

# Calculating human resource need

Who will you need, when will you need them, can you afford them? This toolkit, recently developed for use in Liberia, can substantially assist the process

## Resource Requirement Tool – RRT

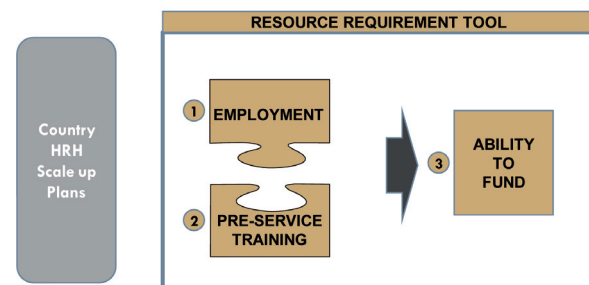
### Purpose

- To estimate and project the resources required for meeting Liberia's Human Resources for Health (HRH) plans, including employment and pre-service training
- To analyse the affordability of Liberia's HRH plan, including employment and pre-service training
- To allow the Ministry of Health (MOH), the Ministry of Education, and other relevant ministries to analyse 'what if' scenarios in their plans
- To facilitate the monitoring of HRH scale-up plans

### RRT functionality

- Data inputs for HRH employment, pre-service training, and available resources
- Scenario analysis
- Detailed and summary outputs

## RRT Overview



### Contacts

- MOH Counterpart
- Global Health Workforce Alliance (GHWA) Consultant

## Data collection guide

The purpose of this guide is to obtain information necessary for estimating and projecting the costs of employing and training countries' planned level of HRH. It seeks data on (a) current and (b) planned numbers of HRH as well as planned/desired levels of expenditure.

### General country information

1. *Population*
  - What is the total population of your country?
  - What is the population growth rate?
2. *How many regions are there?*
  - What is the population in each region?
  - What is the population growth rate in each region?
3. *Economic indicators*
  - Total GDP/GNI captured by the government / government budget?

### Labour market information

4. *Number of HRH*
  - What HRH cadres would you like to cost (i.e. doctors, nurses, etc)?
  - How many of each HRH per cadre are there?
  - How many volunteer HRH are there? For which cadre?
5. *Regional distribution/hardship areas*
  - Are certain areas considered to be 'hardship' ones where MOH pays or plans to pay hardship deployment bonuses? (i.e. is serving in a particular region considered hardship?)

- If there are 'hardship' areas, do we have data on what percentage of HRH work there?
- Do HRH receive bonuses or specific in-kind benefits for working there?
- Do you expect that the HRH regional distribution would change? What expected changes do you anticipate?

### 6. Compensation for HRH

- How much does each cadre earn?
- What is the range of salaries per cadre?
- Are there salary top-ups by NGOs?
- Does the MOH offer performance bonuses? To what percentage of the HRH? To what cadres? How much? Cash and non-cash?

### 7. Human Resource management cadres?

- How many HR management personnel?
- What are their salaries and benefits?
- What are the operating expenses of the HR department per year?
- Is the HR department expecting any investments in human resource information systems (HRIS) and information technology (IT) systems? When will that be done? Has there been a cost estimate for this?

### 8. Moonlighting

- Do public sector HRH tend to practice privately as well? If so, what percentage do so?

### 9. Projections

- What is the plan for scaling up HRH – does the

MOH intend to reach the World Health Report recommended level of 2.3 HRH per 1000 population, by when?

- Is there a plan to change the structure of the compensation and have different compensation to account for regional deployment?
- Do you plan to phase-in pay for performance bonuses?

#### 10. Attrition rate

- What has it been and what is it expected to be? If no attrition estimates, then how many (a) retired, (b) migrated, (c) died, (d) left the public sector?

#### 11. Key informants

- Who is the best person at the MOH to answer data questions?

### Pre-service training

12. List the functioning pre-service training institutions for HRH (all cadres).

13. For each training institution that receives government funding:

#### General information

- How many of each cadre graduate per year?
- What is their total training capacity (in terms of numbers of students per cadre)?
- What is the drop-out rate?
- How many students are there at the training institution (including in non-health disciplines) in total?
- Where is the training institution located (specifically is it in an urban or rural location)?
- What percentage of the students are from the area

where the training institution is located?

#### Costing information

- What are the recurrent (take financial statements and disaggregate them to identify personnel, operating, and other expenses) for both the health worker training and the entire training institution?
- What are the training institution's capital assets? What is the expected lifetime when new of each of the capital asset? How old are the capital assets? What is the replacement cost today of the capital assets?
- Do the training institutions collect any revenues from their students? How much?

