

General Information

Project Title:	Strengthening Human Resources for Health
Prime partner sub-partner(s):	Jhpiego Management Sciences for Health (MSH), Ethiopian Midwives Association (EMwA), Ethiopian Association of Anesthetists (EAA), Open University (OU) Project Mercy Health Science College
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ACRONYMS

BSC	Balanced Score Card
B.Sc.	Bachelor of Science
CPD	Continuing Professional Development
COC	Certificate of Competence
DHRDA	Directorate of Human Resources Development and Administration
DQA	Data Quality Assessment
EAA	Ethiopian Association of Anesthetists
ETS	Effective Teaching Skills
EMwA	Ethiopian Midwives Association
EMT	Emergency Medical Technicians
FAA	Fixed Amount Award
FMHACA	Food, Medicine and Healthcare Administration and Control Authority
FMOE	Federal Ministry of Education
FMOH	Federal Ministry of Health
FMWYCA	Federal Ministry of Women, Youth and Children's Affairs
GoE	Government of Ethiopia
HE	Health Economics
HEW	Health Extension Worker
HEP	Health Extension Program
HERQA	Higher Education Relevance and Quality Agency
HRIS	Human Resources Information System
HR	Human Resources
HRH	Human Resources for Health
HRM	Human Resources Management
HSDP	Health Sector Development Program
HSEDC	Health Sciences Education Development Center
IQA	Internal Quality Assurance
IT	Information Technology
ICT	Information and Communication Technology
ISS	Integrated Supportive Supervision
IST	In-service Training
JD	Job Description
MCNH	Maternal, Child and Neonatal Health
M&E	Monitoring & Evaluation
MOU	Memorandum of Understanding
MOWCYA	Ministry of Women, Children and Youth Affairs
MSH	Management Sciences for Health
NIMEI	New Innovative Medical Education
OU	Open University
OR	Operation Room
PFSA	Pharmaceuticals Fund and Supply Agency
PMTCT	Prevention of Mother to Child Transmission
PSE	Pre-service Education
RHSC	Regional Health Science College

RHB	Regional Health Bureau
SCM	Supply Chain Management
SNNPR	Southern Nations, Nationalities and Peoples Region
SOP	Scope of Practice
TB	Tuberculosis
TOT	Training of Trainers
TOR	Terms of Reference
TWG	Technical Working Group
TVET	Technical and Vocational Education and Training
USAID	United States Agency for International Development
WCI	Work Climate Improvement
ZHD	Zonal Health Department

1. PROGRAM AREA / PROJECT DESCRIPTION:

The Strengthening Human Resources for Health (HRH) Project is a **six year (2012 – 2018)** bilateral cooperative agreement with an overall goal of improving the human resources for health status in Ethiopia. Funded by the United States Agency for International Development (USAID) under the “Investing in People” category of the foreign assistance framework, the project is contributing to the Government of Ethiopia’s (GoEs) efforts to build or strengthen local capacity for development of sustained systems for managing human resources for health, increasing availability of midwives, anesthetists, health extension workers and other priority cadres, improving and monitoring the quality of education, and continuing professional development of health care providers, and generating evidence to inform HRH policies and practices.

A qualified, motivated and competent health workforce is a critical element required to address Ethiopia’s high burden of morbidity and mortality resulting from communicable diseases, nutritional disorders, and poor maternal and child health outcomes, and to contribute towards achievement of key goals in the national Health Sector Transformation Plan, Human Resources for Health (HRH) strategy and health related Sustainable Development Goals (SDG 3 & 10).

However, findings from a 2012 Rapid Situational Assessment of Human Resources for Health in Ethiopia¹ indicated that there was a critical shortage of health professionals across cadres in most regions. Unmet need for midwives and anesthetists stood at 63% and 44%, respectively, with regional variations such as Gambela (93%) and Somali (89%). Although the Federal Ministry of Health (FMOH) has successfully trained and deployed more than 34,000 health extension workers (HEWs), the annual attrition rate was approximately 5%. In addition, some regions still had a high unmet need for HEWs, including Somali (34%) and Tigray (19%). Though recent data indicate a marked improvement in the number of health workers available to provide services in the public health sector, there is still a need for additional efforts to increase the health workforce and meet the goals laid out in the government HRH strategy.

Poor quality pre-service education (PSE) and in-service training, rapid turn-over of skilled health care providers, inequitable distribution of the health workforce, underdeveloped regulatory capacity needed to sustain human resources for health quality, and ineffective management of human resources for health systems contribute to the HRH challenges. The Human Resources Information System (HRIS) was not fully functional and requires additional strengthening and expansion to all levels of the health system. Of particular importance is having structure and staff dedicated to HRIS and providing training in human resources data collection, processing, data analysis and data for management decision-making. The HRH Project has worked successfully to address these challenges, however, additional inputs are required to consolidate and strengthen efforts made to date.

Through program inputs at both the national and regional level, and in collaboration and coordination with the Federal Ministry of Health (FMOH), Higher Education Relevance and Quality Agency (HERQA), Food, Medicine and Health Care Administration and Control

¹ *Jhpiego 2012. Human Resources for Health: Rapid Situational Assessment of Prioritized Geographic Areas.*

Authority (FMHACA), Regional Health Bureaus (RHBs), and other key stakeholders, the HRH Project is working to address these challenges by implementing the strategies outlined below.

2. OBJECTIVES/PURPOSE:

The ultimate goal of the HRH Project is to improve health outcomes for all Ethiopians, with emphasis on the reduction of infectious diseases and maternal and newborn morbidity and mortality. The HRH project's efforts will build upon previous work and processes, and implement activities organized within the following key results:

Result 1: Improved Human Resources for Health Management

Result 2: Increased Availability of Midwives, Anesthetists, Health Extension Workers (HEW)s and other Essential Health Workers

Result 3: Improved Quality of Training of Health Workers

Result 4: Monitoring & Evaluation, Program Learning and Research

The Projects goals and objectives will be met through systems aimed at production, deployment and support of high-quality professionals at all levels of health service delivery. The increased quantity and quality of health workers (Result 2 and 3) will be supported by an overall strengthened health management approach (Result 1). All project approaches will be evidence based and rooted in program learning (Result 4).

Year 5 Work Plan (01 October 2016- 30 September 2017)

Result 1: Improved Human Resources for Health Management

Human Resources Management (HRM) in the context of the health sector is the integrated use of systems, policies and practices to plan, develop, recruit, deploy, motivate and retain health workers in order to meet the health sector goals. Though significant progress has been made in the last four years of Project implementation, the HRM system in the country needs further strengthening, as poor HRM practices can affect the availability and performance of health workers, ultimately resulting in poor health outcomes. The HRH project aims to achieve improved HRM by improving management and leadership capacity, motivation and retention of health workers, availability and utilization of HR policies and practices, collaboration and partnership for HRH, and management of staff training.

IR 1.1 Improved Human Resources for Health Management (HRM) Capacity

Over the last four years, the HRH Project has implemented several HRM interventions at the Federal Ministry of Health (FMOH), Regional Health Bureaus (RHBs), Zonal Health Departments (ZHDs) and Woreda Health Offices (WorHOs); Food, Medicine and Healthcare Administration and Control Authority (FMHACA) and two professional associations (Ethiopian Midwives Association and Ethiopian Anesthetists Association). These interventions were intended to address the existing HRH management challenges and ensure that improved HRM systems, policies and practices are in place at all levels of the health system.

The interventions were designed to respond to the challenges and HRM capacity needs that were identified through participatory HRM Capacity Assessments that were conducted in 2012 and 2013 in collaboration with the FMOH, 11 RHBs, FMHACA, EMwA and EAA. Three-year HRM capacity building plans were developed to address the identified gaps at each of these institutions, and the HRH Project has been providing technical and financial support to ensure implementation of these plans.

Major intervention areas include reviewing/revising Human Resources (HR) structures and increasing staffing levels at the FMOH, RHBs, Zonal, Woreda and Health facility levels. This has led to the creation of more than **1300** additional HR positions at the RHBs, Zonal and Woreda health offices. These are permanent, full-time HR positions, with all salaries and benefits paid by the Ethiopian government. By the end of June 2016, more than **1134 (87%)** of these newly created HR positions were filled with candidates who meet minimum requirements for the positions.

Additional inputs included improving systems and practices for performance planning and management, strengthening HR data collection and use including improving filing systems, and ongoing technical support to transfer knowledge and skills from HRH Project staff to their counterparts in the government offices. The project has also supported the establishment of post-graduate training programs in HRH management and health economics at three higher

educational institutions, University of Gondar, Jimma University and Addis Continental Institute of Public Health, to ensure access to relevant training for HR professionals.

These efforts have greatly enhanced the capacity of the FMOH and RHBs to plan, recruit, orient and deploy health workers; strengthen performance planning and management (implementation of the Balanced Score Card approach), create a work environment that enhances performance and productivity, and increase availability and use of quality HR data for evidence-based decision-making.

In Year 5, the HRH Project will consolidate the achievements and continue to provide targeted technical assistance (and financial support) to further strengthen the HRM capacity of the health system at national and local levels. For example, the Project will advocate for approval of the revised HR structure/positions in Amhara; restructuring at the FMOH, Oromia and Tigray RHBs, continue to support RHBs to fill vacant HR positions, strengthen the implementation of BSC, and collaborate with the FMOH and other stakeholders such as the Tulane University Technical Assistance project to strengthen HR data management.

Sub- IR 1.1.1 Improve Human Resources (HR) structure and staffing at FMOH, RHB, Zone, Woreda and health facility levels

Activity 1.1.1.1 Provide technical assistance to RHB HR Support Processes to organize and conduct consultative workshops with regional Civil Service Bureaus/Regional Cabinets to secure approval for newly proposed HR positions, create additional positions, and support job grading.

To address the HR leadership and management challenges that were identified during the HRH Capacity assessments, the HRH Project has provided financial and technical support to sustainably increase the number of qualified HR staff at the FMOH and RHBs. As a result, suitable organizational structures were created at the FMOH, Oromia, Addis Ababa, Afar, Somali, Benishangul-Gumuz and Gambella Regions. This has led to the creation of more than 1300 additional HR positions at the RHBs, Zonal and Woreda health offices, largely, in these six regions. These are permanent, full-time HR positions, with all salaries and benefits paid by the Ethiopian government. By the end of June 2016, more than 1134 (87%) of these newly created HR positions were filled with candidates who meet minimum requirements for the positions.

The HRH Project inputs resulted in the creation of more than 1300 HR positions, of which 1134 (87%) have been filled and fully funded by the government as of June 2016.

The Oromia RHB has been particularly successful in restructuring its HR functions. The RHB created 713 new HR positions at the RHB, Zonal and Woreda Health Offices, and successfully negotiated approval from the regional Cabinet. 558 (78.3%) of these positions were filled by the end of June 2016. However, the RHB plans to restructure and create additional HR positions at zonal and Woreda health offices to reduce the current workload and improve service quality.

In SNNP, Dire Dawa and Harari, comprehensive assessments revealed that independent HR structures exist at all levels of health system including the health centers but most of the positions were unfilled. The HRH Project support in these regions was towards filling the vacant positions.

In Amhara, the HRH Project provided technical and financial support to review/revise the existing HR structure. A proposal was developed to create independent HR structures (separate from the Civil Service pooled function) for Zonal, Woreda and health facility levels. The proposal contained more than 760 New HR positions but approval by the regional Cabinet was not granted due to budgetary implications. A similar assessment in Tigray found that HR positions exist at the RHB and health facilities but not at the Woredas. However, a proposal with the recommended number of HR positions has not been developed.

Given the differences in each region, in Year 5 the HRH Project will provide need-based technical support to Tigray, Amhara and Oromia RHBs. Technical support to the Tigray RHB will focus on revising the organizational structure and creating an independent HR unit at the WorHOs level in line with the Woreda Transformation agenda (a part of the next five year Health Sector Transformation Plan). In Amhara, the Project will advocate for approval of the proposed HR structure and positions at Zonal, Woreda and Health facilities. In Oromia, a consultative workshop will be held to discuss the need for additional HR positions at various levels of the health system. In all the three regions the goal of conducting stakeholders' consultative workshops is to secure approval for the proposed new HR structure and positions. Key stakeholders anticipated to take part in such workshops include the regional civil service and/or regional Cabinets.

Activity 1.1.1.2 Provide ongoing technical support to the FMOH, RHBs, ZHDs, and Woreda Health Offices to fill newly created or existing vacant HR positions.

In Year 5, the HRH Project will continue to provide technical support to the HR staff at RHBs and Civil Service Bureaus to fill the remaining HR positions as well as replace vacant positions. This support includes developing/updating job specifications, preparing position announcements, reviewing Curriculum Vitae (CVs) and conducting interviews. The annual target for this activity is 571 HR positions, which includes vacant HR positions carried forward from Year 4, existing vacancies, and anticipated new positions. Similar support will be provided to Tigray and Amhara regions if approvals are granted by the Regional Civil Service Bureaus or Regional Cabinets.

Activity 1.1.1.3 Provide technical support to RHBs for recruitment, selection and orientation of new staff (mainly health care providers)

Improved HRM capacity has a significant role in enhancing HR planning, recruitment and deployment of health professionals, which in turn improves access to quality health services such as reproductive, maternal, newborn and child health services; prevention and control of communicable and non-communicable diseases and community mobilization for improved health service utilization.

In Year 5, the HRH Project will technically support the HR Support Processes at RHBs in recruitment, selection, orientation and deployment of **8,740** health professionals graduating from universities and colleges. Project staff will also work with the RHBs to track and maintain up-to-date data on health worker deployment. For each of these activities, HRH staff seconded at the RHBs will work closely to coach and support the RHB staff to conduct functions related to recruitment, budget allocation and orientation.

The HRH Project will provide technical support for the recruitment, selection, orientation and deployment of 8,740 health workers.

Activity 1.1.1.4. Support the SNNPR RHB team to organize an experience-sharing visit at the FMOH, Oromia and Amhara, to learn how the HR Support Process and HR Data Management (Archive and HR statistics) are organized

At the SNNP RHB, the HR Development and Administration (HRDA) and HR Data case teams are organized in two different Support Processes. As a result, the HRDA support process does not receive timely HR data as the HR Data Support Process reports directly to the RHB.

Experiences at the FMOH and other regions indicate that there is better coordination and improved data use for decision-making when the HR Data case team is under the HRDA (such as at the FMOH), or when it is an independent Work Process (such as the Amhara RHB). The SNNP RHB is interested in learning more about the alternative ways to organize these case teams, and in Year 5, the HRH Project will support the SNNP RHB's HRDA Support Process team to organize a 7-day experience-sharing visit to the FMOH, Oromia and Amhara. The participating team will comprise representatives from the RHB senior management and human resource management support process.

Activity 1.1.1.5 Provide financial support to the FMOH to conduct follow-up visits to RHB HR support processes

As a policy developing organ, the FMOH should supervise and provide technical, financial and material support to the RHBs, health professional training institutions, and agencies and hospitals that report to the FMOH, with the aim of enhancing HRM practices.

In the last 4 years, the HRH Project has provided technical and financial support to the FMOH to plan, schedule and conduct follow-up to the institutions stated above. In this project year, technical support will be provided to organize semi-annual follow-up visits, and provide financial support for one of the two visits. During these visits, the HRM plan and achievements will be reviewed to document success and challenges, onsite feedback and coaching will be provided, and joint action plans developed to address challenges. Best practices and lessons learned will be documented and disseminated at semi-annual/annual review meetings.

Sub IR 1.1.2 Human Resource Data collection and use

Activity 1.1.2.1 Collaborate with Human Resources Information System (HRIS) implementing partners to strengthen HR data management at the regional level

Data collected through the HRIS should guide evidence based planning, budgeting and decision making. However, the quality of data generated at all levels remains poor. The HRH Project has been providing technical support to the RHBs for HR data collection and decision making in collaboration with CDC funded Tulane University Project and the FMOH. In Year 5 the Project will continue to collaborate with these partners with the aim of working towards ensuring that the HRIS software is fully functional at the RHBs, Hospitals, ZHDs, sub-city offices and majority of health centers in all regions.

During previous years of implementation, the FMOH requested the HRH Project to support an assessment of the current national HRIS, and develop recommendations on the requirements to make it functional. The assessment was not conducted due to a lack of consensus among key stakeholders on the implementation approach; If the assessment continues to be a priority for the FMOH, the Project will provide technical support for the assessment as needed.

Activity 1.1.2.2 Provide technical support to the RHBs during semi-annual HR data collection

The HRH Project has been providing technical support to the FMOH and RHBs to collect HR data from the ZHD, Woreda health offices, sub city health offices and health facilities on a quarterly and semi-annual basis. For example, with extensive support from HRH Project staff, comprehensive data on the health workforce number, professional categories, qualification and distribution by management structures/health facilities were collected from all RHBs, federal agencies, hospitals and other institutions as well as teaching hospitals from October- December 2015. These efforts will continue in Year 5, with the Project supporting RHBs to collect complete and timely HR data.

Activity 1.1.2.3 Provide ongoing technical support to reinforce HR data analysis and evidence-based decision making

Collecting HR data alone is not sufficient – the data must be utilized for decision-making at all levels. The Project has worked closely with the RHBs to improve the use of HR data for evidence-based decision-making such as staff deployment, transfers and supportive supervision. In year five, the Project will consolidate its achievements and provide ongoing technical support to all RHBs to analyze the HR data (by disaggregating the data by different variables such as number, gender, professional category and sub category in each institution, and comparing it against the staffing standard and work load), and make evidence-based decisions such as planning, deployment and management of the health workforce.

Activity 1.1.2.4 Provide ongoing technical support to RHBs to organize personnel files

Since 2013, the HRH Project has supported RHBs to organize personnel files, ensuring completeness and effective filing for easy retrieval. As a result, the FMOH and all regions now have a strong system in place for organization of these files. In program Year 5, the HRH Project staff will support the RHB HR Support Process staff to ensure that the established system is maintained and expanded as new staff are hired. Using the existing checklist developed by the Project, support will also be extended to zonal and Woreda offices as well as health facilities.

Activity 1.1.2.5 Provide technical support to strengthen regular HR data reporting

Timely reporting of HR data is critical for evidence-based decision making at all levels. This is particularly important at the FMOH and RHB level as they plan for need-based deployment of the health workforce. The HRH Project has been supporting RHBs to provide timely reports from the RHBs to the FMOH, and assisted the RHBs to collect HR data from the lower levels. In Year 5, the existing reporting practices will be consolidated and further strengthened to ensure routine and timely HR data reporting.

