding for training from the NHM, managers did not have the powers to carry out training needs assessment, resulting in the neglect of large skill areas. However, where managers did have sufficient autonomy, some of the HR systems were reported to be working – for example the supervision of multi-purpose health workers by their immediate supervisors.

Managers lacked the resources to implement certain elements of the HR sub-systems. For example, there were insufficient funds for travel (including fuel) and allowances to

enable district and CHC level supervisors to travel to health facilities. At CHC level, there was one vehicle that had to be shared by three-to-five supervisors, which restricted their movements, limiting them to visiting only a few health facilities. This was in contrast to PHC level supervisors working in the same area as their supervisees, where supervision appeared to happen on a regular basis because they were provided with travel allowances rather than depending on the office vehicle. The managers at district level appeared to lack resources of their own for in-service training – other than for externally-funded training (see below). This may also be an explanation for why training needs assessments were not carried out.

In some cases, it was the lack of skilled human resources that hindered the HR functions, such as in-service training. District level managers said they had difficulty in a) identifying skilled trainers from within the district as there was a shortage of doctors who normally act as trainers, and b) even if they were in post, it was difficult to secure their time to run courses because of the pressure of providing routine clinical services. In the case of supervision, the PHC level multi-purpose health supervisor (female) is a supervisory cadre, meaning that when they were promoted from the role of multi-purpose health worker, they were trained for undertaking supervision. In contrast, no other supervisors are specially trained for supervision.

### **9.6.2 The nature of staffing and contracts**

The way in which the HR systems are implemented depended partially on the staffing groups involved and the nature of their contracts. Unlike paramedical staff, medical doctors remained a state cadre throughout the period studied. As such, they are managed by the Department of Health Services, and the CDMO has no control over the posting and transfer of doctors on regular contracts within the district once they have been assigned, except for making temporary transfers based on the needs of the organisation. Interestingly though, unofficially the CDMOs do try to impede transfers of doctors outside their districts as a means of optimising the staffing of their health facilities. The other function that differs for doctors on regular contracts is appraisal, as

discussed above. Though the actual appraisal is carried out at district level in the same way as for other cadres, the approval is at a higher level.

The study population is governed by two types of contract. The first is the regular government contract governed by public service rules. The second is the fixed-term contract. There are numerous types used by the government, but within this study population these were contracts funded by the National Health Mission (NHM) with a few funded by Odisha government. Unlike staff on regular contracts who are transferred from one posting to another in line with the staffing needs, staff on NHM contracts can apply to their preferred locations, and if they do not get them first time around they can apply for jobs in these locations when there is a fresh advertisement for recruitment. The appraisal system differs for staff on NHM-funded contracts in two ways. First, their performance is linked to financial bonuses, and second, the renewal of contracts is based on satisfactory performance. This probably explains why the performance appraisal system for staff on NHM-funded contracts is functioning, unlike the appraisal systems for staff on regular contracts, although there was no clear evidence that health worker performance was any better. The fact that NHM-funded staff mainly work on RCH-related programmes means that they benefit more from in-service training provision and supervision – both of which are focused more on RCH programme areas.

### **9.6.3 The nature of funding/reforms**

The study contrasts two main funding sources for the HR functions: the government regular funding, similar to other sectors in public service; and the National Rural Health Mission (NHRM), latterly renamed as the National Health Mission (NHM). The NRHM aimed at structural and functional reforms in the health care system and included the provision of extra funding from central government. The NHM continued this mission. In order to deliver better services, the NHM employed more staff than in the approved and funded establishments and so the staff in these additional posts were employed on temporary contracts. This method of employment allowed the increased use of rewards and sanctions, using financial bonuses and the non-renewal of contracts for leverage on performance.

A strong focus was on Reproductive and Child Health (RCH) services, with the funding of these areas set as a priority. This resulted in NHM funding for in-service training and supervision focused on these areas. The NHM also provided specific guidelines for planning and implementing IST, supervision and PA systems, which could have enhanced their effectiveness as systems. Whilst this might have improved performance in some areas of service delivery, other areas continued to be neglected.

#### **9.6.4 Geographical context**

A major difference between the two study districts is the level of remoteness – particularly beyond the district headquarter in Koraput district compared to Jagatsinghpur district. Out of the four HR functions, one would expect this remoteness to present the biggest challenge for the posting and transfer function. However, for doctors, because the system is operated centrally at the state headquarter, it is easier to see where the vacancies are across districts and therefore apply the rules to make the necessary transfers following initial posting in order to achieve the fair distribution of staff. While this may meet the objectives of state level managers, it did not always coincide with the interests of the doctors themselves (see below).

Paramedical staff working in Jagatsinghpur district were mostly originally from that district and were therefore happy with their postings. However, paramedical staff working in Koraput were originally from other districts, due to the shortage of indigenous staff in Koraput. The staff were not happy with their postings and could not get transfers to other districts through the normal request process.

Remoteness also affects transport and communications, particularly in Koraput district where travel time from the district headquarter to the CHC and from the CHC to PHC level was comparatively higher than in Jagatsinghpur. As a result, it was a big problem for the district and CHC level supervisors, but not for PHC level supervisors visiting the villages in the area under the PHC. It was more difficult to conduct training in the remoter parts of Koraput, therefore managers conducted the majority of training at district level, resulting in difficulties in accessing this for staff in remote locations. The doctors working

in such areas did not submit their PAR in time because they could not get reminders about it due to disconnection from the office of the CDMO.

#### **9.6.5 Social context**

Though a gender lens was used in the study design, few instances of this being a single factor in the successful implementation of the HR functions were identified. However, examples of an intersection between gender and geography did become apparent. In one case, a female staff nurse was deputed by the CDMO from an urban hospital to a rural facility with accommodation, to enable her to take care of her infant. In a second example, it was identified that regarding access to training for staff in remoter health facilities in Koraput district, female staff were more disadvantaged than men. This was because they have to balance domestic work with their job tasks, and it was therefore difficult to manage the time to travel to the district headquarter to attend training.

All the explanations listed above for the poor implementation of HR systems related to shortcomings or negligence. The study also found examples of the intended or actual misuse of the posting and transfer system, but not of the other systems. Managers stated that, although they had the powers since paramedics became a 'district cadre', they were reluctant to carry out certain posting and transfer decisions because of 'political pressure' and the negative consequences this might have for them. There were other cases cited, that in their frustration with not being successful through the normal administrative channels, staff had resorted to the use of 'parallel systems' (La Forgia et al., 2015) which involved the use of bribery or actual 'political pressure' to influence posting and transfer decisions. This has the effect of making it more difficult for managers to fill vacancies in underserved areas, and may cause other health workers who are unable to use the parallel systems to feel aggrieved.

An interesting intersection between gender and corruption was also identified. Female health workers preferred not to pay bribes. This was possibly because they do not have much control over money, and also that they did not feel that it was worth spending huge amounts, preferring instead to save it.

## 9.7 Conclusion

Looking at the four HR functions as part of a wider HRM system, posting and transfer, in-service training, performance appraisal and supervision and review were all intended to improve the effectiveness of public sector health workers in Odisha state. The design of the HRM sub-systems to support the HR functions were mostly logical, except where appraisal did not link to improving performance, or the design of the structure, such as the approval steps for performance appraisal for doctors, was impractical. As reported by the managers and health workers, some of these HRM sub-systems were implemented as intended. Certain sub-systems have missing elements that would impair the effectiveness of the HR function. A significant missing part of each sub-system was a feedback channel; hence neither improvements to the sub-systems nor learning from the implementation of them would be possible. There are some linkages between the sub-systems, but clear opportunities for other linkages were missed, thus reducing the effectiveness of the overall HRM system. Contextual factors that would support or hinder the effectiveness of individual sub-systems or the overall HRM system included: management authority and competencies, access to resources, the nature of staffing and contracts, the type of funding or reforms, the geographical and the social contexts. In most cases, these factors hindered the effectiveness of the HRM sub-systems and the overall system.

## Chapter 10: Discussion

### 10.1 Introduction

It has long been acknowledged that health workers are key to the delivery of health services (WHO, 2013, 2006). The requirement of an effective health workforce has been re-iterated more forcefully as a condition for achieving Universal Health Coverage (UHC) (Campbell et al., 2013; WHO, 2013). Yet this is not simply about having more health workers, but also about their effectiveness. An important determinant of the effectiveness of health workers is human resource management (HRM). It is difficult and complex to establish the link between HRM and health worker effectiveness – or performance (Guest, 2011; Purcell and Kinnie, 2007). This study has therefore focussed on the effect of HRM on the attitudes and behaviour of health workers in the context of the Indian public health system at district level on the assumption that, as argued by Purcell and Hutchinson (2007), this will contribute to improved organisational outcomes.

The study, which was conducted within the state of Odisha, selected for review four HRM functions that are strongly associated with health workforce effectiveness: posting and transfer – for without staff in place there is no performance; in-service training, supervision and review and appraisal – all of which support the performance of the individual.

Following Purcell and Hutchinson's model (2007), the study examined the 'intended practice' in relation to all four HRM functions from document review and key informant interviews. Then, using in-depth interviews with managers and staff, the study identified the reported practices implemented, how they were perceived and the apparent effects of these practices on health worker attitudes and behaviour. From the interpretation of these findings, it has been possible to identify where problems arise and to propose some areas for improvement for the state of Odisha, which might also be applicable to other states in India and indeed to other countries with certain similar characteristics as identified in this study.

The next section provides a brief summary of the findings outlined in the previous five chapters. This is followed by a reflection on the Purcell and Hutchinson model, and based on the findings, a revised version of this model, situated within a wider systems approach to HRM including the environment – or context within which the HRM system is placed. Having established the revised model to link HRM functions to HR outcomes – in this case related to health workforce effectiveness – the findings of the study are considered in relation to the design and reported implementation of the HRM system and sub-systems and the environment, or context, in which these systems are being operated.

## 10.2 Key findings

The key findings from chapters five to nine are summarised in Box 1 below.

