



Research summary: Annexe 1d

## **Project 4 – Rural posting**

**Understanding deployment policies and systems for staffing rural areas**

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## Background

In the past decade the initial emphasis in tackling the so-called “human resources for health crisis” [1] has been on scaling up the health workforce [2, 3]. However, the maldistribution of health workers and the associated difficulty of filling health worker posts in rural areas has long been recognised as a serious challenge to the equitable provision of healthcare. A major part of the problem is that for a variety of reasons posts in these areas are less attractive than posts in urban areas.

Much research has already been devoted to understanding health worker behaviour in relation to taking up and remaining in posts in different locations [4, 5]. This will be further explored in ReBUILD in Project 2 which takes a holistic view of the evolution of the incentive environment in the post conflict period from the perspective of health workers. The problem of maldistribution is also exacerbated on the management side by ineffective deployment systems [6].

In a large organisation operating at a national or regional level, staff will be moved around from one facility or institution to another while remaining roughly on the same terms and conditions of employment as well as being promoted to higher level posts from within the organisation. This can be considered as a kind of “internal labour market” [7] of the workforce from the point of entry into the organisation until the point of exit (see Figure 1).

The task of the human resource manager is to manage this “internal labour market” within the overall organisation by a mixture of push and pull policies to ensure equitable distribution of health workers. For example, conditions of engagement of junior staff may be that they must spend an initial period of their employment in an underserved area [8]. Likewise, management may employ a mix of incentives to pull or attract staff to work in underserved areas [9, 10].

**Figure 1: Deployment within the organisation**



These push and pull mechanisms will be guided by human resource (HR) policies. The HR policies themselves often seem quite rational and to support fair and equitable staff deployment. As with the translation of any policies into action, the effectiveness of the policy will depend on the “implementation fidelity” of the relevant human resource management systems [11]. There is evidence in the public sector in both rich and poor countries that the HR systems can be inefficient and very slow [6, 12]. This is also likely to be the case in large private sector organisations that have needed to develop bureaucratic systems.

Deployment policies and systems will govern a series of decisions about the jobs of individuals within the workforce. This usually starts with “posting” which, for example, the Ghana Health Service defines as “the movement of staff for the GHS from one location in the health service to another. He/she remains subject to the laws of the GHS.”<sup>1</sup> Once in post, a person may be subject to “transfer”. Variations on transfer include terms such as “deputation” or “secondment”<sup>2</sup> which relate to temporary posting.

The deployment policies will be governed by a complex set of rules relating to posting locations, periods and benefits. For example, to ensure mobility of staff the Ghana Health Service has a rule that “No person shall be allowed to stay at a (new) post for more than

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<sup>1</sup> GHS 1997

<sup>2</sup> E.g. 'Seconded officer means an officer seconded to the Public Service: from another institution or from the Public Service to another institution.' (Republic of Zambia, 1990)

four years continuous”<sup>3</sup>. Employees who have served in rural areas may get priority for promotion, as in the Nepalese health system [13]. There may be the facility for getting a joint posting for the spouse of an employee. If government funds the initial training of employees, there will be rules governing initial deployment of graduates.

The implementation of deployment policies relies on the authority of those who manage the systems. The levels of authority may differ according to the type of staff. For example, in some countries doctors can only be posted by a central authority while lower grade cadres such as nurses may be posted at regional level. In decentralised organisational structures or where responsibility for service delivery has been devolved to local government, responsibilities for posting may be at district level.

Because of the growing alternatives to government employment, there is an increasing use of incentives to support deployment of staff to rural areas (WHO 2010) that would be administered as part of the deployment system. As with all administrative systems, there are also sanctions developed to ensure compliance with the deployment regulations. For example, in Nepal grounds for dismissal from service include: “[not attending] the office where he or she has been posted or deputed and carry out functions”. The deployment system will include the appropriate management of these incentives and sanctions.