Sub IR 1.1.3 Improve performance management systems and practices

Activity 1.1.3.1 and 1.1.3.2 Provide on-site technical support to RHBs to consolidate implementation of Balanced Score Card (BSC) at ZHDs, Woreda, and Hospitals, and provide technical support to initiate BSC implementation

The Balanced Score Card (BSC) system is a management tool for performance planning, measurement and improvement, in which staff and supervisors develop joint work plans. In 7 regions (Oromia, Amhara, Tigray, Dire Dawa, Harari, Addis Ababa and SNNP RHBs), implementation of BSC began before the HRH Project was initiated, and the Project has been

supporting these regions to conduct additional training and cascade the implementation to the hospital/health center level. The Project also organized an experience-sharing visit for emerging regions (Afar, Gambella, Somali and Benishangul RHBs) to SNNP and Oromia, and supported them to develop taskforces and action plans to guide them as they begin the implementation in their own regions.

In Year 5, ongoing technical support will be provided to the 7 regions as they continue to cascade implementation to lower levels, and support will be provided to emerging regions as they start to implement the approach at the RHB level.

Activity 1.1.3.3 Revise the existing HR supportive supervision checklist to incorporate indicators to assess the implementation of BSC

Regular supportive supervision can facilitate the implementation of BSC at all levels of the health system. To be effective, supervision should be guided by well-developed performance indicators organized into checklists. However, the existing supportive supervision checklist used by the regions does not contain all the necessary indicators to assess the implementation of BSC.

In Year 5, the HRH Project will provide technical support to develop and incorporate relevant BSC indicators into the existing HRM supportive supervision checklists. Project staff will also support the RHB HR Support Process in the regions to select/adapt and incorporate the indicators relevant to the regional context and include them in the RHB integrated supportive supervision checklist.

Activity 1.1.3.4 Provide technical support to review, update, develop, and distribute job descriptions

The HRH Project has provided significant support to RHBs to build their capacity to develop and distribute job descriptions (JDs) for all employees. The Project will consolidate the achievements to date and provided need-based technical support with a focus on developing JDs for health workers at health centers and hospitals.

IR 1.2 Improved HRM Motivation and Retention Schemes according to the Country Context

Evidence in the literature suggests that how health care providers are managed, motivated and supported is not only central to the quality of health services that they provide but it also enhances job satisfaction, retention and productivity². In Year Two and Three, the HRH Project conducted employee satisfaction surveys at the FMOH and 11 RHBs, supported RHBs to collect and analyze staff exit interviews, and conducted a national study on health workers job satisfaction, motivation and intention to leave. Key findings and recommendations from these activities were disseminated as appropriate, and findings from the retention study included in the national HRH Strategic Plan. RHBs were also encouraged to utilize the findings and develop strategies to enhance the work climate

² The World Bank. Global conference on Universal Health Coverage for Inclusive and sustainable growth: lessons from 11 country case studies: A global synthesis report, 2013. Available at <http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2013/12/05/00046183220131205145919/Rendered/PDF/83140WPOJPPOUOBox0379884B00PUBLICO.pdf>

Sub-IR 1.2.1 Formulate and implement institution specific motivation and retention strategies

Activity 1.2.1.1. Provide technical support to RHBs to institutionalize, reward and recognize best performing institutions and staff

Effective utilization of the BSC performance management system can lead to the identification of high performing employees and institutions. The HRH Project has been encouraging RHBs to use the results of BSC implementation to introduce performance based rewards with the aim of motivating health workers. As a result, the regions developed criteria, and a fair and transparent process to identify and recognize health workers based on their performance. Rewards included recognizing the health workers by awarding certificates, and providing material and financial gifts for their achievements.

In Year 5, technical support will be provided to support RHBs to institutionalize the reward and recognition systems, and ensure the sustainability and ownership of the performance appraisal system at all levels to enhance motivation and retention of health workforce.

Activity 1.2.1.2 Provide technical support to develop region-specific staff motivation and retention strategies

The HRH Project will support RHBs to develop region-specific staff retention and motivation strategies based on the findings and recommendations from the retention study as well as employee job satisfaction surveys and staff exit interviews conducted in each region.

Activity 1.2.1.3 Provide Health Professional Career Structure Implementation training for HR managers at RHBs, Federal Agencies and Hospitals

In 2013, the HRH Project provided financial support to the FMOH to orient HR staff from the RHBs, federal agencies, and hospitals on the health workers' incentive package including duty, housing and risk allowances. The FMOH subsequently revised and updated the health workers career structure implementation guideline, and requested technical and financial support from the Project to conduct a 3-day training for 55 HR managers and staff. In response to this request, in Year 5 the Project will provide technical and financial support to the FMOH to conduct the training, which will facilitate standardization and implementation of the health professionals' career structure in all regions/institutions.

Sub-IR 1.2.2 Develop and implement Work Climate improvement programs

A conducive work environment is essential for delivery of health services. Poor work climate is a source of low morale, poor job satisfaction, unsatisfactory health-worker performance and low productivity. In Year 4, the HRH Project updated and revised the work climate improvement strategy and advocated with RHBs to adopt the strategy, and supported RHBs to provide training on 5S-KAIZEN Total Quality Management (TQM), a continuous quality improvement strategy used to improve working environment within an organization.

In Year 5, the Project will support additional training of HR staff on 5S-KAIZEN, and provide regular coaching and technical support to ensure timely initiation and implementation of the interventions to improve the work climate.

Activity 1.2.2.1 Provide technical and financial support to RHB, ZHD and Hospital HR units to conduct 5S-KAIZEN TQM trainings and implement work climate improvement

The goal of 5S-KAIZEN TQM is to increase staff motivation, resulting in increased efficiency of workers and improved quality of services, which in turn increases customer satisfaction. In Year 3 and 4, the HRH Project supported the Amhara, SNNP, Addis Ababa, Dire-Dawa, Harari and Oromia RHBs to implement 5S-KAIZEN TQM by providing training and mentorship to HR staff in the RHBs and selected hospitals. One of the most notable features of KAIZEN is results from many small changes accumulated over time. As an example, in Amhara, effective physical reorganization of the office work space and filing has contributed to the overall improved work climate.

In Year 5, the HRH Project will support the training of 80 HR staff on 5S-KAIZEN TQM principles and practices, and continue to provide ongoing technical support and coaching to HR staff in collaboration with regional civil service bureaus (where available) to sustain these achievements.

Activity 1.2.2.2 Conduct follow up and coaching to strengthen implementation of work climate improvement (through KAIZEN)

Providing coaching after 5S-KAIZEN TQM training encourages implementation of the interventions to improve the work climate. The Project will provide ongoing coaching and follow-up at the FMOH and 7 RHBs (except emerging regions).

IR 1.3 Improved Human Resources for Health Policies and Practices

The HRH Project supported the FMOH to finalize the National HRH Strategic Plan (SP). Once the SP is disseminated, the HRH Project will provide technical and financial support to the RHBs to adopt/adapt the plan to the regional contexts.

Sub-IR 1.3.1 Improve access to and compliance with HR Policies and procedures

Civil service proclamations, HR guidelines and standard operational procedures formulated by the Federal Civil Service Ministry and regional bureaus of civil service were not easily available and accessible to HR managers and officers. In Years Two and Three, the HRH Project collaborated with Human Resources Development and Administration (HRDA) Processes in all the RHBs to identify, assemble, print/photocopy and distribute relevant federal and regional civil service proclamations, policy and procedure manuals. The Project also provided financial support to provide orientation on these regional HR policy documents to HR staff, and develop and distribute flyers and newsletters to increase awareness of the civil servant rules and regulations. Training related to HR policy manuals and their utilization was also provided as part of the HRM trainings.

In Year 5, technical support will be provided to the RHBs to increase the availability and accessibility of HR policy documents and strengthen the staff orientation processes.

Activity 1.3.1.1 Provide technical support to RHBs to assess the availability of HR policies and procedure manuals

Access to relevant HR policies and procedural manuals improves the understanding and compliance of HR managers, staff and the health workforce. During Year 3 and 4, the HRH Project provided technical and financial support to the RHBs to print/photocopy and disseminate

relevant national and regional HR policy documents. Efforts were made to improve accessibility and utilization of the documents through supportive supervision and coaching visits.

In Year 5, achievements in the last two years will be consolidated and technical support will be provided to assess the availability of HR policies during supervision visits from RHBs to sub-regional levels. This will help to identify gaps in availability, accessibility and use of HR policy and procedures manuals and develop plans to address gaps.

Activity 1.3.1.2 Provide technical and financial support to RHBs to conduct stakeholder consultative meetings, to review and finalize regional HRH Strategic Plans

In Year 4, Tigray and Amhara RHBs developed regional HRH strategic plans based on the National HRH SP with technical and financial support from the HRH Project. In Year 5, the Project will provide technical and financial support to organize and conduct stakeholders' consultative meetings to seek inputs, revise and finalize the plans. The HRH Project will also technically support other regions to develop HRH strategic plans.

Sub IR 1.3.2 Support the Food, Medicine and Healthcare Administration and Control Authority (FMHACA) to strengthen/establish Health Professionals Regulation (HPR) policies, systems, programs and practices

The assurance of quality of healthcare and patient safety partly depends on regulation of health practice and health professionals. Setting and enforcing robust systems that support and facilitate regulation is important to promote integrity and accountability of health professionals. The HRH Project has supported the FMHACA to develop policy frameworks for all segments of health professionals' regulation. The support provided reinforced implementation and monitoring of health care and professionals regulation particularly professionals' registration, licensure and re-licensure, Continuous Professional Development (CPD), Scope of Practice (SOP), and Fitness for Practice (FFP). In addition, the Project generated evidence on the uptake and challenges of regulation programs across the country. The Project also supported the development of a regulatory sector strategic plan and sector-wide transformation initiatives on medical ethics and regulatory audits.

Sub IR 1.3.2.1. Develop or revisit policy and legal frameworks governing health care and professional regulation (professional registration, licensure, and re-licensure) in Ethiopia.

FMHACA is currently rethinking its regulatory approach and reviewing the Proclamation (Number 661) governing health care and professional regulation in order to address emerging health priorities. This proclamation will dictate subsequent legal frameworks or Directives and the operation of health care and professional regulation in Ethiopia. Similarly, an ongoing process is underway to harmonize Legal Directives and Regulations with the five-year health sector strategic plan launched in the beginning of 2016.

In the previous quarters, the HRH Project supported FMHACA to revise Proclamation Number 661, and include new articles related to health care and professional regulation, including formation of ethics committees and professional councils, emergency medicine, telehealth, etc. In Year 5, the HRH Project will continue this support as outlined below:

Activity 1.3.2.1.1. Support FMHACA to hire local technical and legal experts to review the draft proclamation (661) and improve its quality (clarity, comprehensiveness, harmony with health sector goals).

The HRH Project will support FMHACA to strengthen the Proclamation Number 661 through facilitating review to ensure clarity of the articles, orientation towards national and global health agendas, comprehensiveness encompassing all health professional categories, harmony with health sector goals and ongoing health programs, etc.

Activity 1.3.2.1.2. Support FMHACA to print the final proclamation and related legal framework documents for health care and professional' regulation.

Final proclamation and related legal framework documents will be published and distributed to quickly reach out to key stakeholders and engage regional health bureaus, health facility managers, health professionals, professional societies, higher learning institutions and the judiciary apparatus during its implementation process. Support will enable the Authority catalyze the scale up and implementation of health care and professional regulation programs across the nation. The support will also enable the Authority to mobilize and engage key stakeholders.

Sub IR 1.3.2.2 Create awareness on health care and professional regulation policy, legal frameworks, systems and processes among health professionals and health managers.

The HRH Project has supported FMHACA to develop guidelines and directives to help implement health professionals' regulation. To increase awareness of these documents, the HRH Project will support FMHACA to distribute and publicize the documents using different approaches such as social media. The FMHACA web page will also be used to reach the wider audiences of health professionals and managers.

Similarly, the HRH Project has supported FMHACA to develop a draft health professionals' regulation handbook. In this year, the Project will support finalization and use of the handbook among key stakeholders particularly health facility managers, health professionals and board members of hospitals and professional societies. The following specific activities will be conducted:

Activity 1.3.2.2.1 Compile FMHACA's statutory documents (proclamation and related legal framework documents) and publish them on a CD ROM/DVD for distribution to health facilities and professional associations.

Activity 1.3.2.2.2 Provide technical and financial support to FMHACA to organize a 3-day training on principles, approaches and standards of health care and professional regulation for participants drawn from RHBs, facilities and professional associations.

Activity 1.3.2.2.3 Support FMHACA Directorates to develop key messages on professional regulation (medical ethics, licensure, CPD, audit) suitable for web page or social media platforms.

Activity 1.3.2.2.4 Edit, publish and distribute 500 handbooks on health care and professional regulation

Sub IR 1.3.2.3 Implement an internal regulatory audit initiative and assess conformity to regulation standards at select Champion/Lead Hospitals

The HRH Project has supported the FMHACA regulation sector transformation initiatives launched along with the FMOH health sector transformation agenda. One of the initiatives is a standard conformity audit that aims to assess conformity to regulation standards and monitor regulatory practices at health care facilities in all regions. The audit currently does not assess elements of various regulatory initiatives such as CPD, SOP, and FPP, as these have not been fully launched or rolled-out nationally. In the interim, the HRH Project introduced a modeling approach in year 4 (also known as a champion-led approach), which developed an internal regulation audit tool, selected “champion” hospitals, and trained assessors/auditors from FMHACA, professional associations and health facilities.

The modeling approach was designed to demonstrate professional regulation practices and document best practices at a small scale, to develop lessons learned that can be used to inform scale-up. The HRH Project planned to support the champion facilities to conduct internal regulation audits or self-review process in Year 4, this was done in 1 institution in Tigray (Ayder University).

In Year 5, additional support will be provided to expand upon these efforts, including facilitating integration of regulatory audits with quality management (quality audit) systems and processes. This will promote a self-regulation approach at the institutional level by working closely with the human resource departments of each selected champion hospitals. The following activities will be conducted:

- Activity 1.3.2.3.1** Support the FMHACA and 11 champion hospitals to integrate the internal regulatory audit with existing quality management (quality audit) systems and processes.
- Activity 1.3.2.3.2** Support champion hospitals to complete self-assessments using the audit tool, and generate assessment reports.
- Activity 1.3.2.3.3** Provide technical support to the hospitals to monitor re-licensure rates among health professionals
- Activity 1.3.2.3.4** Support FMHACA to document best practices and lessons learned on Professional regulation (licensure, medical ethics and internal regulation audit or self-review)

Sub IR 1.3.2.4. Develop legal framework and guideline on professional scope of practice

The HRH Project supported the FMHACA and professional associations to develop a directive and guidelines on scope of practice for fifteen categories of health professionals, which can help to avoid medial errors and confusion among health care team members. The directive has not yet been finalized as there is disagreement between some professions, (e.g. radiology and radiography technicians), regarding the scope of practice. In Year 5, the HRH Project will support the following activities to address the existing challenges and finalize the directive.

- Activity 1.3.2.4.1** Provide technical support to FMHACA to strengthen the national committee on scope of practice
- Activity 1.3.2.4.2** Provide technical support for FMHACA and national scope of practice committee to resolve inter-professional disputes related to overlapping scopes

Activity 1.3.2.4.3 Support FMHACA to review the draft directive on scope of practice

Sub IR 1.3.2.5 Strengthen medical ethics programs and newly formed ethics committee at national and subnational levels

In Year 4, the HRH Project supported development of a directive on ethics, and the establishment of regional ethics committees to address patient complaints. Five regional ethics committees were formed and supported to review medical ethics cases (Addis Ababa, Tigray, Amhara, SNNPR and Dire Dawa). However, the committees are not fully functional, due to challenges such as a lack of member confidence and competence on guiding principles of professional regulation, unavailability of legal experts at the RHBs to follow-up on the directive endorsement process, and a lack of capacity of the legal experts to expedite decisions passed by the committee.

To increase awareness of the ethics directive, several advocacy and educational platforms such as national technical working groups, hospital review forums, health sector review forums, regulatory performance review workshops, mainstream media, printed media and brochures were used to educate health managers and professionals. The Project also collaborated with professional associations to make medical ethics and quality of health care a conference theme at plenary sessions at annual assembly meetings.

To ensure sustainability of the ethical review system, the Project will continue to provide financial and technical support to the regional and national committees through onsite mentorship and the conduct of a performance review workshop. Support will also be provided to finalize endorsement of the directives and establish ethics committee in other regions to realize a decentralized and functional medical complaints review systems and processes. The following activities will be conducted:

- Activity 1.3.2.5.1** Support FMHACA and its regional counterparts to finalize the development and endorsement of the ethics directives
- Activity 1.3.2.5.2** Support FMHACA and new/emerging ethics committees to organize bi-annual experience sharing visits
- Activity 1.3.2.5.3** Provide technical and financial support to FMHACA to compile patient complaints and conduct trend analysis on ethical breaches and medical errors reported to national and regional ethics committees
- Activity 1.3.2.5.4** Support FMHACA ethics committees to develop and publish a case-based learning package (on ethical breaches and medical errors)
- Activity 1.3.2.5.5** Provide financial support to FMHACA to print standard operating procedures for the patient complaint review process (flow charts) and ethics directives
- Activity 1.3.2.5.6** Support FMHACA to provide biannual coaching and mentorship support to regional ethics committee
- Activity 1.3.2.5.7** Support the Federal FMHACA ethics committee to organize a 3-day performance review workshop
- Activity 1.3.2.5.8** Provide technical and financial support to the Ethiopian Medical Association (EMA) and the national Ethics Committee to develop a training module on medical ethics
- Activity 1.3.2.5.9** Provide financial support to print and distribute the medical ethics training module to new ethics committees and facilities

Sub IR 1.3.2.6 Establish processes and tools to identify and report ethical breaches and medical errors committed at champion hospitals

As regulatory audit practices mature, complaint review process will increasingly become decentralized to regional level ethics committees, and as patient health literacy improves, it is likely that RHBs and health facilities will be overwhelmed by an increasing number of patient complaints and legal litigation. To address this emerging challenge, health facilities will have to work closely with regional complaints hearing committees.

To understand the magnitude and nature of patient safety issues, facilities will need to introduce a process and design tools that allow them to identify and report patient safety incidents, particularly those that result from a lack of fitness for practice, unethical medical practice or unprofessionalism

In order for health facilities to understand the magnitude and nature of patient safety issues, they will need to introduce a process and design tools that allow them to identify and report patient safety incidents, particularly those that result from a lack of fitness for practice, unethical medical practice or unprofessionalism. Facilities can then utilize this site-level data to inform both regulatory and clinical audit processes, and in the long term provide information that the FMOH can use to realize its goals related to improving health quality.

