

Building the Knowledge Base: Monitoring and Evaluation and the HRH Effort Index

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CapacityPlus improved human resources for health (HRH) measurement and monitoring and evaluation capacity at the country level and developed an HRH Effort Index for national and subnational application to spur policy changes and enable cross-country comparisons.

Background

Accurate and timely information for decision-making and advocacy is a key system component in strengthening human resources for health toward achieving the goals of AIDS-Free Generation, Ending Preventable Child and Maternal Deaths, and Family Planning 2020. However, indicators used to measure efforts and progress in HRH have been limited and often unreliable, especially in countries with weak or no monitoring and evaluation (M&E) plans and/or human resources information systems (HRIS). Such limitations prevent or severely constrain country, donor, and program initiatives to identify and address gaps in HRH and to track progress over time. The skilled health professionals density ratio (SHPDR), which measures the number of physicians, nurses, and midwives per 10,000 population (Campbell et al. 2013; World Health Organization [WHO] 2006) and the health workers reach index, which incorporates the SHPDR and measures of access to and actual use of services provided by health workers (Save the Children 2011) are two indicators that have increasingly been used to measure progress in improving the health workforce. Yet both indicators are limited by variable data quality and by the fact that they exclude certain cadres of health workers, such as auxiliary and community health workers. These limitations hinder the measures' utility in understanding the relationships between HRH inputs, service use, and health outcomes. CapacityPlus helped to bridge these gaps by developing a more robust measurement approach to assessing the complex framework for HRH—the HRH Effort Index—and by increasing capacity for M&E of HRH at the country level through improved measurement approaches and M&E skills.

Strategy and Approaches

CapacityPlus developed the HRH Indicator Compendium (Figure 1), which provides a summary of standardized indicators in the areas of global leadership; health workforce policy, planning, and management; health workforce development; and health workforce performance support. HRH stakeholders can use the Compendium to identify indicators to monitor the HRH situation in their countries. The Compendium details how the varied indicators (e.g., rates, ratios, and indices) can be calculated.

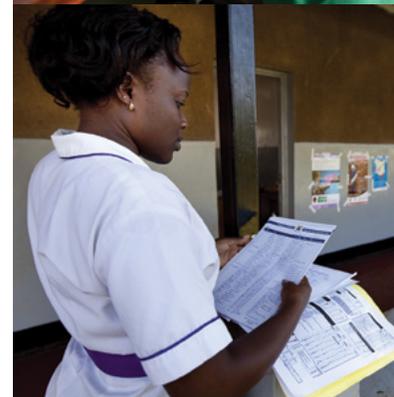


Figure 1: Screenshot of HRH Indicator Compendium

Indicator	Description/Definition	Method of Calculation	Score
Health worker geographic retention	Percentage of health workers whose current primary health care practice setting is the same geographic location as their own community. "Their own community" is defined as the geographic location (city/town and country) that the primary health worker identifies as his or her place of birth.	Total no. of primary health care workers practicing in their own community / 2007 total no. of primary health care workers currently employed in the country	4
Staff satisfaction	Staff feel satisfied and well treated by the organization.	See table in Appendix B	2
% of health service employment facilities without social protection	Social protection from accidents, occupational employment for health service providers differs from country to country, but is considered to include at a minimum: health insurance, accident, and sick leave/maternity leave.	Total no. of health service employment facilities in the country that are without social protection/Total no. of health employment facilities in the country	5
Workforce loss ratio	Ratio of exits from the health workforce (can be subdivided based on data available for exits, reason for leaving, etc.).	No. of health workers who left the active labor force in the last year/Total no. of health workers	6
Latest force activity rate	Proportion of HRH currently active in the labor force (over a given period).	No. of persons with health-related skills active in the labor force/Total no. of persons of working age with health-related skills	6
Employment/unemployment rate	Proportion of HRH currently employed (or unemployed) (over a given period).	No. of persons with health-related skills currently employed (or unemployed)/Total no. of persons with health-related skills active in the labor force	6
Provider productivity	Relative no. of specific tasks performed among health workers.	Specific tasks performed over a mean period (e.g., ambulance)	6

To complement the Compendium, CapacityPlus developed M&E Guidelines for HRH, which address the need for a conceptual framework for any HRH intervention, guiding the reader through the domains of interest (e.g., from overarching policies to the health facility level) and the logical steps (from inputs and processes to outputs and outcomes) to ensure that a solid M&E plan is formulated (including indicators and data collection methods) to measure progress and results of HRH interventions.

