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RWANDA

RWANDA INTEGRATED HEALTH SYSTEMS STRENGTHENING PROJECT:

Quarterly Report Narrative

October - December 2010

Rwanda IHSSP Project:

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Contract No. GHH-I-00-07-00058-02,

Task Order No. GHH-I-03-07-00058-00

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Acronyms

AIDS/SIDA	Acquired Immunodeficiency Syndrome
BDD	Base de Données/Database
CA	Collaborating Agency
CAAC	Cellule d'Appui a l'Approche Contractuelle; performance-based financing Department of the Rwandan Ministry of Health
CBHI	Community Based Health Insurance (Mutuelle)
CDF	Community Development Fund
CHD	Community Health Desk (MOH)
CHW/ASC	Community Health Worker (Agent de Sante communautaire)
CTAMS	Cellule Technique d'Appui au Mutuelles de Sante; Mutuelle Technical Support Cell
CPD	Continuous Professional Development
CPN	Consultation Prenatale/Antenatal Consultation
DHIS	District Health Information System
DHS	Demographic and Health Survey
DH	District Hospital
DRG	Diagnosis Related Group
ET	Extended team
GOR	Government of Rwanda
HC	Health Center
HDP <i>asdl</i>	Health Development & Performance, a newly created Rwandan NGO from remnants of the Cordaid Rwanda team
HIV/VIH	Human Immunodeficiency Virus
H(M)IS	Health (Management) Information System
HR	Human Resources
HSS	Health Systems Strengthening
IHSSP	Integrated Health Systems Strengthening Project
ICT	Information, Communication and Technology
IT	Information Technology
M&E	Monitoring & Evaluation
MIS	Management Information System
MCH	Maternal and Child Health
MOH	Ministry of Health

MSH	Management Sciences for Health
NGO	Non-governmental Organization
PBF/PBC	Performance-based Financing/Performance-based Contracting
PEPFAR	President's Emergency Plan for AIDS Relief
PMA	Paquet Minimum des Activités; Rwandan basic package of health
PMTCT	Prevention of Mother-to-Child Transmission [of HIV]
PBP	Performance – based Financing
PRISM	Performance of Routine Information System Measurement tool
QA	Quality Assurance
RBF	Result-Based Financing
SIS	Système d'Information Sanitaire (Health Information System)
TA	Technical Assistance
TOT	Training of Trainers
TWG	Technical Working Group
USAID	United States Agency for International Development
USG	United States Government

1. Executive Summary

This report provides a snapshot of status of implementation of activities planned during the second quarter of the fiscal year 2010/11, covering the period between October and December 2010.

During this period, the project registered significant progress in achieving quarterly targets - both through implementation of the planned activities, and, in achieving the intended deliverables. The project continued to support the MoH in its efforts to strengthen Health systems at central and decentralized level, while engaging all the technical staff to reinforce capacity transfer to MOH counterparts across the five (5) programmatic components.

In **improving utilization of health data for decision making and policy formulation**, the IHSSP/HMIS team provided regular orientation to the newly recruited HMIS team at the MOH on data management, analysis, and reporting. The Team also trained, and built the capacity of MoH's Community Health Desk, the PBF-unit (CAAC) and TB units on performance-based financing (PBF) data management, including supporting the preparation of quarter three (Q3) PBF payments to health facilities. Through this support it is expected that staff members at CAAC responsible for PBF-payments will be able to perform independently in 2011 the complete PBF payment process.

Responding to the request of the National Malaria Control Programme, IHSSP in collaboration with SPS and CHD prepared the functional specifications for a system to track essential drugs and supplies needed by Community Health Workers (CHWs).

Another key achievement registered by the project during this quarter is the support to the MoH and MINALOC to establish the Community Based Health Insurance membership stratification. The project designed the data base to capture the CBHI membership stratification information, and conducted training to data entry staff and supervisors. The Project also co-financed salaries for the data entry staff, and has continued to provide technical and management supervision of this process. A contribution system based on the Household revenues could increase equity and strengthen the financing of the CBHI System in Rwanda. The MINALOC has shown interest in use of these data for its planning and budgeting processes.

The project supported the MoH to collect data for PRISM assessment from selected 20 Health Centers, 20 villages CHWs, 5 District Hospitals, and 5 Administrative Districts. This survey will inform the status of data collection and information use at the Districts, and by Community Health workers.

Strengthening financial systems for the rational use of available health resources continued to be the IHSSP priority areas of support. The project supported the MoH to design the draft performance – based Financing (PBF) framework for The Rwanda Drug, Consumables and Equipment Central Procurement Agency (CAMERWA), and was presented to the board and partners.

The MOH's CAAC was assisted to upgrade PBF data collection tools and PBF web application. Extensive work was done on the development of a TB-PBF model jointly with the TB unit. Indicators were selected, tariffs were set and a user friendly MS Access-based data entry tool was developed. The latter will be integrated into PBF web platform in January 2011.

The IHSSP has been at the helm of assisting the MoH to organize and conduct central level-District Hospital evaluation. During this quarter, the IHSSP in collaboration with the MoH and other partners conducted a surprise unannounced central level District hospitals evaluation, assessing quantitative and qualitative status of delivery of health services to all District Hospitals and surrounding health centers. This exercise was supported by 12 members of IHSSP team of staff, and supported CAAC in data analysis, and reports will be disseminated to stakeholders.

The project has initiated as well a process for independent PBF counter-verification and system audit. A standard protocol was elaborated and will be used the local NGO, HDP in the next quarter. The independent firm has been sub-contracted to implement this activity.

The work on the costing of packages of health services (to determine the true cost of each type of health activity) continued during this quarter. The IHSSP/Health Financing staff provided technical and financial support to the MoH for this activity. Data entry is in its final stages. The findings can also be used to establish modalities through which health facilities will be reimbursed for rendered services, to decide and the provision of government subsidies, as well as the contributions from insurance agencies and individual patients.

And finally, the Rwandan PBF-experience has been shared with a large international audience during a well attended panel at the first Annual Global Symposium on Health Systems Research, which took place in Montreux, Switzerland in November.

With regards to strengthening **leadership, management and improved human resource productivity**, IHSSP has made commendable achievements not only in support of the MoH/ Human Resources for Health Task Force, but also positioning other cadres of health professional bodies. These include the Rwanda Medical Council, Board of Pharmacist and the wider network of Allied Health Professionals.

For the MoH, the IHSSP/HRH team provided orientation and coaching to the Chair of HRH TWG, a newly recruited staff of the MOH, while continued to assume the secretariat roles. The team provided technical assistance to the MOH/CHD in the technical review and completion of the National Community health strategic Plan. The project financed a one day stakeholder's validation work shop.

In support of Health Professional Bodies, the achievements during the reporting period include technical facilitation of the process as well as financing the verification of nurses and midwives' diplomas from 23 nurses' schools in country. Registration of these nurses and midwives has been completed.

With support of IHSSP, the Continuing Professional Development Policy and its Strategic Plan has been completed, and validated in a one day stakeholder's workshop also financed by the project.

The IHSSP/HRH team supported to finalize the draft law establishing the Rwanda Allied Health Professions Council. The team also helped to define framework and implementation plan for the review of the documents – leading to the establishment of National Council of Pharmacists, and, in addition, the IHSSP/HRH team assisted the MOH to finalize the draft ministerial order determining the list of paramedical professions and their regulations.

During this quarter, the IHSSP/**Quality Improvement** team, in collaboration with the MoH and partners, completed the review and updated the list of policies, procedures and clinical guidelines required at the District Hospital where after a baseline assessment was conducted in the 40 District Hospitals to establish whether these instruments actually exist and are used.

Another important milestone completed by the project during this quarter is the completion of District Hospital accreditation road map.

Effective decentralization of health and social services is an important step to improving access to services. The project support in this area during this quarter was to assist the MOH in elaboration of terms of reference for elaboration of National Strategic Plan for Decentralization of Health Services.

The project is also working with the MoH and MINALOC to recruit one Health M&E Officer in all the 30 Districts who will add value to supporting health and social services decentralization efforts. In this endeavor, the IHSSP/Decentralization team supported the MoH to develop terms of reference for the position which are currently advertized. The Decentralization team has also taken part in District Joint Action Development Framework, a meeting bringing together Districts development programs stakeholders.

2. Project Overview.

The Government of Rwanda (GOR) has shown strong commitment to improving delivery of health services through strengthening its Health System. The National Health Sector Strategic Plan (HSSP-II, 2009-2012) provides a strategic framework and specific reforms that will guide the Ministry of Health and partners in achieving the Government of Rwanda's vision of improving the health status of the population.

In support of these efforts, Integrated Health System Strengthening Project (IHSSP), a 5-year USAID-funded project, managed by Management Sciences for Health (MSH) has the main goal of supporting the Ministry of Health to strengthen health systems at central and decentralized structures. The project is tailor-made to achieve the 5 intermediate results areas:- 1) *Improved utilization of data for decision-making and policy formulation*; 2) *Strengthened health financing mechanisms and financial planning and management for sustainability*; 3) *Strengthened leadership and management and improved human resource productivity*; 4) *Quality improvement for results in access to and quality of services through standardized approach*; and 5) *Effective decentralization of health and social services to improve access*. This program of support has the main objective of strengthening the MoH's capacity to provide high quality, client-oriented health and social services to all Rwandans in a sustainable manner.