The HRH Project will provide technical and financial support to RHBs and champion hospitals to design, test and implement processes and tools that facilitate internal reporting of ethical breaches and medical errors. The following activities will be conducted:

- Activity 1.3.2.6.1** Provide technical and financial support to three champion hospitals to design and test tools for internal reporting of ethical breaches and error.
- Activity 1.3.2.6.2** Provide technical support to three Champion Hospitals to compile and Analyze patient complaints, and generate reports.
- Activity 1.3.2.6.3** Organize a 3-day workshop to present findings from the internal patient complaint and medical error review.
- Activity 1.3.2.6.4** Provide technical support to Champion Hospitals to generate action plans to address patient complaints, ethical breaches and medical errors
- Activity 1.3.2.6.5** Support FMHACA to organize a dissemination workshop to share findings of a rapid assessment on the magnitude and nature of patient complaints, ethical breaches and medical errors (funding for assessment to be leveraged from other sources)

Sub IR 1.3.2.7 Develop an online system to automate health professionals' registration and licensure

FMHACA is developing Information Communication Technology (ICT) infrastructure to upgrade its professional registration and licensure systems and processes. This is in line with the information revolution agenda of the five-year health sector transformation plan. Automation of health professionals' registration and licensure facilitates access and utility of data to analyze trends, review performance and generate evidence to inform registration and licensure practices. In Year 5 the Project will provide FMHACA with financial and technical support to establish an online registration system. The following support will be provided:

- Activity 1.3.2.8.1** Provide technical and financial support to FMHACA to analyze data on

Activity 1.3.2.7.2 professional registration and licensure and develop a plan of action
Provide technical assistance to disseminate findings of the analysis

IR I.4 Enhanced Human Resources for Health Forums at Federal and Regional Levels

Addressing HRH challenges requires multiple stakeholders with strong partnership and networking. At the beginning of the HRH Project, national and regional HRH forums were established with diverse membership including Ministries of Health, Education, Finance and Economic Development, and Civil Service, bilateral and multilateral donors, public and private education and training institutions, international non-government organizations and professional associations. The HRH Project provided technical and financial support to ensure regular meetings at national and regional levels. This support will continue in Year 5 as below:

Activity 1.4.1 Provide technical and financial support to strengthen existing HRH forums through conducting regular meetings (linked to HR review meetings)

The existing multi-sectorial HRH forums are a platform where diverse stakeholders leverage resources to address HRH challenges. In the last three years, the HRH Project has provided technical and financial support to the FMOH and RHBs to organize and conduct the forum meetings and facilitate discussions and efforts to collaborate. During Year 5, the Project will provide technical support for semi-annual forum meetings at the national level and quarterly meetings at regional levels. Technical support will be extended to link the HRH forum meetings with regular regional quarterly meetings focusing on review of the RHB HR plans

IR 1.5 Improved Management of Staff Training

Sub-IR 1.5.1 Conduct HRM in-service training at FMOH and regional health bureaus

In-service training in HRM as well as various other professional development activities are critical inputs to improve knowledge, skills and attitude of HR leaders, managers and staff. In collaboration with the DHRDA at the FMOH, the HRH Project developed a standardized curriculum for HRM In-service Training, and conducted two rounds of Training of Trainers for 60 senior HR Staff from the FMOH, FMHACA and RHBs. In Year 3 and 4, 2037 HR staff received a 5-day training in HRH Management, accounting for 87% of the life of project target (2560 HR staff to be trained in three years).

Activity 1.5.1.1 Conduct roll out HRM training at National and Regional levels

The Project will continue to provide a 5-day HRM training for 300 HR staff who are working at the regional, zonal, woreda and hospital level in all regions.

Sub-IR 1.5.2 Strengthen post-HRM Training follow-up and mentorship

Activity 1.5.2.1. Conduct quarterly post-HRM training follow up for HRM training participants

Post-training follow up is one of the key interventions provided to the HR staff after HRM in-service training. In Year 4, 44% of the trained HR staff received post training follow up visits and mentorship. In Year 5, both the HRH Project staff and selected mentors at national and regional levels will conduct mentorship visits to the trained HR staff to encourage them apply the knowledge and skills gained from HRM training, and reinforce positive practices. A total of 800

trained HRM staff will be supported. The post-HRM In-service training follow up and coaching will be conducted using a checklist designed to facilitate the coaching and mentorship support.

RESULT 2: Increased Availability of Midwives, Anesthetists, HEWs and Other Essential Health Workers

An effective health system requires an adequate number of motivated and skilled human resources. The FMOH recognizes the need for qualified, committed, compassionate, respectful and caring health workers contributing to the health sector goals and objectives. To date, the HRH Project has contributed towards the graduation of over 20,168 health workers, including 8,301 midwives, 617 anesthetists, 10,626 HEWs, 287 emergency medical technicians, and 63 biomedical technicians. The HRH Project will continue to support training colleges and universities to increase the supply and availability of priority cadres by strengthening the capacity of education institutions to increase production while assuring quality.

IR 2.1 Increase Availability of Anesthetists

The FMOH has prioritized access to safe emergency and essential surgical services, including building the capacity of primary hospitals to perform emergency and essential surgery including cesarean section. The FMOH has made significant investments in the training of emergency surgical officers who are expected to provide services at the primary hospitals; however, the limited availability of qualified anesthesia providers is a bottleneck. The HRH Project will continue to support the FMOH efforts to ensure that an adequate number of qualified anesthetists are trained and deployed.

Sub-IR 2.1.1 Faculty Development

The HRH Project has been supporting the FMOH to build the capacity of anesthesia faculty and maintain anesthesia education quality standards through a need-based technical and pedagogical faculty development activities. Support will continue in Year 5 as outlined below:

Activity 2.1.1.1 Provide a 5-day effective teaching skills (ETS) training of trainers (ToT) for anesthesia faculty

During routine coaching and mentorship visits conducted in Year 4, it has been observed that most of the faculty in newly established anesthesia teaching programs have not had basic training on teaching methodology. In order to address this gap which is further compounded by the high turnover of anesthesia faculty, the HRH Project will provide an Effective Teaching Skills training of trainers (TOT) for 30 anesthesia faculty, who are then expected to cascade these trainings to other faculty in their respective institutions. This training will create an opportunity for the EAA to co-facilitate sessions thus building their capacity to provide similar trainings in the future.

Activity 2.1.1.2 Provide a 5-day simulation training of trainers (ToT) for anesthesia faculty

The HRH Project has been supporting simulation training for instructors and skill lab assistants across all universities and colleges. However, unlike other cadres, there are no anesthesia skill lab assistants in most institutions, therefore requiring that anesthesia faculty receive simulation training as they are expected to manage the skills labs. Simulation training also provides an opportunity to teach faculty how to utilize a range of high-fidelity simulators procured and

distributed by the HRH Project. A 5 day simulation TOT will be provided for anesthesia faculty with the EAA providing co-training support. The trained faculty will be expected to cascade these trainings to other faculty in their respective institutions.

Activity 2.1.1.3 Provide a 5-day clinical teaching skills (CTS) training of trainers (ToT) for anesthesia preceptors

As a result of the shortage in the number of anesthesia faculty, the clinical education of anesthesia professionals relies significantly on preceptors (anesthetists practicing at health facilities). Efforts have been made by the HRH Project in the past four years to train anesthesia preceptors. However, because of high attrition, there is a need to provide additional clinical trainings skills (CTS) for preceptors who have not yet been trained, to ensure that they can effectively support student during clinical practicums. The HRH Project will provide CTS training for 30 preceptors in Year 5, who will then be expected to cascade these trainings to other preceptors in their respective institutions.

Activity 2.1.1.4 Provide a 5-day instructional design (ID) training of trainers (TOT) for anesthesia faculty

Following the accreditation of anesthesia teaching institutions to provide CPD courses for anesthesia professionals, it is important to build the capacity of faculty at these institutions to design and develop training packages in line with the national standards. These skills are also required to review/update the national generic BSc. anesthesia curriculum, which is planned for this year. The HRH Project will provide instructional design TOT training for 30 faculty, who can then cascade the training at their institutions (through Fixed Amount Awards, see result 3 below), and support the EAA in developing future in-service training packages as part of CPD. The Project will also explore the feasibility of providing this training online instead of face-to-face.

Activity 2.1.1.5 Provide a 5-day technical update training for anesthesia preceptors on priority topics identified during the task analysis study

As part of ongoing efforts to ensure that anesthesia preceptors have updated technical/clinical knowledge and skills required to practice safe anesthesia, a 5 day technical update training will be provided for 60 preceptors. These trainings will be delivered based on priority needs identified during the task analysis study conducted in previous year, using existing training packages, and following the principles of competency based training. Efforts will be made to emphasize content related to RMNCH, HIV, TB and Malaria.

Sub-IR 2.1.2 Strengthening Clinical Education

The HRH Project has been working to strengthen the continuum of learning between the three main learning environments: 1) Theoretical learning in the classroom 2) Practice of skills prior to direct patient care in a skills lab and 3) Clinical practice in the actual clinical setting. For each environment, standards, curricula and teaching materials have been reviewed, created, and implemented; faculty and preceptor clinical, teaching and management skills improved; and adequate infrastructure, equipment, and supplies procured. Additional inputs this year are outlined below:

Activity 2.1.2.1 Identify clinical education sites for anesthesia training, and facilitate signing of memorandums of understanding with new clinical practice sites

Effective clinical anesthesia education requires students to have ample opportunities to practice their clinical skills. Training institutions should select appropriate clinical practice sites to maximize student exposure to different cases/skills. Through implementation of fixed amount awards, 5 institutions in Amhara and 1 in Tigray (Axum University) will be supported to sign Memorandums of Understanding (MOUs) with newly selected clinical practice sites. These institutions were selected based on gaps identified during ongoing coaching and monitoring visits.

Activity 2.1.2.2 Print, laminate and distribute anesthesia practice standards and protocols (management algorithms, functionality checklists, flowcharts)

As part of standardizing clinical anesthesia education, in year 4 the HRH Project supported the development, printing, lamination and distribution of 10 evidence-based and up-to-date clinical guidelines (100 copies of each distributed to 100 hospitals). This support will continue in year 5, with the Project supporting the distribution of 10 additional anesthesia clinical practice standards and protocols (100 copies of each) on anesthetic management/resuscitation of a patient and processing and handling of anesthetic and ancillary equipment. These standards will include resuscitation and management guidelines and algorithms which will address maternal and child health care, and can also be used for the education and training of other health care professionals such as nurse specialists.

Activity 2.1.2.3 Support the FMOH to develop competency based assessment tools for student performance assessment

Competency based assessment focuses on what students are expected to do in clinical practice and their ability to transfer and apply skills, knowledge and attitudes to new situations and environments. To ensure that the principles of competency based assessment are used during clinical education for anesthetists, the HRH Project supported the FMOH to develop assessment tools in Year Four. As a continuation of this activity, a 3-day student performance assessment training will be provided for 20 anesthesia faculty in Year 5. The faculty are expected to subsequently produce assessment tools addressing 5 major competencies in the curriculum. During the training, experiences from implementation of existing tools will be shared, consensus will be reached on how to monitor the future implementation of these tools, and a coordinator will be assigned at each institution to support the use of the tools.

Activity 2.1.2.4 Organize a five day workshop to develop a skills lab manual to guide management of anesthesia skill labs

The HRH Project has been providing simulation training for anesthesia faculty and skill lab assistants to improve the clinical education for this cadre, and skill lab management was one of the areas emphasized during these trainings. Though these trainings have significantly improved the effective management of skill labs, ongoing staff turnover has resulted in an implementation gap of good lab management practices. To address this challenge, the HRH Project will support the development of an anesthesia skill lab manual which can be used to provide guidance for new staff, thus strengthening anesthesia skill lab management.

Activity 2.1.2.5 Support the establishment of national anesthesia forum to facilitate dialogue and collaboration between anesthesiologists and anesthetists working at universities, colleges and hospitals

In Ethiopia, there are five different tracks of anesthesia provider trainings (1 physician and 4 non-physician). The HRH Project will support the establishment of a national forum where faculty from all the five training tracks will come together and discuss strengthening the quality of education for anesthesia, and explore opportunities for collaboration and inter-institutional support. This forum could also be an opportunity to identify and utilize local experts to address the anesthesia faculty shortages.

Sub-IR 2.1.3 Infrastructure and Educational Resources

Infrastructure and educational resources are essential inputs to increase production and quality of education. The HRH Project will support 24 public institutions that are providing anesthesia training to identify and fix critical gaps in the functionality and utilization of teaching and learning materials.

Activity 2.1.3.1 Support the maintenance of anesthesia skills lab equipment in universities and colleges

The HRH Project has equipped anesthesia skill labs at teaching institutions with the required simulators for the practice of core competencies. As part of ongoing efforts to enable skill lab assistants to repair and utilize non-functional simulators, the HRH Project will support the maintenance of non-functional simulators in 7 anesthesia teaching institutions (5 in Amhara and 2 in Tigray). These institutions were selected based on gaps identified during routine follow-up visits. Efforts will also be made to orient faculty and skill lab managers/assistants on how to effectively maintain the simulators.

Activity 2.1.3.2 Conduct coaching and mentoring at anesthesia teaching institutions to strengthen utilization of anesthesia simulators

The HRH Project has been supporting anesthesia teaching institutions to effectively utilize skill lab materials and supplies. Observations made during coaching and mentoring visits indicate that though almost all the anesthesia training institutions have all the required materials, they are not being adequately used to support student training (some items are found in storage or are misused). The Project will conduct coaching and mentoring visits to address the identified gaps and provide demonstrations on how to use the simulators.

Sub- IR 2.1.4 Curriculum development and strengthening

Periodic revision and refinement of curricula is required to address changing health priorities and needs, and to ensure that students receive training that is based on up-to-date evidence and community needs. The HRH Project has provided technical and financial support for the development and revision of two anesthesia curricula based on the results of the anesthesia task analysis study. The HRH Project will continue to support FMOH in the revision of anesthesia curricula through the following activities:

Activity 2.1.4.1 Support the FMOH to review and revise the level 5 anesthesia nursing curriculum

In year 4, HRH project provided technical and financial support to the FMOH for the revision and development of level 5 nurse anesthetist Educational Occupational Standards (EOS). The HRH Project will support the FMOH to review and revise the level 5 anesthesia curriculum based on the EOS, which addresses implementation and quality related challenges identified with the previous curriculum.

Activity 2.1.4.2 Support the FMOH to develop assessment tools for level V nurse anesthetist training

As part of ongoing efforts to ensure that anesthesia providers can provide safe services upon deployment, the HRH Project will provide technical support for the development of assessment tools for the level 5 anesthesia certificate of competence (COC) examination. These tools will be developed based on the EOS and the revised curriculum.

Sub-IR 2.1.5 Monitor and Improve Anesthesia Education Quality

The HRH Project will support and facilitate various coaching, monitoring and supervision activities, collaborating with the FMOH, RHBs and other key stakeholders. Standardized guidelines and checklists will be used to guide supervision and monitoring, and findings will be used to improve anesthesia education. The following activities will be conducted:

Activity 2.1.5.1 Conduct coaching and mentorship visits at anesthesia clinical practice sites to document successes and share lessons learned

The HRH Project has been providing support to improve anesthesia clinical education for the past four years. Documentation of best practices and lessons learned from the implementation of various interventions will generate evidence that can be disseminated with local stakeholders, and used to further strengthen program inputs. Coaching and mentorship visits will include collection of success stories and other information to capture the current progress and usefulness of the interventions made by the HRH Project to strengthen clinical education at the selected sites.

Activity 2.1.5.2 Using the nationally endorsed anesthesia education standards, provide quarterly mentorship and coaching to anesthesia teaching institutions, supporting them to use the standards to improve quality of education

Using the nationally endorsed anesthesia education standards, the HRH Project will continue to support the FMOH to provide mentorship and coaching to anesthesia teaching institutions, supporting them to use the standards to assess, improve and monitor quality of education. All institutions will be supervised and supported by a team comprising representatives from the FMOH, the EAA, and the HRH Project. It is expected that the FMOH in collaboration with EAA will be able to continue to conduct this activity beyond the life of the project, as it is now a part of their existing supervision system.

Activity 2.1.5.3 Conduct a national review meeting to discuss lessons learned from the implementation of anesthesia education quality standards

The HRH Project has led the process of developing and supporting the implementation of anesthesia program quality improvement standards. These standards are being utilized by

anesthesia teaching institutions to assess their level of performance, identify gaps and take corrective measures, and results of the assessments are being shared with HERQA. However, there is currently no mechanism for anesthesia teaching institutions to come together and present their achievements, challenges and best practices in improving quality in line with the HERQA standards. The HRH Project will conduct a two day meeting for department heads or delegates from all anesthesia teaching institutions, where they will present their respective institutional experience with implementing the standards. Representatives from the FMOH and HERQA will also be invited to the meeting.

Activity 2.1.5.4 Organize geographic clustering of institutions to facilitate sharing of good practices on implementation of the HERQA standards

As part of the activity above (2.1.5.3), geographic clusters will be created for anesthesia teaching institutions. Each cluster (maximum 5 institutions per cluster) will have a selected lead institution that scored the highest as per the HERQA standards. The lead institution will coordinate sharing of experiences with the other institutions in the cluster, with the expectation that this will create a positive competitive environment among teaching institutions. The HRH Project will provide technical support for the formation of these clusters and follow up on consecutive discussions within the clustered institutions.

Activity 2.1.5.5 Provide technical and financial support to the FMOH to conduct a national RHSCs (regional health science colleges) forum

The HRH Project has provided ongoing support for the conduct of annual forums where regional health science colleges can share best practices and lessons learned as it relates to strengthening the quality of education. These efforts will continue in Year 5, where the agenda will also include an orientation on the newly developed educational standards for vocational anesthesia training.

Sub-IR 2.1.6 Strengthening the Capacity of the Ethiopian Association of Anesthetists

The Ethiopian Association of Anesthetists (EAA) is a professional association comprising more than 600 anesthesia professionals working in the Ethiopian healthcare system. EAA is the only organization authorized by FMHACA to accredit and provide professional CPD courses for non-physician anesthetists. The Association has a key role to play in patient care, monitoring and analysis of anesthesia practice, integration of new evidence-based practices, and maintaining high quality practice standards. Moreover, the Association, through the provision of technical update trainings, plays a vital role in improving anesthesia education and clinical services provided to the community. In Year Five, the HRH Project will continue to provide support for activities which will strengthen the overall capacity of the Association and ensure future sustainability of activities initiated by the project.

Activity 2.1.6.1 Provide a 3 day clinical training skills (CTS) training for EAA CPD trainers

The HRH Project has been supporting the EAA to provide need-based in-service trainings for member anesthetists, including developing 9 training packages. In year 5 the HRH Project will provide CTS training for EAA in-service training facilitators. Participants will be selected by EAA in collaboration with the FMOH and respective teaching institutions.

Activity 2.1.6.2 Procure equipment and supplies to strengthen the EAA CPD (continuing professional development) Unit

As part of the continuous efforts to strengthen the capacity of the EAA CPD unit, the HRH Project will provide financial support for the purchase of priority equipment and supplies, including a generator, digital camera, and an LCD projector. These procurements will ensure that the Association can effectively provide high quality in-service trainings for its members.

Activity 2.1.6.3 Support the EAA to conduct a 7-day workshop to revise its policies and guidelines.

To strengthen the EAA's organizational planning, performance and management, and ensure alignment with the Government requirements for local associations, the HRH project will provide financial and technical support for the revision of the Association's 3-year strategic plan, human resource, and finance manuals.