### **Box 1: key findings of the study**

1. Relevant HRM systems for staffing/deployment and performance are designed based on accepted practice and are broadly in place, although certain key elements may be absent. For example, the performance appraisal is incomplete with missing elements, for example the face-to-face interaction of managers and staff.
2. Even though the majority of HRM systems were logically designed to achieve their objectives and were complete, it was reported that most of them were not fully implemented as designed.
3. Lack of coherence between the systems leads to a lack of optimisation of work done within individual systems. The four HR functions appeared to be designed as stand-alone systems, and with one or two exceptions being implemented as such. Coordination between HR functions and feedback on their effectiveness was not taking place, resulting in a lack of learning across the whole HRM system.
4. Implementation is heavily affected by the following factors:
  - Management authority and competencies: None of the managers are formally trained on HRM and are therefore not fully competent and not interested to undertake HRM functions. Furthermore, the authority to design and operate the HR system is distinctly distributed between state and district level managers respectively, leading to no one having complete authority and control over the systems. The planning process is centralised at the state level without the involvement of district authorities, leading to the incomplete implementation of HR systems, because the planning was not matching with the realities on the ground.
  - Nature of staffing and contracts: the level of control that district managers have over staff depends on the nature of their cadre – they have less control over doctors who belong to a state cadre than over district cadres. Appraisal has a different format for staff on NHM contracts than for those on normal government contracts.

- Nature of funding and reforms: the nature of the funding for NHM-affected staff contracts and the NHM's focus on RCH services affected funding and support for supervision and in-service training.
  - Geographical context: remoteness affects the ability of managers to fill posts and retain staff (posting and transfer), particularly for doctors, as being a state-level cadre they are more readily moved from one district to another. Remoteness may also affect HR functions due to the lack of transport for managers (for supervision) and access for staff (for in-service training). Communications to staff about appraisal were also hampered by distance.
  - Social context: examples of an intersection between gender and geography were identified, with access issues for women in more remote locations and difficulties in attending training at the district headquarter. There was one example of a favourable deputation being provided because of family needs. Corruption was only reported in relation to posting and transfer, although interestingly, females preferred not to participate.
5. With the above weaknesses in the HR functions in place, the HRM system at district level currently fails to adequately support the contribution of the health workforce towards improved service delivery.

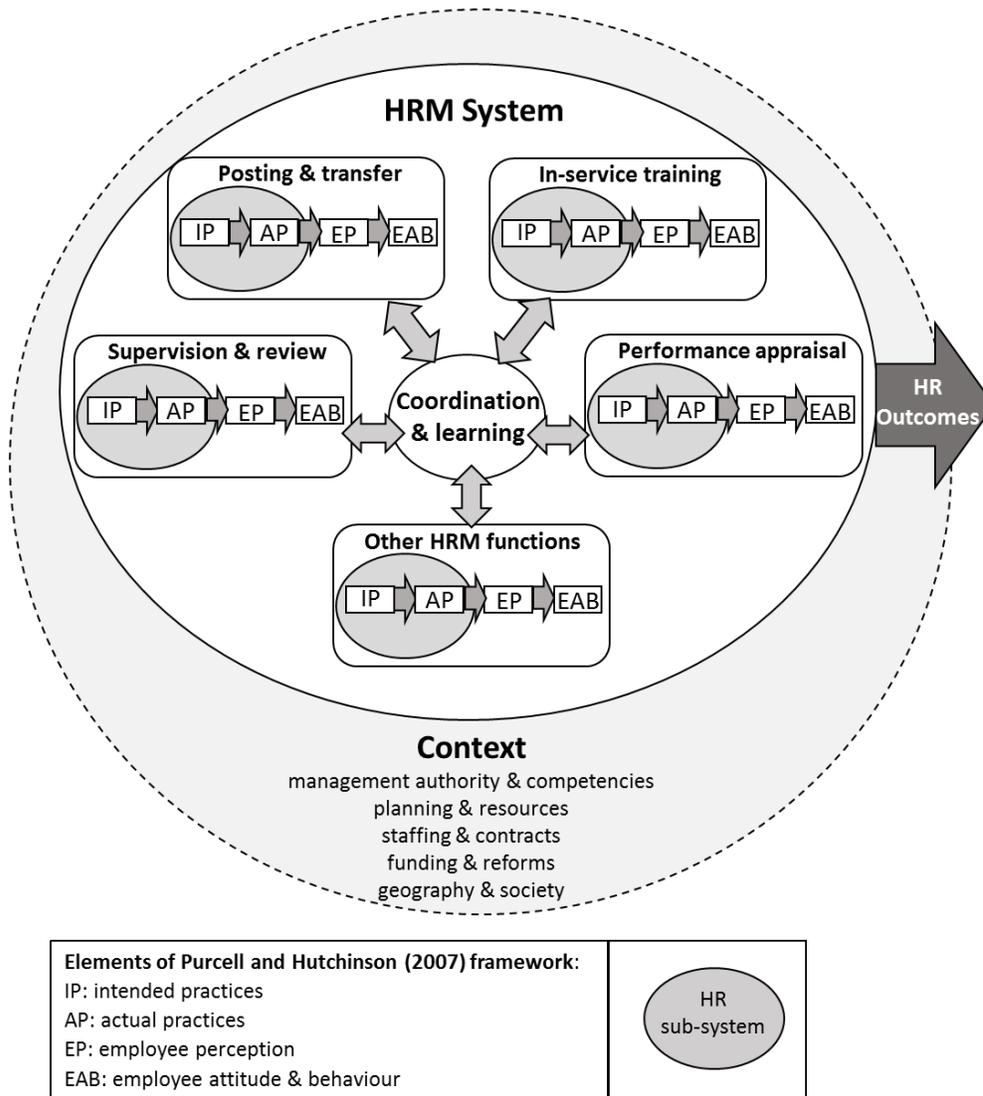
### **10.3 Reflections on and developments of the Purcell and Hutchinson model**

The study began to answer the key question 'how does Human Resource Management affect the attitudes and behaviour of HWs in the context of the Indian public health system at district level?' from the position that there were some policies in place for HR functions related to staff performance. As in other health systems areas, the problem is that these policies are inadequately implemented – or not implemented at all. This challenge with 'implementation fidelity' (Carroll et al., 2007) is shown clearly in the early stages of Purcell and Hutchinson's (2007) model of the links between HRM policies and organisational outcomes, where 'intended practice' represents policy, and 'actual practice' is implementation in local context as reported by managers and staff. Building on this model, I have now added the concept of the overall HRM process existing as a 'system', with specific sub-systems for different HRM functions – in-service training and performance appraisal, for example (see Figure 12 below). The policy, or 'intended practice', provides the purpose of the system in the stated objectives and may prescribe elements of the HRM sub-system. This allows for an analysis that will ensure a) all the components of the system are in place and are functioning, and b) there is a mechanism

for checking whether the system is having the desired effect on health worker behaviour (via the essential steps of 'perception' and 'attitude' in Purcell and Hutchinson's model).

Whilst this explains the functioning and effects of individual HRM functions, strategic HRM takes a broader systems approach (Agyepong et al., 2012; Atun, 2012; Buchan, 2004; De Savigny and Adam, 2009; MacDuffie, 1995). As McDuffie (1995) and Buchan (2004) submit, HRM functions should be combined to have a greater effect on improving HR outcomes. The linkages between HR sub-systems are needed, for example, to ensure that skills developed through in-service training are followed-up during supervision. Those links need to be coordinated, to ensure that they actually occur and to avoid conflict between sub-systems or unintended effects such as well-trained staff posted at inappropriate places or they leaving organisation (Agyepong et al., 2012). A coordinated approach increases the chances of learning about problems and successes within and between the sub-systems. This therefore creates a whole-systems approach to human resource management – which, with the learning component included, can be adaptive (De Savigny and Adam, 2009). The adoption of a systems approach naturally takes account of the environment – or context. The factors within the environment that are of most importance are those which either hinder or facilitate the implementation of the HRM system, as a whole and as individual functions. The importance of the various contextual aspects will differ according to the situation. These are however likely to include those things that enable managers to manage effectively (for example, their level of autonomy and the availability of resources); the nature of the contracts of different cadres; the sources and nature of funding; geography and social factors. Some of these factors are important to the whole of the HRM system (for example, the availability of resources) and some are specific to certain HRM functions (for example, corruption is more likely to seriously affect posting and transfer than appraisal).

Figure 12 the Purcell and Hutchinson model situated within a wider HRM systems model and surrounding context



#### 10.4 Application of the model to the study findings

The revised model described above is now used to discuss the findings of the study. First, using this approach to human resources management, the intended and the practice implemented in local context is discussed in terms of a system as a whole, which is made up of sub-systems relating to the HR functions. The concept of horizontal and vertical integration of the HRM system and sub-systems is explored. The factors influencing

district level managers' ability to operate these sub-systems effectively are then discussed as part of the context in which the districts can manage the HR functions. The limitations of the study are discussed at the end of this section.

#### **10.4.1 Human Resource Management as a system made up of sub-systems**

There was no evidence of an 'architect' – or wholistic design - of the overall HRM system (Tyson and Fell, 1986). It is likely that the different systems were developed independently in response to various reforms. For example, after 2015, a different performance appraisal system for NHM staff from that used for the regular staff was introduced, and different posting and transfer systems were used for doctors and paramedical staff after 1999. It is therefore unsurprising that the HRM functions (or sub-systems) appear very disconnected, with 'system owners' at different levels (national, state and district) and, with the exception of some instances at the lowest levels of the structure, no linkage between them. The 'systems thinking' approach stressed the importance of the integrated design of systems and mechanisms for coordination (e.g. at state level) to achieve optimum impact (Agyepong et al., 2012; Atun, 2012); and in HRM theory this approach is referred to as the 'bundling' of HR strategies (MacDuffie, 1995). The linking of HR sub-systems is referred to as 'horizontal integration' (Armstrong and Taylor, 2017; McCourt and Eldridge, 2003). To ensure bundling is adopted, a more strategic approach to HRM is needed (Boxall, 1992; Fritzen, 2007). This approach would be complemented by regular review to ensure the strategic HRM objectives are being achieved, with action taken where necessary, including adaptation to a changing environment (Agyepong et al., 2012). The reviews need to be carried out against key performance indicators relating to both HRM processes and outcomes (Bach, 2003b; Hornby and Forte, 1997). In order to manage such an integrated HR system, a unified HR structure is usually needed as found in most private sector enterprises and increasingly in the public health sector in high income countries (Bach, 2003b, 2000). In government organisations, this structure is usually much more fragmented (Martineau and Caffrey, 2013), although the DOHFW has had a unique State Human Resource Management Unit (SHRMU) since 2009 to coordinate the recruitment, deployment and

promotion of doctors and their in-service training on management. This is an encouraging start and provides opportunities for improvement for better coordination and design of HR sub-systems, which this study demonstrates is badly needed. A revised terms of reference for this unit and probably additional or different staffing would also be needed.