The project also published an eLearning course, An Introduction to Monitoring and Evaluation of Human Resources for Health, on the HRH Global Resource Center to provide stakeholders with the essentials on M&E of HRH and inform them about tools and resources to develop M&E systems and plans.

To better inform HRH investments and support more equitable health systems, the project developed the HRH Effort Index (modeled after the Family Planning Effort Index), using the HRH Action Framework as a conceptual guide and inputs from an international advisory group (including USAID and WHO), reviews of the relevant literature, and interviews with HRH experts in Mali, Nigeria, Uganda, and the Dominican Republic. The Index guides key informants through a self-administered survey tool covering 50 items across seven HRH dimensions identified in the HRH Action Framework (Figure 2): leadership and advocacy; policy and governance; finances; education and training; distribution, recruitment, and retention; human resources management; and monitoring, evaluation, and information systems. The informant answers by scoring their assessment of the extent to which each item has been developed and/or supported, based on a scale of 1 to 10 (see example in Table 1).

Figure 2: HRH Action Framework

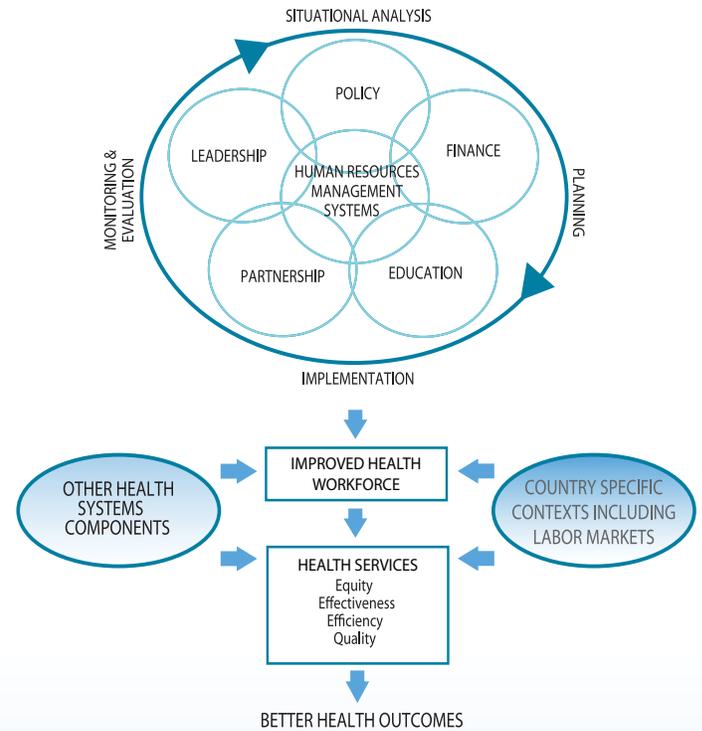


Table 1: Example of HRH Effort Index Items and Scoring in Leadership and Advocacy Dimension

#	DIMENSION AND ITEM	Extremely weak/ No national effort	CIRCLE YOUR RATING	Extremely strong/High-level national effort	I don't know
I. LEADERSHIP and ADVOCACY (5 items)					
1.	Human resources for health (HRH) prominence within the Ministry of Health Extent to which there is a permanent HRH office or post within the Ministry of Health that develops and monitors HRH policies and strategies, that is well placed within the government, and staffed by adequately skilled personnel.	1 2 3 4 5 6	7 8 9 10		
2.	Political support for HRH Extent to which elected officials in the country prioritize meeting HRH needs to strengthen the workforce by passing laws and regulations and sponsoring actions and policies aimed at improving the health workforce.	1 2 3 4 5 6 7 8	9 10		
3.	Influence of HRH leaders or champions Extent to which the country has one or more clearly influential leaders or champions who successfully advocate for HRH needs (e.g., increasing funding for HRH) at high levels, promote HRH in the country by making positive public statements about HRH, and/or support actions and policies aimed at improving the health workforce.	1 2 3 4 5	6 7 8 9 10		