3. Summary of progress made during the quarter

1) Result area 1: Improved utilization of data for decision making and policy formulation.

Context and challenges:

At present too many data are collected and reported from health facilities and by the community health workers and too few are used. Access to data is difficult, due to lack of a national data sharing mechanisms and limited web infrastructure. The HMIS subsystems need to be built to be fully operational and data managers at the MOH, Districts and health facilities are either new or being hired. There is a perceived lack of data quality, particularly from the HMIS, calling for improved systematic internal data audit procedures in different structures of data flows.

Key achievements realized during the quarter.

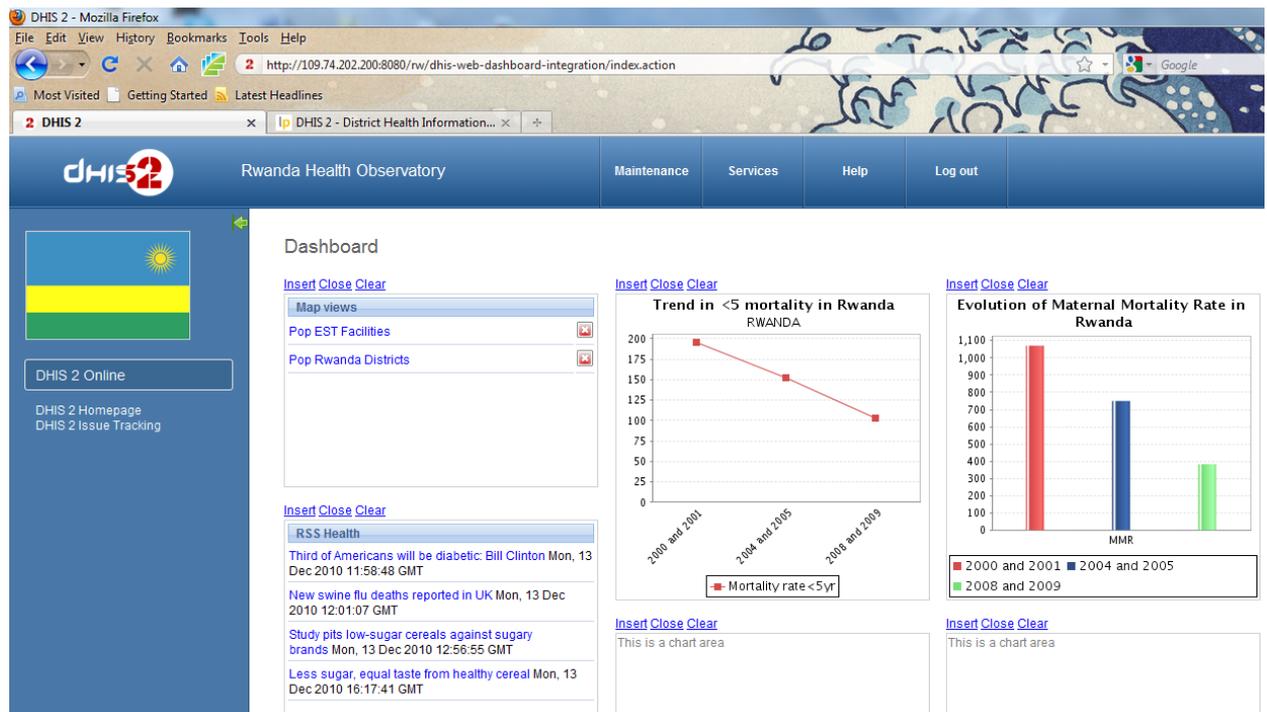
This quarter was characterized by a continuing focus on **orienting the new HMIS team at the MOH as well as building greater capacity for PBF data management within the Community Health Desk, CAAC and TB units**. Key accomplishments during this quarter for the health information systems component included the following:

Design and development of TB PBF data collection and entry: Indicators have been defined, and tariffs set. Data collection forms and an Access-based data entry tool have been developed to capture third quarter data. These will be integrated into PBF web platform in January 2011.

Development of functional specification for CHW supplies logistics management system: IHSSP worked with SPS and CHD to prepare the functional specifications for a system to track

essential drugs and supplies needed by CHWs. This is a medium term measure requested by the Malaria Program and CHD while awaiting the implementation of the LMIS.

Implementation of prototype Data warehouse and Dashboard: The project worked with the HMIS team and WHO Geneva to configure the DHIS-2 web platform and upload data. Demonstrated the system to the Minister of Health in a special meeting he requested. The Minister has requested that the system be functional with key data sets by the end of January 2011. A screen shot of a sample page of the dashboard is shown below.



Completion of analyses for HIS Statistical Yearbook 2009: Worked with the MOH/HMIS team to organize a workshop and complete detailed data analyses to produce the 2009 statistical yearbook. Helped the team prepare the narrative and coordinated the layout of Draft 0. The year book has now been finalized and is being printed.

HR information system: With support of short term local consultant, IHSSP completed a review of iHRIS and got the software operational again. The Project worked with the MOH's eHealth coordinator to prepare a road map for HRIS development. The detailed functional requirements definition will start in January 2011.

Support to President's Malaria Initiative: IHSSP provided access to additional data, supported routine analyses, continued configuration of network with new server. Worked with PNL's M&E technical working group to help define their terms of reference and prepare an action plan.

Support to MOH/CAAC: the HMIS Advisor assisted with the preparation of Quarter 3 PBF payments, and worked closely with CAAC's staff responsible for payment to develop his capacity to be able to prepare the payment vouchers.

Support to MOH/Community Health Desk: Project staff met with CHD team members twice a week in the month of December to begin the first, in a series of continuing capacity building session, on using Community HMIS/SISCommunaire data. During the reporting period, the focus has been on analyzing specific indicator trends using pivot tables and preparing the Community PBF payment vouchers.

PRISM (Performance of Routine Information Systems) assessment: IHSSP staff conducted the pre-testing and implementation of the first round of PRISM data collection. Data were collected in 20 health facilities in 5 randomly selected districts, at least one per province and additional modules were incorporated to assess data collection and information use at the Administrative District and by Community Health worker teams. Data entry will be completed in January followed by a data analysis workshop to develop initial conclusions about the strengths and weaknesses of Rwanda's HMIS. This will help to refine strategies and interventions to enhance the system over the next 2 years. **Support to MOH ICT unit:** Assisted in the selection of a software solution that is being used by the MOH ICT helpdesk to log and monitor requests.

Support for special data analyses: worked with the HMIS team to respond to a wide range of requests for data from the HMIS. This included: data for costing exercises being conducted by IHSSP, CHAI and Lux Development, data requested by the National Institute of Statistics (NISR), and data for the MCH annual report.

2) Result area 2: Strengthened financial systems for the rational use of available health resources

Context and challenges

MOH has made progress in mobilizing resources to finance delivery of health services, and, has been successful in obtaining basket funding for direct financing of funding gaps in its strategic plans. Rwanda is also considered as best practice country in Africa in implementation of Community Based Health Insurance (CBHI) and performance –base financing (PBF) to improve access, quantity and quality of health care services. These financing systems, however, need assistance to reinforce their operational planning, put in place accountability mechanisms and, streamlining financial procedures.

Key achievements realized

CBHI stratification process with members' database data entry: The main activities in the IHSSP support to Community Based Health Insurance were relative to the implementation of the new policy, which calls for stratification of premiums according to income groups.

The main activity in the quarter was the continuation of the stratification data entry. As mentioned in the previous report, the stratification of the population for CBHI has been done with an existing program under the Ministry of local government (Ubudehe program). The activity begun in August, 2010 and the data entry process (planned for duration of 4 months) is still ongoing.

Apart from the elaboration of the Data base, the training of data entry staff, the financial support and the technical support through the technical committee in charge of that activity management, the IHSSP team has been asked to manage all administrative issues of the activity.

A Cooperative Agreement has been signed between IHSSP and MoH. Under the terms of this Agreement, the MOH agreed to disburse about 120,000,000 Rfw to IHSSP for payment of salaries of three hundred (300) temporary contractual staff recruited by IHSSP in collaboration with the Ubudehe technical committee. IHSSP is responsible of the management, supervision and performance of the temporary contractual staff. This included signature of contracts, supervision of their work, process their payments, tax declaration and their performance management.

One of the main challenges for this activity was the request of the MoH to finish the data entry earlier than originally planned. The deadline has been moved to January 2011 instead of March 2011. In order to overcome this challenge, 200 additional staff were hired.

The security of the database, which is crucial to the government, has been confided to IHSSP, until the end of the activity. A data security and sharing protocol for the Ubudehe income stratification database was drafted and proposed to our counterparts (MoH and Minaloc). The details about the protocol in can be found in annex 1.