Because of the importance to individuals of getting jobs in preferred locations (for personal or family benefit), implementation of the deployment system according to the specified rules may come under pressure [14] through patronage or what in one country is referred to as ‘source force’[15]. This will of course undermine the objectives of the deployment policies and systems, which usually include increasing equitable access to health services.

Little research has been completed on the specific HR systems for staff deployment in mid and low income countries. In the health sector both Weiner in Nepal in the 1980s [15] and later Collins et al [16] in Pakistan deployment systems were not sufficiently robust to withstand the pressures of political patronage – what Weiner refers to as ‘source force’. In the education sector in Ghana Hedges et al found that as well as manipulation of the posting system by those who had influence, many new teachers simply did not report to their postings if they did not like them [17].

No references in the post conflict literature were found that specifically covered deployment policies and systems. Geographical imbalance of health workers between urban and rural settings is found in post conflict settings [18, 19]. Weakened systems, but may have been due to problems with systems before. An illustration of the weakness of the control systems is demonstrated by the rise in the number of ghost workers [20]. This is partly due to the collapse of information systems, including those concerned with collecting

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<sup>3</sup> E.g GHS 1997

HR data [21]. At the root of all these problems is likely to be the lack of leadership in the immediate post conflict period [22]. Improving the distribution of health staff has a direct impact on increased equitable access to health services. This achievement and strengthening the governance of any administrative systems – in this case the deployment system – provide an important contribution that goes beyond the limits of the health sector to state-building in post conflict or post crisis situations.

During the period 2000 to 2008, the Zimbabwe Public Service experienced skills flight which weakened the public service delivery system. As a result, Cabinet directed that a civil service manpower audit be conducted under the auspices of the Ministry of Public Service. The payroll and skills audit was successfully conducted in 2010. The government has also announced its intention “to eradicate irregularities in personnel posting”<sup>4</sup>. In Uganda, the decentralised system of governance is meant to ‘bring power nearer to the people’ literally meaning that the communities usually through their local councils can moderate deployment mechanisms and develop local sanction systems that could theoretically improve the equitable distribution of health workers. However, this has proved very difficult in the post conflict districts of the North contributing to the significant staffing shortages at district level (e.g. over two-thirds of posts are vacant in Lamwo district).

## **Rationale for the research**

In a post conflict situation there may be opportunities for avoiding the problems that have developed in more stable health systems. The overall drive for reconstruction may put more pressure on results from service delivery and therefore more pressure on getting staff to provide services, which in turn will put pressure on the deployment systems to work effectively. But unless these systems are made robust with effective governance procedures, they will probably begin to experience similar problems as found in more stable situations. In the post conflict context there may be lessons to learn from comparison between how the non-state actors with relatively large national workforces manage the challenge of deployment compared with public sector health providers.

There has been an increasing amount of research in mid and low income countries to understand the choices that health workers make regarding their location of employment. This is to be able to inform policy options for improving the distribution of the available workforce. The ReBUILD project will also investigate the incentive environment regarding attraction and retention of health workers with a particular focus on the context of the post conflict environment (Project 2).

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<sup>4</sup> See [http://www.publicservice.gov.zw/index.php?option=com\\_content&view=article&id=84&Itemid=70](http://www.publicservice.gov.zw/index.php?option=com_content&view=article&id=84&Itemid=70)

This study, which will complement rather than duplicate Project 2 and existing research on health worker choices<sup>5</sup>, will focus on one of the specific administrative mechanisms for ensuring that staff are posted to rural areas. It will examine both the efficiency of the deployment systems within organisations (see Figure 1) and their effectiveness in achieving staffing levels against sanctioned posts. It will also explore how these systems have evolved in the post conflict period.

## Research aims and objectives

### Aim

- To identify ways to improve deployment systems to rural areas used by large employers of health personnel in post conflict contexts.

### Cross cutting objectives for studies in Uganda and Zimbabwe

- To describe the current deployment policy and systems and how and why they have changed over time since the emergence from conflict
- To assess the impact on the staffing of rural areas of the key changes in deployment policy and systems
- To recommend ways to improve the current system of rural deployment and posting of HRH
- To identify lessons learnt in the development of deployment policy and systems in post crisis or conflict situations.