The selection of the HR sub-systems for analysis in this study was based on what seemed logical, of importance to health worker performance and implementable. However, further scrutiny of the posting and transfer system found that the outcome of the initial posting component of the system had an important impact upon subsequent posting. This was found to be true elsewhere in India (Purohit and Martineau, 2016b) and signifies the importance of first posting after recruitment in strongly influencing the future service trajectory of individuals. In some of the more complex HR sub-systems including posting and transfer, the sub-systems themselves may need to be broken down further, in order to understand where the problems lie and to capture all the important linkages.

#### **10.4.2 Vertical integration of the HRM system and sub-systems**

Before leaving the systems design theme in this discussion, although this was not specifically covered in this study, the concept of ‘vertical integration’ – that is linking HRM to wider organisational strategy (McCourt and Eldridge 2003), should be mentioned, since this is the reason for having HRM functions in the first place. The HR outcomes represented in Figure 12 support the wider purpose of the organisation – in this case the DOHFW achieving health goals, including Universal Health Coverage. Although this link has clearly been made (Dieleman et al., 2009; Kabene et al., 2006; Poz et al., 2006) in the health sector, the lack of integration or coherence between the health policies and human resource (HR) strategy is one of the major causes of the inability within state or national organisations to meet the health goals (Dussault and Dubois, 2003; Figueroa-Munoz et al., 2005; Martineau et al., 2015). The development of strategic three-to-five-year sector plans is a good opportunity to ensure better ‘vertical integration’, although within Odisha this does not happen at state level, where planning

is limited to an annual basis. Nevertheless, the level of integration could be considered in annual reviews.

Having discussed the design of the overall HRM system and its subsystems (intended practice), we now consider the reported practice implemented in local contexts which will ultimately lead to effects (or not, as the case may be), on the behaviour of health workers. The level of 'implementation fidelity' (Carroll et al., 2007; Hasson, 2010) is determined by many factors which may be particular to some HR sub-systems but not to others.

#### **10.4.3 Management authority, resources and competencies**

To be able to implement the HR sub-systems effectively, managers need to have the authority, the resources and the necessary competencies.

District health managers in Odisha are operating a so-called decentralised environment. However, levels of authority regarding HRM vary. They have had full authority over paramedical staff since they became a 'district cadre' in 1999. The medical officer cadre is state level, so there is little authority at district level regarding HRM. Even where there is assumed authority for HRM in decentralised contexts, the reality of the decision-space, as identified by Bossert (Bossert, 1998), may be different from what is stated, as has been found by some researchers (Alonso-Garbayo et al., 2017; Bossert et al., 2010; Sumah and Baatiema, 2018). It is not uncommon for the HR function to be performed by both centralised and decentralised authorities (Heywood and Harahap, 2009; Martineau et al., 2003b; Wang et al., 2002), but this does make it confusing for managers. Authority may be overridden by other factors describe below

HR sub-systems were more likely to function as intended where resources were provided through vertical programmes – largely for RCH activities. Whilst this may benefit these specific programmes, other areas of activity may suffer - even simply not being given training opportunity for some staff For example, vertical funding for a specific programme focusses on strengthening specific services, and HRM practices are

implemented only for those staff who are directly linked to the programme (Mussa et al., 2013). More importantly, this undermines the authority of district managers since they cannot decide, for example, on training priorities and therefore naturally see the process of training needs analysis as pointless.

Even with the appropriate authority, managers still need the competencies to manage the overall HRM system and its sub-systems. There was no evidence that managers had been provided with the necessary competencies. This is not uncommon and researchers have found that overall HRM implementation is weak in LMICs' decentralised systems (M. Dieleman et al., 2011; Liu et al., 2006; Wang et al., 2002). Even at national level, HRM competencies tend to be weak (Martineau and Caffrey, 2013; Nyoni and Gedik, 2012). In addition to weak HRM competencies at national level in the countries of the South-East Asia Region of the WHO, the HRM functions are fragmented within different departments under the Ministry of Health of these countries (Cometto et al., 2019). Whilst the development of training in HRM would be challenging to organise, an initiative to talk through the model depicted in Figure 12 and demonstrate the possible linkages between sub-systems and how they contribute to improving health worker performance would be a first step in the education of managers in HRM.

#### **10.4.4 Nature of staffing and contracts**

The fact that district managers have to deal with a variety of staff cadres is normal within most health systems (WHO, 2006). The challenge for the managers is that there are different levels of authority for managing staff, depending on whether they are district or state level cadres. They also have different types of contract – the main difference being whether they are funded directly by state government or by a separate programme, which in this case is the NHM and is discussed further below. Assuming that this situation adds to the complexity of human resource management, clear guidelines on how each cadre or contract should be managed would help managers at district and facility level.

#### **10.4.5 Nature of funding and reforms**

The authority of district managers may be only partial, with some national programmes, such as the NHM, overriding decentralised authority. This is common with training and supervision initiatives funded and often delivered by ‘vertical programmes’ (Mussa et al., 2013; Vujicic et al., 2012) and this was found in Odisha, but more unusually this affected – in a positive way – effectively functioning appraisal system for staff on NHM contracts. As with the different types of employment contracts, having variation in the HRM sub-systems depending on the funding will add to the complexity for managers. However, at a higher level, it does offer opportunities to learn what types of systems work in different contexts, although this does assume there is a feedback mechanism in place (Agyepong et al., 2012).

#### **10.4.6 Geographical context**

The selection of a more remote district (Koraput) to compare with a more accessible district (Jagatsinghpur), did highlight some important differences relating to geographic context. The first, relating to posting and transfer, is very common in most health systems (Schaaf and Freedman, 2015; WHO, 2010; Zurn et al., 2004). What has not frequently been reported on is the effect that remoteness has on HRM systems more generally. One aspect of the system that is affected is that of communications. Some respondents in remoter parts of Koraput district claimed not to have heard about the performance appraisal system and others claimed they did not get reminders to submit their appraisal forms. Now that electronic communication is commonly available through e-mail, Social media and other channels, this should no longer be a problem, although it may have been used as an excuse.

Whilst some communication does not necessarily need to be conducted face-to-face, this is very important in relation to supervision, where the relationship of trust and responsiveness between managers and staff is crucial (Marquez and Keen, 2002). Staff working in remoter areas tend to miss out on supervision (Dieleman et al., 2003) as access is more challenging and transport budgets for supervisors insufficient. Since staff

in remote areas have to be more autonomous in their work, as stated in the intended practices on supervision in the study that the remote areas should be more intensively supervised. A deeper analysis of the supervision system may be needed to understand why this is not happening.

#### **10.4.7 Social context**

Although gender can be a very important determinant in effective HRM (Standing, 2000), there were no references found in the policy documents analysed. As acknowledged below in the study limitations, it was not possible to interview many women in this study. Had more been interviewed, the study might have gained more insights into the gender-related factors in posting and transfer, which appear to be an under-researched area. Whilst the WHO guidelines on increasing access to health workers in remote and rural areas advocates for including gender in studies to better understand the distribution of the workforce in such areas, it provides no guidance on how policies should be made relevant to both men and women (WHO, 2010). Gender issues were identified in relation to the sub-system of in-service training and, as other authors have noted (George, 2007; Newman, 2014; Standing, 2000), a key issue relates to access to the training. In the case of respondents from Koraput, the issue relating to access to in-service training was an intersection between gender and geographic contexts. A compounding factor in the reasoning behind female staff being unable to travel for training might be the societal expectations regarding caregiving roles (WHO, 2019). Appraisal and supervision systems may affect the genders less obviously. However, reviewing the HRM system as a whole would offer the opportunity of scrutinising all HRM sub-systems in terms of gender sensitivity. Recent work in this area has stated that: “Policies to date have attempted to fix women to fit into inequitable systems; now we need to fix the system and work environment to create decent work for women” (WHO, 2019 p4). Improving the work environment for women may help to redress the imbalance amongst the doctor, pharmacist and lab technician cadres, as well as help to retain women in the other cadres.

Corruption was one of the external influences that overrode the authority of district managers. This was not observed in three of the sub-systems but was evident in the sub-system of posting and transfer, although it did appear that some health workers resorted to it only when other avenues to avoid or influence a transfer to an unpopular location had been exhausted. In some cases the staff, particularly those with sufficient power, tried to distort the system to obtain their preferred places of posting. Weiner (1989), termed such a phenomenon as 'source force,' commonly used by the Nepalese to describe the people having money and access to the elites of society. La Forgia et al. (2015), termed such mechanisms as 'parallel systems,' which are operated through political connections and side payments. Such staff having 'source force,' when transferred by the management to undesirable places, do not join and try to cancel the transfer through 'parallel systems'. If they are unsuccessful in effecting the cancellation, they join the new place of posting and then go on leave. Similar to our study, other researchers have also observed instances when staff went on leave following an unwanted transfer (Aitken, 1994; La Forgia et al., 2015). The consequences of this practice are twofold: the management cannot post other staff to such places, which in turn causes them to remain vacant for longer periods. Several researchers have found political pressure and corruption to be one of the common mechanisms in posting and transfer (Jean Marion Aitken, 1994; Blunt et al., 2012a; La Forgia et al., 2015; Schaaf and Freedman, 2015, 2013)

In conclusion, to achieve desirable HR outcomes, it is essential to ensure the completeness of individual HR systems for all HRM functions, with one integrated HRM system as a whole. In addition, to implement such a HRM system effectively, it is necessary to match the HRM system against the context within which it operates.

## **10.5 Limitations**

There are several limitations to the study, related to both the content of the data and the process of data collection.