Remaining challenges are:

- Ensure completeness of data (Some districts sent uncompleted data with missing villages' data)
- Ensure the quality of data in the Data Base
- Ensure validation of Data

The first challenge is being addressed by CDF. As for the quality of the data, IHSSP has a developed a data audit protocol and will conduct the data audit in January, 2011. Two percent of the data entered will be checked to ensure they are accurate.

A data validation committee has been proposed with members from different institutions involved in the initiative: the statistics & National identity commissions, IT people from MoH and Minaloc and 2 technical staff from IHSSP.

Elaboration of the CBHI procedure manual: the IHSSP team, after the assessment conducted to identify gaps in administrative, financial and accounting management as well as in the functionality of organizational structures, had some propositions to improve quality of CBHI

procedures. IHSSP participated in a 2 weeks workshop to elaborate the procedure manual and gave technical and financial support. The next step will be the translation and dissemination of the approved CBHI Procedure Manual.

CBHI database manual: the final version of the manual - which explains in detail how to enter data in the web-based database for each indicator related to CBHI - was finished. Due to the stratification, new indicators had to be added; the website was re-vamped and some corrections were made to the calculation methods used for the graphs available in the analysis menu.

Costing exercise data collection phase: The costing exercise is currently at the phase 2 which is the data collection (data collection + data entry). At health center level, data were collected and discussed through different processes:

- A meeting with experts from health centers and supervisors allowed to identify standards to be considered in the costing tools;
- Data were collected in the selected health centers and entered in Excel

Preliminary results of the health center costing were presented in November to MoH and the USAID in separate meetings. Both presentations were well received and some key points raised were:

- Need to do capacity building in costing at MOH level as a big priority for both USAID and MOH
- Quality of care (as defined by health outcomes, not PBF scores) should be linked with the costing results
- Data validation: HMIS reported data should be verified in the registers.
- Health center actual expenditures on drugs is greatly underestimated because ARVs, FP commodities, vaccines, etc are all funded externally through vertical programs and are not currently accounted for
- Timeline for the continuation of study: district hospital data entry and analysis done by January 2011; data analysis done by February 2011

PBF Presentations at the first Annual Global Symposium on Health Systems Research:

Over 1200 participants from more than 100 countries came together in Montreux (Switzerland) in November 2010 to discuss research on health systems. One well-attended panel session was held to present research on the impact of Performance Based Financing (PBF) in Rwanda. The presentations were made by representatives of the Ministry of Health (MOH) and the USAID-funded Integrated Health Systems Strengthening Project managed by Management Sciences for Health (MSH). They were made on behalf of the MOH under the guidance of the Permanent Secretary.

This session was noted in the final conference plenary by Dr Anne Mills as one of the highlights of the whole conference and she described the evaluation of the Rwanda PBF experience as an

‘excellent example of impact evaluation of a health system intervention, using strong methods. (see Annex 2)

A short article to the World Bank’s Results Based Financing web site on the Montreux PBF presentations was drafted. The World Bank RBF team has agreed to put links to the Montreux PBF Power Point presentations on their web site with the articles.

PBF counter-verification mechanism: PBF is implemented in Rwanda at the national level since 2008 at health center (HC) and hospital level. Productivity of HC-activities is verified and validated by district teams (combination of administrative and hospital staff).

The national PBF model in Rwanda defined different levels of data validity and control including quality and quantity counter verification and a PBF system audit. This should be performed by an independent unit who is auditing different aspects of the PBF-framework:

1. Accuracy of quantity as reported in the central PBF database
2. Verification of existence of phantom patients and of existence of service rendered
3. Client satisfaction
4. Accuracy of quality of HCs as evaluated by district hospital team
5. Audit of the PBF-system and procedures

IHSSP has a subcontract with a local NGO, Health Development and Performance (HDP) and those tasks will be performed under this subcontract. HDP will conduct above described aspects of the PBF framework.

The objective of these exercises is two-fold:

1. Evaluation of the PBF-framework as implemented like designed and
2. Establishing a system of independent audit and data verification with subsequent sanctions when anomalies and fraud is detected in order to enhance credibility of the PBF-model and the reported data.

Three protocols which describe the background and the procedures to follow related to quantity control in the register, existence of clients and their satisfaction of the services were developed and reviewed in this quarter in collaboration with the CAAC and HDP. The system audit and quality control of the PBF-evaluations at health center are described elsewhere but are also effectuated by the same independent entity. A similar exercise has been done in 2008 and 2009 but this focused mainly on the existence of phantom patients.

CAMERWA PBF framework development: IHSSP was invited in October 2010 to design and develop a PBF framework for CAMERWA institution, a not for profit organization established by the GoR in 1998 to manage the acquisition and supply of medicines nation-wide. The first draft describing the design and how the scheme will work has been prepared and presented to the board of CAMERWA. A long series of consultations with CAMERWA and partners involved in the pharmaceutical supply chain took place and through this process the PBF monitoring system

was defined (including indicators and assessment procedures). The PBF model for CAMERWA will provide incentives directly to CAMERWA staff based on their performance. The 3 main objectives of the scheme at CAMERWA are:

1. Increase productivity and facilitate income
2. Improve quality of service and responsiveness to users.
3. Improve motivation and behavior of CAMERWA staff.

Regarding to the performance assessment, performance will be judged at 3 levels:

- Institutional performance which will determine the total budget for the PBF remuneration.
- Departmental (Unit) performance
- Individual performance

At the end of each quarter, each unit prepares a report of their unit's performance; institutional performance is determined against pre-defined indicators.

A performance assessment unit was proposed in order to guarantee the separation of functions being the evaluation of the strategy from the ongoing management role. The assessment board is composed by independent organizations (MoH, district pharmacy forum, Global Fund, SCMS, Deliver Project, SPS, IHSSP). The tasks of the unit are: identify and propose performance indicators for the institution and department, evaluate quarterly (Institution and departments) and elaborate report.

Review of the TB PBF model: Rwanda has made in February 2010 a PBF proposal for HIV and TB to the NSA, which was included in the funding framework of strategic plans. A number of TB PBF indicators (at the community level and at the HC level) were determined in a short time without consultation of IHSSP in order to meet the previously agreed upon budget of roughly \$ 0.2 per capita. A concept paper was developed by the MOH CAAC. After the approval for funding by the Global Fund, the IHSSP-team reviewed the concept note and found the following weaknesses in the scheme's implementation design:

- No clarity on the operational plan of the model: there was a need to define roles and responsibilities, also need to refine the model to facilitate the practical implementation.
- Implementation of this model is not in harmony with the principles already defined in the PBF national model for community and for health facilities and to avoid duplication of M&E activities (22 additional indicators)

IHSSP proposed several significant improvements to the scheme, but in the end, these werenot accepted by the Global Fund, who emphasized the importance of implementing as closely as possible the original concept note despite the fact that by the technical working group recommends a different implementation more in line with the actual way PBF is designed at HC-level. A review will be done mid 2011 and the previous recommendations will be taken into account.

USAID fiduciary risk assessment: USAID/Rwanda worked with a fiduciary risk assessment team that came in Rwanda from November 21 – December 3 to look at various entities in the health system, including the PBF system. The evaluation was one step in the process that will potentially allow USAID to directly fund PBF districts in the future. IHSSP facilitates the process especially in the field visits and by providing requested information for USAID.

PBF District Hospital evaluations: during the last quarter of 2010, unannounced evaluations by central level were planned for all hospitals and supported by 12 members of the IHSSP-team. The data collection tool was further refined and the data were analyzed together with the CAAC. A report has been written up and will be disseminated early 2011 to stakeholders and posted on the MoH-PBF website. (see Annex 1)

Community PBF: IHSSP focused on the following activities during the reporting period.

- MOH instructions were developed for impact evaluations of the 4 intervention arms of Community PBF.
- For the national community PBF-program, 2 TB-indicators were added to the pay-for-performance model. The payment mechanisms were further elaborated and the first payments were effectuated for the months of October and November. On average a cooperative earned 3700 \$ for the health specific activities (set of 7 indicators) while 900\$ was received on average for the report. Reporting rates increased to 97% for the last 2 quarters of 2010.

Capacity building transfer to MoH and IHSSP staff:

1. PBF evaluations require extensive M&E and the Excel data collection tool has been explained in a series of on-the-job training sessions to 2 members of the CAAC. There is still need to further supervise their skills in updating the tool depending on the selection of the indicators for the quarterly evaluations but it is expected that the CAAC will be able to use autonomously this tool by mid 2011.
2. Scientific Writing Skills Workshop on PBF: The workshop took place 20-23 October 2010. Three IHSSP-staff members participated in facilitating the workshop with the MoH/CAAC counterpart staff. The workshop was organized by the Institute for Tropical Medicine in Antwerp and the School of Public Health in Kigali and aimed at bringing together writers and helping them improve their articles. Authors of a journal supplement on the PBF experience of Rwanda and contributors to a book on PBF impact assessments coordinated by the School of Public Health were also invited.