Activity 2.1.6.4 Provide financial and technical support to EAA to update its website

The HRH Project supported the EAA to launch an official website and improve visibility through engaging member anesthetists and other stakeholders by uploading relevant information and messages. In Year 5 the HRH Project will continue to support the EAA to update its website that allows its members to access online CPD courses. In this regard, HRH will cover financial costs for a consultant who will update the website and orient EAA staff on how to maintain and update it.

Activity 2.1.6.5 Support the EAA to organize its 13th Annual Conference

To facilitate networking and experience sharing among anesthesia providers, as well as support provision of technical updates, the HRH Project will continue to support the national EAA annual general assembly. This event will include opportunities to provide continuing education sessions on priority health issues for anesthetists practicing in different parts of the country, as well as sharing of HRH Project successes (brochures or leaflets summarizing achievements to date).

Activity 2.1.6.6 As part of the annual conference, recognize high performing graduating students and senior anesthetists through provision of certificates

To recognize and motivate high performing anesthesia students and practicing anesthetists, the HRH Project will support the EAA to identify and recognize top-scoring anesthesia graduating class students and senior anesthesia professionals. Nominees for the recognition will be identified in consultation with teaching institutions and member anesthetists, and certificates will be provided during the Association's annual conference.

Activity 2.1.6.7 Support the EAA to procure office furniture for 10 regional chapter offices (Desktop, table & chair)

To improve the visibility and functionality of the Association at the regional level, and ensure access, the HRH Project will provide financial support for the procurement and distribution of office furniture to 9 regional and 1 city administration EAA chapter offices. These offices will be responsible for handling all matters requiring the Association's support within the region (e.g. medico-legal matters related to anesthesia practice).

Activity 2.1.6.8 Provide technical and financial support to EAA to develop, submit and present program learning at national and international forums

The HRH project will support the EAA to document key findings from program implementation, and present accepted abstracts at selected national, regional, or international forums.

Sub-IR 2.1.7 Support Licensure Exam Provision for Anesthesia Graduates

The HRH Project is providing technical and financial assistance for the establishment of a national licensure exam system. In Year 5, the HRH Project will implement the activities identified below in an effort to support the FMOH to roll out licensure exams for anesthetists.

Activity 2.1.7.1 Support the FMOH to review the anesthesia licensure exam blueprint

The content of the national anesthesia licensure examination is determined by a pre-established blueprint with specifications for key practice areas /domains, which then guide the content and number of items to be assessed. The HRH Project supported the development and revision of anesthesia licensure exam blueprints in years 3 and 4. The blueprint requires periodic (annual) review and update. In year 5, the HRH Project will provide the FMOH with technical support for the revision of the blueprint

Activity 2.1.7.2 Provide technical support to the FMOH for the process of anesthesia licensure exam item development and review

In year 4, The Project supported the FMOH to develop 980 high-order multiple choice questions (MCQ) to test the application of scientific principles in the perioperative management of a patient. In order to expand and strengthen the item bank for anesthesia licensure examination, the HRH Project will continue to provide technical support for the development of additional licensure exam items in line with the revised exam blueprint.

Activity 2.1.7.3 Provide technical support for the design, development and review of OSCE for the anesthesia licensure examination

In addition to the knowledge-based licensure examination, the FMOH plans to introduce skill assessments through a series of well-designed assessment stations using the Observed Structured Clinical Examination (OSCE) approach. The HRH Project will provide technical support to the FMOH to design and develop OSCE stations.

Activity 2.1.7.4 Provide technical support to the FMOH for anesthesia licensure exam standard setting and scoring

The level of difficulty for the national licensure examination varies annually, thus requiring a re-adjustment of passing scores. The HRH Project will continue to provide technical support to the FMOH to use a sound methodology (Modified Angoff method) to set pass scores.

Activity 2.1.7.5 Produce a technical report documenting feedback on the anesthesia licensure examination process

To document achievements and lessons learned, the HRH Project will support the EAA to generate a technical report on the overall process of anesthesia licensure examination. This report will be shared with the FMOH.

IR 2.2 Increase Availability of Midwives

Increasing professional care by midwives is recognized as the main strategy to reduce maternal and newborn morbidity and mortality. There has been a marked increase in the numbers of midwives being trained and deployed to the public health sector – it is expected that the number of midwives (all categories) will progressively increase to 20,090 by 2020 and to 26,579 by 2025. The HRH Project will continue to support the FMOH to meet these goals by supporting midwifery training institutions to increase the quantity and quality of midwives, with the aim of producing competent midwives who will provide high quality RMNCH services in line with government goals and objectives.

Sub- IR 2.2.1 Faculty Development

The HRH Project has been supporting the FMOH to build the capacity of midwifery faculty by providing need-based technical and pedagogical training. The following support will be provided in year 5:

Activity 2.2.1.1 Provide a need-based technical update training on selected MNCH, FP, HIV/AIDS, Malaria, and TB topics for midwifery teaching faculty

To improve the quality of teaching provided to midwifery students, particularly in priority areas such as MNCH, Family Planning and Reproductive Health (FP/RH), Malaria, TB and HIV, the HRH Project will provide need-based technical update training for midwifery faculty. The training will provide the faculty with updates on evidence-based guidelines, and national and international best practices.

Activity 2.2.1.2 Provide a 5-day effective teaching skills training of trainers (TOT) for midwifery faculty

To ensure that there is an adequate pool of faculty available to provide effective teaching skills training, the HRH Project will provide a 5-day TOT for midwifery faculty, who will then be expected to cascade similar trainings in their respective institutions. During this training, advisors from EMwA will co-train with Jhpiego advisors thus building their capacity to provide similar trainings in the future.

Activity 2.2.1.3 Provide a 5-day simulation training for midwifery skill lab assistants

Attrition of trained faculty and skills lab assistants continues to be a challenge to providing clinical education at most institutions. The HRH Project will provide a 5-day simulation training for midwifery skill lab assistants at institutions where there has been attrition. EMwA staff will join as co-trainers so as to build their capacity to provide future trainings.

Activity 2.2.1.4 Provide instructional design (ID) training of trainers (TOT) for midwifery faculty

Midwifery faculty need to have the skills to design and revise curricula and develop course syllabi, ensuring congruence between learning outcomes, teaching and learning methods, and assessment methods. The Project will provide an instructional design TOT course for midwifery faculty using online or face to face modality as appropriate, with the expectation that they will then cascade similar trainings to other faculty in their respective institutions.

Sub- IR 2.2.2 Strengthening Clinical Education

The HRH Project has been working to strengthen the continuum of learning between the three main learning environments: 1) Theoretical learning in the classroom 2) Practice of skills prior to direct patient care in a skills lab and 3) Clinical practice in the actual clinical setting. For each environment, standards, curricula and teaching materials have been reviewed, created, and implemented; faculty and preceptor clinical, teaching and management skills improved; and adequate infrastructure, equipment, and supplies procured. Additional inputs this year are outlined below:

Activity 2.2.2.1 Provide a clinical teaching skills (CTS) training for midwifery clinical preceptors

The HRH Project will provide clinical trainings skills for midwifery preceptors, to ensure that they can effectively support student during clinical practicums.

Activity 2.2.2.2 Support institutions to expand clinical education sites and sign MOUs

To increase opportunities for students to practice their skills in the clinical setting, the HRH Project will support midwifery teaching institutions to identify and sign MOUs with new clinical practice sites. As the number of clinical education sites increases the number of students attached to each facility will decrease, thus ensuring that students have access to greater caseloads and practice opportunities.

Activity 2.2.2.3 Support the FMOH to develop midwifery skill lab standards

The HRH Project will provide technical assistance to the FMOH for the development of midwifery skill lab standards that will guide training institutions on the minimum requirements to ensure that essential competencies can be learned by students.

Activity 2.2.2.4 Distribute current guidelines to midwifery teaching institutions

As part of standardizing midwifery education through promoting standardized practices in clinical education sites, the HRH Project will continue to support the printing and distribution of relevant MNCH guidelines and FMOH protocols/standards. These documents will be distributed to 52 clinical midwifery teaching institutions.

Sub-IR 2.2.3 Monitor and Improve Quality of Midwifery Education

The HRH Project will continue to provide technical and financial support to the FMOH to monitor and supervise midwifery teaching institutions. This activity will be conducted in collaboration with the FMOH, RHBs and EMWA, using standardized tools, and findings will be used to improve midwifery education.

Activity 2.2.3.1 Mentor and support midwifery schools to assess and improve the quality of education using national midwifery education standards

The HRH Project will provide mentorship and coaching to training institutions, and support them to use the national midwifery education standards and guidelines to assess, improve, and monitor the quality of education provided.

Activity 2.2.3.2 Support the FMOH to conduct an annual forum for RHSCs providing midwifery training

In previous years, the HRH Project has provided technical and financial support for an annual RHSC forum, during which colleges share best practices, challenges and lessons learned in improving the quality of midwifery education. This support will continue in year 5.

Activity 2.2.3.3 Provide technical and financial support for the development of competency based assessment tools for student performance assessment

Through FAAs, the Project will support HSEDCs to work with midwifery faculty and develop competency based assessment tools, with the aim of improving the quality of midwifery education.

Sub -IR 2.2.4 Curriculum Development and Strengthening

To produce healthcare professionals that are responsive to the needs of the population, curricula have to be periodically reviewed and updated. The HRH Project will provide support to review and revise midwifery curricula based on the revised occupational standard which was developed in Year Four.

Activity 2.2.4.1 Support the FMOH to review and adapt an innovative midwifery curriculum

The HRH Project has been supporting the review and development of various midwifery curricula, which included a revision of the FMOH midwifery occupational standards in year 4. This support will continue in year 5, with the Project supporting the revision of the level IV midwifery curriculum based on the updated occupational standards.

Activity 2.2.4.2 Support the FMOH to finalize and distribute modules developed for the Level IV midwifery program

With technical and financial support from the HRH Project, the FMOH developed 6 midwifery learning modules in year three. The HRH Project will provide support to update these modules in line with the revision of the level IV curriculum and occupational standards, and support finalization and distribution of electronic copies of the modules.

Sub- IR 2.2.5 Strengthening the Capacity of the Ethiopian Midwifery Association (EMwA)

The EMwA will be supported to further expand its role as a key stakeholder for all activities related to midwifery, and in particular, education, practice, and regulation. Specific capacity building activities are outlined below:

Activity 2.2.5.1 Develop need-based CPD courses for midwives

The HRH Project has been providing technical and financial support for the establishment of a CPD unit at the EMwA. As part of this ongoing support for this activity, the Project will support the development of four CPD courses. Topics for the development of the courses will be identified from the results of the midwifery task analysis study conducted by the Project.

Activity 2.2.5.2 Update the EMwA website to increase functionality and allow for provision of CPD courses

The HRH Project has supported EMwA to establish a functional CPD unit. Ongoing support in year 5 will include updating the EMwA website so that midwives can access online CPD trainings.

Activity 2.2.5.3 Support activities to actively promote CPD courses to Association members

As part of strengthening the capacity of EMwA to provide CPD courses, the Project will provide technical support for the dissemination of promotional messages to members of the Association.

Activity 2.2.5.4 Provide technical and financial support to EMwA to develop, submit and present success stories, program learning and abstracts at the EMwA general assembly, EMwA International Day of the Midwives, and other relevant local, regional and international forums.

The HRH Project will support EMwA to document success stories and lessons learned in implementing project activities, and disseminate key findings during the Association's 25th general assembly, the international day of midwives, and other relevant local, regional and international conferences and meetings.

Sub-IR 2.2.6 Support Licensure Exam Provision for Midwifery Graduates

The HRH Project is providing technical and financial assistance for the establishment of a national licensure exam system. In Year 5, the HRH Project will implement the activities below in an effort to support the FMOH to roll out licensure exams for midwives.

Activity 2.2.6.1 Support the FMOH to review the midwifery licensure exam blueprint

In order to develop valid and reliable licensure exam items, the HRH Project will continue to support FMOH to update the midwifery licensure exam blueprint, including incorporating evidence from findings generated through studies conducted by the HRH Project and other stakeholders.

Activity 2.2.6.2 Support the FMOH to develop and review midwifery licensure exam items

The HRH Project will continue to provide technical support to the FMOH for the development of additional midwifery exam items, which will expand the existing item bank and contribute to the accumulation of high quality items.

Activity 2.2.6.3 Provide technical support for the design, development and review of OSCE for the midwifery licensure examination

The HRH project will continue to support the FMOH to providing ongoing coaching and feedback to midwifery faculty/item developers as they develop OSCE stations for the clinical examination of midwives. These stations will be developed based on the updated exam blueprint.

Activity 2.2.6.4 Provide technical support to the FMOH for midwifery licensure exam standard setting and scoring

The level of difficulty for the national midwifery licensure examination varies annually, thus requiring a re-adjustment of passing scores. The HRH Project will continue to provide technical support to the FMOH to use a sound methodology (Modified Angoff method) to set pass scores.

Activity 2.2.6.5 Produce a technical report documenting the feedback on the midwifery licensure examination process

To document achievements and lessons learned, the HRH Project will support the EMwA to generate a technical report on the overall process of midwifery licensure examination. This report will be shared with the FMOH.

IR 2.3 Increased Availability of HEWs

Ethiopia's Health Extension Workers Program is a community based strategy to deliver health promotion, disease prevention and selected curative health services at the community level. The FMOH has prioritized scaling up of urban and pastoralist health extension worker programs, and maintaining and improving the quality of the rural health extension program. In response to the FMOHs plan, the HRH Project will continue to support the following activities:

Sub-IR 2.3.1 Strengthening HEW Training Program:

The health extension program is the FMOH's flagship program to ensure primary health service delivery and quality of care through the effective implementation of essential packages including family health (reproductive, maternal, newborn and child health) and disease prevention and control (HIV/AIDS, tuberculosis and malaria). The HRH Project has been providing support to HEW training institutions to increase the production of qualified and competent HEWs, and has contributed to the graduation of 10,626 HEWs.

In the 2016/2017 year, the FMOH has planned to produce 9,000 HEWs. The HRH Project will contribute towards this goal by implementing the following activities:

Activity 2.3.1.1 Support the FMOH/TVET to revise the existing HEW curricula and assessment tools

The FMOH/TVET educational occupational standards were recently revised and updated. Based on the revised version, the HRH Project will provide financial and technical support to revise the existing HEW curricula.

Activity 2.3.1.2 Support the FMOH to reprint and distribute level IV HEW training modules

The HRH Project will support the FMOH by supporting costs to print and distribute 1000 modules to be used for HEW Level IV training.

Activity 2.3.1.3 Support the FMOH to provide effective teaching skills training for HEW faculty

To strengthen the HEW teaching and learning processes at RHSCs, the HRH Project will provide technical and financial support to the FMOH/TVET to provide effective teaching skills training for HEW faculty. The training will focus on teaching methodology and curriculum orientation, and is expected to enhance the theoretical and practical teaching capacity of the HEWs instructors.

Activity 2.3.1.4 Support the FMOH to finalize the B.Sc. Family Health Nurses curriculum

The lack of a career pathway for HEWs has been identified as one of the causes of high attrition rates. To address this challenge, the FMOH has planned to provide additional training for Level IV HEWs, leading to a bachelor's degree in family nursing. The FMOH has already developed a

draft curriculum to guide this training; in year 5 the HRH Project will provide support to finalize the curriculum. .

Activity 2.3.1.5 Support the FMOH to conduct a 2-day annual review meeting for RHSCs providing HEW training

The HRH Project will provide technical and financial support to the FMOH to organize an annual forum for RHSCs, in collaboration with RHBs and TVET agencies. The objective of the forum will be to facilitate experience sharing between programs providing HEW training, including progress of implementing quality improvement activities, deployment of HEWs, etc.

Activity 2.3.1.6 Support the FMOH to conduct coaching and mentoring visits to RHSCs providing HEW training

The HRH Project will support the FMOH to conduct coaching and mentoring visits to HEW training institutions. The aim of the coaching is to identify gaps in providing quality education for this cadre, and support institutions to develop and implement activities to address the gaps. This activity will be linked with visits to Emergency Medical Technician (EMT) and Health Informatics Technician (HIT) programs.

Activity 2.3.1.7 Support the FMOH and TVET to conduct a review meeting between RHSCs and their affiliated clinical training practicum sites

The HRH Project will provide technical support for discussions between the FMOH/TVET and clinical practice sites, with the aim of discussing current gaps in the provision of student clinical practicum opportunities, and agreeing upon next steps to strengthen the clinical education for HEWs.

Activity 2.3.1.8 Provide technical support to the FMOH /TVET in the provision of training for the Urban Health Extension (UHEW) program

The FMOH has begun providing training for the urban health extension program. The Project will provide technical assistance for this training based on requests from the FMOH.

Activity 2.3.1.9 Provide technical support the FMOH to develop and finalize curricula for training of new essential health workers such as forensic, sterilization and audiometric technicians

The FMOH has planned to provide training for new cadres such as forensic technicians, sterilization technicians, and audiometric technicians. The HRH Project will provide technical support for the development and finalization of curricula for these cadres.

IR 2.4: Increased Availability of other Essential Health Workers

Sub-IR 2.4.1 Strengthening the Emergency Medical Technician (EMT) Training

The Ministry of Health has identified training of emergency medical technicians as a priority in order to improve pre-hospital emergency care in managing all emergencies including maternal emergencies. In the 2015/2016 year, the FMOH planned to train 280 EMTs. The HRH Project will continue to provide technical and financial support by implementing the activities below:

Activity 2.4.1.1 Support the FMOH to provide basic life support training for EMT instructors

The Project will collaborate with the Addis Ababa University - Emergency Medical Training Center (AAU-EMTC) to conduct a 5-day technical update training for EMT faculty, including shock management, infection prevention and emergency drug use.

Activity 2.4.1.2 Support the FMOH to provide effective teaching skills and curriculum orientation training for newly hired EMT instructors

Effective teaching skills training will be provided to newly hired EMT instructors, with the aim of enhancing their teaching capacity. The instructors will also be oriented to the EMT curriculum.

Activity 2.4.1.3 Support the FMOH/TVET to conduct a clinical training skills training for EMT instructors

A clinical training skills training will be provided to EMT instructors, to provide them with the skills required to provide effective clinical teaching.

Activity 2.4.1.4 Support the FMOH/TVET to conduct an annual review meeting for institutions providing EMT training

Support will be provided to the FMOH/TVET to organize a meeting for deans, coordinators and faculty of RHSCs that are providing EMT training, where they will share best practices, challenges and lessons learned in implementing the training.