Individual responses are averaged per dimension and also to produce an overall “index” of HRH effort (see Figure 4). The main application of the Index is through a survey to experts from different sectors (e.g., public, private, nongovernmental organizations [NGOs], faith-based organizations [FBOs]) and institutions (e.g., Ministry of Health, professional associations, professional schools, academia) gauging efforts at the national level. However, other applications can include surveys at subnational (e.g., province, county) levels and group or consensus meetings, where stakeholders score and discuss each item, dimension, and the overall score as a way to identify strong and weak areas of HRH investment and effort, with evident buy-in and capacity-building potential. User feedback from a pilot test of the Index in Kenya and Nigeria in 2014 informed final revisions to the tool, which was subsequently applied in several countries through a variety of modalities: individually for national (Burkina Faso, Dominican Republic, Mali, and Ghana) and subnational (Dominican Republic) scopes, and collectively through a consensus meeting of stakeholders (Mali).

CapacityPlus also conducted several evaluations of innovative HRH investments that generated much-needed evidence. These used a variety of methods including a pre- and post-intervention design in the pilot of an mHealth family planning in-service training application among health workers in Senegal to foster retention of training content. The evaluation demonstrated improved knowledge of family planning side effects 10 months after the training. In Nigeria, the project obtained and analyzed existing data available from the community health and midwifery associations to assess the effectiveness of support to preservice education institutions and students in increasing the number of newly qualified health workers, and complemented these results with additional primary data collection at schools that received support, among key preservice education stakeholders involved in the processes, and with scholarship recipients. In Uganda, the project linked HRIS data with client record systems such as DHIS 2 to elucidate the association between increases in the health workforce and changes in

service delivery. Where baseline values were lacking, the project innovated by conducting retrospective or reconstructive evaluations (e.g., effects of human resources management policy and practice among Kenyan faith-based organizations).

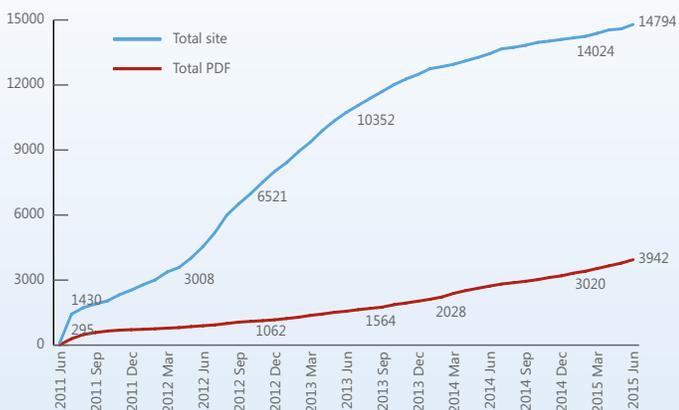
Highlights of Results

Building Country Capacity in Monitoring and Evaluation

CapacityPlus's M&E tools have been accessed by and disseminated to a wide range of users around the world. For example, the interactive online version of the HRH Indicator Compendium has been visited 14,794 times (an average rate of 308 times per month) and the PDF downloaded 3,942 times since the tool's launch in June 2011 (Figure 3).

Figure 3: Number of Visits to the Online and PDF HRH Indicator Compendium

(June 2011–June 2015)



Similarly, in the four months after the release of the HRH M&E eLearning course, the number of users grew more than 100 times, after which it continued to grow at a slower pace of about 20 users per month, with users coming from 116 countries. As of June 2015, the course had been visited by 1,303 users, with 158 certificates issued.