3) Result area 3: Strengthened leadership and management and improved human resource productivity

Context and challenges

The MOH in collaboration with the partners has devised human resources management and development strategies, including the PBF, to ensure staff retention and improve productivity. However, further refinement of procedures for individual staff and MOH department performance planning, assessment, and payment is needed. The massive scale of the CHW program presents significant challenges with respect to CHW capacity building, motivation, retention, QA, and data collection and use. The current HRMIS has laid a good foundation, but it has limited scope for supporting operational needs of district and health facility human resource (HR) managers, and the data are therefore not maintained routinely.

Key achievements realized

During this quarter, the IHSSP main activities to strengthen leadership and management and improving human resource productivity focused on supporting the Health Professional Bodies and the MOH to elaborate the HRH strategic Plan.

The IHSSP provided technical support, and financed the Rwanda Medical Council to complete and validate the **Continuing Professional Development Policy and its Strategic Plan**. The IHSSP staff prepared and facilitated a one day stakeholder's validation workshop, in collaboration with the Councils' leadership.

In support of activities of the Rwanda Nursing and Midwives Council, IHSSP supported and financed the process for **verification of nurses and midwives diplomas** from 23 nursing schools in the country and finalization of nurses and midwives registration.

The Rwanda Association of Pharmacists/ *Association des Pharmaciens du Rwanda* was supported to define framework and implementation plan for the review of existing documents – leading to the establishment of **Council of Pharmacists**. The creation of this council is a high priority for the MOH and the project.

IHSSP staff provided considerable technical assistance to the MOH/CHD in the review and completion of the **National Community health strategic Plan**, and the project financed a one day stakeholders validation work shop.

The Allied Health Professions Association was supported to finalize the draft **law establishing the Rwanda Allied Health Professions Council** and determining its organization, functioning and competence.

The project also facilitated the finalization, by the MOH, of draft ministerial order determining the **list of paramedical professions** and their regulations.

The IHSSP staff provided orientation and coaching to the Chair of HRH TWG and to newly recruited staff of the MOH. IHSSP continued to assume the secretariat role of the group.

4) Result area 4: Quality improvement for results in access to and quality of services through standardized approach

Context and challenges

Quality improvement is central to health systems strengthening. The IHSSP intends to support the efforts of the MOH to implement a national supervision framework at the national, district, health center levels and community levels – to harmonize with the existing PBF mechanism. Other strategies to QI includes accreditation of District Hospitals, establishing a governing structure for quality improvements and, incorporating QI modules into pre-service training for appropriate cadres of health providers.

Key achievements realized.

During this quarter, the preparatory process for accreditation took another step forward. The multi agencies task team, chaired by the MOH and facilitated by IHSSP QI staff, reviewed and updated the **list of policies, procedures and clinical guidelines** required for the District Hospital to ensure improved health service delivery. These instruments were further reviewed during the DH manager's workshop held in Gisenyi, November 2010. The recommendations from this meeting were incorporated, and the final list was approved. These instruments will serve as benchmarks, guiding the accreditation of Districts Hospitals.

Following the approval of standard required operating policies, procedures and guidelines, the baseline assessment of existence of these service delivery instruments was done in 40 DH during November- December, 2010. The QI team decided to conduct physical external baseline assessment - to cross-verify the reliability of findings initially reported by the DHs themselves. (see Annex 4)

In a nutshell, the gaps on existence standard required policies, procedures and guidelines at DHs indicates that 89% of DHs have less than 20% of required policies, procedures and guidelines, and, only 8% (3 DH hospitals) have above 40% of required policies , procedures and guide lines.

Elaboration of the District Hospital's accreditation roadmap: The IHSSP/QI team together with the international consultant, Mr Greg Becker, designed a DH accreditation roadmap that feeds into the strategic framework for DH accreditation. *See annex 3:*

The Four year Plan 2011-2014 for quality Improvement was developed as part of the comprehensive IHSS Project plan, and drafted Terms of reference for both Quality Improvement and Specialized services Technical Working Groups. These are national-level technical working groups bringing together the MOH and multi agencies technical staff from clinical partners.

5) Result area 5: Effective decentralization of health and social services to improve access

Context and Challenges

The MOH is keen to implementing initiatives to strengthen health governance through district health system development to ensure health system decentralization and citizen participation in health policy decisions and service delivery;

The key challenge remains working out operational modalities to strengthen the administrative decentralization structures, engaging partnerships approaches at district level, and improving capacities of decentralized structures.

The IHSS project has plans to improve the capacity of districts, sectors, and CHWs to manage and implement decentralized health service delivery, focus on role clarification, team building, and involvement of civil society organizations (CSOs) and other stakeholders

Key achievements realized.

During this quarter, the project support to decentralization included assisting the MOH in elaboration of terms of reference for elaboration of National Strategic Plan for Decentralization of Health Services.

Preparation for Training/orientation (elaboration of content and tools) on planning, supervision and M&E of health programs for the newly recruited IHSSP decentralization staff has been completed, and, training is expected during the next quarter.

Strengthening sector's institutional capacity: In support to the MoH, the IHSSP/Decentralization team developed the terms of reference, with job description, for the Districts M&E Officer position. The ToR was approved by both the MoH and the MINALOC. The hiring process is in progress and will be completed by end of January 2011.

The IHSSP/Decentralization team took part in a District Joint Action Development Framework, held in Nyarugenge District of Kigali City. The JADF meeting is held quarterly at district level, bringing together all the district's stakeholders in development programmes, including health.

4. Capacity building to the MOH

During this quarter, the IHSSP leadership engaged the technical staff to reinforcing formalized capacity transfer activities to MOH counterparts around the key results areas of the project. Besides the capacity building nature of all the IHSSP program of support, the project elaborated a capacity building plan, outlining specific areas which the technical staff have to transfer skills to MOH counterparts. See Annex 6

5. IHSSP's Technical Contribution to the work of the MOH

Planning for the International Community Health conference: IHSSP technical staff participated in the technical working group for planning of the International Community Health conference. The two IHSSP technical staff prepared Abstracts which will be presented in plenary sessions and as posters.

Development of Community Health Strategic plan: the IHSSP staff were part of technical team that reviewed the CH Strategic plan and its M&E framework.

Data Triangulation: Three of the HSSP staff participated and facilitated in the CDC/TracPlus data triangulation workshop. This is focused on Maternal and Child Health indicators/ data for the first time. HMIS Advisor facilitated the working group on Maternal Mortality, while the Strategic Advisor and M&E Advisor on MCH and Reproductive Health and GBV, respectively. Key indicators were selected for triangulation and roadmap was developed for completing the triangulation process in 2011.

Revising of the IHSSP work plan: The IHSSP completed the elaboration of the 4 year work plan and budget, and the 2010/2011 work plan and budget was approved by USAID. The project also elaborated the core performance indicators, linked to the five intermediate results. These indicators will be used to track and measure progress in the implementation of the project.

6. The main implementation challenges experienced

During the course of implementation of quarterly work plan, the following challenges were experienced:

#	Programmatic Challenge	Solution sought by the project	Additional information.
1.	Pressure and urgency (presented by the MoH and MINALOC) to complete the stratification of community -based health insurance. According to the two counterparts, the data base should be ready by January 2011, but based on the workload (data entry work, ensure reliability/validity of data,) the completion is likely to be in end March 2011	-Hiring additional staff. -Contracting all data entry staff based on their performance. -A data validation committee created, with members from institutions managing national data sets (the National Statistics Institutes, National identity Commission, IT people from MoH and MINALOC, 2 technical staff from IHSSP)	-A data security and sharing protocol for Ubudehe income stratification database was drafted and proposed to Government counterparts (MoH and MINALOC). - The security of database, which is crucial to the government, has been confided to IHSSP, till the end of the activity.
	Delays in clarification of the scope of IHSSP support to decentralization at District level, and delays in recruitment of M&E Officer position at District level.	-The project has elaborated the ToR , including job description for the M&E Officer position at District level. -The project has requested for the support from MSH HQ to avail a consultant to help the MoH elaborate the National Strategic Plan for Decentralization of Health	

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Annex 1: Performance Management Plan: showing indicators, targets and achievements of the IHSSP for fiscal year 2011

<i>Indicators</i>	<i>Target FY11</i>	<i>Achievement <current quarter></i>	<i>Cumulative Achievement FY11</i>	<i>Comments</i>
IR 1.0: Improved utilization of data for decision making and policy formulation				
1. HMIS is fully functional- the MOH produces and publishes quarterly activity reports on national indicators	HMIS is fully functional	<ul style="list-style-type: none"> -Building capacity for PBF data management to the MoH’s Community Health Desk, CAAC and TB units. - Helped the CAAC/MOH to upgrade PBF data collection tools and PBF web application, - Designed and developed TB PBF data collection and entry. These will be integrated into PBF web platform in January 2011 - Responding to the request of the National Malaria Control Programme, IHSSP in collaboration with SPS and CHD prepared the functional specifications for a system to track essential drugs and 	<ul style="list-style-type: none"> - Roll-out of cell phone-based Community Health Information systems (mUbuzima and RapidSMS), including transfer and distribution of 10,000 cell phones to Community Health Workers. - Training of 1,000 including data managers and CHW coordinators in the use of Rapid SMS reporting system - Implemented a web-based application for sharing the Ministry of Health’s health facility database. http://www.pbfrwanda.org.rw/hf/in 	