Sub-IR 2.4.2 Strengthening Health Information Technician (HIT) Training Programs

The FMOH has prioritized the training of health information technicians, and the HRH Project will provide technical and financial support for the following activity with the aim of strengthening the pre-service education for this cadre:

Activity 2.4.2.1 Support the FMOH to provide effective teaching skills and curriculum orientation training for HIT instructors

Sub-IR 2.4.3 Increase the availability of Biomedical Technicians

Healthcare providers cannot provide life-saving and high impact MNCH, HIV/AIDS, tuberculosis and malaria interventions without functional infrastructure. Equipment maintenance has long been a challenge to service delivery mainly due to a lack of trained personnel. In response to this need, the FMOH identified training of biomedical technicians as a priority and the HRH Project began to support biomedical technician training in year 2. In this year, the HRH Project will continue to provide support as follows:

Activity 2.4.3.1 Support the FMOH to conduct a technical update training for training institutions providing biomedical technician training

The HRH Project will provide a technical update training to address biomedical engineering faculty knowledge and skill gaps. The training will focus on installation, calibration, operation, maintenance and troubleshooting for selected medical equipment.

Activity 2.4.3.2 Conduct a user level technical update training for skill lab assistants working in biomedical technician training institutions

A 5-day user's level technical update training will be provided for skill lab assistants to build their capacity on the basic care and maintenance knowledge and skills for the devices and equipment available at their respective facilities.

Activity 2.4.3.3 Support the FMOH to organize a 5-day ETS and curriculum orientation training for biomedical technician instructors

To strengthen the teaching and learning processes of biomedical technicians, the HRH Project will provide technical and financial support to the FMOH/TVET to provide a 7-day training for biomedical technicians instructors on teaching methodology and curriculum orientation. The training is expected to enhance the theoretical and practical training capacity of the biomedical technicians' instructors and make them familiar with the TVET curriculum to transfer quality knowledge and skills to students and introduce effective performance assessment.

Activity 2.4.3.4 Provide technical support to the FMOH for the distribution and installation of biomedical technician skill lab equipment

The HRH Project will provide technical support for the distribution and installation of skill lab materials and equipment procured by the FMOH.

Activity 2.4.3.5 Support the FMOH to organize a workshop to develop standardized equipment based technical update training modules for biomedical instructors

The Project will provide technical and financial support to FMOH to organize a module writing workshop to develop 10 modules to guide equipment based technical updates for biomedical engineering instructors and skill lab attendants. The modules will provide reference material that includes up-to-date information to improve the quality of biomedical engineering and technicians training.

Activity 2.4.3.6 Provide technical support to the FMOH to develop a medical equipment management system

The HRH Project will provide technical assistance to the FMOH to develop a system that facilitates tracking and monitoring of medical equipment, with the aim of enabling timely repair and maintenance.

Sub-IR 2.4.4 Strengthen Supply Chain Management (SCM) Training

In Ethiopia, one of the major challenges to providing adequate health services (including MNCH, FP/RH, HIV, TB and malaria) is due to poor management of logistics required to ensure the continuous availability of supplies including drugs and medical equipment. Pharmaceutical supply chain management (SCM) ensures provision of medicines in the right quantity, with the acceptable quality, at the right time and with optimum cost, in line with the health system's objectives. Though pharmacy professionals take a drug supply chain management course in their pre-service education, it fails to equip the students with essential supply chain management competencies (drug selection, procurement, distribution, pharmaceutical stock management etc.) as it is not practical and contextualized to the health system requirements.

In the last four years, the HRH Project has collaborated with the FMOH and other implementing partners (including USAID/DELIVER, SCMS, and SIAPS) to develop a

postgraduate curriculum in supply chain management to develop health supply chain management leaders. In this year, the Project will support delivery of the postgraduate program, as well as strengthening of supply chain management teaching at level IV pharmacy programs and at undergraduate pharmacy education programs. Support will include faculty development, curriculum strengthening, and monitoring and improving the quality of SCM training. The HRH Project will coordinate efforts with USAID/DELIVER, SCMS/SIAPs and other donors such as UNICEF and the Bill and Melinda Gates Foundation.

Activity 2.4.4.1 Support the FMOH to conduct an instructional design TOT training for pharmacy instructors who are currently teaching supply chain management courses

Instructional design skills training will enable faculty to systematically review and appraise curricula for inclusion of priority national pharmaceutical supply chain management issues, standardize SCM course syllabi, and develop appropriately designed learning materials that reflect the SCM competencies for pharmacy technicians and pharmacists. To facilitate this, the HRH Project will organize an instructional design training for faculty teaching SCM at diploma, degree and MSC programs.

Activity 2.4.4.2 Support the FMOH to organize a 4-day workshop to develop learning modules on SCM competencies for the pharmacy level IV program

For the 2016/17 fiscal year, the FMOH planned to support an intake of 300 new students in the pharmacy level IV program. RHSCs are currently recruiting new instructors to teach SCM competencies to these students. The HRH Project will support the FMOH and the TVET to organize a 4-day workshop to develop learning modules for SCM competencies required for the pharmacy level IV curriculum. The modules will facilitate learning by providing standardized reference materials for students.

Activity 2.4.4.3 Provide technical and financial support to the FMOH to organize a 3-day workshop to review the pharmacy level IV curriculum

The HRH Project will support the FMOH to organize a 3-day workshop to review the existing pharmacy level IV curriculum in collaboration with the TVET. The curriculum will be revised to ensure integration of relevant SCM competencies.

Activity 2.4.4.4 Provide coaching and mentoring support to RHSCs to implement the pharmacy level IV curriculum

The HRH Project will support coaching and mentoring visits to institutions that have new student intakes in the level IV pharmacy program. The coaching and mentoring support will evaluate the implementation of the reviewed level IV curriculum at each institution, and identify challenges and best practices.

Activity 2.4.4.5 Mentor and support utilization of standardized SCM course syllabi in post graduate SCM teaching institutions

The Project will continue to mentor and support utilization of the standardized SCM course syllabus at SCM teaching institutions, to ensure delivery of quality and SCM courses.

Activity 2.4.4.6 Support the FMOH to develop draft SCM program accreditation and quality improvement standards in collaboration with FMHACA and HERQA

The HRH Project will support the development of national accreditation and quality improvement standards for the postgraduate SCM program. A desk review will be conducted to collect global evidence and best practices, and the information collected will guide the preliminary discussions with stakeholders resulting in the development of draft standards.

Activity 2.4.4.7 Support the FMOH to organize a 2-day workshop to finalize postgraduate SCM program accreditation and quality improvement standards

A workshop will be organized to finalize the postgraduate SCM national accreditation and quality improvement standards in collaboration with FMOH, FMHACA, PFSA and HERQA.

Activity 2.4.4.8 Mentor and support postgraduate SCM teaching institutions to assess and improve the quality education using national education standards

The HRH Project will continue to provide ongoing mentorship and coaching support to Jimma and Addis Ababa Universities, supporting them to assess their performance using the national SCM education standards, including identifying gaps, and develop solutions to address the gaps identified.

Activity 2.4.4.9 Mentor and support RHSCs to assess and improve the quality of SCM training using internal quality assurance and improvement standards for the level IV pharmacy program

The HRH Project supported development of internal quality assurance and improvement standards for the level IV pharmacy program. In Year 5, Project will support RHSCs teaching pharmacy to assess their performance using these standards, identify gaps, and develop solutions to address the gaps identified. Effective implementation of the standards will strengthen the production and deployment of competent pharmacy professionals.

Activity 2.4.4.10 Support the Federal TVET agency to organize a 3-day workshop to review the COC assessment tools for the pharmacy level IV program

Over the past year, TVET and COC agencies have made great efforts to provide accurate, reliable, and timely assessments of the competence of mid-level health graduates. The HRH Project contributed towards these efforts by supporting regional COC centers to design and develop assessment tools, and build capacity of examiners/assessors. In this year, the Project will continue to support federal TVET agency to review the national COC assessment tools for the pharmacy level IV program in collaboration with regional COC centers. The workshop will ensure use of standardized competence assessment tools.

Activity 2.4.4.11 Support the FMOH to conduct a workshop to facilitate pharmacy schools teaching SCM to sign MOUs with SCM practice sites to improve practical SCM training

Strengthening pre-service SCM training requires pharmacy students to have adequate opportunities to practice their skills. SCM training institutions should ensure that their students have access to SCM practice sites such as the PFSA, pharmaceutical importers and whole sale distributors. The HRH Project will support a 1-day workshop where 10 pharmacy schools will sign MOUs with SCM practice sites, so as to improve the selection, procurement, distribution and pharmaceutical supplies stock management skills of pharmacy students.

Sub-IR 2.4.5 Support the FMOH to Establish and Strengthen BSc Nursing Specialty Programs - Neonatal Nursing, Operation Room (OR) Nursing, Emergency and Critical Care Nursing, Pediatric and Child Health Nursing, Psychiatric Nursing, Ophthalmic Nursing, and Surgical Nursing

Neonatal Nurses, Operation Room Nurses, Emergency and Critical Care Nurses, Pediatric and Child Health Nurses, Psychiatric Nurses, Ophthalmic Nurses, and Surgical Nurses have been identified by the FMOH as high priority cadres whose number needs to be increased in order to meet the quality healthcare needs of the population. Though Ethiopia has achieved the Millennium Development Goal 4, the rates of neonatal mortality remain high. A focus on ensuring that newborns are provided with quality services is an essential component of MNCH services, and is in line with government priorities. In Year 4, the Project supported the development of seven nurse specialty degree programs curricula (Neonatal Nursing, Emergency and Critical care Nursing, Operation theater nursing, Surgical nursing, Pediatrics Nursing Ophthalmic Nursing and Psychiatry Nursing), and the implementation of these programs in 18 universities with a total intake of more than 1200 students. The Project will consolidate these efforts and the gains made so far through the implementation of the following activities:

Activity 2.4.5.1 Support the FMOH to conduct a 4-day Problem Based learning (PBL) training for nursing specialty instructors

The curricula for specialty nursing programs was designed using innovative, evidence based pedagogical approaches, including the introduction of problem based learning (PBL). To prepare faculty from these programs to effectively use this approach, a 4-day PBL training will be provided for instructors coming from all nurse specialty teaching institutions with the aim of introducing them to the fundamental principles of PBL, development of PBL cases, conduct of PBL sessions and assessment of students during PBL sessions.

Activity 2.4.5.2 Support the FMOH to organize a 1-day PBL advocacy meeting for deans from PBL implementing institutions

Considering the novelty of PBL as a teaching approach and lack of awareness among the leadership of universities, there is a need to increase institutional awareness of PBL through effective promotion and advocacy. The HRH Project will organize a 1-day meeting to promote and advocate for use of PBL as an effective teaching approach. The meeting will be used to create a common understanding among instructors and deans, and as an experience sharing platform for all stakeholders.

Activity 2.4.5.3 Support the FMOH to revise and update nursing specialty curricula for three programs (emergency nursing, neonatal nursing and OR nursing)

To produce healthcare professionals that are responsive to the needs of the population, curricula should be periodically reviewed and updated. The HRH Project will support the revision of three curricula to include changes based on recommendations from the implementation of the existing curricula. The revision process will ensure that the curricula are updated, competency based and modularized. This training is for diploma level nurses who will obtain a B.Sc. degree upon graduation.

Activity 2.4.5.4 and 2.4.5.5 Support the FMOH to develop and finalize 3 new curricula for degree level nursing specialty programs in neonatal nursing, operation room nursing, and emergency and critical care nursing. This a new program which will recruit students from high school level.

The Project will continue its support to develop 3 curricula for generic nursing specialty programs for neonatal nursing, OR nursing, and ECCN nursing.

Activity 2.4.5.6 Provide mentoring and coaching to improve the quality of nursing specialty education

The HRH Project has been supporting the FMOH to provide coaching and mentoring visits at nurse specialty training institutions to ensure periodic self-review and continuous improvement of quality education. The Project will continue to provide support for quarterly coaching and mentoring visits.

Activity 2.4.5.7 and 2.4.5.8 Conduct a 5-day workshop to develop quality improvement standards for 3 nursing specialty cadres (oncology, nephrology & cataract surgery), and a workshop to finalize and endorse the standards

The HRH Project will support a workshop to adopt HERQA quality improvement standards for three nursing specialty cadres (Oncology, Nephrology & Cataract surgery) with the aim of developing cadre specific quality improvement standards. The standards will be used to support a culture of ongoing self-review at nurse specialty teaching institutions and departments.

Activity 2.4.5.9 Support the FMOH to conduct an annual program review meeting for nursing specialty teaching institutions

The annual review meeting will be a platform for all institutions and stakeholders to discuss challenges and lessons learned in implementation of the nursing specialty training programs.

Sub-IR 2.4.6 Support establishment of postgraduate programs in Human Resources for Health Management (HRM) and Health Economics (HE)

Professionalizing human resource health management is a prerequisite to strengthen human resources planning and management capacity effectively and sustainably. Likewise, developing a cadre of health economists is necessary to strengthen capacity for health planning and monitoring, evidence-based decision-making and efficient resource allocation and utilization.

The HRH Project supported the establishment of postgraduate programs in health economics and human resources for health management, enrolling 124 students in two public and one private higher education institutions to date. In Year 5, the Project will focus on monitoring and assuring quality of education for these programs.

Activity 2.4.6.1 Conduct a Portfolio and Action Research Workshop

Acknowledging that thesis supervisors are currently steering students to focus primarily on quantitative research in both programs, this activity will build academics' understanding and appreciation of qualitative research, action research, and a portfolio/learning log to support the revised assessment for HRM students, and to encourage HE students to adopt mixed research methodologies.

Faculty will be supported to use evidence from research, scholarship and professional development to underpin their approaches to teaching, and engage in a discrete action research

project together. Through their experiential learning, academics will be better prepared to evaluate HRM student's assessment around their change initiatives and portfolio/learning logs, and help HE students appreciate how qualitative research can explain the 'why' of results data sets. The workshop will also build academics confidence to support all students to conduct applied research for their thesis.

Activity 2.4.6.2 Update the HRH management program student assessment framework to ensure greater application of knowledge to work practices

Reviewing the thesis titles of the 1st cohort of students showed that they are mostly large data collection research topics. It is expected that HRM student thesis topics would seek to implement and evaluate a HRM work-based improvement initiative using research and reflection. This activity will refocus the assessment rubric on applied assessment for the HRM program. Universities will be encouraged to shift from a heavy weighting for the final exam to a lower weighting, thus increasing the weighting for coursework. The coursework will now include a portfolio/learning log, and a change initiative that will be identified at the start of the program and tracked through each module.

These changes will help students to focus on applying their new knowledge throughout their study and demonstrate to employers that the programs are applied and introducing change benefits to their department/office/local community immediately.

Activity 2.4.6.3 Conduct a workshop to finalize quality improvement standards for MPH programs

The setting of standards will ensure that MPH programs have sufficient consistency and quality to meet the needs of the Ethiopian public health system, and are aligned with international standards for graduate public health training. The standards will establish benchmarks for accreditation for new MPH programs, and facilitate quality assurance for existing MPH programs. The Project will support stakeholders to conduct a workshop to develop and finalize these standards.

Activity 2.4.6.4 Collect quarterly retention and performance data from universities and develop a technical report

The HRH Project will explore the student data currently collected by each university and seek to standardize it so that a systematic and coherent picture can be gained of student performance. A checklist will be provided to the universities to help determine the data that is collected albeit in different formats, and program coordinators will be engaged in data collection, with the aim of building a profile of the student body, and understanding their performance. The data will be used to develop a technical report to document program implementation and lessons learned

Activity 2.4.6.5 Conduct site visits to selected student employers (employer engagement)

The HRH Project will contact supervisors of students enrolled in the 1st cohort to conduct interviews which will gather evidence on the changes in the student's work as a result of studying the program, both individually and collectively by disseminating new practices through the department/office/community. During the interviews, the employers will also be informed of the knowledge and skills that the program delivers, and encourage them to support additional employees to take the courses.

Sub IR 2.4.7 Support the Project Mercy Health Science College

The HRH Project has supported the Project Mercy College to provide high quality pre-service education and in-service training for the SNNP region health workforce. The College has provided training for 17 midwives who all successfully passed the COC exam, and has recently enrolled an additional 52 students into the program. In Year 5, the Project will be supported to conduct the following activities:

Activity 2.4.7.1 and 2.4.7.2 Support training and graduation of the 2nd batch of 52 students who are currently enrolled in the midwifery program

The Project Mercy program provides opportunities for clinical nurses to attend a year-long practical skill focused training and attain midwifery status. The Project will provide training for the 52 currently enrolled students, who will then be required to sit for the national COC exam. The college will support students that do not pass the COC by providing them with additional skills training.

Provide In-service Training for 250 health workers

The FMOH has been working to provide need-based, standardized, and institutionalized in-service training to ensure sustainability and ownership in capacity building. Project Mercy has established an in-Service training unit, hired an officer to manage it, and has been working on the development of IST manual. In this year, the college will collaborate with the SNNP RHB to provide need-based training for 250 health workers providing MNCH and related services. The SNPP RHB will facilitate recruitment of participants, and ensure that trainings are delivered based on the national IST standards. The following activities will be conducted:

- Activity 2.4.7.3** Prepare relevant training materials (efforts will be made to use existing FMOH training materials)
- Activity 2.4.7.4** Provide newborn care training for 60 participants
- Activity 2.4.7.5** Provide Integrated Management of newborn & child Illness (IMNCI) training for 20 participants
- Activity 2.4.7.6** Provide comprehensive family planning training for 40 participants
- Activity 2.4.7.7** Provide a 3 day advanced life support (ALSO) training for 60 participants
- Activity 2.4.7.8** Provide a 12-day PMTCT basic training for 20 participants
- Activity 2.4.7.9** Provide training on maternal, infant and young child feeding for 50 participants

Activity 2.4.7.10 Conduct a sustainability strategy assessment

Project Mercy, with financial support from the HRH Project, established a Health Science College with a long-term vision of creating a center of excellence that would build the capacity of mid-level providers working on MNCH and other areas in the SNNP region. The College will conduct a strategy assessment to assess the progress made to date, and develop a strategic plan for continuation of the college including regional priorities for MNCH services, targets to be achieved, a management structure, resources required, and potential sources of income generating activities.

Result 3: Improved Quality of Training for Health Workers

Competent health workers are essential to provide high quality and safe healthcare services and meet national and global health development goals. Ethiopia's success in rapidly increasing the quantity of health worker production will not translate into improvement in population health outcomes if the quality and competence of health workers is not improved. The HRH Project has been supporting and will continue to support the efforts of the Government of Ethiopia to strengthen quality of pre-service education and in-service training of health workers with a focus on major cadres (doctors, health officers, midwives, nurses, anesthetists, pharmacists and medical laboratory technicians) directly involved in provision of maternal, newborn and child healthcare, reproductive health/family planning services, and HIV/AIDS, tuberculosis, and malaria prevention, care and treatment.

IR 3.1 Improved Quality of PSE of Health Workers

Sub IR 3.1.1. Strengthen Health Science Education Development Centers (HSEDCs)

The HRH Project has provided technical and financial support to 29 government universities, 23 government colleges, and 20 private colleges to establish and strengthen HSEDCs, with the aim of supporting various education quality improvement activities. As a result of the support provided, quality of education has been systematically assessed, curricula strengthened, assessment tools and procedures improved, and instructors' capacity built. In Year 5, the HRH Project will continue to provide technical and financial support to health training institutions to strengthen the functionality and sustainability of HSEDCs, including advocacy for institutionalization, where HSEDC is not integrated in the organogram officially.