### **10.5.1 Limitations of data collection**

#### *10.5.1.1 Availability of policy documents*

The data on intended HRM practices was collected from the official documents. However, despite taking due care, I may have missed some of the data available in hard copy only, particularly hard copies of circulars sent to update policies. I tried to overcome this limitation by validating the information on intended practices through the interview of policy-makers/state level managers, and asking about what documents were available that I may have missed.

#### *10.5.1.2 Recall bias*

In the case of the actual practices of in-service training, supervision and performance appraisal, I used a reference period of the preceding twelve months. Therefore, the staff might have forgotten some events that they may not consider important, when in fact these might have been significant for the study. For instance, I asked about the evaluation of the training, in which case the staff may not remember whether a pre-test and post-test were conducted at the beginning and end of the training programme. In addition, the events related to posting and transfer are not very frequent. In this case, the staff may not recall exactly the events that happened around the relevant time. I minimised this bias to some extent through probing and by triangulating the information through interviews of staff and managers at district and facility level.

### **10.5.2 Limitations of using conceptual framework**

The framework by Purcell and Hutchinson (2007) that was used to explore the link between HRM and the effect on employees has its own limitations. One example is that it does not describe sufficiently the link between the attitude and behaviour of

employees with the unit-level outcomes in terms of productivity and quality of goods and services (Guest, 2011). Taking this into account, I have not measured the unit-level outcomes as indicators of performance in quantitative terms, but have looked into health workforce performance in terms of the attitude and behaviour of health staff, as reported by them. Nevertheless, this framework proved to be a very useful starting point for building the revised framework shown in Figure 12 that incorporates a systems approach to HRM.

### **10.5.3 Limitations related to methodology**

Several researchers have suggested longitudinal research methods to study the causal link between HRM and performance (Guest, 2011; Patterson et al., 2010). According to them, longitudinal studies are better-placed to examine the sequential cause and effect link between introduction, implementation and impact on performance. However, within the constraints of the given resources and the time available, I chose to carry out a cross-sectional study to explore the association between HRM and performance, rather than looking for a perfect cause and effect relationship.

Direct observation could have been another option for recording the actual implementation of HRM practices, with a greater opportunity for examining the content and process of their implementation. I did not use observation as a method for collecting naturally-occurring data, because it was not possible to capture the implementation of HRM practices that usually take place sporadically over varied timeframes. For example, performance appraisal is expected to be carried out once a year, and there is no certainty of when posting and transfer would occur within a given period. Instead, I chose in-depth interviews in which I asked about the implementation of HRM practices over the preceding one-year period, to capture the events over this time. Since the data on the implementation of HRM practices are collected through interviews, I have not presented them as 'actual practices' as used in the model of Purcell and Hutchinson. Therefore, in the Results section, I have presented them as 'reported practices'. However, I gathered

different perspectives from both staff and managers and triangulated this information to build the picture of what really happened.

#### **10.5.4 Limitations related to the trustworthiness of the findings**

Although I do not hold any official position within the public health system of Odisha, I am a member of some of the state level committees related to human resources and health systems. The state level policy-makers and managers were aware of this, which might have influenced their responses when I interviewed them. This was not the case for district and facility level managers and health staff with whom I had not a long-term working relationship before the interview. However, they knew that I had come from the state capital, which might have prompted them to hide or exaggerate the information, based on their own interests. The study design, in which I included state, district and facility level managers and all cadres of health staff as study participants, was useful to validate and cross-check the information provided by these different categories of respondents. In addition, I allowed sufficient time for interaction and the development of rapport before the actual interview started, in order to assure respondents about the confidentiality of the information that they provided.

As described in Chapter 2, the Odisha state is divided into KBK and non-KBK districts, based on very diverse geographical and socioeconomic differences. In this context, there would be questions raised about the transferability of findings from within and between KBK and non-KBK districts. To overcome the issue of transferability of findings, I have selected one district from each group. In addition, I have given “thick descriptions” of the contextual information of each of these two districts, based on which the results can be generalised for the state of Odisha. However, there is huge diversity between the states within India, with varying degrees of difference in HRM policies and their implementation. This study has found some patterns and mechanisms surrounding the composition of intended HRM practices, the factors that influence their implementation and the mechanisms through which this affects staff performance, that could also be explored in other states of India. This study has analysed the links within and between

four HRM functions as a systems approach in the broader health system context, which could be useful in achieving a better understanding of HRM systems and sub-systems within similar contexts.

#### **10.5.5 Limitations due to gender imbalance of sample**

As described in the section 4.8.4, of a total of 65 district and facility level managers and health staff interviewed, 20 are female. In this sample, all MPHWFs and staff nurses are female and all doctors and laboratory technicians are male. There is only one female pharmacist and one-third of district and facility level managers are female. Despite my efforts to recruit preferentially female doctors, I was unable to select anyone for interview because the proportion of female doctors in the public sector in Odisha is relatively low. There were two female doctors available in the selected blocks, however, they were not recruited because their length of service was less than one year. Similarly, there are few female laboratory technicians and pharmacists in post, as compared to males. There was only one female pharmacist in the selected block of Jagatsinghpur district, who in turn was recruited in the sample. There are a few female managers at CHCs and at district level. I have accordingly recruited all nine female managers/supervisors available in the sampled blocks and districts. Despite making all efforts to select equal numbers of female staff and managers, there is a gender imbalance within the sample. This might have limited the perspectives of females that otherwise would have been different if both genders were equally represented.

## **Chapter 11: Conclusion and recommendations**

### **11.1 Conclusion**

An analysis of four HR functions within the overall human resource management system, as operated at district level within one state in India, has shown that although there may be a weak positive effect on the attitudes and behaviour of public sector health workers there are many missed opportunities. In most cases, the design of the systems is logical, though some improvements could be made. The major problems occur at the implementation stage. HRM sub-systems are not being operated as designed. Key elements of these systems are either missing or are being carried out ineffectively. This may be because of ineffective management – in turn due to the insufficient autonomy of managers, or the lack of resources and skills. Other contextual factors hinder the operation of the HRM sub-systems – in particular corruption in relation to posting and transfer. The HRM sub-systems are reportedly being implemented in isolation and insufficient monitoring and evaluation is being carried out to help to make improvements to the sub-systems. Perhaps what is most obviously missing is any clear oversight of the HRM sub-systems and consideration of them as part of a wider HRM system designed to ensure that there is an effective health workforce to deliver the required health care services and in turn to contribute to the achievement of the goal of Universal Health Coverage.

However, the findings from this study provide a very useful starting point for improving the four HRM functions of posting and transfer, in-service training, supervision and review and performance appraisal. Considering these together should help to promote the view of HRM as an overall system, with co-ordinated sub-systems. More detailed recommendations are given in the next section.

### **11.2 Recommendations**

Several recommendations emerge from the study that are useful for Odisha, can be adapted to other states in India, and are important for all LMICs:

- A general approach to improving the effectiveness of HRM systems in achieving desired HR outcomes would be to develop the strategic configuration of HRM practices. Several researchers have suggested developing the strategic configuration of HRM practices, to gain additive effect of the components of different HRM systems on employee performance (Agyepong et al., 2012; Atun, 2012; Buchan, 2004; Macduffie, 1995). Based on the findings of this study, we recommend adopting a strategic approach in aligning the HRM practices, particularly by integrating several sub-systems of different HRM functions. With this approach, the sub-system of one HRM function is likely to complement the sub-system of another, making the system more comprehensive.
- Ensure the completeness of the HRM systems. It is essential to have the HRM systems complete and comprised of all relevant sub-systems, to make them effective for improving staff performance. In some of the more complex sub-systems, further drilling down may be needed (for example for systems of first posting and subsequent transfer).
- Integrate different HRM systems to reinforce the effects that lead to health workforce performance, e.g. ensure that training needs assessment constitutes one sub-system of the performance appraisal system. To build the competencies of staff, provide on-the-job training and carry out monitoring and evaluation of staff performance after training, formally including these aspects within systems of supervision.
- Such a review of the HRM system offers the opportunity to review that both policy and practice address gender issues, both within the four HRM functions covered by this study and more broadly.

- Develop monitoring systems with appropriate feedback mechanisms to ensure the effective implementation of HRM practices and both the wider HRM system and service delivery. This could be built into annual reviews and plans.
- Ensure the provision of adequate resources for the implementation of HRM practices. Make sure that sufficient resources are provided to implement the HRM practices, including competent managers to implement supervision and in-service training within the stipulated time.
- Build the capacities of managers. Ensure that they are sufficiently competent to administer HRM systems and sub-systems through specific capacity-building programmes. These should include the explicitly-stated objectives of each HRM practice, the procedures to implement these and the mechanisms to monitor their implementation. The managers also need to be trained on the core principles of HRM so that they can better understand the objectives of HRM practices and assess the effectiveness on health workforce performance. Managers also need clear guidelines on where they have authority for decision-making and where they do not. Where there are different rules and processes related to cadre or contract status, managers would benefit from guidance.
- In the case of Odisha, the terms of reference for the SHRMU many need to be revised with an appropriate change to the unit's staffing profile to address this. With regard to the health workforce in Odisha (and other states in India), these recommendations need to be discussed with the staff of the SHRMU and other key stakeholders, to decide what changes can be made. The discussion could be guided by Figure 12. When there is some agreement on what is possible to change at state level, the key findings of the study could be fed back to district level managers, to identify what changes they have the power to effect, and what changes they would consider useful.

### **11.3 Contributions to knowledge**

The result of practically applying the Purcell and Hutchinson (2007) HRM-performance link model in the study has shown that separating the intended practice from the practice implemented in local context has helped to identify whether the problem with the HR function lies within the design or the implementation. However, it was found that a more detailed analysis of the design and implementation, as reported by the managers and health workers, was needed to better understand where the problems lay. Viewing the HRM functions as HRM sub-systems with a sequenced set of elements has enabled a more precise identification of the problems. Looking at the HRM sub-systems as part of a large HRM system helped to identify both the positive linkages between sub-systems in line with the 'bundles' approach to strategic HRM (Buchan, 2004; MacDuffie, 1995), although more often the absence of linkages and thus missed opportunities were identified. The importance of feedback at system and sub-system level to allow for adaptation was also identified (Agyepong et al., 2012; De Savigny and Adam, 2009), though this was mostly lacking. More insights could be brought in that some of the facilitators and barriers to the effects on functioning as system and sub-system levels were related to the context – or the environment of the systems. Problems at this level will affect what can be done within the system and may point to where changes would be needed beyond the HRM system. In short, although the concepts of the HRM-performance link and integrated strategic HRM are not new, the contribution of this study is the development of a model which combines these two concepts within a wider, systems-based approach (Agyepong et al., 2012; Atun, 2012). The model in Figure 12 can be used to guide the diagnosis of the management of the health workforce and the development of an integrated strategy to address emerging problems.