Indicators	Target FY11	Achievement <current quarter>	Cumulative Achievement FY11	Comments
		<p>supplies needed by CHWs</p> <p>- Assisted with the preparation of Quarter 3 PBF payments, and worked closely with CAAC's staff responsible for payment to develop his capacity to be able to prepare the payment vouchers.</p>	<p>dex.php</p> <p>-Helped the MOH to produce the National Health statistical booklet of 2009</p> <p>-Conducted Training on the data use and analysis for the MoH staff (CTAMS, e-health and HMIS departments)</p>	
2. HMIS Standard operating procedures (SOPs) for community-based, and health facility HMIS completed, validated and disseminated.	HMIS SOP for community based, and health facilities disseminated		Supported the MOH to develop HMIS Guideline for Health Facilities, and community-based interventions, and operationalization of Community HMIS	.
3. CBHI database functioning to track Mutuelle performance:	Completeness of reporting increasing from 75%, current base-line to 85%	Designed the Community Based Health Insurance membership stratification database.		Database scheduled to be complete in next quarter

Indicators	Target FY11	Achievement <current quarter>	Cumulative Achievement FY11	Comments
4. Data use score (baseline value : Source- PRISM)	To set base-line, based on findings from PRISM assessment	Supported the MoH to collect data for PRISM assessment from selected 20 Health Centers, 20 villages CHWs, 5 District Hospitals, and 5 Administrative Districts. This survey will inform the status of data collection and information use at the Districts and by Community Health worker teams	The activity started this quarter	
IR 2.0: Strengthened financial systems for the rational use of available health resources				
5. CBHI Strategic Plan revised and procedure manual developed and disseminated	CBHI Strategic Plan revised	-Helped the MOH to adopt the CBHI stratification, developed data base and, co- financed the training of data entry agents, and managed 300 Data entry Clerks and the data entry supervisors		
6. PBF procedure manual for DHs, HCs, TB and CAMERWA developed and disseminated	PBF procedure manual for TB and CAMERWA developed	- Designed the draft PBF framework for The Rwanda Drug, Consumables and Equipment Central Procurement Agency (CAMERWA),and has been presented to the board and partners	-Lead the process , in collaboration with the MOH, to design the PBF model including supporting the MOH/CAAC to refine indicators; elaboration and piloting the Quality and Quantity performance evaluation of services at Health	

Indicators	Target FY11	Achievement <current quarter>	Cumulative Achievement FY11	Comments
		<p>- Reviewed the Rwanda TB PBF model to respond to comments raised by the Global Fund, and in harmony with principles guiding the National PBF models.</p> <p>-Organized, in collaboration with MOH/CAAC, and conducted a surprise central level District hospitals evaluation, assessing quantitative and qualitative status of delivery of health services to all DH.</p>	<p>Centers and District Hospitals</p> <p>-Supported the MOH/CAAC in the on-going revision of PBF framework to respond to evolving demand of the model, including revising the contracts, PBF user guide and the data base.</p> <p>-Assisted the MOH/CAAC team with the processing of quarterly PBF payments – introducing new payment tariffs for selected districts and redistributing payments for specific indicators across different donors.</p>	
7. PBF system audited annually	2011 annual PBF system audit completed	-Elaborated the protocol and designed methodology to be used by an independent firm in both PBF counter-verification and system audit. The local NGO , HDP, has been sub-contracted to		

Indicators	Target FY11	Achievement <current quarter>	Cumulative Achievement FY11	Comments
		implement this activity		
8. % of Districts who conducted CBHI data audit	No target set for 2011	Implementation will start in next quarters		
9. % of Districts to which Community Client Survey has been Conducted	30% of Districts have Community Client Survey conducted	Implementation will start in next quarters		
10. Health services costing study and analysis conducted and report validated.		-Technically, and financially supported the MOH in the implementation of costing exercise of the packages of health services to determine the true cost of each type of health activity. Implemented the data collection and data entry.		
11. The study on financial barriers to accessing health care conducted and report disseminated	study on financial barriers to accessing health care conducted	The activity will start during the next quarters		
12. Community PBF implementation review conducted and report disseminated	Community PBF implementation review conducted	The activity is planned to be implemented during the next quarters	Conducted training on community PBF to introduce the revised PBF module and tools to the districts. Officials from 377 sectors- with a total of 1,416 participants attended	

Indicators	Target FY11	Achievement <current quarter>	Cumulative Achievement FY11	Comments
			workshops organized in 19 different parts of the country. -Supported the MOH /CAAC to revitalize the reporting on Community health activities in the framework of community PBF. As a result, the completeness of reporting increased from 17% to 75%.	
IR 3.0: Strengthened leadership and management and improved human resource productivity				
13. HRH Strategic Plan and its operational plan completed and approved	HRH Strategic Plan approved	- HRH Strategic Plan completed and validated, awaiting approval by the GoR. -Provided orientation and coaching to the Chair of HRH TWG, a newly recruited staff of the MOH. IHSSP continued to assume the secretariat roles of the group -Provided technical assistance to the	Supported the MOH to design the Human Resources for Health component of Health Systems Strengthening (HSS) Strategic Framework	

Indicators	Target FY11	Achievement <current quarter>	Cumulative Achievement FY11	Comments
		MOH/CHD in the review and completion of the National Community health strategic Plan, and financed a one day stakeholders validation work shop.		
14. Needs Assessment for Nurses and Pharmacists to inform licensing conducted and validated	Needs Assessment for Nurses and Pharmacists to inform licensing conducted.	-Supported and financed the verification of nurses and midwives' diplomas from 23 nurses schools in country, and, finalized registration of nurses and midwives	Held consultative meetings with representatives of councils of Nursing and Midwifery to define norms and standards for licensing	
15. Existence of a functioning structure to coordinate CPD, with approved strategic plan.	CPD Policy and Strategic plan completed, and there exist a functioning structure to coordinate the program.	-Completed and validate the Continuing Professional Development Policy and its Strategic Plan. Prepared and facilitated a one day stakeholders validation workshop	Provided finance for , and facilitated the process of elaboration of Continuing Professional Development (CPD) Policy and strategic plan for Rwanda Medical and Dental Council.	
16. Guideline on the scope of practices for Doctors validated and disseminated	Guideline on the scope of practices for Doctors elaborated	The activity will start during the next quarters		
17. Allied Health Professionals Council has legal	Allied Health Professionals Council	- Supported to finalize the draft law establishing the Rwanda Allied Health		

Indicators	Target FY11	Achievement <current quarter>	Cumulative Achievement FY11	Comments
status	has legal status	<p>Professions Council</p> <p>-Supported to define framework and implementation plan for the review of existing documents – leading to the establishment of Council of Pharmacists</p> <p>-facilitated the finalization, by the MOH, of draft ministerial order determining the list of paramedical professions and their regulations.</p>		
IR 4.0: Quality improvement for results in access to and quality of services through standardized approach				
18. Quality Improvement Policies, Procedures and guidelines developed and disseminated to DHs –	Quality Improvement Policies, Procedures and guidelines developed and disseminated to DHs –	<p>- Completed the review and updated the list of policies, procedures and clinical guidelines required, by standards, of the District Hospital, and, financed a validation meeting.</p> <p>- conducted baseline assessment in 40 DHs to determine existence and, or gap in</p>		

Indicators	Target FY11	Achievement <current quarter>	Cumulative Achievement FY11	Comments
		<p>availability of policies, procedures and clinical guidelines required, by standards, of the District Hospital</p> <p>- Drafted Terms of reference for both Quality Improvement and Specialized services Technical Working Groups. These are national-level technical working groups bringing together the MOH and multi agencies technical staff from clinical partners.</p>		
19. Accreditation standards for DHs created and approved	Accreditation standards for DHs created	With support of the international consultant, Mr Greg Becker, designed a DH accreditation roadmap		
20. The National External Accreditation body created and operational	The National External Accreditation body created	Implementation of this activity is planned in following quarters		
21. Services package for a referral hospital, a teaching hospital, provincial hospitals and private health	Services package for a referral hospital, a teaching hospital, provincial hospitals	These activities are planned to be implemented during the next quarter		Consultant scheduled for next quarter

Indicators	Target FY11	Achievement <current quarter>	Cumulative Achievement FY11	Comments
facilities defined and validated	and private health facilities defined			
22. National Quality improvement councils established	No target is set for 2011	N/A		
IR 5.0: Effective decentralization of health and social services to improve access				
24 Strategic plan on Decentralization of Health Services completed and disseminated	Strategic plan on Decentralization of Health Services completed	-Assisted the MOH in elaboration of terms of reference for elaboration of National Strategic Plan for Decentralization of Health Services. Request has been sent to MSH headquarters for a suitable consultant to help developing the strategy.		
23. Districts functional review on health Services completed and validated	Districts functional review on health Services completed	-Supported the MoH to develop terms of reference, with job description, for the Districts M&E Officer position. The ToR was approved by both the MoH and the MINALOC, and the advert released.	Conducted a needs assessment and scope of technical assistance for the District Health Steering Committee in establishing coordination mechanisms for a new integrated supervision approach.	