Activity 3.1.1.1 & 3.1.1.2 Conduct a high level advocacy workshop to foster ownership and sustainability of HSEDCs at Universities and RHSCs (regional health science colleges)

The HRH Project will organize a one-day high level advocacy workshop for key university stakeholders, where HSEDCs successes and challenges will be discussed. The aim of the meeting is to inform leadership at the universities, FMOE and FMOH of the best practices and challenges facing the HSEDCs, and advocate for incorporation of the centers as part of the university organogram, including allocated resources and personnel.

A similar meeting will also be organized for RHSC stakeholders, including college deans, TVET representatives, and representatives from the FMOH and RHBs.

Activity 3.1.1.3 Conduct quarterly coaching and mentoring visits to support HSEDCs to implement their functions

The HRH Project will conduct quarterly coaching and mentoring visits to HSEDCs at universities and regional health science colleges including private colleges to strengthen their functions. During the visits, the Project staff will provide technical assistance to ensure that the HSEDCs have the capacity and commitment to conduct robust and regular quality improvement activities.

Activity 3.1.1.4 As part of coaching and mentoring visits, conduct targeted visits by FMOH and HERQA leadership to advocate for HSEDC institutionalization

As part of quarterly coaching visits, the HRH Project will engage high-level leadership from the FMOH, RHBs, HERQA, and TVET, and support them to visit at least 10 institutions. Institutions

with outstanding performance or long standing challenges requiring the attention of leadership will be visited, with the aim of increasing awareness of the leaders on the role of the HSEDCs, and to encourage institutionalization of these centers.

Activity 3.1.1.5 Support the FMOE supervision directorate to strengthen regular follow up of HSEDCs

The HRH Project will provide technical and financial assistance to the FMOE supervision directorate to strengthen their oversight of HSEDCs as part of their routine supervision to higher education institutions. This will encourage university leadership to pay greater attention to the functioning of the HSEDCs.

Activity 3.1.1.6 Provide technical support to HSEDCs to use social media to foster collaboration and sharing of best practices and challenges

The HRH Project will provide technical support to HSEDCs to use social media as a tool for establishing a virtual community of practice where best practices and challenges can be shared. This could be used to share literature and working documents, and can be used as a forum for networking with the aim of improving the quality of education.

Activity 3.1.1.7. Document best practices in establishing and strengthening HSEDCs

The HRH Project has provided technical, financial and material support to institutions to establish, strengthen and institutionalize HSEDCs. The Project will document success stories, challenges, and remaining tasks regarding HSEDCs, which will help to inform program learning, successful transition and future planning.

Sub IR 3.1.2 Provide Fixed Amount Awards (FAA) to HSEDCs

In Years 2 and 3 of the project implementation, direct funding to 41 HSEDCs was provided through Fixed Obligation Grants to support various activities related to faculty development, curricula revision, learning tools development and to improve the quality of health trainings. The Project also provided technical support through mentorship, coaching and TOT trainings to consolidate and institutionalize these activities. Similar support was also planned in Year 4, and will be implemented in this year as a carry-forward activity, with additional funding provided to support institutionalization and sustainability of these activities through the Fixed Amount Award (FAA) mechanism.

Activity 3.1.2.1 Provide Fixed Amount Awards (FAA) to HSEDCs at health teaching institutions to strengthen clinical practice, simulation training and quality assurance.

Through providing direct funding to HSEDCs from the HRH Project, institutions will be supported to strengthen clinical practice, simulation training, quality assurance and other activities related to improving the quality of education. HSEDCs will be encouraged to mobilize additional resources to support activities.

Sub IR 3.1.3. Faculty Development

Activity 3.1.3.1. As part of quarterly coaching and mentoring visits, support institutions to plan and conduct faculty development training

The HRH Project will advocate for institutions to routinely identify faculty gaps in knowledge and skills, plan and conduct faculty development trainings to address the gaps. The project will also provide technical assistance during actual delivery of faculty development trainings.

Activity 3.1.3.2 Conduct two effective teaching skills courses for medical laboratory and pharmacy programs

The HRH Project will provide technical and financial support to FMOH to conduct two effective teaching skills courses for 50 faculty from laboratory and pharmacy programs. The training will strengthen their skills in planning and conducting teaching/learning, assessing students, and monitoring of training programs.

Activity 3.1.3.3 Provide technical assistance to the FMOH to conduct Problem Based Learning (PBL) Training for faculty from PBL implementing medical schools

The HRH Project will provide technical assistance to the FMOH to conduct PBL trainings for 70 faculty from 14 PBL implementing medical schools. The training will build the skills of instructors to design PBL cases, facilitate PBL tutorials, and monitor implementation of the PBL curriculum.

Sub IR 3.1.4. Curriculum development and implementation

Activity 3.1.4.1 Support the FMOH and PBL implementing medical schools to conduct a 5-day workshop to develop PBL cases and expand the PBL case bank.

The HRH Project will provide financial and technical support to the FMOH to develop PBL cases and expand the case bank. A 5-day workshop will be organized in which 30 clinical, biomedical and public health experts from the 14 PBL implementing medical schools will be supported to develop 25 – 30 standardized cases. The availability of standardized cases will facilitate quality PBL teaching throughout the country.

Activity 3.1.4.2 Provide technical assistance to the FMOH for the finalization, dissemination and use of a PBL implementation guideline

In Year 4, the HRH Project supported the FMOH to draft a PBL implementation guideline, which will support institutions and faculty to plan, prepare, facilitate and monitor PBL. In this year, the Project will provide support to finalize, disseminate and facilitate the use of the guideline.

Activity 3.1.4.3 Provide technical assistance to Jimma University for the implementation of a master's program in health professions education

The HRH Project collaborated with the Klinikum der Universität München (LMU) to support Jimma University to establish a master's program in health professions education. Support included developing a curriculum, training faculty, student selection, and co-teaching. The Project will continue to provide technical assistance in Year 5 for the implementation of the program including facilitation of face-to-face and on-line teaching and learning and mentoring student projects.

Activity 3.1.4.4 Provide financial and technical support to the consortium of medical schools to improve medical curricula and quality of medical education

In years 3 and 4, the HRH Project technically supported the establishment of a consortium of medical schools, which serves as a forum for member schools to coordinate efforts to improve quality of medical education. In year 4, the Project provided technical assistance to FMOH and the Consortium to design a model medical curriculum. This year, the HRH Project will support the Consortium to finalize and disseminate the curriculum.

Activity 3.1.4.5 Support the FMOH to conduct curriculum revision/development workshops for medical laboratory and pharmacy programs

The HRH Project will provide technical and financial support to FMOH in Year 5 so that curricula for accelerated medical laboratory and pharmacy programs will be developed. Once completed, the FMOH has planned to enroll 600 medical laboratory and pharmacy students in this year.

Activity 3.1.4.6 & 3.1.4.7. Support Addis Ababa University to implement a postgraduate program in Regulatory Affairs

To address the human resource gap in regulating food, medicine and healthcare services, the HRH Project will provide technical support to the Addis Ababa University (AAU) and FMHACA to develop a curriculum for postgraduate program in regulatory affairs. Additional technical support will be provided to conduct instructional design training and develop modules for the program.

Activity 3.1.4.8 As part of quarterly coaching and visits, support deans to monitor implementation of competency based curricula

The HRH Project will support coaching and mentorship visits to institutions to ensure appropriate implementation of competency based curricula.

Sub IR 3.1.5. Strengthen international quality assurance systems at health training institutions

Activity 3.1.5.1 As part of quarterly coaching and mentoring visits, support institutions to conduct semi/annual program level assessments using national standards

The HRH Project will support HSEDCs to guide departments to conduct semiannual or annual program level assessments using national education standards, and use the findings to improve the quality of education. Support will also include ensuring institutions analyze assessment results and use them for improvement purposes.

Activity 3.1.5.2 Support the FMOH and HERQA to guide institutions as they conduct program level assessments

In addition to working with health training institutions, the HRH Project will work closely with the FMOH, HERQA and TVET to build their capacity to guide and support institutions to implement regular program level assessments. Institutions will be supported to report the assessment results to FMOH, HERQA and TVET.

Activity 3.1.5.3 Support institutions to develop a database to collect and analyze findings from program level assessments

Health training institutions will be supported to develop a database where assessment findings will be stored, analyzed and summarized, to facilitate communication of progress to stakeholders.

Sub IR 3.1.6 Strengthen gender-responsive education

Women in Ethiopia have much lower literacy rates than men (38% vs 65%). Women also face a number of obstacles to accessing, and successfully completing higher education programs, including a lack of family commitment to higher education, lack of access to financial resources, and in-grained cultural beliefs that could lead to women underestimating their academic abilities.

To date, the HRH Project has supported more than 52 health teaching institutions to establish and strengthen gender offices, and built capacity of gender focal persons through provision of capacity building trainings such as life skills trainings so that they will effectively help female students to be more assertive, manage stress effectively, and develop problem solving and negotiation skills.

The gender offices have also provided counseling for female students with psychosocial and educational challenges and linked them with the university/college clinics as appropriate for any health related issues. Direct funding was also provided to institutions to address gender disparities, with the aim of improving the educational outcomes of women. The HRH Project will continue this support by implementing the activities below, and will work with both male and female students to ensure parity in the education system.

Activity 3.1.6.1 Advocate for formal integration of the gender focal position in the organogram at universities and colleges

Though most institutions have gender directorates and a gender focal person, this position is not a formal part of the institutional structure and organogram in all institutions (particularly RHSCs). Having a dedicated focal person facilitates stronger implementation and institutionalization of gender related initiatives. The HRH Project will advocate for the formal integration of this position in each institution's organogram in collaboration with the FMOE and the Federal Ministry of Women, Youth and Children's Affairs (FMWYCA).

Activity 3.1.6.2. Support the TVET and RHSCs to adopt the national sexual harassment policy

One of the role of gender offices is to prevent gender based violence by creating awareness, increasing male involvement, empowering female students and creating a safe educational environment. Despite the FMOE's efforts to develop and promote a national sexual harassment policy, the recommendations in the policy are not practiced at RHSCs. The HRH Project will support the TVET and RHSCs to support colleges to adapt sexual harassment policy/code of conduct for their context and benchmark best practices from universities. During the workshop, action plans for translating the policy into action will be developed by RHSCs.

Activity 3.1.6.3 Advocate for the implementation of sexual harassment policies

As evident from recent studies conducted at Jimma and Hawassa Universities, there is a high level of gender based violence that creates an unfavorable learning environment for female

students³. The HRH Project will provide technical support and advocate with institutions to implement their existing sexual harassment policies as part of routine coaching and mentorship visits.

Activity 3.1.6.4 Conduct a 2-day transformational leadership training for gender focal persons and gender directorates

The HRH Project will collaborate with the FMOE and the FMWYA to organize transformational leadership training for gender focal persons. With this support, the leadership capacity of 50 gender focal persons, directors and HSEDC focal persons will be built to bring positive changes in gender functions and HSEDC at health training institutions.

Activity 3.1.6.5 Conduct counseling skills trainings for gender focal persons

Gender focal persons are expected to provide appropriate and effective counseling for students with psychosocial challenges. To strengthen their capacity to do so, the HRH Project will conduct two 1-day counseling skills trainings.

Activity 3.1.6.6 Support the FMOE to conduct a rapid assessment to identify gaps related to gender, and determine whether there is a need for gender responsive pedagogical training

In response to a request from the FMOE, the HRH Project will support the conduct of a rapid assessment to identify the existing gaps in the provision of gender responsive education. Findings from the assessment will inform the development of national level gender responsive pedagogy training package for higher education institutions.

Activity 3.1.6.7 Advocate for gender responsive pedagogy during coaching, mentorship and follow up support at institutions

The HRH Project will provide coaching and mentorship visits at health training institutions including support to gender offices. During these visits, the Project will advocate with deans, department heads, HSEDC, and gender focal persons for effective implementation of gender responsive pedagogy at all levels of education.

Activity 3.1.6.8 Through Fixed Amount Awards, support gender offices to strengthen gender clubs and strengthen systems for preventing gender based violence

The HRH Project will continue to provide direct financial support to gender offices through administration of fixed amount awards. The gender offices are expected to use the funding to conduct high impact targeted gender activities related to preventing gender based violence by advocating and creating awareness, increasing male involvement, empowering female students and creating a safe educational environment.

³ Mamaru et al., Prevalence of Physical, Verbal and Nonverbal Sexual Harassment and their Association with Psychological Distress among Jimma University Female Students - A Cross-Sectional Study. Ethiopia Journal of Health Science 2015 Jan; 25 (1): 29 – 38

³ Sendo et al, Prevalence and factors associated with sexual violence among female students of Hawassa University in Ethiopia. Available at <http://www.spp-j.com/spp/1-2/spp.2015.04A0002>

Activity 3.1.6.9 Organize an annual forum to discuss implementation of activities at gender offices, including sharing of best practices, challenges, and validation of gender performance indicators

To promote collaboration, experience sharing, networking and benchmarking among the stakeholders working on gender mainstreaming, the Project will support a national review meeting where representatives from universities, colleges, the FMWYCA, FMOE, RHBs and others will review best practices and challenges, and validate performance indicators. The Project and FMWCY will provide technical and financial supports to revitalize the already existing national gender forum for health training institutions.

Activity 3.1.6.10. Support gender offices to improve documentation of gender related activities

The Project will provide technical support to gender offices to strengthen documentation and filing of activities carried out by the offices. Currently activities are not well documented in many institutions, and whenever there are staff transitions, information is not available to new staff. The documentation will also focus on best practices and lessons learned, which can then be shared with other institutions or could be benchmarked with other gender focal persons working in other institutions.

Activity 3.1.6.11 Advocate for the generation of evidence by the gender offices on the retention of female students

One of the gaps identified in gender offices is poor documentation of the reasons that female students are dropping out of school. As part of routine coaching and mentorship, HRH Project staff will advocate and support gender officers to document the leading psychosocial, financial and academic challenges faced by female students and therefore contributing to attrition. The Project will also encourage gender offices to document successes in retaining students.

Sub IR 3.1.7. Improve Students' Clinical Training

The clinical component of health professionals' education is critical, as it provides students with opportunities to practice their skills in a real-life setting. The adequacy of clinical learning opportunities remains a challenge, however. Poor coordination between training institutions and health facilities, inadequate practice sites, large numbers of students, and a shortage of experienced preceptors are among the major causes.

The HRH Project has facilitated the expansion of practice sites, supported distribution of clinical guidelines, and developed a clinical practice guideline to standardize clinical practice for students at different types of training facilities. In Year 5, additional support will be provided to conduct the following activities:

Activity 3.1.7.1. Organize a two days' workshop to improve collaboration and coordination of clinical practice among teaching institutions and practice sites

The HRH Project will provide technical and financial support to health training institutions to organize workshops with the aim of improving collaboration and coordination with health facilities and other clinical practicum sites. Discussions will focus on best practices, challenges and future directions regarding students' clinical practice. Training institutions organized into four regional clusters will identify key issues and develop plans of actions to address challenges discussed.

Activity 3.1.7.2. Conduct advocacy with HSEDCs and training institutions to select motivated preceptors and develop their skills with clinical skills training

As part of quarterly coaching and mentoring visits, the HRH Project will advocate with deans, department heads and HSEDC focal persons in the training institutions to identify, select and support motivated health workers from their clinical practice sites and assign them as preceptors.

Activity 3.1.7.3. As part of FAA, support HSEDCs to develop and implement a student assessment policy for clinical practice based on the national clinical practice guideline & curricula requirements

The HRH Project will provide technical and financial support to HSEDCs to develop/strengthen and implement a student assessment policy for academic programs based on the national clinical practice guideline, and institutional curriculum requirements. The policy will inform instructors, preceptors and others how to prepare, conduct and monitor performance assessments; roles of assessors, students, and practice sites; how to provide feedback, etc. The Project will advocate for and monitor the implementation of the assessment policy regularly during quarterly visits.

Activity 3.1.7.4. Support HSEDCs to identify settings suitable for clinical and community practice and formalize relationships to facilitate student practice

As per the national clinical practice guideline, students need to have practice opportunities at various health facility settings and contexts to prepare them for service delivery. In Year 5, the HRH Project will support HSEDCs to select and develop formal relationships with selected settings such as community practice sites.

Activity 3.1.7.5. Support health training institutions to assign one motivated clinical practice coordinator at the program level

Many institutions only have one clinical coordinator for all health science departments. This has resulted in a heavy workload for the coordinators, and compromised follow up of clinical practice for the programs. The national clinical practice guideline instructs health training institutions to assign a clinical coordinator for each program. The Project will advocate with and provide support to institutions to assign a motivated clinical practice coordinator for each program/department.

Activity 3.1.7.6. Through FAA Support HSEDCs to standardize clinical practice by developing explicit course syllabi for each clinical attachment and per department

The national clinical practice guideline notes that most of the course syllabi in health training programs do not provide explicit guidance for clinical teaching/learning activities. Through the FAAs, the HRH Project will provide technical and financial support to HSEDCs to develop a syllabus for clinical attachments.

Activity 3.1.7.7. Through FAA, provide financial and technical support to HSEDCs to conduct review meeting with clinical practice sites

The HRH Project will support HSEDCs to conduct review meetings with clinical practice sites. During the meeting, the effectiveness of the partnership, the technical support given by HSEDCs to practical sites, best practices and challenges will be discussed. Future directions and improvement ideas for effective practical training will be designed.

Activity 3.1.7.8. Document best practices in improving clinical practice

The HRH Project has provided technical, financial and material support to institutions to improve clinical education of students. The Project will document the achievements, challenges and remaining tasks, which will help to inform program learning, successful transition and future planning.

Sub IR 3.1.8 Enhance clinical simulation-based learning

Use of simulation based training is an effective strategy to develop practical competencies. The HRH Project has supported institutions to establish and strengthen simulation centers and trained faculty to use clinical simulation and develop learning materials. The Project will continue this support by implementing the activities below:

Activity 3.1.8.1: Through FAAs, support HSEDCs to train faculty on clinical simulation-based learning

The Project will continue to support HSEDCs to conduct need-based simulation training for faculty and skills lab assistants from all health programs in supported institutions.

Activity 3.1.8.2: Through FAAs, support HSEDCs to integrate simulation-based learning into curricula and introduce deliberate practice of key clinical skills

Simulation based learning experiences must be planned, scheduled, implemented and evaluated in the context of a broader curriculum. To ensure that, integrating simulation learning exercises into curricula is essential. The HRH Project will provide technical and financial support through the FAAs to ensure that simulation based learning is integrated into curricula and it is properly planned, scheduled and implemented in a sustainable manner. In addition, the Project will advocate with HSEDCs to continuously support programs at the course and curricular levels.