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## Appendices

### Appendix 1: Data collection tools

#### Interview topic guide for policy makers and state level managers:

Interviewee Code:		
Date of Interview:		
Start time:	End time:	Duration:
Name of interviewer:		
Name of Transcriber:		
Details of Interviewee:		
Age:	Gender:	
Education:		
Designation:		
Total length of service:		
Length of service in this designation:		
Length of service at this place:		

We would like to talk with you about your views and experiences of managing human resources for health in the state. Let me start by asking you some general questions about the situation of human resources and the challenges you face.

1. What is the title of your post/designation?
2. How long have you been on this post? What were the previous posts held by you? How did you come to this post?
3. How is the health staff situation in this state? (Probe: doctors, nurses, LTs, pharmacists and MPHWs. Also probe for adequacy, distribution and skill mix)
4. How the job responsibilities of various categories of health staff are fixed? (Probe: who decides, how is it communicated)
5. What is your opinion about the performance of health staff? (Probe: doctors, nurses, LTs, pharmacists and MPHWs)
6. What challenges do you face in maintaining high performance of these staff?
7. What interventions have you done for maintaining high performance of health staff?
8. What are your suggestions for improving the performance of health staff? (Probe: doctors, nurses, LTs, pharmacists and MPHWs)

Thank you. Now I would like to talk with you about some specific issues related to human resource management such as the recruitment, deployment and retention; job

descriptions; in-service training; supervision, monitoring and review; and performance appraisal of health staff in your state.

*Recruitment, posting and transfer*

9. How do you recruit health staff? (Probe: doctors, nurses, LTs, pharmacists and MPHWs.)
10. Who decides the number and type of staff required? Who actually recruits these staff? Why? (Probe: The detailed process for doctors, nurses, LTs, pharmacists and MPHWs. Also probe for contractual and regular staff and regularisation of contractual staff; frequency of recruitment)
11. What extra efforts are made to attract more staff in government health system? (Probe: doctors, nurses, LTs, pharmacists and MPHWs. Also probe for new schemes, incentives, any other)
12. What is your opinion about current system of recruitment? (Probe: Challenges, advantages and disadvantages in case of doctors, nurses, LTs, pharmacists and MPHWs)?
13. What are your suggestions to modify the existing system of recruitment so as to improve the health staff situation?
14. Once recruited, how do you post them at health facilities? (Probe: who is the authority for doctors, nurses, LTs, pharmacists and MPHWs) and on what basis?
15. What is criteria for posting and transfer of health staff? (Probe: doctors, nurses, LTs, pharmacists and MPHWs) How do you do this?
16. What is your opinion on existing system of posting and transfer? How would like to modify it so as to improve health staff situation in your area?
17. How do you ensure availability of health staff in rural and remote areas? (Probe: filling up of vacancies and also physical presence)
18. How the recruitment, posting and transfer have changed after NRHM?
19. What are current strategies for retaining health staff in rural and remote areas? (probe: monetary and non-monetary incentives) What is your opinion on these strategies? What are your suggestions in modifying these strategies so as to improve health staff situation in your area?

*In-service training*

20. What trainings were conducted last year for health staff? (Probe: doctors, nurses, LTs, pharmacists and MPHWs. Also probe for who decided training domain, who conducted, where, the process of selection, duration of training)
21. What are the challenges or barriers and enablers in planning and conducting such trainings? (Probe: resources, trainers, time, flexibility in decision making)
22. According to you how these training influenced the performance of health staff? Give examples. How trainings are related to CCR or PAR of health staff?

(Probe for advantages and disadvantages, achieving targets or undertaking main activities, incentives, promotion)

23. Can you share some examples of training that could not bring any change in the performance of health staff? Why?
24. According to you, what components/features of training the health staff like most or did not like? Why do you think so? (Probe: content, process, incentives, time, place, relevance)
25. What are the changes in trainings after NRHM?
26. What are your suggestions in modifying trainings so as to improve the performance of health staff? (Probe: authority to decide domain and selection of staff, process of training, training need assessment)

#### *Supervision and review*

27. How is the work of health staff supervised and reviewed? (Ask separately: Probe for who does this, where and how frequently) (Probe: doctors, nurses, LTs, pharmacists and MPHWs.)
28. How does supervision and review influence the work of health staff? Give example.
29. What components of supervision and review could be useful for health staff in their work? How?
30. What components of supervision and review may not be useful for health staff? Why?
31. How are supervision and review related to performance of health staff? How are supervision and review related to their CCR or PAR?
32. According to you, what aspects of supervision and review did the health staff like? Why? What aspects of supervision and review they did not like? Why?
33. How do the authorities give feedback after supervision and review of the work done by health staff?
34. What is your opinion about supervision and review and its relation to the performance of health staff? (Probe for advantages and disadvantages, achieving targets or undertaking main activities, incentives, promotion)
35. What are the changes in supervision and review after NRHM?
36. What are your suggestions in modifying supervision and review so as to improve the performance of health staff?

#### *Performance appraisal*

37. How was the performance appraisal (PAR/CCR) of health staff done last year? (Probe: who does, what frequency, where) (Probe: doctors, nurses, LTs, pharmacists and MPHWs.)
38. How does performance appraisal (PAR/CCR) influence the work of health staff? Give example.

39. How does performance appraisal (PAR/CCR) related to their actual performance?
40. According to you, what aspects of performance appraisal (PAR/CCR) did the health staff like? Why? What aspects of performance appraisal (PAR/CCR) they did not like? Why?
41. How do the authorities give feedback after performance appraisal (PAR/CCR)?
42. What is your opinion about performance appraisal (PAR/CCR) and its relation to the work performance of health staff? (Probe for advantages and disadvantages, achieving targets or undertaking main activities, incentives, promotion)
43. What are the changes in performance appraisal (PAR/CCR) after NRHM?
44. What are your suggestions in modifying performance appraisal (PAR/CCR) so as to improve the performance of health staff?
45. What are your overall suggestions to improve the performance of health staff?
46. What do you think about the fairness of the system towards the staff performing better and those who are not performing as per expectation?

**Interview topic guide for managers/supervisors at district and health facility level**

Interviewee Code:		
Level:	State/District/Block/Health facility	
Name of District:	KBK/non-KBK	
Date of Interview:		
Start time:	End time:	Duration:
Name of interviewer:		
Name of Transcriber:		
Details of Interviewee:		
Age:	Gender:	
Education:		
Designation:		
Total length of service:	Urban/Peri-urban:	Tribal/Rural:
Length of service in this designation:		
Length of service at this place:		
Native district:		

I would like to talk with you about your views and experiences of managing health staff under your jurisdiction.

1. What is the title of your post/designation?

2. How long have you been on this post? What were the previous posts held by you? How did you come to this post?
3. How is the health staff situation under your area? (Probe: doctors, nurses, LTs, pharmacists and MPHWs. Also probe for adequacy, distribution and skill mix)
4. What categories of staff do you manage? What kind of activities do you perform in managing these staff?
5. How the job responsibilities of various categories of health staff is fixed? (Probe: who decides, how is it communicated)
6. How do you ensure that health staff work according to their job responsibilities?
7. How do you supervise and review the performance of the health officials/staff?
8. What is your opinion about the performance of health staff? (Probe: doctors, nurses, LTs, pharmacists and MPHWs)
9. What challenges/difficulties do you face in maintaining high performance of these staff?
10. According to you what are the factors that influence their performance?
11. What interventions have you done for maintaining high performance of health staff?
12. What are your suggestions for improving the performance of health staff? (Probe: doctors, nurses, LTs, pharmacists and MPHWs)

Thank you. Now I would like to talk with you about some specific issues of human resource management such as the recruitment, deployment and retention; job descriptions; in-service training; supervision, monitoring and review; and performance appraisal of health staff under your jurisdiction.

*Recruitment, posting and transfer*

13. How do you recruit health staff? (Probe: doctors, nurses, LTs, pharmacists and MPHWs.)
14. Who decides the number and type of staff required? Who actually recruits these staff? Why? (Probe: The detailed process for doctors, nurses, LTs, pharmacists and MPHWs. Also probe for contractual and regular staff and regularisation of contractual staff; frequency of recruitment)
15. What extra efforts are made to attract more staff in government health system? (Probe: doctors, nurses, LTs, pharmacists and MPHWs. Also probe for new schemes, incentives, any other)
16. What is your opinion about current system of recruitment? (Probe: Challenges, advantages and disadvantages in case of doctors, nurses, LTs, pharmacists and MPHWs)?
17. What are your suggestions to modify the existing system of recruitment so as to improve the health staff situation?

18. Once recruited, how do you post them at health facilities? (Probe: who is the authority for doctors, nurses, LTs, pharmacists and MPHWs) and on what basis?
19. What is criteria for posting and transfer of health staff? (Probe: doctors, nurses, LTs, pharmacists and MPHWs) How do you do this?
20. What is your opinion on existing system of posting and transfer? How would like to modify it so as to improve health staff situation in your area?
21. How do you ensure availability of health staff in rural and remote areas? (Probe: filling up of vacancies and also physical presence)
22. How the recruitment, posting and transfer have changed after NRHM?
23. What are current strategies for retaining health staff in rural and remote areas? What is your opinion on these strategies? What are your suggestions in modifying these strategies so as to improve health staff situation in your area? (Give scenario of plane vs difficult to reach areas or nearby vs faraway places from block/district head quarter and then ask this question)

#### *In-service training*

24. What trainings were conducted last year for health staff? (Probe: doctors, nurses, LTs, pharmacists and MPHWs. Also probe for who decided training domain, who conducted, where, the process of selection, duration of training)
25. What are the challenges or barriers and enablers in planning and conducting such trainings? (Probe: resources, trainers, time, flexibility in decision making)
26. According to how these training influenced the performance of health staff? Give examples. How trainings are related to their CCR or PAR? (Probe for advantages and disadvantages, achieving targets or undertaking main activities, incentives, promotion)
27. Can you share some examples of training that could not bring any change in the performance of health staff? Why?
28. According to you, what components/features of training the health staff like most or did not like? Why do you think so? (Probe: content, process, incentives, time, place, relevance)
29. What are the changes in trainings after NRHM?
30. What are your suggestions in modifying trainings so as to improve the performance of health staff? (Probe: authority to decide domain and selection of staff, process of training, training need assessment)
31. If you have given the opportunity for deciding training domains and selection of staff for training, how would you do it differently?