Indicators	Target FY11	Achievement <current quarter>	Cumulative Achievement FY11	Comments
26. Assessment on the roles of CSOs to support HSS efforts at district level completed and validated.	Assessment on the roles of CSOs to support HSS efforts at district level completed	This activity is planned to be implemented during the next quarters		

Annex 2: Rwanda RBF Presentations at the first Annual Global Symposium on Health Systems Research.

Over 1200 participants from more than 100 countries came together in Montreux in November 2010 to discuss research on health systems. One well-attended panel session was held to present research on the impact of Performance Based Financing (PBF) in Rwanda. The panel was moderated by Dr Yogesh Rajkotia, a senior health economist with USAID, Rwanda, and the presentations were made by representatives of the Rwandan Ministry of Health (MOH) and the USAID-funded Integrated Health Systems Strengthening Project (IHSSP) managed by Management Sciences for Health. They were made on behalf of the MOH under the guidance of Dr Agnes Binagwaho, Permanent Secretary.

The first presentation, which was made by Dr. Louis Rusa, Director of the Rwandan MOH's PBF unit (Centre d'Appui del l'Approche Contractuel), outlined the implementation of the national PBF program, which started in 2006. The program was developed in response to one of the main challenges to improving services, which was the shortage of health workers and low worker productivity and motivation. PBF is currently in place for health centre and district hospital services and is being expanded to community-based services. The PBF program provides incentives to the facilities to improve and increase key services, and is additional to the funding of the services themselves. A portion of these incentives are then paid to the health workers. A total of 65 service quantity, quality and management indicators are used at the district hospital level and 43 at the health centre level. Other important policy changes that have helped to support the PBF program have been the decentralization of decision-making to the facility level, the implementation of systems to increase accountability, and the increases in the coverage of the Community-Based Health Insurance Program .

The second presenter was Dr. Kathy Kantengwa, MSH's Principal Technical Advisor for PBF, and she described how the program influenced maternal and child national health indicators. Overall, infant, under-5 and maternal mortality rates experienced greater declines since the PBF program started and this is, reportedly, related to increases and improvements in maternal and child services. For example, selected data from three different sources (Demographic and Health Services reports, a World Bank evaluation, and the PBF database) indicate significant increases in numbers of institutional deliveries and family planning services, both of which have been keystones of the PBF program. An apparent decrease in ante-natal services could have been due to improvements in data accuracy or a reduction in the number of pregnancies following increased contraceptive use.

Dr. Cedric Ndizeye, IHSSP's Finance Systems Advisor, then presented on the importance of setting appropriate indicator fee levels to ensure that the incentives achieve the greatest possible impact. With a limited budget for paying incentives it is crucial to set fee levels that use the available funding to maximize health worker motivation to achieve the desired increases and improvements in services (both key services and total services). He noted the importance of taking into account the expected volume of services when determining the fee for each indicator and that, even with low unit fees, cumulative indicators can be responsible for a large part of the funding. Where numbers of services are small and fee levels are modest, quantity indicators will yield little revenue and may not motivate health workers to increase the provision of these services but these services should still carry incentives if they are important.

Finally, Mr. David Collins, MSH's senior advisor on costing, made a presentation on the impact of the PBF on the cost of health centre services. The analysis was carried out for 6 health centres over a period of 3 years using an activity-based costing model called CORE Plus. One of the main findings was that the average cost per service increased over that period. This led to a conclusion that, while PBF is expected to reduce the unit cost per service in the long-term by increasing productivity, the cost may actually increase in the short term when services have previously been underfunded (as salaries rise to appropriate levels, missing equipment and supplies are purchased, and facilities are upgraded)

In summary, the evidence presented indicates that the PBF program has contributed to increased and improved maternal and child services, which, in turn, has contributed to increasing declines in infant, under-5 and maternal mortality rates. An important contributory factor was the way in which the indicators and related financial incentives were set to maximize the impact of a limited budget. Increased expenditure on staffing, supplies, equipment and buildings has also been a factor in improving the quantity and quality of services which were previously underfunded. Some of the lessons learned relate to the importance of regular oversight and the need for management skills; the importance of accurate and timely health information; and the possible need to link incentives more to quality rather than quantity of services and to emphasize preventive services over curative services. Several other elements of this program that can serve as models for others include use of a web-based PBF data system, the investment in local leadership and the development of capacity and support to the health workers.

This session was noted in the final conference plenary by Dr Anne Mills as one of the highlights of the conference and she described the evaluation of the Rwanda PBF experience as an 'excellent example of impact evaluation of a health system intervention, using strong methods.'

Annex 3: Results on DH quarterly evaluation of 2010Q4.

National averages

Hopital de district / Scores 2010Q3	Volet 1 Fonctionnement	Volet 2 Encadrement	Volet 3 Activites cliniques	Score total Evaluation Niv central
Bushenge	89.4%	81.9%	87.0%	86.7%
Butaro	81.5%	54.2%	61.5%	66.0%
Byumba	85.6%	75.8%	85.5%	83.6%
Gahini	57.0%	81.9%	79.2%	73.1%
Gakoma	53.0%	66.7%	54.1%	56.3%
Gihundwe	63.1%	68.5%	70.9%	68.1%
Gisenvi	68.9%	95.8%	59.6%	69.6%
Gitwe	71.5%	83.3%	60.9%	68.6%
Kabava	73.5%	84.7%	64.9%	71.4%
Kabgavi	88.1%	84.7%	62.8%	74.8%
Kabutare	63.8%	93.5%	64.3%	70.0%
Kaduha	64.2%	83.3%	80.4%	76.1%
Kanombe	48.3%	22.2%	28.1%	33.0%
Kibagabaga	60.0%	70.2%	73.2%	68.6%
Kibirizi	50.3%	61.1%	85.6%	70.1%
Kibogora	90.1%	100.0%	98.1%	96.1%
Kibungo	73.5%	95.8%	72.9%	77.7%
Kibuve	74.2%	88.9%	83.4%	81.7%
Kigeme	81.5%	68.1%	86.4%	81.3%
Kirehe	80.8%	100.0%	59.6%	74.1%
Kirinda	64.9%	88.9%	58.7%	66.6%
Kiziguro	88.1%	80.6%	58.2%	71.6%
Mibilizi	54.4%	58.1%	85.5%	70.7%
Mugonero	56.9%	62.9%	61.3%	60.3%
Muhima	62.9%	83.3%	86.1%	78.6%
Muhororo	83.4%	84.7%	79.2%	81.6%
Munini	82.8%	100.0%	78.1%	83.9%
Murunda	76.3%	93.5%	75.9%	79.5%
Nemba	64.2%	72.2%	64.7%	66.1%
Ngarama	69.4%	65.3%	64.9%	66.3%
Nvagatare	84.4%	68.5%	57.2%	67.6%
Nvamata	51.7%	38.9%	93.0%	69.8%
Nvanza	83.4%	68.1%	86.4%	81.9%
Remera Rukoma	16.6%	63.9%	66.0%	50.7%
Ruhengeri	63.8%	34.7%	61.5%	56.8%
Ruli	72.8%	91.7%	78.5%	79.4%
Rutongo	82.8%	91.7%	69.2%	77.7%
Rwamagana	89.4%	87.5%	58.6%	73.6%
Rwinkwavu	82.1%	90.3%	79.0%	82.2%
Shvira	61.6%	87.5%	81.9%	76.9%
National average	70.2%	76.8%	71.6%	72.2%

The overall average measured quality score for the whole country is 72.2% but ranges from 33% for Kanombe MH to 96.1% for Kibogora DH. Kanombe has only been evaluated for the second time and is not yet fully acquainted with the requirements but is slowly incorporating recommendations from the previous evaluation. It is also a hospital which is under full renovation and it is likely that the score will improve significantly for the next evaluation.

Table: National scores for the specific components

Component	Mean	Std. Dev.	Min	Max
TOTAL SCORE	72.2%	10.9%	33.0%	96.1%
Volet 1 Fonctionnement	70.2%	15.1%	16.6%	90.1%
Volet 2 Encadrement	76.8%	18.0%	22.2%	100.0%
Volet 3 Activites cliniques	71.6%	13.6%	28.1%	98.1%
General clinical activities	73.8%	19.1%	24.0%	100.0%
HIV Activities	67.1%	23.2%	0.0%	100.0%
Infrastructure	73.8%	15.9%	32.6%	100.0%

Main observations:

- 1) Supervision of health centers has the largest spread (so most variability between hospitals) but also highest median score. Management and clinical activities have similar scores and similar IQR although the upper scores are close to 100% for clinical activities.
- 2) Compared to the quarter 2 score which is obtained via peer evaluation, the other 2 quarters which have scores for evaluations done by central level; the quarter 2 scores are clearly lower than the peer evaluation indicating that central level is stricter, that unannounced visit is capturing better reality and/or that evaluated indicators were more difficult to achieve. Of notice is that the evaluation of quarter 3 by central level is clearly providing lower scores and larger spread than the similar evaluation of quarter 1 (is this due to introduction of HIV-component to be evaluated or because evaluators become more severe or due to the one outlier skewing the averages downwards?)
- 3) HIV service is a newly introduced component evaluating the follow-up of an HIV cohort. The national average score is fairly high (83.2%) but the outcome of the 2008 cohort was worse than the one of the previous year. Best results are obtained for CTX-provision and for ART-supply. Many hospitals performing poorly on monthly weight taking. Regular CD4-screening is performed rather well but this does not necessarily mean that appropriate action is taken after the results are available or that the results are communicated in time to the patient.