### Conceptual framework

In a large organisation, posting to jobs within that organisation is determined by the deployment policy (see Figure 2). The deployment policy may be developed as a standalone rational response to a problem. Or it may be influenced either positively or negatively by other events (e.g. broader public sector reform). Deployment policies may be used to improve distribution of staff. This is particularly in the less popular job locations (often rural areas), by allocation of employees from a central pool of health workers within the organisation.

The deployment policies can be measured in terms of effectiveness (vacancy and turnover rates) and efficiency (resources needed and time taken) across the organisation and in specific parts or geographic locations (e.g. rural areas). The effectiveness and efficiency of the policy will be mediated by the design and operation (i.e. the 'implementation fidelity') of the deployment system. An important input to the deployment system is accurate and

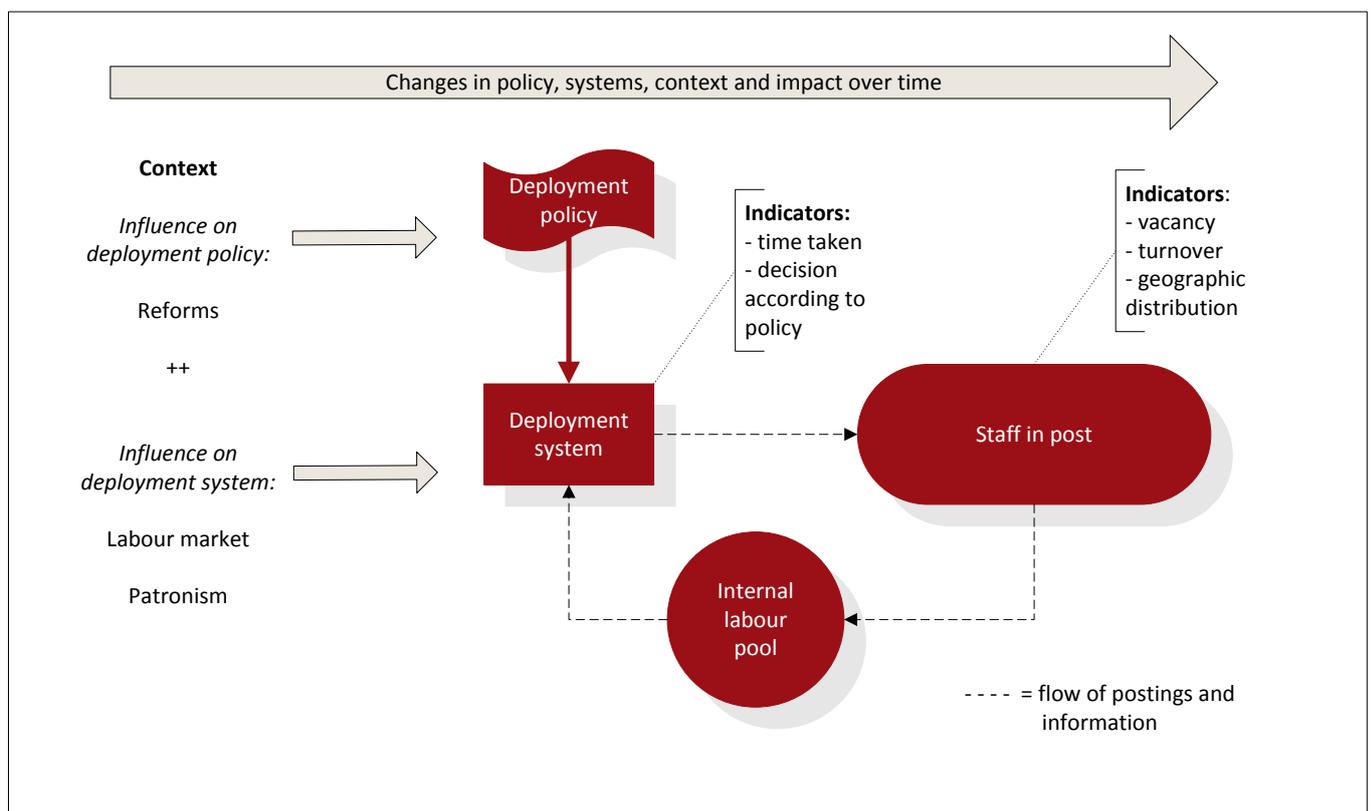
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<sup>5</sup> E.g. Serneels et al 2010, Rao et al 2010, Kruk et al 2010