#### *Supervision and review*

32. How is the work of health staff supervised and reviewed? (Ask separately: Probe for who does this, where and how frequently) (Probe: doctors, nurses, LTs, pharmacists and MPHWs.)

33. How does supervision and review influence the work of health staff? Give example.
34. What components of supervision and review could be useful for health staff in their work? How?
35. What aspects of supervision and review may not be useful for health staff? Why?
36. How are supervision and review related to performance of health staff? How are supervision and review related to their CCR or PAR?
37. According to you, what aspects of supervision and review did the health staff like? Why? What aspects of supervision and review they did not like? Why?
38. How do you give feedback after supervision and review of the work done by health staff? (Probe: on the spot/in meetings, individually/collective, verbal/written)
39. What is your opinion about supervision and review and its relation to the performance of health staff? (Probe for advantages and disadvantages, achieving targets or undertaking main activities, incentives, promotion)
40. What are the changes in supervision and review after NRHM?
41. What are your suggestions in modifying supervision and review so as to improve the performance of health staff?

#### *Performance appraisal*

42. How was the performance appraisal (PAR/CCR) of health staff done last year? (Probe: who does, what frequency, where) (Probe: doctors, nurses, LTs, pharmacists and MPHWs.)
43. How does performance appraisal (PAR/CCR) influence the work of health staff? Give example.
44. How does performance appraisal (PAR/CCR) related to their actual performance?
45. According to you, what aspects of performance appraisal (PAR/CCR) did the health staff like? Why? What aspects of performance appraisal (PAR/CCR) they did not like? Why?
46. How do you give feedback after performance appraisal (PAR/CCR)?
47. What is your opinion about performance appraisal (PAR/CCR) and its relation to the work performance of health staff? (Probe for advantages and disadvantages, achieving targets or undertaking main activities, incentives, promotion)
48. What are the changes in performance appraisal (PAR/CCR) after NRHM?
49. What are your suggestions in modifying performance appraisal (PAR/CCR) so as to improve the performance of health staff?
50. According to you, what factors of job satisfy health staff and what factors dissatisfy them?

51. What are your overall suggestions to improve the performance of health staff?

**Interview topic guide for health staff:**

Interviewee Code:		
Level:	State/District/Block/Health facility	
Name of District:	KBK/non-KBK	
Date of Interview:		
Start time:	End time:	Duration:
Name of interviewer:		
Name of Transcriber:		
Details of Interviewee:		
Age:	Gender:	
Education:		
Marital status:	Occupation of spouse:	
Total length of service:		
Length of service in this designation:		
Length of service at this place:		
Native district:		

*General information about job and performance*

1. What is the title of your post/designation?
2. Please tell me about your daily routine activities.
3. What are your main activities? (Probe for job responsibilities – written or verbal – who guides them)
4. How do you undertake these main activities?
5. What challenges do you face in undertaking main activities?
6. What are the things that support/help you in undertaking main activities?
7. What are the hurdles in undertaking main activities? How do you deal with these hurdles?
8. What are the activities that you enjoy most? Why?
9. What are the activities that you do not enjoy? Why?
10. What are the factors that gives you job satisfaction? What are the factors that dissatisfies you?
11. How do you get feedback of your work? (Probe for good and bad performance) What is your opinion about such feedback?
12. What do you think about government’s attitude towards your job and activities? How the government deal with people who are performing well and those who are not performing as per expectation? (Probe for salary, incentives, rewards, and sanctions – disciplinary action)
13. What do you think about your own performance? (Probe for enablers and barriers)

14. How can you perform in a better way than now? (Probe for resources, direction and competencies)

Thank you. Now I would like to talk with you about some specific issues such as your entry in this job and postings, your job responsibilities, the in-service trainings you received, assessment of your work performance and the returns you receive from this job.

*Recruitment, posting and transfer*

15. How were you selected for this job? (Probe for appointing authority/selection committee, application process, selection process, age while selected, contractual or regular, educational qualification, probation if any)
16. What is your opinion about the selection process? (Probe for advantages and disadvantages)
17. What are your suggestions for modifying selection process?
18. Why did you choose to do this job? (Would you recommend to anybody else to join this job, if yes/no, why?)
19. Why did you choose to stay at this place that is current place of posting? On what basis you are posted here?
20. Which was the earlier place you were posted? How did you transfer to this place?
21. Do you have in your mind any other place of preference to work? If yes, have you tried to get transfer? What efforts you made for that? Why do you want to get transfer there?
22. In general, what is process of getting transfer? (Probe for authority to approach for transfer, the process, rules/guidelines, and any other means)
23. What is your opinion about the existing process of getting transfer? (Probe for advantages and disadvantages)
24. What are your suggestions for modifying the process for posting and transfer?
25. What are the changes in selection, posting and transfer after NRHM?

*In-service training*

26. What trainings did you receive last year? What trainings do you remember taken previously? (Probe for training domain, who conducted, where, the process of selection, duration of training)
27. How did your work changed after these trainings? Give example.
28. What components of training could you use in your work? How?
29. What components of training could not be used? Why?
30. How are trainings related to your performance? How trainings are related to your CCR or PAR?
31. What aspects of trainings did you like? Why? What aspects of trainings you did not like? Why?

32. What is your opinion about trainings and its relation to your performance?  
(Probe for advantages and disadvantages, achieving targets or undertaking main activities, incentives, promotion)
33. What are the changes in trainings after NRHM?
34. What are your suggestions in modifying trainings so as to improve your performance?

*Supervision and review*

35. How is your work supervised and reviewed? (Ask separately: Probe for who does this, where and how frequently)
36. How does supervision and review influence your work? Give example.
37. What components of supervision and review could you use in your work? How?
38. What components of supervision and review could not be used? Why?
39. How are supervision and review related to your performance? How are supervision and review related to your CCR or PAR?
40. What aspects of supervision and review did you like? Why? What aspects of supervision and review you did not like? Why?
41. How do you get feedback after supervision and review of your work?
42. What is your opinion about supervision and review and their relation to your performance? (Probe for advantages and disadvantages, achieving targets or undertaking main activities, incentives, promotion)
43. What are the changes in supervision and review after NRHM?
44. What are your suggestions in modifying supervision and review so as to improve your performance?

*Performance appraisal*

45. How was your performance appraisal (PAR/CCR) done last year? (Probe: who does, what frequency, where)
46. How does performance appraisal (PAR/CCR) influence your work? Give example.
47. How does performance appraisal (PAR/CCR) related to your actual performance?
48. What aspects of performance appraisal (PAR/CCR) did you like? Why? What aspects of performance appraisal (PAR/CCR) you did not like? Why?
49. How do you get feedback after performance appraisal (PAR/CCR)?
50. What is your opinion about performance appraisal (PAR/CCR) and its relation to your work performance? (Probe for advantages and disadvantages, achieving targets or undertaking main activities, incentives, promotion)
51. What are the changes in performance appraisal (PAR/CCR) after NRHM?
52. What are your suggestions in modifying performance appraisal (PAR/CCR) so as to improve your performance?

53. What are your overall suggestions to improve the performance of health staff?
54. What do you think about the fairness of the system towards the staff performing better and those who are not performing as per expectation?



## **Appendix 2: Participant Information Sheets and Consent Forms**

### **Information sheet: Policy Makers/State level managers**

Study: Policy and practice of human resource management in Indian public health system at district level and its effect on health workforce performance

#### **PARTICIPANT INFORMATION SHEET**

Dear Madam/Sir,

My name is .....I am here with Public Health Foundation of India (PHFI) and Liverpool School of Tropical Medicine (LSTM), UK to know about policy and practice of human resource management and its impact on health workforce performance in Government health sector in Odisha. I would like to explain the study.

#### **Purpose of the study:**

This study wants to know about the human resource management policies related to 1) Recruitment, deployment and retention 2) Supervision, monitoring & review 3) In-service training 4) Job descriptions and 5) Performance appraisal. We would like to discuss with you what are your expectations regarding actual implementation of these policies and according to you how these might impact the performance of the health workforce. We would also like to take your opinion and suggestion towards changing HRM practices so as to improve the performance of health workforce. We will also interview managers/supervisors at district and health facility level and peripheral health staff to know their perspectives, experiences and suggestions in this regard. We want to clarify that, the study does not intend to evaluate or certify the work performance of anybody in your organisation.

#### **Benefits of the study:**

This study may not benefit you personally but the study findings can help you and managers to explore the possibilities of appropriately modifying the HRM policies and practices so as to further improve the performance of health workforce.

#### **Your participation:**

You have been invited to participate in the study because you are knowledgeable and you being the authority to formulate HRM policies and give directives for its implementation. Your perspectives and experiences can help us in understanding the context, content and process of HRM policies and their subsequent implementation.

Your participation is entirely voluntary and it is up to you to decide whether to participate in the study or not. You are free to withdraw from the study at any time. If you do not participate in the study, this will not affect your work or career. You can choose not to answer any question with which you do not feel comfortable.

Data collection process:

You are requested to take part in an interview that will last approximately sixty to ninety minutes. You can suggest appropriate time for the interview so that it does not affect your routine daily work. Also, you can suggest the suitable place for interview where you feel comfortable and nobody else can hear our conversation.

With your permission, we would like to record the interview with you by voice recorder so as to capture all the information. In addition, we will take notes on paper.