Annex 4: Results on the gaps in existence of standard policies, procedure and guidelines at DHs.

Percentage of Policies, procedures and guidelines found present in district hospitals.

DH	Nyanza	Bushenge	Butaro	Gisenyi	Gitwe	Kabaya	Kabgayi	Kabutare	Kaduha	Kibagabaga
Score in %	46.2	6.9	3.8	7.9	4.7	14.2	1.9	12.9	8.2	6.9
DH	Kibilizi	Kibuye	Kigeme	Kirinda	Mugonero	Munini	Nemba	Ruhengeri	Shyira	R. Rukomo
Score in %	1.9	9.1	31.8	9.4	0.0	3.5	7.5	7.5	1.6	9.4
DH	Gakoma	Gihundwe	Kibogora	Kirehe	Muhororo	Ruli	Byumba	Murunda	Nyamata	Rutongo
Score in %	64.8	0.0	5.3	18.9	68.6	6.9	3.1	42.8	13.5	1.9
DH	KMH	Ngarama	Nyagatare	Kiziguro	Gahini	Rwinkwavu	Kirehe	Kibungo	Rwamagana	
Score in %	2.2	3.1	4.7	4.7	2.5	2.2	3.8	9.1	5.0	

Note : Hospitals of Gakoma, muhima and Kacyiru Police Hospital are not included on the table.

Annex 5: Data security and sharing protocol for Ubudehe income stratification database:

This document covers the measures that will be taken to ensure data security and enable efficient sharing of digital data from the Ubudehe data collection exercise undertaken by MinaLoc and MiniSanté.

The purpose of this data collection exercise was primarily to gather data at the local level:

- To enable the Community-Based Health Insurance program to develop accurate policies for the stratification of Mutuelle payments.
- To assist with the re-demarcation of target populations for health facilities.
- To serve as the initial list of potential members of mutuelles, the starting point for the development of a dynamic mutuelle membership database.
- To assist MINALOC with an updated enumeration of population at the district, sector and village levels.

During the period of data entry, the security of data will be assured by IHSSP (Integrated Health Systems Strengthening Project) staff who have managed the data management process. All data are entered into a password protected MySQL database on a secure file server. During the course of data entry and cleaning, IHSSP will prepare updates on the progress of data entry with MiniSanté and MinaLoc.

Once data entry are complete, IHSSP will hand over the entire database to MiniSanté, who after validation will provide a full copy of the data set to the MOH. This handover will include:

- A complete backup of the MySQL database with each individual record.
- Database documentation, describing the structure of the database and a data dictionary.
- A set of tables and charts summarizing the data set, including population by district, population by income category and other summary analyses requested by the Ministry.
- An aggregated data set containing all of the key variables summarized by village that will be made available for broader sharing.

Individual vs aggregate data: Data about the identity of individual Rwandan citizens will not be available for public access. All requests for individual data must be made through the PS MiniLOC. However, the aggregated data set described above, once approved by MiniLoc and MiniSante, will be made available to the public via the MOH web site.

Once the data are transferred to the MOH and MiniLoc, the IHSSP will destroy its copy of the data set and re-purpose the database server.

Annex 6

IHSSP Capacity Building Plan Situation Analysis

The Integrated Health Systems Strengthening Project (IHSSP) is committed to working with the Rwandan Ministry of Health at all levels to build capacity within the ministry to manage all aspects of the health system, and in turn deliver consistently high quality health services. The project, currently beginning its second year, focuses not only on building MOH staff capacity through mentoring and training, but on developing sustainable tools and systems to support the ministry's work beyond the life of the project. Early in its lifespan, IHSSP is providing intense one-on-one and group mentoring and technical guidance. But as the project matures, IHSSP will phase out technical support and focus on system strengthening to prepare for a smooth program exit.

Health Management Information System (HMIS)		
Status at project launch (11/09)	Current status/activities being implemented	What this means for the Rwandan health system
MOH HMIS team was very small. With funding from CDC/COAG a data quality advisor, a database administrator and a provincial supervisor/capacity building advisor were hired, but were not trained in the GESIS software.	One-on-one and small group on-the job training has begun with HMIS database administrator, new HMIS coordinator, and PBF coordinators from PBF and Community Health unit. Focus is on developing queries in SQL server and MySQL and using Excel pivot tables to create tables and charts.	Transfer of skills and capacity from IHSSP TA to MOH staff in HMIS
CHWs, their supervisors, and <i>Encadreurs de Sante Communautaire</i> needed training in mUbuguzima and cell phone-based reporting	Curriculum developed and 1000 trainers trained across the country in mUbuguzima and RapidSMS	Rwanda health system will have vastly improved capacity to access information and data from the community level and to communicate with CHW personnel via appropriate cell-phone technology
M&E staff within individual health programs tended to work independently with little coordination from the central M&E or HMIS departments. Many had received training in M&E through different initiatives by IHSSP, Measure, and the School of Public Health, but the content of these training programs is not necessarily consistent. Data managers and M&E staff in districts and health centers were in need of capacity building. For example, there was no clear	Curriculum developed, with IHSSP technical assistance, for GESIS training for health center data managers	Improved access to and use of timely, complete and appropriate data for management, policy and epidemiological decision making.

<p>orientation plan with HMIS-related training such as Data Quality Assessment, use of the GESIS software, proper compilation and recording of HMIS data, analysis and use of data for decision-making. This was all left to the districts, some of whom took initiative but not in a coordinated manner.</p>		
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Challenges:

- It is difficult to schedule multi-day capacity building sessions because the small HMIS team has many conflicting priorities. One-on-one mentoring and repeated, brief training sessions may be the answer.
- It is difficult to balance the pressure to respond quickly—especially to data requests—with the need to take the time necessary to build the HMIS team’s capacity to respond independently. This should improve now that the IHSSP HMIS Senior Advisor is based in the ministry again and can take advantage of down-time for unscheduled training.
- Some of the more challenging programming tasks are most efficiently handled by IT professionals. The eHealth Enterprise architecture project of the MOH may be a good model to replicate where there are alliances created between health sector staff and private contractors (GEMBI in South Africa, for example).

Where do you want the MOH HMIS capacity to be in 1-2 years?

- All data managers from district health centers and district hospitals have basic HMIS data management (data collection, analysis, use) skills and are familiar with SOPs facilitated by IHSSP sponsored training.
- As a result of mentoring by the IHSSP HMIS advisor, national level HMIS team is capable of producing quarterly and annual health statistics bulletins independently – from data analysis to basic page formatting.
- As a result of mentoring by the IHSSP HMIS advisor, HMIS team is able to respond in a timely manner to all but the most complex ad-hoc queries.
- As a result of mentoring by the IHSSP HMIS advisor, key databases and systems can be configured and maintained by Rwandan staff and local consultants without external consultant support (PBF, HMIS, SISCom). This implies both simplifying some of the systems and training a core team in their management.
- The centralized ICT helpdesk team is cross trained by IHSSP in each of the HMIS-related applications so that they can provide on-going maintenance and user support.

Health Financing		
Status at project launch (11/09)	Current status/activities being implemented	What this means for the Rwandan health system
The policy document for the CBHI vision and this was not yet started. The development of new laws, CBHI strategic plan and tools to guide the implementation didn't yet exist.	The elaboration and review of CBHI policy, laws and strategic plan was developed through the CBHI extended team and health finance technical working group both in of which IHSSP plays a lead role	CBHI is intended to make health care services accessible to 100% of the population. It is essential that it is implemented in a coherent consistent and sustainable way nationwide
Technical assistance was needed for review of the clinical PBF model for health centers and district hospitals	IHSSP worked with PBF team at the CAAC to integrate portions of the Measure data quality assessment tool into the quarterly performance evaluations conducted in all health centers.	This enables the MOH to monitor the evolution of data quality more effectively down to the individual health center level.
A virtual business plan was needed to support health facilities to achieve their targets.	The clinical PBF framework for the fiscal year July 2009 to June 2010 was reviewed by the PBF unit with support from IHSSP, with forecasting for unit fees to be paid for each indicator and contracts and evaluation tools updated for the health center scheme. The district hospital model was reviewed for the evaluation mechanism with an introduction of external evaluation from the central level to avoid collusion and for more transparency.	PBF enhances the achievement of both quantitative and qualitative objectives in service delivery
CBHI had one premium amount for all members. This was inequitable between rich and poor and did not assure enough revenue to cover the costs of services	IHSSP is leading the effort of several partners (MINALOC, MOH, GTZ, UNICEF, WHO, ILO, SIDA) automate the entire UBUDEHE (on paper) database, which documents levels of income for all Rwandans). Among the many uses of the resultant database will be stratification of insurance premiums by income level.	Rwanda will now have an exhaustive database of all families with income indicators and categorization. The uses of such a database beyond CBHI are many.
The central CBHI and PBF databases were centrally controlled by MSH staff on behalf of the MOH. The MOH monitored them closely, but more training was needed for the ministry to maintain and	ToRs of the CBHI database editorial committee was drafted by IHSSP. TORs for PBF database editorial committee were drafted prior to IHSSP. This helped in transferring the management of the CBHI	The success of PBF and CBHI depends largely on the availability and exploitation of up-to-date data. By the end of IHSSP, the Rwandan MoH will have all the capacity needed to maintain, manage and exploit