Applying the HRH Effort Index

The pilot test of the Index in Kenya and Nigeria in May–June 2014 included 49 HRH and health systems experts from ministries, professional councils, training institutions, NGOs, and FBOs. This initial application resulted in differences in total scoring between the two countries (Kenya=

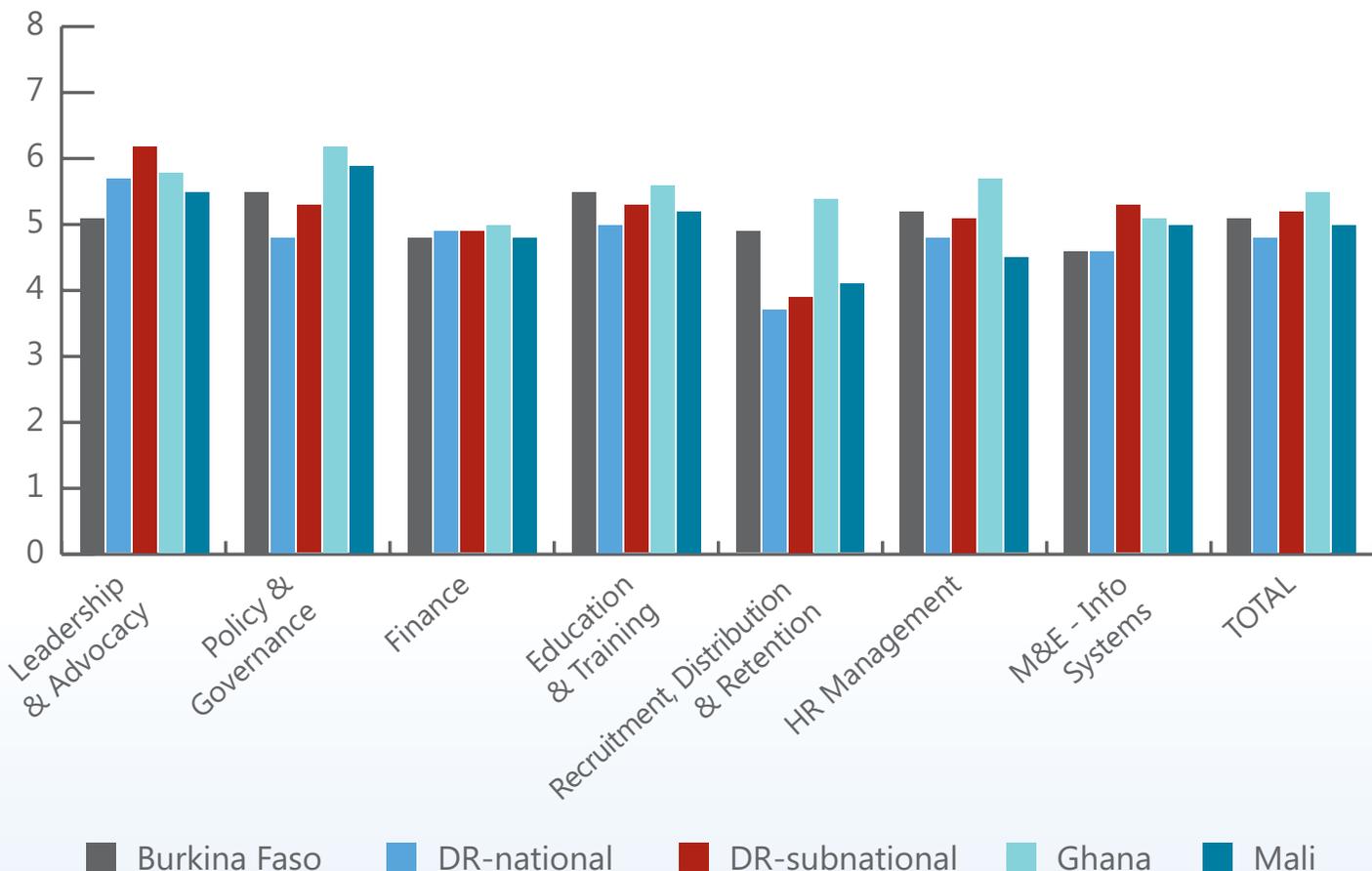
5.7 and Nigeria= 4.2) as well as variations in scoring by individual dimensions. The project subsequently applied the finalized HRH Effort Index in four countries: Burkina Faso, the Dominican Republic (nationally and in three subnational regions), Mali, and Ghana, among 19, 16, 27, and 20 respondents, respectively. Respondents came from government, FBOs, multilateral and bilateral organizations, NGOs, professional associations and councils, health facilities, and academic institutions. Figure 4 presents the results.