#### Projections

- For recurrent costs: are there any reasons to believe that there will be changes in recurrent costs for educating HRH (e.g. changes in educational strategy, class sizes, etc)?
- For capital investments: what capital outlays are planned for the training institutions in the coming years?
- Are drop-out rates expected to change?
- Are any other changes planned in how pre-service training is conducted that might affect costs?

#### Funding

- How much do the training institutions receive from the Ministry (MOH or Ministry of Education (MOE)?
- How much from donors (in cash)?
- How much in-kind (scholarships, teachers, etc)?
- How much from students as fees, etc.?



*Estimating the population growth rate is required information for Liberia's HRH plans*

**Budget/donors**

14. What is the percentage allocation to health and education of government budget/GNI?
15. What is the percentage allocation to HRH in the health budget and of HRH training in the education budget?
16. What are the expected changes in these allocation proportions?
17. What is the donor contribution for HRH via the MOH and MOE?
18. What is the expected change in these contributions?
19. Do donors contribute directly to HRH and education, not via the relevant Ministries? If so, how much?

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**Resource Requirement Tools (RRTs)**  
**Frequently asked questions**

1. *How does the RRT estimate the HRH skill mix?*  
RRT is **not** a tool for projecting and planning the number HRH by itself BUT it can help inform HRH planning when used interactively. Initially, it takes the number of HRH by cadre as inputs from national plans. However, in subsequent uses, RRT enables users to vary the number of HRH as a feedback mechanism to HRH planners who may choose to change the planned levels of HRH based on the affordability of initial plans.
2. *Is RRT a costing tool?*  
RRT is **more** than a costing tool as it estimates the projected HRH resource requirements including projected costs and expenditures. It also compares resource requirements to likely resource availability.
3. *Is the RRT a demand forecast?*  
RRT is **not** a demand forecast as it does not estimate the ability of customers to pay for HRH. It takes the number of HRH by cadre as inputs from national plans and estimates the resources required to meet those planned levels.
4. *What other tools have RRT's functionalities?*  
There are no other tools with RRT's functionalities. RRT does **not** replicate existing tools, it builds on them. Its content is based on World Bank Group costing Tool (March 2007) and WHO Costing Tool (2002).
5. *Who designed the RRT?*  
The RRT was developed by the Financing Task Force of the Global Health Workforce Alliance (GHWA) in collaboration with the World Bank Group.
6. *Has the RRT been applied anywhere?*  
The World Bank in collaboration with the HRH planning department of the Ministry of Ethiopia applied the RRT Employment Component in Ethiopia in June of 2008. The World Bank and Ethiopia team found the tool very useful.
7. *Does the RRT estimate the resource requirements for the public and private sectors?*  
RRT estimates the resource requirements only for the public sector HRH because the private sector responds to patient demand and as such is self-financing. However, RRT takes into account the current number of private sector HRH and projects their growth over time.
8. *Does the tool estimate resource requirements for the private sector?*  
RRT estimates the number of HRH servicing the private sector as well as HRH in pre-service training in the private sector and project their growth BUT does not estimate/project the costs as the private sector responds to patient demand and as such is self-financing.
9. *How does the RRT estimate the HRH growth in the private sector?*  
Private sector HRH growth is calculated from its baseline level as a function of population growth and per capita income growth with adjustment for income elasticity, the factor representing the propensity to spend additional income on health.
10. *How long does it take to apply the RRT in a country?*  
The timing of each application varies based on the ease of data availability. On average, it takes about 2 weeks to populate the RRT.
11. *How can a country prepare for an RRT application?*  
Countries can assign analysts from the MOH and the MOE to serve as counterparts to the GHWA Financing Task Force Secretariat staff. They can also collect all available country HRH data in advance to the RRT application
12. *Can countries that have limited HRH data use the RRT?*  
Yes. The RRT enables users to both make assumptions about unavailable data as well as to leave data fields blank.
13. *How frequently should the RRT be used?*  
The RRT can be used annually to plan for the resource requirements for HRH plans as well as to monitor the implementation of those plans.
14. *What is the purpose of the tool?*  
The purpose of the RRT is: (a) to estimate and project the resources required for meeting Liberia's HRH plans, including employment and pre-service training; (b) to analyse the affordability of Liberia's HRH plan, including employment and pre-service training; (c) to allow the MOH, the MOE and other relevant ministries to analyse 'what if' scenarios in their plans; (d) to facilitate the monitoring of HRH scale-up plans.
15. *Who is the audience of the tool?*  
Ministries of Health, Ministries of Education, Ministries of Finance, and Development partners.

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