Initiative to obtain Comprehensive and Accurate information on Stock, Profiles, and Distribution (APD) of Health Workers

Overview of potential World Bank assistance to Malawi presented at the ECSA Workforce Observatory Meeting in Arusha, 2006

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I. Obtaining accurate and comprehensive information on health worker stock, profiles and distribution (SPD), including Absenteeism

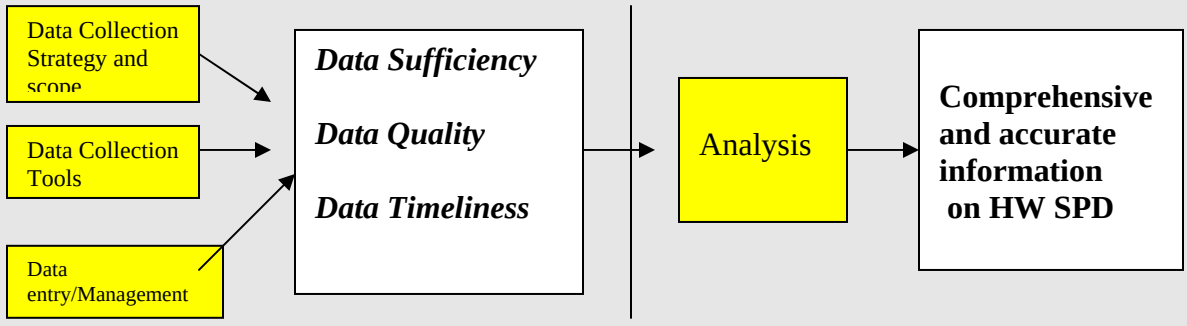
Why obtain information on health worker SPD?

At the very core of the "health worker crisis" in many countries in SSA are inefficiencies and inequities related to the available stock, profiles and distribution (SPD) of health workers (HW). Imbalances in the supply, composition, and deployment of human resources for health (HRH) leading to inequities and inefficiencies in the effective provision of health services, are major constraints to attaining the Millennium Development Goals (MDGs). High levels of HW absenteeism and the prevalence of Ghost workers add to these inefficiencies and inequities. Comprehensive and accurate information on health worker SPD, absenteeism and Ghost workers is thus crucial if targeted HRH interventions are to be developed and monitored.

Obtaining health worker SPD information requires more than just collecting data

Obtaining comprehensive and accurate information on health worker SPD requires more than just a focus on data collection. Well designed collection strategies and tools have to be complemented by careful data entry and analysis if sufficient, timely and good quality data is to be obtained and turned into comprehensive and accurate information on health worker SPD.

Figure 1: Determinants of Comprehensive and Accurate information on Health Worker SPD.



What form of data collection should be used?

There are plenty of methods by which health worker SPD data can be collected and mapped. Only a universal facility health worker census, with a well designed data collection strategy and tools to collect sufficient and good quality data can lead to the production of *information* that is both comprehensive and accurate and thus fully representative. Furthermore, although indicative data and information on health worker SPD and absenteeism can be obtained through sampling surveys, an accurate depiction and identification of Ghost Workers requires identification of health worker "salary source" (i.e. whether on public or private payroll), and cross referencing those health workers on public/private payroll with those actually registered at the facility level. Sampling surveys and subsequent extrapolation can indicate the extent of the problem, but not identify actual Ghost workers.

Why is data entry and analysis important?

Careful and timely entry and alignment of data is crucial if the timeliness, sufficiency and quality of collected data is to be maintained. Subsequent analysis is required to turn health worker data into information, by computing a broad range of indicators on health worker stock, profiles, distribution and absenteeism (including Ghost workers).

Table 2: Comprehensive information on health worker SPD

Stock
Number of HW cadres
% breakdown of cadres
Cadre-cadre ratios
Profiles
Gender
% male/female
Age Structure
% old/young
Educational attainment
%primary ed/higher education
% specialist/non specialist degrees
% educated nationally/internationally
Professional Experience
% limited/vast experience
HW Ownership
% salary paid private sector/public sector
work hours
% full time/part time

Distribution (cadres/profiles)
Geographical
district distribution %/ratios
urban/rural distribution %/ratios
Facility ownership
working in private/public %
Facility type
working in hospital/health center/health post etc

Absenteeism (cadres/profiles)
Absenteeism per stock
Attendance Ratio per cadre
Absenteeism Geographic Distribution
Attendance Ratio rural/urban
Attendance ratio per district
Absenteeism per facility ownership
Attendance ratio per sector
Absenteeism per Profile
Attendance Ratio per profile (all)

II. Frequent problems…

…with collection, entry and analysis of data

Although a full fledged facility health worker census has the potential to collect data that is sufficient and of good quality, inadequate scope and design of collection strategies, and

insufficient attention paid to entering and subsequent analysis of the data, often compromises the extent to which useful health worker information can be derived.

In Malawi, lack of sufficient funding and technical assistance in the design of appropriate strategies and tools, as well as problems with subsequent data entry and analysis, compromised a recent attempt to obtain comprehensive and accurate information on health worker SPD. And because data was only collected on health workers present at the time of visit, the data is not suitable to compute levels of absenteeism (which requires both data of health workers supposed to be on duty and actually present at the time of visit) and to identify Ghost workers (which requires collection of data on health workers registered at the facility level, and salary source of health workers – in order to cross reference this with payroll data).