Activity 3.1.8.3: Through FAAs, support HSEDCs to develop and use competency-based learning tools for teaching and assessment

Many HSEDCs developed competency-based learning and assessment tools (learning guides, checklists, algorithms, standard operating procedures, flow charts, etc.) using support obtained from the Project during year 3 and 4. These tools are being used for teaching and assessing some clinical skills in a standardized way in a simulated environment and actual clinical practice sites. Institutions require additional support to develop tools for other essential skills in their academic programs by their own HSEDCs. Therefore, the HRH Project will provide financial and technical support to HSEDCs through FAAs to develop and use these learning and assessment tools.

Activity 3.1.8.4: Finalize and disseminate the draft guideline on management of simulation centers, and support its use

The HRH Project developed a draft guideline on the operation and management of simulation centers, which includes content on effective handling of models and simulators, periodic inventory counts, and improved documentation on the use of the centers. In Year 5, the Project will support finalization and distribution of the guideline to universities and colleges, and support teaching and other support staff to use it to strengthen teaching.

Activity 3.1.8.5: Provide technical support to teaching institutions to create opportunities for students to practice independently in simulation centers, with structured feedback

Opportunities for repetitive practice, supported with feedback from peers, instructors or simulators, are a key element of effective simulation-based learning that leads to competence in clinical skills. However, the high number of students coupled with inadequate numbers of faculty has been a challenge in ensuring effective utilization of simulation labs. In Year 5, the HRH Project will provide technical support in designing approaches to increase opportunities for students to practice independently in simulation centers, and get timely feedback on their performance.

Activity 3.1.8.6: Provide technical support to HSEDCs to strengthen clinical skills assessment in a simulated environment using the Observed Structured Clinical Examination (OSCE)

The HRH Project will provide technical support (orientation on designing and implementation, and support during actual assessment) to teaching institutions to strengthen their capacity on assessing clinical skills using the OSCE, including advocating for the use of standardized patients to assess communication and clinical decision making skills. This support will be provided to HSEDCs and faculty during the quarterly coaching and mentoring visits.

Activity 3.1.8.7 Document and disseminate best practices and successes related to simulation-based learning

The HRH project will document best practices, successes and challenges related to simulation-based learning. This will help to inform program learning, successful transition and future planning.

Activity 3.1.8.8 Provide need-based technical support for installation, maintenance, and user training on simulators and medical equipment in skills lab and practicum sites

Teaching materials, skills models and medical equipment are often defective or malfunction in many health training institutions and clinical practice sites due to improper installation, usage, and inadequate maintenance. The Project supported institutions to improve practical training through proper installation and maintenance functions in previous years of implementation. In Year 5, the HRH Project will continue to support teaching institutions to install and maintain simulators and other materials at the skills labs. The Project will also provide user-level training for faculty and skill lab assistants.

Sub IR 3.1.9 Improve Technology Supported Learning and Service

Technologies such as electronic-learning and mobile-learning provide opportunities for health students and educators to develop and maintain the essential knowledge, skills, values and behaviors needed for safe and effective patient care. The Government of Ethiopia is supporting the expansion of ICT for improved the quality of teaching and learning. To date, the HRH Project has provided technical, financial and material support to health training institutions to improve their capacity to effectively use technologies for better educational outcomes. The following support will be provided in year 5:

Activity 3.1.9.1. Provide technical support for teaching of 4 clinical courses using video conferencing at selected universities

In year 4, the HRH project provided technical support to FMOH and St. Paul Millennium Medical college to establish video conferencing and e-learning system to teach biomedical sciences to students at 13 medical schools. In Year 5, similar capacity building technical assistance will be provided to establish video conferencing and e-learning facilities to teach clinical sciences. Eight institutions are expected to benefit from this initiative.

Activity 3.1.9.2. Provide technical support for the implementation of a digital library in selected universities

The HRH project will provide technical assistance to eight institutions to establish and implement digital libraries which are repositories of information, digitalized books, guidelines, abstracts and others. The Project will help to design the digital library, collect essential resources, develop skills of librarians on ICT, and support digitalization of contents and usage resources.

Sub IR 3.1.10 Improve Student Selection and Admission Systems for Health Training Programs

Activity 3.1.10.1 and 3.1.10.2 Support the Federal Ministry of Education (FMOE) to organize an advocacy workshop on evidence based student selection /admission, and finalize a student admission guideline

The HRH Project supported the FMOE to draft evidence based student admission guidelines and criteria for academic programs in health, emphasizing academic preparation, interest, personality, interpersonal skills and behavior of prospective students. This guideline and criteria will be reviewed and revised as appropriate during a stakeholder workshop supported by the Project. Support will also be provided to finalize and disseminate the guideline.

Sub IR 3.1.11. Support the Higher Education Relevance and Quality Agency (HERQA) to Strengthen Accreditation and Quality Audits for Health Professionals Education

Activity 3.1.11.1 Conduct a workshop with relevant stakeholders to address academic programs relevant to the priority health needs of the country and its regulation

The higher education proclamation has given HERQA the mandate to ensure that higher education and training offered at any institution is in line with the needs of the country. However, it has been difficult for the Agency to ensure relevance of health programs because of limited capacity. The HRH Project will provide financial and technical support to HERQA to organize a workshop with the aim of engaging all relevant stakeholders and discuss the challenges and possible solutions and future directions regarding relevance of academic programs.

Activity 3.1.11.2 Support HERQA to revise the existing accreditation directive and develop a comprehensive directive for accreditation of health programs

The existing accreditation directive derived from the higher education proclamation needs revision to address the challenges faced during implementation. The peculiarities of health programs and new developments in health profession education such as use of program level

standards and impact of licensure examination justify the development of a separate accreditation directive for health programs. The HRH project will provide technical and financial support to develop an accreditation directive for health programs.

Activity 3.1.11.3 Purchase reference books to support continuous professional development of HERQA technical staff

In year 3, the HRH Project purchased books in quality assurance and higher education to support continuous professional development of HERQA technical experts. However, there is demand for additional books in areas of curriculum, accreditation, and quality assurance to support continuous learning and improve the service rendered to HEIs, stakeholders and the public at large. The Project will procure these relevant books to improve library of the Agency and develop its staffs capacity.

Activity 3.1.11.4 Conduct a training on internal quality assurance, education standards, and functions of an HSEDC for higher education supervision experts at the FMOE

For effective implementation of the various quality assurance activities by institutions and their HSEDCs, support and guidance from the FMOE is essential. To ensure that they are prepared to provide this support, the HRH Project will orient and train FMOE staff on the use of education standards, internal quality assurance policy, QA mechanisms, and roles and functions of HSEDCs help higher education supervision experts in FMOE to support institutions. The HRH Project will support FMOE to train 15 higher education experts and prepare them for better work.

Activity 3.1.11.5 Support HERQA to digitize inputs related to the accreditation system

The HRH Project will continue to support HERQA to procure ICT materials and train IT staff, with the aim of using technology to support accreditation. In addition to expediting the work process, this will enable HERQA and its customers to easily track accreditation status of higher education programs, and maintain students and instructors database.

Sub IR 3.1.12. Support the Federal Technical and Vocational Education and Training (TVET) Agency and its regional counterparts to strengthen health worker training

The HRH project provided all rounded support to the FMOH and TVET Agency to strengthen training of mid-level health workers in the last four years. In response to a request from the FMOH, the HRH Project will provide technical and financial support in Year 5 to conduct the following activities:

Activity 3.1.12.1. Provide technical and financial support to FMOH/TVET to develop occupational standards (OS) for new academic programs.

Based on the request of FMOH, the Project will support the FMOH to organize a workshop to develop occupational standards for 4 new programs based on the result of labor market analysis. The standards will be used for development of curricula, opening of new programs and inform occupational assessments.

Activity 3.1.12.2. Provide technical and financial support to FMOH/TVET to develop model curriculum as per the revised occupational standards.

In year 4, the FMOH revised occupational standards of 11 TVET programs including nursing, pharmacy, midwifery, and medical laboratory in collaboration with the HRH Project, which will help to update curricula for these programs and produce health care professionals responsive to the needs of the population. The HRH Project will provide technical and financial support to FMOH to develop 11 model curricula based on the revised occupational standards.

Activity 3.1.12.3. Provide technical and financial support to FMOH/TVET to design and develop assessment tools as per the revised occupational standards.

To make sure that student assessment in TVET academic programs is in line with the newly developed curricula, the FMOH will be supported to conduct two rounds of a 6-day workshop to design and develop assessment tools for 11 programs as per the revised occupational standards.

Activity 3.1.12.4. Provide technical and financial assistance to FMOH/RHB/ TVET to conduct program level quality audit at selected public and private health science colleges.

In collaboration with the FMOH/RHBs/TVET Bureaus, the HRH Project has made tremendous efforts to ensure quality of education in TVET programs. In year 4, the Project supported development of educational standards for TVET and supported regional TVET Bureaus to conduct program level quality audits at 9 public and private health science colleges. The Project will continue its support to FMOH/RHBs/TVET bureaus to conduct quality audit in 6 programs (Midwifery, Nursing, Anesthesia, HEWs, Pharmacy and Medical Laboratory) in 12 selected public and private institutions using the national standards. Following the audit, findings will be communicated to institutions so that they will develop plan of action to address the gaps identified.

Activity 3.1.12.5. Provide technical assistance to Oromia Regional Health Bureau (ORHB) to facilitate smooth transition of regional health science colleges from TVET to the Health Bureau.

Regional Health Science Colleges in Oromia region are working under the auspices of the regional TVET Agency. This reportedly caused challenges in health training programs. Based on other regions' experiences and existing challenges in health training programs, Oromia RHB and RHSCs have been discussing with FMOH and regional TVET to rectify the root causes of the problems. Transferring the mandate of governing the regional health science colleges to ORHB was identified as plausible solution. In response to the request from Oromia RHB, the Project will provide technical support to the RHB to facilitate smooth transition of Regional Health Science Colleges.

Activity 3.1.12.6. Provide technical and financial assistance to Oromia RHB to conduct benchmarking visit to SNNP RHB.

As part of transferring the mandate of governing RHSCs in Oromia, The HRH project will provide technical and financial support to Oromia RHB to conduct a benchmarking visit to SNNP Regional Health Bureau and Health Science Colleges to learn lessons that will help and facilitate smooth transition of RHSCs.

Facilitate Transition of Health Professionals Occupational Competency Assessment to RHBs

The overall objective of the national TVET strategy is to create a competent, motivated, adaptable and innovative midlevel workforce that plays a pivotal role in poverty reduction and socioeconomic development efforts of the country. The outcome of training delivered in the TVET system is measured through a process of verification of a candidate's achieved competencies, known as occupational/competence assessment.

In principle, this assessment and certification process is expected to be led by relevant sectors. However, due to limited capacity in the sectors and desire to ensure standardized process across sectors, this task has been coordinated by the Occupational Competence Assessment and Certification Agency (OCACA). Recently, FMOH and RHBs are showing their commitment to take over the responsibility of the assessment and certification process. To date, the HRH project has provided technical support to OCACA to improve quality of competency assessment. In year 5, our support will shift to RHBs to prepare them to take over the assessment and certification process in their respective regions. The following activities will be performed to facilitate the process:

Activity 3.1.12.7. Advocate with RHBs to prepare for their new role in managing occupational assessments of midlevel health professionals, and provide technical support as needed

The HRH Project will advocate with RHBs and provide needed technical support for their preparation to take over COC assessments of the health sector.

Activity 3.1.12.8. and Activity 3.1.12.9 Support RHBs to develop a working document to guide the transition of managing occupational assessments and organize a 1-day consultative workshop to review the document developed above with stakeholders

The Project will support RHBs to develop and review a working document with stakeholders to guide the transition of occupational assessments. The document will show the financial, staff and capacity requirements, and the relationship with COC centers and other stakeholders.

Activity 3.1.12.10. Provide technical support to Amhara RHB to establish case team or unit responsible to lead the assessment process under human resource administration support process.

Based on the request of Amhara RHB, the HRH Project will provide technical support to establish and strengthen the case team for coordinating COC assessments. Capacity building activities on assessment, administration of tests and facilitating working relationship with all stakeholders are some of the technical supports the Project will provide to the to-be established case team.

Sub IR 3.1.13 Support the FMOH to Implement the National Licensing Exam for University Graduates

In Years 3 and 4, the National Licensing Examination was established with the comprehensive support from the HRH Project with the aim of ensuring public safety and stimulating educational quality improvement. The HRH Project will continue its support to FMOH to strength licensing examinations in year five.

Activity 3.1.13.1 Advocate for the establishment of expert and advisory teams at national level for item development and validation

The HRH Project will provide technical support to national board of licensing examination at FMOH to establish cadre-specific technical and advisory teams for item development and validation involving experts from education institutions, professional associations, FMOE, FMOH, partners and other stakeholders. Undertaking this activity is vital to sustain and strengthen national licensure examination. The main duties and responsibilities of the teams will be designing or updating exam blue print, developing and validating test items, and setting pass scores.

Activity 3.1.13.2 Support the FMOH to review the national licensure examination implementation guideline

In year 2 and 3, the HRH Project supported FMOH to develop the national licensure examination implementation guideline which serves as a framework to guide the whole assessment process. New directions for developing items, test centers, skills assessments and assessors are suggested to be included by FMOH and other stakeholders in the implementation guideline. The Project will support FMOH in Year 5 to update and finalize the national licensure examination implementation guideline that addresses the suggestions and new direction.

Activity 3.1.13.3 Provide technical support to the FMOH to conduct an examiner /assessor methodology training

The HRH Project will provide technical support to conduct student assessment methodology training for 90 assessors for 7 health cadres (Medicine, Nursing, Health officers, Midwifery, Anesthesia, Pharmacy, and Medical Laboratory). Upon completing the trainings, the FMOH will have competent assessors who are ready to efficiently and reliably carry out their duties and responsibilities in examining /assessing competence of graduates.

Activity 3.1.13.4 Provide technical support to develop and review exam blueprints

Quality exam blueprint ensures reliability and validity of licensing exams. Accordingly, the HRH Project supported the FMOH to develop exam blueprints for medicine, health officer, midwifery, anesthesia and nursing in years 3 and 4. This year, the HRH Project will continue its technical support for the FMOH to update the blueprints for the five programs and develop exam blueprints for pharmacy and medical laboratory programs.

Activity 3.1.13.5 Provide technical support to the FMOH for item development and validation

Once the blueprint is finalized, exam items matching the content area on the blueprint will be developed. Exam items (for written and performance assessment) will be developed for a total of 7 health cadres in two round workshops and as the same time a quality review process (item validation) will be made to ensure the appropriateness and effectiveness of assessment tools.

Activity 3.1.13.6 Support the FMOH to conduct institutional capacity assessments at selected assessment centers

The FMOH conducted licensing examinations for five health cadres in previous years using available infrastructure at universities. In order to identify and standardize the assessment centers, FMOH has planned institutional capacity assessments. The HRH Project will provide technical support to develop tools for capacity assessment, conduct assessment, and select

assessment centers in the big regions and Addis Ababa. The selected 5 training institutions may be accredited as an assessment center based on fulfilling requirements of assessment for each profession.

Activity 3.1.13.7 Provide technical support for the administration of the national licensure examination and setting standards

Following the item development process, the HRH Project will provide technical support to FMOH to effectively administer computer based knowledge assessment and invigilate the performance assessment process.

Activity 3.1.13.8 Support the FMOH to set pass scores on licensing examination

Because of the critical influence of cut scores on validity of an exam, licensing exams set criterion-referenced pass scores using a rigorous methodology. The HRH Project will continue to provide technical support to FMOH in defining the minimum level of knowledge and skill required to provide safe healthcare services and identifying a score on the examination that corresponds to that performance standard (setting passing score) by organizing a two round standard setting workshop.

Activity 3.1.13.9 Organize a stakeholder meeting to provide feedback on the examination results

The HRH Project will support a one-day stakeholders' feedback meeting that includes higher education institutions, FMOE, FMOH, and HERQA. This will create opportunities to communicate the results of the assessment and give feedback to training institutions, HERQA, FMOE and FMOH so that joint action plans can be developed for improving quality of education.

Activity 3.1.13.10 Mentor and coach exam scoring and item analysis processes

Following training on exam scoring and item analysis software, the HRH Project will mentor and coach staffs of NBE at the FMOH to properly use the computer assisted item analysis and scoring software.

Activity 3.1.13.11. Provide technical support for the development of a roadmap to guide technology facilitated licensure examination

As the number of examinees and programs taking national licensing exams increases, managing and analyzing exam results efficiently and accurately will be become a huge task. The HRH Project will provide technical support to the FMOH to develop a roadmap for technology facilitated licensure examination. This document will help FMOH to systematically introduce technology supported examination nationally.

IR 3.2 Improved Quality of Training for Health Workers

The HRH Project has been supporting the FMOH in improving the quality of in-service training (IST) through standardization and institutionalization of IST. It has supported the FMOH to develop an IST guideline and directive, established 43 IST sites, and has been building the capacity of the selected IST centers. The HRH Project continues supporting the IST centers, regional health bureaus and FMOH to implement this initiative. The HRH project in its year five

project implementation will also continue supporting FMOH and RHBs to improve the quality of IST by strengthening IST centers throughout the country.

Sub IR 3.2.1 Develop the capacity of national in-service training team at FMOH to Better Follow Standardization and Institution

Nationally, FMOH has established the IST team under the development case team in human resource administration and development directorate. Currently, the IST team has three staff members, and strengthening the capacity of the team with capacity building trainings, experience sharing and benchmarking events, will enable the national team to better coordinate the IST initiative. In this regard, the following activity is planned.

Activity 3.2.1.1 Provide technical support in standardizing e-learning material

The national IST team has been assessing and reviewing different training manuals previously. Most of these manuals were training manuals for face to face group training events. However, currently, e-learning materials have been developed and being requested to be reviewed. The national team has had difficulties in assessing and standardizing e-learning and blended training approach. Therefore, The HRH Project will provide technical support and mentoring to the national IST team in reviewing and standardizing e-learning materials.

Sub IR 3.2.2 Strengthen RHB's in-service training coordination capacity

To ensure sustainability of quality in-service training programs, RHBs have to play a significant role in implementation of IST programs in their regions, particularly in leading and coordinating IST centers in their region. In order to carry out this responsibility, RHBs need support to build their coordination capacity. In year five, the HRH Project will provide the following support:

- Activity 3.2.2.1.*** Provide IST program management training for RHBs IST focal persons and HR heads
- Activity 3.2.2.2.*** Provide mentoring and coaching to IST sites and RHBs
- Activity 3.2.2.3*** Support RHBs to conduct stakeholder regional meetings to review IST provision in the region
- Activity 3.2.2.3.*** Organize annual national review meeting to create platform for inter-regional experience sharing

Sub IR 3.2. 3. Improve the capacity of in-service training centers

Since the initiation of IST standardization and institutionalization, IST centers were selected and supported to develop their capacity for standardized IST course delivery. At the beginning, there were 35 centers and progressively their number is increasing and now there are 49 IST centers. Based on their identified needs, the IST centers require continuous technical support from stakeholders. The following support is planned from the HRH Project:

Activities 3.2.3.1 & 3.2.3.2. Review and contextualize instructional design skills (IDS) and Clinical Training Skills (CTS) Manuals

The IDS and CTS training manuals from Jhpiego have helped many training professionals to develop instructional design and facilitation skills in Ethiopia. These manuals were focused on reproductive health and not contextualized to the national context. Hence, the HRH Project will

provide technical support to FMOH to review and adapt the IDS and CTS training packages so that they become national standard training packages for all IST in the health sector.