Reimbursement:

Your participation is totally voluntary and we will not provide any monetary or on-monetary incentives for your time contribution by participating in the interview.

Confidentiality:

We will transfer your voice recording to the researcher's computer and will be stored in password protected file known to researcher only. We will delete the recording after all the information is transformed into a written document on the researcher's computer. This file will be labelled so that nobody can identify it with your identity. Your name will be written only on the consent form, and will be stored separately from the recording and written document of the interview and will not be linked with your interview. We will store information provided by you giving a confidential identification number for you.

Nothing that you tell us today will be shared with anybody outside the research team, and nothing will be attributed to you by name. Further, your name or identity will not be reflected in the final results of the study.

We once again wish to emphasize that the study does not intend to evaluate or certify your or anybody else's work performance in your organisation.

Willingness to participate:

If you agree to participate in this study, please complete two copies of consent form attached. Please keep one copy for your records and I will take another copy for me.

If you have any questions during or after completion of the study, you can contact the following through phone or email.

Dr Shridhar Kadam,  
Associate Professor,  
Public Health Foundation of India  
Indian Institute of Public Health, Bhubaneswar  
3rd Floor, JSS Software Technology Park,  
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**Information sheets: Managers/supervisors at district and facility level.**

Study: Policy and practice of human resource management in Indian public health system at district level and its effect on health workforce performance

**PARTICIPANT INFORMATION SHEET**

Dear Madam/Sir,

My name is .....I am here with Public Health Foundation of India (PHFI) and Liverpool School of Tropical Medicine (LSTM), UK to know about policy and practice of human resource management and its impact on health workforce performance in Government health sector in Odisha. I would like to explain the study.

Purpose of the study:

This study wants to know about the implementation of human resource management policies related to 1) Recruitment, deployment and retention 2) Supervision, monitoring & review 3) In-service training 4) Job descriptions and 5) Performance appraisal. We would like to discuss with you about your experiences regarding actual implementation of these policies and according to you how these might impact the performance of the health workforce. We would also like to take your opinion and suggestion towards changing HRM practices so as to improve the performance of health workforce. We will also interview policy makers and peripheral health staff to know their perspectives, experiences and suggestions in this regard. The main idea of the research is to take into account the perspectives of you as managers/supervisors, peripheral health staff and policy makers so as to understand the mechanism through which HRM policies and practices have impact on performance of health workforce. We want to clarify that, the study does not intend to evaluate or certify the work performance of anybody in your organisation.

Benefits of the study:

This study may not benefit you personally but the study findings can help you and policy makers to explore the possibilities of appropriately modifying the HRM policies and practices so as to further improve the performance of health workforce.

Your participation:

You have been invited to participate in the study because of your authority to implement the HRM policies and supervise, monitor and review the performance of health staff under your jurisdiction. Your perspectives and experiences can help us in understanding the enablers and barriers in implementation of HRM policies and its impact on health workforce performance.

Your participation is entirely voluntary and it is up to you to decide whether to participate in the study or not. You are free to withdraw from the study at any time. If you do not participate in the study, this will not affect your work or career. You can choose not to answer any question with which you do not feel comfortable.

Data collection process:

You are requested to take part in an interview that will last approximately sixty to ninety minutes. You can suggest appropriate time for the interview so that it does not affect your routine daily work. Also, you can suggest the suitable place for interview where you feel comfortable and nobody else can hear our conversation.

With your permission, we would like to record the interview with you by voice recorder so as to capture all the information. In addition, we will take notes on paper.

Reimbursement:

Your participation is totally voluntary and we will not provide any monetary or on-monetary incentives for your time contribution by participating in the interview.

Confidentiality:

We will transfer your voice recording to the researcher's computer and will be stored in password protected file known to researcher only. We will delete the recording after all the information is transformed as written document as MS-Word file. This file will have secret code and nobody can identify it with your identity. Your name will be mentioned only on the consent form and by no means can be linked with your interview. We will store information provided by you giving a confidential identification number for you.

Nothing that you tell us today will be shared with anybody outside the research team, and nothing will be attributed to you by name. Further, your name or identity will not be reflected in the final results of the study.

We once again wish to emphasize that the study does not intend to evaluate or certify your or anybody else's work performance in your organisation.

Willingness to participate:

If you agree to participate in this study, please complete two copies of consent form attached. Please keep one copy for your records and I will take another copy for me.

If you have any questions during or after completion of the study, you can contact the following through phone or email.

Dr Shridhar Kadam,  
Associate Professor,  
Public Health Foundation of India  
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Mobile: +919437053456  
E-mail: shridhar.kadam@iiphb.org

## **Information sheet: Health staff**

Study: Policy and practice of human resource management in Indian public health system at district level and its effect on health workforce performance

### **PARTICIPANT INFORMATION SHEET**

Dear Madam/Sir,

My name is .....I am here with Public Health Foundation of India (PHFI) and Liverpool School of Tropical Medicine (LSTM), UK to know about policy and practice of human resource management and its impact on health workforce performance in Government health sector in Odisha. I would like to explain the study.

Purpose of the study:

This study wants to know about the implementation of human resource management policies related to 1) Recruitment, deployment and retention 2) Supervision, monitoring & review 3) In-service training 4) Job descriptions and 5) Performance appraisal. We would like to discuss with you what your experiences of implementation of these policies are and according to you how these might impact your performance. We would also like to take your opinion and suggestion towards changing HRM practices so as to improve your performance. We will also interview policy makers and managers/supervisors at state, district and health facility level to know their perspectives, experiences and suggestions in this regard. The main idea of the research is to take into account the perspectives of you as health staff, policy makers and managers/supervisors at state, district and health facility level so as to understand the mechanism through which HRM policies and practices have impact on your performance. We want to clarify that, the study does not intend to evaluate or certify the work performance of anybody in your organisation.

Benefits of the study:

This study may not benefit you personally but the study findings can help policy makers and managers to explore the possibilities of appropriately modifying the HRM policies and practices so as to further improve the performance of health workforce.

Your participation:

You have been invited to participate in the study because you as health staff are involved in health service delivery and the HRM practices can have direct or indirect impact on your work. Your perspectives and experiences can help us in understanding the implementation of HRM practices and its impact on your performance.

Your participation is entirely voluntary and it is up to you to decide whether to participate in the study or not. You are free to withdraw from the study at any time. If you do not participate in the study, this will not affect your work or career. You can choose not to answer any question with which you do not feel comfortable.

Data collection process:

You are requested to take part in an interview that will last approximately sixty to ninety minutes. You can suggest appropriate time for the interview so that it does not affect your routine daily work. Also, you can suggest the suitable place for interview where you feel comfortable and nobody else can hear our conversation.

With your permission, we would like to record the interview with you by voice recorder so as to capture all the information. In addition, we will take notes on paper.

Reimbursement:

Your participation is totally voluntary and we will not provide any monetary or on-monetary incentives for your time contribution by participating in the interview.

Confidentiality:

We will transfer your voice recording to the researcher's computer and will be stored in password protected file known to researcher only. We will delete the recording after all the information is transformed as written document as MS-Word file. This file will have secret code and nobody can identify it with your identity. Your name will be mentioned only on the consent form and by no means can be linked with your interview. We will store information provided by you giving a confidential identification number for you.

Nothing that you tell us today will be shared with anybody outside the research team, and nothing will be attributed to you by name. Further, your name or identity will not be reflected in the final results of the study.

We once again wish to emphasize that the study does not intend to evaluate or certify your or anybody else's work performance in your organisation.

Willingness to participate:

If you agree to participate in this study, please complete two copies of consent form attached. Please keep one copy for your records and I will take another copy for me.

If you have any questions during or after completion of the study, you can contact the following through phone or email.

Dr Shridhar Kadam,  
Associate Professor,  
Public Health Foundation of India  
Indian Institute of Public Health, Bhubaneswar  
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Infocity Road, Patia,  
Bhubaneswar 751024  
India.  
Mobile: +919437053456  
E-mail: shridhar.kadam@iiphb.org





### **Appendix 3: Coding framework**

1. Deployment (posting and transfer)
  - 1.1. Policy
  - 1.2. Reported Practice
  - 1.3. Effect on employee
    - 1.3.1. Perceptions and suggestions
    - 1.3.2. Attitude / Behaviour
2. In-service Training
  - 2.1. Policy
  - 2.2. Reported practice
  - 2.3. Effect on employee
    - 2.3.1. Perceptions and suggestions
    - 2.3.2. Attitude / Behaviour
3. Supervision and review
  - 3.1. Policy
  - 3.2. Reported practice
  - 3.3. Effect on employee
    - 3.3.1. Perceptions and suggestions
    - 3.3.2. Attitude / Behaviour
4. Performance Appraisal
  - 4.1. Policy
  - 4.2. Reported practice
  - 4.3. Effect on employee
    - 4.3.1. Perceptions and suggestions
    - 4.3.2. Attitude / Behaviour
5. Changes in policies and practices after NHM
6. Effect on performance
  - 6.1. Staff supply and distribution
  - 6.2. Individual level performance
7. Contextual factors
8. Working environment
  - 8.1. Rewards and promotion
  - 8.2. Remuneration
  - 8.3. Resources
  - 8.4. Job responsibilities
  - 8.5. Other



## Appendix 4: Example of coding: Performance appraisal – Actual practices (generated from NVIVO)

<Internals\\Interviews\\R1> - § 5 references coded [10.99% Coverage]

### Reference 1 - 1.42% Coverage

Dr Kadam      What is the system for performance appraisal of staff?  
R1                To be honest the mechanism for appraisal of performance is not strict in government sector. Only these are reviewed in review meeting to some extent on performances. There is PAR. Performance appraisal report. For doctors self-appraisal is there. Other cases immediate boss is empowered to write CCRs.

### Reference 2 - 1.28% Coverage

Dr Kadam      you said training is not linked with promotion and incentives. How is it linked with CCR and PAR?  
R1                Training is also not linked with PAR in our system. I have seen other system, in service training is must. There is record of service book. PAR also. In different educational institutions, but here it is not mandatory that you should have service book.