….with Institutionalizing the collection, entry and analysis of data

Although a well designed initiative to collect, enter, analyze and interpret health worker data holds the potential to produce health worker SPD information that is both comprehensive and accurate, institutionalizing such an initiative is more challenging. The lack of capacity and incentives for facility managers to adequately maintain and update records of their employees *(i.e. records noting date of birth, educational attainment, cultural background, salary source etc)*, the lack of capacity of health authorities at the district, regional and central level to regularly collect, enter and update health worker data, means that institutionalizing such an initiative requires time, money and significant capacity building efforts and technical assistance.

Box 1. Ideal scenario for an institutionalized system for obtaining information on health worker stock, profiles and distribution (and absenteeism and ghost workers)

Capacity/incentives at facility level to collect and maintain records on registered employees
• *Standardized records on each health worker are managed and updated at the facility level by the facility manager (i.e. records on employee name, gender, cadre, job title, educational attainment, salary source, cultural background et are maintainedc)*
Capacity/incentives at the regional level to regularly request, enter and update such data
• *Facilities forward this data to the district/provincial/ health authorities on a regular basis (every year) where this data is entered and updated in a well designed and standardized database.*
Capacity at the central MOH level to regularly demand, enter, update and analyze such data
• *District/Provincial/regional health authorities forward this data to the MOH on a regular basis, where the data from all districts is entered into a national database (linked to the HMIS?)and ready for analysis.*
Capacity at regional level to collect data on absenteeism and forward this to the central MOH level
• *District/Provincial/regional health officials conduct regular unannounced visits to collect data on health workers meant to be on duty, and actually present at the time of visit, and forward this to the central level to identify and determine levels of absenteeism.*

III. Potential World Bank assistance to Malawi

What the ministry of health is planning

The ministry of health in Malawi is contemplating conducting a new facility/health worker census to collect data that is both of good quality and sufficient, and can thus be used to produce comprehensive and accurate information on health worker SPD, absenteeism and Ghost workers.

Why the ministry of health is planning this

Such information is deemed crucial in order to implement the national HRH strategy, and the development and monitoring of targeted interventions on HRH (i.e. assist the government determine how many HW should be produced, which parts of Malawi to focus on- *i.e. districts, urban/rural areas etc*- and types of health workers -*both in terms of cadres and social and cultural characteristics*- require most urgent attention, tackle absenteeism and root out ghost workers etc).

Where does the World Bank fit into this?

The World Bank is carrying out a program on Human Resources for health, funded by the Gates Foundation and the Government of Norway, to assist governments, including Malawi, implement their HRH agendas, and to assist them obtain the necessary baseline information required for this. The Ministry of Health has thus discussed receiving potential support from the World Bank to provide technical assistance in the areas of planning, design and implementation of the data collection strategy, as well as subsequent entering, analysis and interpretation of the data.

To obtain comprehensive and accurate information on health worker SPD, technical assistance by the World Bank would focus on the collection of *sufficient* and good *quality* data, and on subsequently tuning this data into *information* that *accurately* maps the health worker picture in Malawi.

How would the World Bank assist?

If given the go ahead, technical assistance by the World Bank would focus on the following areas: 1) the scope and strategy of data collection 2) data collection tool design, 3) data entry and management, 4) data analysis and interpretation.

1. Data Collection
• **Identify scope of data collection**: ensure census comprehensively covers all facilities and cadres of both the formal (public and private sector facilities) and informal sector (pharmacies) • **Training of Data collectors:** Ensure Data collectors are sufficiently trained prior to data collection • **Design Data collection Strategy:** Ensure data collection distinguishes collection of data from registration lists, on duty lists, and headcounts/ interviews from all health workers present at the facility. • **Quality assurance:** Ensure independent Quality assurance checks are made independent of the data collection effort
2. Data Collection Tool Design:

- **Design of Tool:** Ensure tools/questionnaire focuses on the health worker (key aspects related to cadres and profiles); ensure tool sufficiently captures all required data on health facilities and all health workers; ensure tool captures data via tick boxes, thus speeding up collection and standardizing collected data

3. Data Entry and Management:

- **Design of data base**: ensure the data entry interface uses drop down menus to prevent typing errors and other data entry mistakes; ensure every record of a HW is given an entry or row line in the database and a unique ID number;
- **Supervision of data entry**: ensure all data collected of both health facilities and health workers is entered as collected**,** and ensure cadre is cross referenced with educational attainment, for accuracy;

4. Analysis and interpretation

- **Analysis of data**: Ensure careful and comprehensive analysis of the data and computation of indicators on registered stock, profiles and distribution, as well as absenteeism (difference between those health workers supposed to be on duty, and those actually present at time of visit) and ghost workers (by comparing salary of health workers with relevant payroll information)
- **Production of a report**: Interpret the findings, and produce policy and program recommendations, as well as recommendation on strategy and methods to institutionalize the process of obtaining health worker SPD information in Malawi.

Thank you!