timely data on staffing (e.g. vacancies and length of service of individuals in post). The system will also need a monitoring and evaluation system to ensure it is achieving the objectives of the deployment policy.

Job location is a key concern for health workers and their dependents. Although the salary for the job may be the same in each location, the additional benefits (job-related allowances, access to training, dual working opportunities, etc) and social (access to good schools, entertainment, proximity of family) will differ. Where possible, health workers will try to get their preferred jobs. Both the policy and more often the deployment system will therefore be under pressure from employees and other stakeholders. A measure of the robustness of the system is related to the implementation fidelity and therefore the ability to meet stated policy objectives.

**Figure 2: conceptual framework for examining deployment policy and systems over time**



## Research design

The study will have a retrospective element to identify the deployment policies and systems in use from the end of conflict or crisis period (Uganda 2006 and Zimbabwe 2009). Policies

and systems in the period prior and during the conflict or crisis period will also be studied, as they will have been the basis for the state of the systems at this point.

This research is organised as case studies, using both qualitative and quantitative methodology, allowing for in depth investigation of rural posting of healthcare providers within the real life contexts of selected districts. By selecting districts with different economic and geographic contexts and looking at rural posting policies and systems over time, detailed case studies will be developed.

In both countries the deployment policies and systems will be examined as case studies for government employers in selected districts and one other large organisation that has an internal labour market. In Zimbabwe this will be the Roman Catholic owned employers and in Uganda we will consider two prominent employers with a strong base in Northern Uganda which has been strongly affected by the war: AVSI an Italian organisation and the Uganda Catholic Medical Bureau (UCMB). While the UCMB in Uganda oversees healthcare delivery within the catholic based health facilities, each health facility autonomously recruits and deploys its employees. Although most of these facilities are rural based, they are normally individual entities without any peripheral satellite units.

Policies and systems at different stages in the period under investigation will first be identified from reviews of documents from which initial descriptions and systems maps will be developed. These will be reviewed in key informant interviews to check for accuracy and realism. Contextual factors that may have influenced the development of the policies (e.g. broader public sector reforms) or the implementation of the systems will be identified both in the document review and the key informant interviews.

The implementation of the deployment systems in rural areas both in the past and currently will be “audited” using interviews with district level managers who operate the systems. As well as interviews with health workers, which will include job histories to identify the impact of the systems on individuals and analysis of routine staffing data to identify vacancy and turnover rates at different stages of the period under investigation.

## **Research methods**

This section provides an overview of the research methods to be used in study country. The quantities (e.g. number of interviews) refer to the studies in each country.

### **Document review**

*Objective:* To describe the deployment policies and systems, the reasons for their introduction, how they have been implemented and any effects of the policy changes over the selected period.

*Approach used:* There is a range of current and historical documents (covering the conflict and pre conflict periods) which the research team will review which include:

- National HRH policies
- National strategic HRH plans
- Mid-term reviews of HRH plans
- Health Strategic Plans
- Specific deployment policies and operations manuals
- Annual health and HRH reports
- Civil service handbooks (e.g. general orders)
- Academic papers on staffing of rural areas.

For non-state employers the equivalent available documentation will be sought.