use these central databases optimally.	website to MoH from IHSSP. Progressively, CBHI and PBF Database management capacity is being transferred to ministry staff.	these data.
Rwanda is one of a few pioneer countries to scaling up performance based financing schemes nation-wide with success in the CBHI mechanism (91%). Rwanda experiences needed to be well documented and experiences shared with many interested countries.	IHSSP Assisted MoH to present PBF experiences in a regional conference held in Bujumbura and in the first global symposium on health systems research done in Switzerland.	PBF enhances the achievement of both quantitative and qualitative objectives in service delivery
The community PBF model was still nascent and required stronger coordination at the ministry level.	IHSSP helped develop a procedures manual for PBF, 4 models were introduced at decentralized level, database for community indicators developed with the capacity development of data entry for district actors.	PBF enhances the achievement of both quantitative and qualitative objectives in service delivery
Little was known concerning the true and standard costs of health and medical services in Rwanda.	A costing exercise was conducted for the Packages of Health Services to determine the true cost of each type of health activity included in the minimum package of activities and in the complementary package of activities (CPA). The costing exercise will need to be on-going over the years. IHSSP will assure the transfer of costing capacity to an appropriate MOH unit.	Real and standard costs of services will inform policies and setting of both reimbursement levels for services by insurance as well as determining appropriate premiums..... among many other uses of cost data

Challenges:

1. Delay in the roll out of community PBF due to the MOH proposition to introduce in kind incentives for people who use long term family planning, which is not in compliance with TIAHRT.
2. Many tasks for the MOH team with sometimes less focus in some implemented activities.
3. Delay in the validation of the CBHI policy

Where do you want the MOH health financing capacity to be in 1-2 years?

1. The cost modeling includes several important features which will be useful for the MOH and the DRG costing can be an important entrée to many different aspects of the health financing framework in Rwanda. IHSSP will develop a possible strategic use of the costing work and capacity development at MOH.
2. CBHI strategic plan and procedures manual for the CBHI policy implementation developed and disseminated.
3. Procedures manual for PBF developed and disseminated.
4. Additional PBF mechanisms for the health system developed with TA from IHSSP.
5. Data audit continues to reinforce the M&E mechanism with PBF and CBHI – Rwandan capacity to do this assured.
6. The CBHI and PBF platforms will be well supported and well functioning and independent of partner technical support.
7. Community PBF with the system audit rolled out and executed without external assistance.

Human Resources for Health		
Status at project launch (11/09)	Current status/activities being implemented	What this means for the capacity of the Rwandan health system
The Human Resources Information System (HRIS) was not functional	A new HRIS was recommended for year 2 and the Workload Indicator of Staffing Need methodology was established to determine staffing requirements based on facility workloads.	This HRIS will permit the MOH HR department to track informational needs (ex. Movement of personnel, CPD, in-service training, payroll, performance evaluations, etc)
The MoH at central level had no staff dedicated to HR functions to provide leadership and guidance in HR in the MOH. This leadership vacuum made it difficult to advance some HRH strategic areas and ensure the ownership of project interventions by the MOH counterparts.	The MOH's newly hired HR and Institutional Development expert, and an HR team with clear roles and expectations will be trained by a medium to long term HRH Advisor from IHSSP embedded in the MOH HR department	Rwandan MOH will have the tools and ability to assure the availability, qualifications, continuous improvement and development of its human resources
There was no system to fulfill basic HR functions and processes like HRM policies, procedures, performance appraisal, and career development.	IHSSP has been a principal member in the HRH TW Subgroup platform, which has developed and implemented a roadmap for HRH strengthening. The group will also create an HRH strategic plan. IHSSP also contributed strongly to The Health System Strengthening Framework/Consolidated Strategic Plan with its HRH building block was developed and officially validated	The HR function for the MOH will be reinforced and will be able to assure the availability, qualifications, continuous improvement and development of its human resources

Only the Rwanda Medical Council and Nursing and Midwifery Council had legal status. Others professional regulatory bodies including the pharmacists and allied health professionals were not registered.	A registration system has begun for the nursing and midwifery department. This year, IHSSP will train staff of the different professional councils to create a professional licensure and regulation program as well as CPD programs for on-going professional development.	Professional Licensure and regulation will assure qualified practitioners are providing health services.
There was no continuous education program for health care workers.	The Rwanda Medical Council's policy and strategy on continuing professional development programs for medical doctors was developed and adopted.	CPD programs by profession will assure that practitioners are up-to-date with the state of their science.

Challenges:

- Lack of competent and strong HR staff in the MOH to lead the coordination and implementation of HRH interventions
- Insufficient institutional capacity and limited financial and human resources for professional councils

In two years, what will the project have contributed to the MOH's HRH capacity?

- HR capacity development plan with technical and financial assistance of IHSSP
- The HRH TW subgroup, of which IHSSP is a principal member, will be fully functional and accompanying the MOH in the coordination and implementation of all HRH initiatives countrywide
- The HRH strategic plan is being implemented, monitored, and reviewed by the MOH on a regular basis
- An HRM system is in place that includes HR policies, procedures, and tools to provide guidance on staff recruitment, deployment, supervision and performance review, staff development, and guidance on career paths.
- A HRIS is in place and fully functional at central and district levels. IHSSP will have assured the transfer of skills and capacity to the MOH staff to maintain and update the HRIS and conduct analyses using the database that will inform MOH HR decisions
- As a result of training and TA of IHSSP, the medical, nursing and midwifery professions are regulated by strong professional bodies with the capacity to run registration and licensing with standards and scope of practice for their members
- Continuing professional development programs for health professionals, which were developed with IHSSP TA, are being implemented and monitored by trained staff of the different professional councils
- E-learning programs, developed with support from IHSSP, are available for health professionals' continuing development

Quality Improvement		
Status at project launch (11/09)	Current status/activities being implemented	What this means for the Rwandan health system
The MOH did not have a process for continuous quality improvement through an accreditation program.	In consultation with the MOH and a team of district hospital medical directors, IHSSP indentified the priority areas for clinical and organizational management and the required policies, procedures, and guidelines for accreditation in each service area. A District Hospital Accreditation Framework has been drafted by IHSSP and the MOH.	A systematic program for assuring that hospitals are providing care according to minimum quality standards and a culture of on-going quality improvement in hospitals is created
District hospital supervision tools were not available	An integrated district hospital supervision tool was developed and tested with assistance of IHSSP for use by the central level	Supervision is also an essential way of assuring and improving technical quality of service delivery
The MOH did not have a service delivery strategy as part of their system strengthening framework	A service delivery strategy has been developed by IHSSP in close collaboration with the MOH, as part of the overall health system strengthening framework	Defines which service are offered where and by whom

Challenges:

- Although quality assurance is considered crucial, there is no dedicated section of the MOH to ensure successful implementation of the program. However, IHSSP will work closely with the individual counterpart so that capacity is built through implementation of the program.
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In two years, what will the project have contributed to the MOH's Quality Improvement capacity?

- We expect the 40 district hospitals to have the ability to implement accreditation programs. The technical advisory committee should be able to review and update the district hospital policies, procedures and guidelines. Trained surveyors will monitor and assess the accreditation progress.
- We will have established accreditation standards and built the capacity of the body that will oversee the accreditation program.

Decentralization and Governance		
Status at project launch (11/09)	Current status/activities being implemented	What this means for the Rwandan health system
There was no strategic plan for health sector decentralization	A Health System Strengthening framework for Leadership and Governance has been developed	

Challenges:

IHSP had no donor approval of the intervention area even though the staff was already in place.

In two years, what will the project have contributed to the MOH Decentralization and Governance?

- In one year each district will have a team of trainers on health data management, planning , M&E ,and data use for health interventions in IMIHIGO process at district level as a result of IHSSP support
- In two years, the health steering committee at the sector level will be able to perform health data management and use for decision making as a result of IHSSP support.
- Improved data management capacity at all levels, including communities as a result of IHSSP support
- Strengthened capacity of local CSOs and individual community members to influence health sector priorities and services through their ability to participate in sector planning – achieved with IHSSP support
- Strengthened collaboration among MINALOC/NDIS and MOH to support local government in decentralization by (IHSSP) organizing and carrying out capacity building activities and services for members

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