While all countries consistently scored in the mid-range across the various criteria related to national HRH efforts, the lowest scores were given to the “Recruitment, Distribution, and Retention” dimension, followed by financing of HRH (which was also consistent with the pilot test results in Kenya and Nigeria). When looking deeper into the items scored in these dimensions, the two most critical were the lack of an effective distribution strategy for human resources serving rural and remote populations and insufficient efforts on incentives to encourage retention of workers, especially in rural areas. In the finance dimension, insufficient funding for HRH from domestic budgets, to support tuition to students or to produce adequate numbers of health workers, also received lower scores. More refined analyses can be made within and across countries to understand these differences better.

In Mali, CapacityPlus convened a workshop in mid-2015 to disseminate the findings from the individual scoring and ask high-level technical experts and members of the HRH stakeholder leadership group to jointly re-evaluate and reach

Figure 4: HRH Effort Index Scores by Dimension, Burkina Faso, Dominican Republic (national and subnational), Ghana, and Mali



a consensus score for each of the individual elements within each domain of the survey tool. The 43 experts collectively scored many elements similarly or less favorably than the average of the individual application. More importantly, the exercise led to in-depth discussions about strengths and weaknesses in Mali’s multisectoral efforts to improve HRH, and participants proposed recommendations across all the domains—such as discussing how the government can better control quality at private health professional educational institutions, reduce ghost workers, and better apply the national career plan to improve health worker retention in difficult areas. Participants appreciated the rapid assessment nature of the exercise and suggested that the HRH Directorate at the Mali Ministry of Public Health and Hygiene and the stakeholder leadership group use the findings in their evaluation of the Mali 2009–2015 HRH strategic plan and incorporate the emerging recommendations into the next strategic planning cycle.

Lessons Learned and Recommendations

- To generate new knowledge from project interventions, robust impact evaluation designs are needed. Interventions should set up systems to gather baseline information, link activities to health outputs and outcomes, include comparison or control groups where feasible, and measure effects after sufficient time has elapsed to observe demonstrable results. A sufficient M&E budget should accompany these efforts.
- To be effective, building M&E capacity requires that more emphasis be placed on following up with users of tools and workshop participants to support them and ensure that new knowledge and skills are applied in real-life scenarios or translated into sound M&E plans.
- The HRH Effort Index is an important tool to generate additional information about HRH efforts across many domains at the country level to inform policy and advocacy. Despite some



limitations of scoring based on informants' perceptions, indices have proven useful to provide additional information in areas of difficult measurement. The Index's application over time should provide more data to assess whether it can effectively measure progress and results in the HRH area. If proven successful, WHO might consider its wider use for general assessments of the "state of HRH" in relation to health systems strengthening across countries and regions.

- The HRH Effort Index is particularly well suited as a rapid assessment exercise to encourage diverse country stakeholders to identify collectively the strengths and weaknesses in efforts to improve HRH and come together to propose recommendations. Further applications of the workshop process should be encouraged to learn more about their long-term effects.

References

Campbell Jim, Gilles Dussault, James Buchan et al. 2013. A universal truth: No health without a workforce. Forum Report, Third Global Forum on Human Resources for Health, Recife, Brazil. Geneva: Global Health Workforce Alliance and World Health Organization. <http://www.who.int/workforcealliance/knowledge/resources/hrhreport2013/en/> (accessed August 23, 2015).

Save the Children. 2011. Health Workers Reach Index. http://www.savethechildren.org.uk/sites/default/files/docs/HealthWorkerIndexmain_4.pdf (accessed August 23, 2015).

World Health Organization. 2006. The world health report 2006: Working together for health. Geneva: World Health Organization.

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