*Data collection and analysis:* Desk reviews will be carried out by the senior researchers. An initial list of documents will be added to through a snowballing process of following up references and getting recommendations for further reading from the key informant interviews. Analysis of data from document reviews will be based on simple content and time series analysis. The main output will be a narrative of the evolution (including timelines and systems maps) including a description of the deployment system at various points in time and an assessment of the rationale for changes to the systems of rural deployment and posting over time in large government and non-government organisations

*Constraints:* There may be reluctance by employers to release documents, though this may be reduced by engagement through the research uptake strategy (see below). Historical documents may be difficult to locate.

### **Key informant interviews**

*Objective:* To clarify the documented information on the deployment policies and systems, to identify contextual factors that may have influenced the development of the policies or the implementation of the systems and to identify and enable an assessment of the effectiveness of the rural deployment and posting systems in large government and non-government employers of HRH during post conflict or post crisis period and the periods immediately prior to that.

*Sample size and sampling methodology:* Key informant interviews from national down to local level for both government and non-government employers will be purposively selected, according to their knowledge of the focal topics. Additional key informant interviews may be added on recommendation of key informants interviewed. The total number is not expected to be greater than 20.

*Data collection:* The interviews will be semi-structured and focus on the following topics:

- Clarification of the deployment policies and their implementation during the study period
- Key changes in the policy context (e.g. major reforms)
- Policy iterations (whether any lessons were learnt along the way and acted on)
- Clarification of the draft deployment systems maps
- Synergies or dissonances between interventions
- Implementation experiences, constraints and lessons.

The interviews will be tape recorded and noted after gaining permission from the participants. The interviews will take place in a private place acceptable to the interviewee, such as their office.

*Data analysis:* Thematic analysis using NVIVO (or similar software) will be carried out on transcribed texts.

*Constraints:* In some countries, gaining interviews with officials can be time consuming and access for some of the key stakeholders may be hard to gain.

### **Analysis of routine staffing data**

*Objective:* To analyse changes in health worker availability, distribution and attrition during the study period.

*Approach used:* Existing human resource information system data will be collated from national, regional/district or facility sources (whichever are judged to be most reliable and complete).

*Data collection:* The data will be collated by year for the defined period using structured data extraction forms. Three of four key cadres will be selected for inclusion (e.g. medical officer, nurse, midwife and medical auxiliary). Where possible data will be disaggregated by sex.

*Data analysis:* The data will be analysed to describe the trends in health workers availability and distribution study period. Data will be disaggregated by geographic location (urban/rural) and by sex.

The indicators will include:

- Staffing numbers for key cadres and proportion of filled posts (where applicable)
- Length of posting
- Attrition rates (staff lost per year)

- Turnover rates.

*Constraints:* This method relies on the completeness and accuracy of routine data sources. An assessment of the accuracy will be made through interviews with health service managers.

### **In-depth interviews with district level<sup>6</sup> managers**

*Objective:* To explore managers' perceptions and experiences of the implementation the deployment policies and systems during the study period and the impact on vacancy rates and turnover in rural areas.

*Approach used:* In depth interviews will be conducted with managers in selected rural districts using an open ended topic guide and the systems maps developed as a result of Methods 1 and 2. Where possible the historical staffing data derived from Method 3 will be shown for managers to comment on.

*Sample size and sampling methodology:* District level managers will be selected from the following districts in Uganda: Gulu, Kitgum and Amuru. The choice of these three districts in Uganda is based on the fact these districts represent the epicentre of the 20 year conflict that we refer to in this document and from four districts in Zimbabwe, two each from Matabeleland North and Midlands provinces, districts classed as rural. The overall manager and the officer responsible for deployment will be selected for interview. If either is very new, an older member of the management team may be selected in order to provide a historical perspective. A maximum of 10 interviews will be carried out.

*Data collection and analysis:* This will be conducted in the same manner as for the key informant interviews. Participants' responses will be coded and grouped by themes related to the research questions. Qualitative analysis software, NVIVO, will be used to help manage and analyse the data.