Activity 3.2.3.3. Support the FMOH to provide IST database training

The FMOH has developed comprehensive Human Resource Information System, which has different sub systems. One of the sub-system is in-service training database. This database is operationalized recently to be used by IST centers. In order to facilitate the implementation of HRIS-IST database, the training manual has been developed and two rounds of training to have been given to in-service training center data managers. Some in-service training centers have been already using the training database and continuous remote support is being given. In order to fully implement the database system, one round training has been planned for year 5.

Activities 3.2.3.4. & 3.2.3.5. Support the FMOH to provide instructional design training and clinical training skills training for IST sites

The HRH Project will provide technical and financial support to IST centers to develop their capacity for designing, reviewing and delivering IST courses. Training will be provided to 50 course designers and 50 trainers using the newly revised national IDS and CTS manuals.

Activity 3.2.3.6. Document & share best practices from implementation of the national IST initiative

The HRH Project has provided technical, financial and material support to FMOH, RHBs and IST centers to standardize and institutionalize IST in the country. The Project will document the achievements, challenges and remaining tasks in year 5, which will help to inform program learning, successful transition and future planning.

Sub IR 3.2.4. Standardization of in-service training manuals

To date, 38 training packages have been reviewed against standards in the IST guideline and feedback given for improvement. 15 of these national training packages have approved and shared to all in-service training stakeholders for use. In year 5, the Project will continue its support for standardization of IST packages including e-learning training courses.

Activity 3.2.4.1. Support the FMOH to develop and standardize a CRC training manual

Creating a Compassionate, Respectful and Caring (CRC) health workforce is one the transformation agendas of the Health Sector Transformation Plan (HSTP). This initiative has multiple activities, which includes the development of a CRC training package for health care workers. In year 4, the HRH Project supported the FMOH to draft an IST training manual on CRC and will continue its support in year 5 to finalize the CRC manual.

Activity 3.2.4.2. Support FMOH to develop e-learning course standardization tool

The HRH Project will provide technical support to develop tools to assess the quality of e-learning IST courses towards their standardization.

Activity 3.2.4.3. & 3.2.4.4. Assess, standardize and disseminate all newly developed IST training manuals

The Project will continue its technical support to FMOH to standardize all new IST manuals which are developed by FMOH's case teams, professional associations, IST centers, and partners.

Sub IR 3.2.5. Support FMOH, FMHACA, FMOE, RHBs, associations, and providers to develop a needs-based framework for CPD

The HRH Project has provided technical and financial support to FMHACA, regional health bureaus, health professional associations, IST centers, and others for designing implementation framework for continuous professional development in the previous years of Project implementation. Although many efforts have been put in place to institute continuing professional development, CPD has not been launched officially. In year 5, the Project will work more closely with FMOH and FMHACA to roll out CPD.

Activity 3.2.5.1 Organize an advocacy workshop on the implementation of CPD and share global evidence to higher officials at national and subnational level

Some of the reasons for the delay for implementing CPD are believed to be perceived poor capacity of RHBs to ensure access to CPD and fear of the consequences of mandatory CPD on providers, facilities and health systems. The HRH Project has had discussions with FMOH and FMHACA in year 4. In Year 5, the HRH Project will conduct more rigorous advocacy with FMOH and FMHACA to move forward with CPD implementation by finding solutions to allay concerns of the FMOH.

Activity 3.2.5.2. Provide technical support to FMHACA to incorporate CPD into its strategic initiatives and strengthen the CPD unit in FMHACA and regional counterparts

FMHACA is currently developing a list of strategic initiatives to strengthen its activities in relation to regulation of health care, organizations, and health providers amongst others. The HRH Project will provide technical support to FMHACA to include CPD schemes as one of the strategic issues. In addition, the Project will closely work to build the capacity of CPD units at FMHACA and its regional counterparts through mentoring staffs in the units.

Activity 3.2.5.3. Provide technical support to FMOH and FMHACA to develop CPD courses on health care regulation and patient safety

Health care workers in Ethiopia require knowledge and skills updates to effectively support health care regulation and patient safety interventions in their practice. However, there are no CPD courses on these topics. The HRH Project, therefore, will support FMOH and FMHACA to develop CPD courses on health care regulation and patient safety. It will work with the FMOH IST unit to standardize and disseminate the CPD/IST courses for use.

Activity 3.2.5.4. Provide financial support for FMHACA to develop media messages and buy air time on CPD and/or for Radio or TV of national coverage

In order to increase awareness about CPD among all health workers and community, the Project will provide financial and technical support to FMHACA to develop media messages and buy air time for radio and TV advertisements.

Activity 3.2.5.5 Provide technical support to the national CPD Accreditation Committee and Customer's Services Directorate at FMHACA to develop/review CPD program guideline, standard operating procedures

The CPD Accreditation committee hosted under FMHACA Customer Services Directorate leads the national CPD program. It designs legal frameworks and guidelines for CPD. It is comprised of FMHACA staff and delegates of professional societies. The HRH project will continue to provide technical assistance to strengthen the function of the committee particularly during development of job aids, monitoring tools and CPD guidelines.

Activity 3.2.5.6 Provide technical support to RHBs and champion/lead hospitals to identify health workers needs for CPD activities

The Project will support selected champion hospitals to identify health worker needs for CPD courses.

Activity 3.2.5.7. Provide technical support to RHBs to establish a mechanism for monitoring and evaluating effectiveness of CPD in improving healthcare delivery and outcomes

The HRH Project will provide technical support to RHBs through regular coaching visits and virtual means so that RHBs will establish a mechanism for monitoring and evaluating the effectiveness of CPD in improving health care delivery and outcomes.

Activity 3.2.5.8. Conduct a workshop for professional associations (EMwA and EAA) and eleven champion/lead facilities to support integration of CPD activities into their strategic and short term plans

The Project will support FMHACA to conduct a workshop and reach agreement with professional associations and eleven lead hospitals (based on the results of the Ethiopian Hospital Reform Initiative), to incorporate CPD into their strategic plan.

Activity 3.2.5.9 Provide technical and financial support to FMHACA to promote CPD and professional self-regulation during annual conferences of professional associations

The HRH Project will provide technical and financial support to FMHACA to promote CPD and health professional regulations activities during annual conferences of 20 professional associations. Through this activity, most health care workers will be reached and communicated about the benefits, costs and mechanisms to access CPD courses and fulfill regulatory requirements. Health workers would be motivated to develop an individual CPD plan and comply with regulatory requirements.

Result 4: Program Learning and Research Conducted

IR 4.1 Research and Evaluation Evidence on Critical Human Resource for Health Issues Generated

The HRH Project will continue to generate evidence from implementation research and routine program data collection in line with the Project objectives. Project implementation research and program learning will be designed using rigorous methodology and in collaboration with key stakeholders such as the FMOH and RHBs. Findings will continue to inform policy makers, strengthen program implementation and generate evidence that can be shared with the global

community. This collaborative approach is also expected to build local capacity. Accordingly, in Year 5 the Project will conduct the following activities:

Sub IR 4.1.1 Conduct Research Studies/Program Learning

Activity 4.1.1.1. Finalize manuscripts using data generated from the national retention study conducted in the previous program years and submit to peer review journals

The HRH Project conducted a national retention study in Year 3 to identify factors related to health workforce motivation, job satisfaction and retention in Ethiopia, and finalized a technical report which summarized the findings and provided recommendations to the FMOH. In Year 4, the Project published one peer-reviewed article and initiated the development of scientific manuscripts summarizing key findings from the study. In Year 5, four manuscripts will be finalized and submitted to peer reviewed journals (medicine and health officer retention, nurse job satisfaction, anesthesia job satisfaction and managers perceptions of health worker retention).

Activity 4.1.1.2 Conduct literature review to understand global evidence regarding secondment of staff to government organizations, and present recommendations to the FMOH

The HRH Project is currently supporting 9 seconded staff at various departments at the FMOH, FMHACA and HERQA. A number of Project staff also sit at RHB offices. In an effort to systematically assess this mechanism and its usefulness within a health systems strengthening framework, the HRH Project will review existing global literature, and propose recommendations to guide decision making regarding secondment.

Activity 4.1.1.3 Conduct a literature review to understand global evidence on the effect of "dual practice" or "joint appointments" on retention of faculty.

The HRH Project will conduct a systematic review to summarize global evidence on dual practice as a retention mechanism for faculty. Findings will be shared with the FMOH, FMOE and RHBs to inform additional discussions regarding the usefulness of this mechanism to encourage retention within the Ethiopian context.

Activity 4.1.1.4 & 4.1.1.5: Finalize technical report and manuscripts summarizing findings from the end-line midwifery and anesthesia graduating students' competence study

In 2013, the HRH Project conducted a baseline study to assess the competence level of graduating midwifery and anesthesia students. The average performance score for midwives was 51.8%, and the mean score for anesthesia students was 61.5%. Being male, reporting sufficient clinical experience, and managing greater numbers of births during training were significant predictors of higher competence scores for midwifery students. For anesthesia students, competence was associated with being male and attending a university training program.

In Year 4, an end line evaluation was conducted to determine whether competence has improved when compared to the baseline values, given the comprehensive inputs by the Government and HRH Project to improve the quality of pre-service education. In Year 5, the HRH Project will finalize data analysis, and develop a technical report and manuscripts.

Activity 4.1.1.6 Finalize manuscripts using data from the task analysis study for medical doctors, health officers, nurses, pharmacists, and medical laboratory scientists

In Year 3, the HRH Project supported professional associations to conduct studies aimed at assessing the needs and gaps in the education, practice and competencies of medical doctors, health officers, clinical nurses, pharmacy professionals and medical laboratory professionals. A preliminary report was generated and used to inform programmatic efforts, practices and regulation of the target health professionals (including licensing exams) and in turn strengthen professional services. The Project also conducted writing workshops in Year 4 to build the capacity of the professional associations to develop draft manuscripts.

The draft manuscripts will be finalized and submitted to peer review journals in Year 5.

Activity 4.1.1.7 Finalize manuscripts using data from the regulation study

The HRH Project supported FMHACA to conduct a health professionals' regulation study in Year 3 to generate evidence on the existing health professionals' regulation and scope of practice in Ethiopia. In Year 4, a technical report is developed. Data from the study will be used to generate 2 manuscripts for submission to peer review journals in Year 5.

Activity 4.1.1.8 & 4.1.1.9 Support HERQA to conduct an assessment of institutional and program audit practices

HERQA has been engaged in conducting institutional audits for more than ten years and program audit in the past few years, resulting in the development of 72 institutional and 22 program audit reports, which were disseminated to institutions and stakeholders.

Institutions are expected to address the gaps identified in these reports to improve the quality of education. The proposed assessment will systematically evaluate the reports and document the changes at the institutional level (if any). The findings are expected to inform policy, justify the investments made in quality audits, and develop recommendations for future practice. This activity will also build the research capacity of HERQA staff and a technical report will be developed, and manuscripts drafted.

Sub IR 4. 1.2 Documentation and dissemination of research/program learning

Activity 4.1.2.1 Conduct national and regional dissemination workshops to share key findings from HRH studies and program learning

The HRH Project has collaborated with the FMOH and other stakeholders to conduct a number of well-designed research and program learning activities, which have resulted in the generation of high quality data that can be used to inform program implementation and policy development. To increase awareness and use of this information, the HRH Project will conduct dissemination workshops to present key findings and recommendations to stakeholders such as the FMOH, RHBs, professional associations and training institutions.

Activity 4.1.2.2, 4.1.2.3, and 4.1.2.4 Disseminate HRH research and program findings using suitable communication strategies

To ensure that a maximum number of stakeholders are aware of and have access to findings from the research and program learning conducted by the Project, program briefs, bulletins, case studies and other documentation will be developed and distributed to local, regional and global

stakeholders using approaches such as webinars, online communities of practice, and organizational websites.

Activity 4.1.2.5 Disseminate program learning and research findings at relevant regional and international meetings, conferences and forums.

To share lessons learned with the larger global public health community, increase visibility of the HRH activities being implemented in Ethiopia, and facilitate networking and sharing of experiences to further strengthen program implementation, Project staff will participate and present in relevant meetings, forums and conferences. Illustrative examples include but are not limited to:

1. The International Congress of Midwives
2. The Network Towards Unity for Health Conference
3. The Association of Medical Educators in Europe Conference
4. The International Confederation of Nurses
5. The Eastern Africa Health Professions Educators Association
6. The World Health Professions Regulation Conference,
7. The Fourth Global Human Resources for Health Forum,
8. The International Network of Quality Assurance Agencies Conference
9. The Global Symposium on Health Systems Research,
10. The 3rd International Conference on Public Health
11. The International Medical Education Conference
12. The Jhpiego Global Monitoring and Evaluation Meeting

Activity 4.1.2.6 Support participation of HRH Project staff at relevant trainings to further strengthen knowledge and skills that can be applied towards the technical support provided to institutions and other stakeholders.

Project staff will participate in relevant professional trainings to improve their capacity to provide strong technical support related to quality of health professionals training. This includes participation in the Foundation for Advancement of International Medical Education and Research (FAIMER) fellowship program, the International Society for Quality in Healthcare (ISQUA), the Jimma University Master's Program in health professionals training (includes travel to Germany), and the Harvard University Strengthening Human Resources for Health short course.

IR 4.2 Build local capacity in Monitoring, Evaluation and Research

The HRH Project has been supporting the FMOH, RHBs, health professional associations, training institutions and other stakeholders to develop research study protocols, participate in data collection, manuscript writing, program monitoring and supportive supervision. These activities will enhance local institutional capacity to design and conduct implementation research, and improve capacity of government counterparts to monitor program implementation. Ongoing support will be provided in Year 5 as outlined below:

Sub IR 4.2.1 Build Local Capacity to conduct Research

Activity 4.2.1.1 Support the Amhara and Tigray RHBs to finalize 2 manuscripts summarizing findings from the competence assessment of midwives

The HRH Project supported the Amhara and Tigray RHBs to conduct a study assessing the competence of practicing midwives in their regions. The Project will continue to work with the RHBs to disseminate findings from this study through developing technical reports and finalizing manuscripts. Efforts will also be made to support the RHBs to disseminate the findings during key regional meetings.

Activity 4.2.1.2 & 4.2.1.3 Support Oromia RHB to finalize a protocol for a study to assess the competence of Level IV HEWs in the region

In response to a request from the Oromia RHB, the HRH Project will support the region to conduct a study to assess the competence of Level IV HEWs. This will include the development of a protocol, obtaining ethical clearance, and conducting data collection. A technical report will be developed and shared with the bureau leadership to inform decision making regarding the training and support for this cadre.

Sub IR 4.2.2 Conduct Routine Monitoring and Supportive Supervision

Activity 4.2.2.1 & 4.2.2.2 Provide technical and/or financial support to conduct an annual integrated supportive supervision (ISS) visit, and quarterly joint supportive supervision visits.

In line with existing FMOH and RHB supportive supervision efforts, the HRH Project will provide technical and financial support for the conduct of integrated supportive supervision visits in 4 regions (Amhara, Tigray, SNNP and Oromia) at least once a year, including focusing on a review of HRM practices.

Similarly, support will be provided for quarterly joint supportive supervision visits at project intervention sites, with a team comprising of representatives from relevant organizations such as the FMOH, FMHACA, HERQA, TVET and RHBs.

Activity 4.2.2.3, 4.2.2.4, 4.2.2.5 and 4.2.2.6 Conduct regular monitoring visits

The Project will also implement the following activities to facilitate routine data collection and monitoring of key project indicators:

- Activity 4.2.2.3** Conduct ongoing onsite or remote program monitoring visits and follow-up at training institutions, RHBs, ZHDs, and IST centers
- Activity 4.2.2.4** Conduct outcome level/ result monitoring visits at all HRH intervention sites to document the outcomes of project interventions
- Activity 4.2.2.5** Conduct a rapid assessment to document the effect of project interventions on priority health outcomes at health facilities
- Activity 4.2.2.6** Collect annual HRH performance data from training institutions, RHBs, ZHDs and WOHOs

Sub IR 4.2.3 Develop M&E Data Management System

Activity 4.2.3.1 Finalize the development of dashboards to track project performance using a web-based system

To strengthen data use for decision making, the HRH Project has developed a web based platform to document, visualize and share HRH program results across different regions. The development and testing of the web based platform was completed in year 4.

To facilitate collection of high quality data, the Project also procured tablets with remote SMS capabilities. Annual data collection data entry templates for pre-service education institutions were developed using Open Data Kit (ODK) open source software, and installed in the tablets for use in routine data collection.

In Year 5, the Project will upload data on the web platform and develop dashboards on key outcome indicators, to enable data use for decision making at all levels of program implementation.

Activity 4.2.3.1 Collect training data using the Training Information System (TrainSmart) database

The Project will continue to track all training related indicators into the TrainSmart database, which will be used to support reporting.

Sub IR 4.2.4 Develop an education information management system

The HRH Project initiated the process of developing a database to strengthen the educational management information system in target universities and colleges, but activities were halted due to a delay in funding. In Year 5 the Project will continue with this activity, including facilitating a stakeholder meeting to discuss the stakeholder requirements for the database. The database will support the FMOH and training institutions to gather information on the number of health science graduates for evidence-based planning and deployment decisions. Specific activities to be conducted are outlined below:

Activity 4.2.4.1 Conduct a 3-day consultative meeting with stakeholders to discuss customization of a database to track student profiles

Activity 4.2.4.2 Support the FMOH, FMOE and training institutions to develop a database to track student profiles

Sub IR 4.2.5 Develop a robust model to predict the impact of HRH interventions on service delivery.

In consultation with USAID, the HRH Project plans to continue to explore the requirements for development of an impact model that can measure effects of HRH strengthening on health service coverage and quality through a multi phased approach. (*Activity 4.2.5.1*)

Sub 4.2.6 Develop program reports and conduct program review meetings

The following routine activities will be conducted to facilitate planning and implementation of program activities and reporting:

Activity 4.2.6.1 Produce quarterly progress reports

Activity 4.2.6.2 Produce annual progress report

Activity 4.2.6.3 Collect and compile success stories/best practices

Activity 4.2.6.4 Conduct weekly core HRH team meetings
Activity 4.2.6.5 Conduct Year 6 work planning workshop