<Internals\\Interviews\\R10> - § 2 references coded [0.90% Coverage]

### Reference 1 - 0.54% Coverage

DR. KADAM    How does your supervision and review link with CCR?  
R10              No there is no such link  
DR. KADAM    Who writes health staffs CCR?  
R10              In- charge (Medical Officer) writes everything. We will only give their work certificate at the end of the month.  
DR. KADAM    In work certificate what do you write?  
R10              Only whether he is present or absent.

### Reference 2 - 0.36% Coverage

DR. KADAM    So you are supervising health worker's work, but who is writing their CCR?  
R10              All CCR will be written by in charge (Medical Officer)  
DR. KADAM    And your CCR?  
R10              In- charge, whatever work we do, we submit all the data to him so based on that Sir writes our CCR

<Internals\\Interviews\\R16> - § 4 references coded [5.65% Coverage]

Reference 1 - 0.20% Coverage

Dr.Kadam      How supervision and review is linked with CCR?  
R16              I cannot say about the link.

Reference 2 - 0.07% Coverage

Dr.Kadam      Who undertakes your appraisal?  
R16              Medical Officer writes our CCR.

Reference 3 - 2.55% Coverage

Dr.Kadam      When is it done?  
R16              I don't know when doctor writes CCR. Suppose ACP will be there. For these three years CCR is required. The doctor may be in Dhenkanal or Kalahandi. We will go to them and they will write the CCR. We will submit here. Then ACP will be there.

Dr.Kadam      What about your last year CCR?  
R16              I don't know about last year CCR. They should write the CCR and keep it in the office. They don't write it. If they write then we can collect the last three years CCR from the office. The doctor will be somewhere and we will search for him.

Dr.Kadam      What is ACP? Why is it required?  
R16              It is required for work efficiency. You will get after 10 years and after 20 years.

Reference 4 - 2.81% Coverage

Dr.Kadam      When was your last ACP held?  
R16              It was in Jagatsinghpur. It was third ACP. It was in 2012. My third ACP was done at Bhubaneswar. Then when it was done at Jagatsinghpur it went for fixation.

Dr.Kadam      You told that you will have to go to doctors for getting CCR. But how will he remember that you have worked under him?  
R16              He knows as I have worked under him for many days. He will write name and give CCR.

## Appendix 5: Example of chart: performance appraisal

Respondent details	Actual practice	Perceptions and suggestions	Attitude and behaviour
<p>R45 Age: 50 to 60 Sex: Male Length of services: 29 years Type of employment: Regular Type of respondent: District-level manager District: Koraput Domicile: Non-native</p>	<p>Dr. Kadam: how is performance appraisal done? You mentioned that PAR is done for the NHM staff. What about the other staff? R45: other staff actually they do not have the structured PAR format but a CCR. It is required only when there is an increment due. Dr. Kadam: so, how this PAR or CCR and whatever.... R45: it is mostly subjective. Dr. Kadam: so actually how feedback is given based on PAR or CCR? R45: nothing. Dr. Kadam: at present what is the link between training and PAR, supervision review and PAR? R45: no, nothing.</p>	<p>Dr. Kadam: how it is linked to performance? R45 I said that nothing is data driven, It is subjective. But it should be structured one and it should be reviewed then the assessment should be non-biased and the reviewers should be trained because many of our administrators, i mean junior administrator, they don't know how to assess and score the PAR.</p>	<p>Dr. Kadam: how does the PAR influences the actual work? R45: nothing much Dr. Kadam: nothing much? R45: if the PAR is bad, nobody has got much punishment ever. Those days red cards were given. People were not getting increment. It is stopped now; maybe this is happening only in police department <b>now</b> days.</p>
<p>R23 Age: 50 to 60 Sex: Male Length of services: 20 years Type of employment: Regular Type of respondent: Health staff District: Jagatsinghpur Domicile: Native</p>	<p>Dr. Kadam: Ok. yours is CCR or PAR ? R23: Ours is CCR Dr. Kadam: Is there anything about training in CCR? R23: No Dr. Kadam: So actually, Is your CCR actually there or not? R23: It is produced as per need actually. As for example I have completed 20 yrs., I may need CCR. We will talk to in charge MO and go to CDMO directly. Dr. Kadam: Ok it is produced as per need? R23 It should be given</p>	<p>Dr. Kadam: Why do you require CCR? R23: For grade pay change. Otherwise, I don't need it. Dr. Kadam: As your performance appraisal is here done through CCR, Do you want to change or modify it? R23: No, why to change it? Anyhow it's of</p>	<p>R23: Actually we don't have much importance of CCR because we don't have any promotions and all.(laughed). We have only one post. We will join as pharmacist and retire as pharmacist. Dr. Kadam Why do you require CCR? R23 For grade pay change. Otherwise, I do not need it. Dr. Kadam: Ok, your grade pay changes in every 10 yrs. R23: Now I have completed 20 yrs., so I need it, then I don't need it ever. Dr. Kadam Then what's the importance of CCR?</p>

	routinely but there is no specification as such.	not much use to us. Let it be the way it is going on.	R23 Nothing. Actually, CCR is of no use to us. As in case of Health worker they get incentives based on their performance but in our case no such thing is there so it's of no use to us.
R56 Age: 30 to 40 Sex: Male Length of services: 8 years Type of employment: Regular contractual Type of respondent: Health staff District: Koraput Domicile: Non-native	DR.KADAM: How is your performance appraisal done? R56: You are talking about performance appraisal. I sent it yesterday. DR.KADAM: What is there? PAR or CCR? R56: We have annual performance report. DR.KADAM: What is written there? R56: It is about LT's Knowledge, capabilities, achievements, Lab condition, cleanliness, whether reagent has been kept in the suitable place. DR.KADAM: Who sees that? What is process? R56: There is a proforma and MO I/C writes on that. DR.KADAM: Will you write your own proforma or MO I/C will write. R56: I write my performance. In addition, in the side MO I/C write his comments. Then it is sent to district office and then DTO will write about performance. Then CDMO will pass it.	R56: Everything is good in performance appraisal. There is nothing wrong in it.  DR.KADAM: What changes are required to improve in the performance appraisal in order to improve the performance of the LTs? R56: No change is required. It is all right.	DR.KADAM: What is the use of performance? Why has this been done? R56: There will be good implementation. One will be aware that our performance is this much and it must be like that. It is low. DR.KADAM: What is the use of it? R56: Not for anything. Only for continuation of service. DR.KADAM: Is it for any incentives? R56 No. It is for no incentives. If someone does good he will get the same salary. If somebody does very good he will get equal salary. And if someone does more than good he will also get same salary.

## Appendix 6: Approvals of Institutional Ethics Committees



PUBLIC  
HEALTH  
FOUNDATION  
OF INDIA

### Institutional Ethics Committee

Public Health Foundation of India

ISID, 4, Institutional Area, Vasant Kunj, New Delhi - 110 070

#### Communication of Decision of the IEC<sup>1</sup> Form II

TRC-IEC No:	TRC-IEC-260/15	Date:	June 1, 2015		
Project Title:	Policy and practice of human resource management in Indian public health system at district level and its effects on health workforce performance				
Principal Investigator:	Dr. Shridhar Kadam				
Review	Full review	<input type="checkbox"/>	Expedited review	<input checked="" type="checkbox"/>	
Date of review:				(DD/MM/YYYY)	
Date of previous review:				(in case of re-submitted applications) (DD/MM/YYYY)	
Decision of the IEC:	Approval	<input checked="" type="checkbox"/>	Study can begin	Resubmission	<input type="checkbox"/>
	Conditional Approval	<input type="checkbox"/>		Study cannot begin	<input type="checkbox"/>
Requirements to be fulfilled in case of conditional approval:					
Suggested alterations in case of resubmission:					
In case of approval, recommended for a period of :	Valid for 3.5 years from study approval				
Comments:	PhD study under PHFI-Wellcome Trust Capacity Building Programme PHFI Mentor is Prof. Sanjay Zodpey Liverpool School of Tropical Medicine has granted ethics approval				

**Please note: Beginning of the research based on this approval implies acceptance of the following conditions:**

1. PI will inform the Secretariat of the start date of the study.
2. The PI will inform the IEC in case of any adverse events.
3. The PI will inform the TRC (Technical Review Committee) and IEC in case of any change of study procedure (including changes in the informed consent form, recruitment procedure, potential research participant information, site and investigator).
4. The PI will inform the TRC + IEC Secretariat on termination of the study and submit a final report within 3 months of completion of the study.
5. Members of the IEC have the right to monitor the study with prior intimation.
6. Progress report to be submitted to the TRC+IEC Secretariat every 6 months from the date of start of study.
7. This permission is only for the period mentioned above.

*Ramalan Laxminarayan*

Prof. Ramalan Laxminarayan  
Name and signature of Member Secretary



<sup>1</sup> Adapted from the ICMR form: available at <http://www.icmr.nic.in/bioethics/CommunicationofDecisionofIECFormII.doc>

Dr Shridar Kadam  
Liverpool School of Tropical Medicine  
Pembroke Place  
Liverpool  
L3 5QA

Tuesday, 02 June 2015

Dear Dr Kadam,

**Research Protocol (14.059) Policy and practice of human resource management in Indian public health system at district level and its impact on health workforce performance**

Thank you for your letter of 1 June 2015 providing the necessary in-country approvals for this project. I can confirm that the protocol now has formal ethical approval from the LSTM Research Ethics Committee.

The approval is for a fixed period of three years and will therefore expire on 1 June 2015. The committee may suspend or withdraw ethical approval at any time if appropriate.

Approval is conditional upon:

- Continued adherence to all in-country ethical requirements.
- Notification of all amendments to the protocol for approval before implementation.
- Notification of when the project actually starts.
- Provision of an annual update to the Committee.  
Failure to do so could result in suspension of the study without further notice.
- Reporting of new information relevant to patient safety to the Committee
- Provision of Data Monitoring Committee reports (if applicable) to the Committee

Failure to comply with these requirements is a breach of the LSTM Research Code of Conduct and will result in withdrawal of approval and may lead to disciplinary action. The Committee would also like to receive copies of the final report once the study is completed. Please quote your Ethics Reference number with all correspondence.

Yours sincerely



**Dr Angela Obasi**  
**Chair**  
**LSTM Research Ethics Committee**