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<sup>6</sup> Or equivalent decentralised levels for non-government employers

The topic guide will cover the following areas:

- Changes in vacancy levels and turnover over time and possible explanations (commenting on routine data if available)
- Changes in deployment policy and systems and perceived impact on vacancy levels and turnover
- Changes in wider policy context (e.g. general organisational reforms) and possible impact on vacancy levels and turnover, how they became health workers.

*Constraints:* In depth interviewing has to be done in a sympathetic and skilled manner in order to gain maximum understanding, the same is true for the analysis stage.

### **In-depth interviews with health workers (including job histories)**

*Objective:* To explore health workers' perceptions and experiences of the deployment policies and systems and their evolution over time.

*Approach used:* In depth interviews will be conducted with health workers in selected healthcare facilities in the study areas using an open ended topic guide, and where appropriate, the deployment systems maps. For job histories health workers will be asked to give information about previous posting as far back within the study period as possible and to provide their perceptions of the factors that led to these job moves. This is as well as whether these were in accordance with the stated deployment policies and systems in place at the time, or not.

*Sample size and sampling methodology:* Three or four key cadres will be selected for inclusion (e.g. medical officer, nurse, midwife and medical auxiliary). The health workers will be from the same districts as the managers for Method 4.

A mixture of staff with longer service (at least five years) and newer recruits to the district will be selected to give a balance between historical information and the effectiveness of the deployment system for bringing new staff into districts. The selection will also ensure a gender balance to find out whether the policies and systems impact differently on either sex. About 25 in depth interviews including job histories will be carried out.

*Data collection and analysis:* This will be conducted in the same manner as for the key informant interviews.

The topic guide will cover the following areas:

- Changes in vacancy levels and turnover over time in facilities in which they have worked and possible explanations
- Knowledge of changes deployment policy and systems and perceived impact on vacancy levels and turnover

- Perceptions of the fairness of deployment policies and systems at different stages of their employment
- Job history:
  - Job title, location (district and facility type) and start and end dates for each job held
  - Administration explanations given for change of job (including reference to posting/transfer instructions)
  - Personal efforts to secure a change of job (whether successful or not)
  - Future job plans and perception of whether the current deployment policies and systems will support these plans.

*Constraints:* In depth interviewing has to be done in a sympathetic and skilled manner in order to gain maximum understanding, the same is true for the analysis stage.

## Gender

Gender blindness is a cause of the failure of some HR policies [23] including those related to deployment. For example, a study in the Gambia showed that female government health workers were more likely to resign than accept a second posting away from their families [24]. To understand the different impacts of policies on male and female health workers, all routine staffing data will be disaggregated by sex, where possible.

An appropriate representation of female health workers will be included in the sampling for the in depth interviews. Topic guides for key informant interviews and interviews with managers will explore the different impact of deployment policies on men and women and the document review will identify specific differences in policy.

## Ethical issues

Some of the investigation will be straightforward and uncontroversial. However, probing into the misuse of the deployment systems – by operators or employees – will need to be handled very sensitively. The usual consent agreements and assurances of confidentiality will be provided. The protocol will be submitted to Liverpool School of Tropical Medicine and national ethics committees for approval.

## Research uptake

Dissemination will operate at both an international level and within the study countries. Policy makers and HR directors will be engaged at an early stage of the study to ensure that they have confidence in the methods and the subsequent findings. A measure of success in uptake will be the continued monitoring of the deployment system taken on by the

organisations being studied. This is either on their own or with further support from ReBUILD partners.

Other projects doing similar work in country (e.g. Uganda Capacity Project, the WHO HRH assessment on the incentive environment across the health system in Zimbabwe), regional organisations (e.g. WHO AFRO) and global organisations working on HR in the humanitarian field (e.g. Merlin, VSO and Save the Children) and mainstream HR organisations like the HR unit of WHO, Geneva and the Global Health Workforce Alliance, will be kept informed of progress on a regular basis.

The deployment system is only one of many systems used in human resource management. The researchers will aim to engage Human Resource Management (HRM) policy makers and practitioners in the approach to systems audit to demonstrate how this may be transferrable to other HRM systems (e.g. promotion or staff development).

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