

REPUBLIC OF RWANDA



A Healthy People. A Wealthy Nation



ANNUAL REPORT

JULY 2011 – JUNE 2012

ACKNOWLEDGEMENT

The Rwanda Biomedical Center (RBC) annual narrative report was developed to highlight its major achievements one year after its establishment. The report spells achievements obtained and progress made in terms of institutional building, improvement of quality, access and equity; financial stability, research and capacity building. More so, the report highlights key challenges encountered but also shows key strategic directions for the future.

Rwanda Biomedical Center would like to acknowledge the Ministry of Health and RBC partners who actively assisted in the implementation of the activities that made up this report. Our recognition also goes to all RBC stakeholders, Heads of Divisions, planning core team members and all staff for their imperative role in accomplishing their tasks and providing information for this report. We owe special thanks to the RBC Board of Directors for its indispensable guidance and commitment to the RBC cause.

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Acting Director General of RBC

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ACRONYMS

ARV	:	Antiretroviral
ART	:	Antiretroviral Therapy
BSS	:	Behavioral Surveillance Survey
CDC	:	Centers for Disease Control and Prevention
COHSASA	:	Council for Health Service Accreditation of Southern Africa
GIZ	:	Deutsche Gesellschaft für Internationale Zusammenarbeit
EIDSR	:	Electronic integrated Diseases Surveillance and Response
EID	:	Epidemic and Infectious Disease
FELTP	:	Field Epidemiology Laboratory Training Program
FY	:	Fiscal Year
GSMM	:	General Senior Management meeting
HQ-I	:	HEALTHQUAL-International
HPV	:	Human Papilloma Virus
HR	:	Human Resources
ISM	:	Impact Social Mitigation Unit
ICT	:	Information, Communication and Technology
IHDPC	:	Institute of HIV and Disease Prevention and Control
IPPIS	:	Integrated Personnel and Payroll Information System
IAU	:	Internal Auditing Unit
ICAP	:	International Center for AIDS Care and Treatment Programs
EQA	:	International External Quality Assurance
KFH	:	King Faysal Hospital
MOPDD	:	Malaria and Other Parasitic Diseases Division
MMC	:	Medical Maintenance Center
MPDD	:	Medical Procurement and Distribution Division
MPPD	:	Medical Production and Procurement Department
MPD	:	Medical Production Division
MRC	:	Medical Research Center
MH	:	Mental Health
MINECOFIN	:	Ministry of Finance and Economic Planning
MOH	:	Ministry of Health

MIFOTRA	:	Ministry of Public Service and Labour
MDR	:	<i>Multi-Drug Resistant</i>
NCBT	:	National Center for Blood Transfusion
PT	:	National External Quality Control
NHLS	:	National Health Laboratory Service
NRL	:	National Reference Lab
NUR	:	National University of Rwanda
NCD	:	Non Communicable Diseases
OPD	:	Outpatient Department
PBF	:	Performance-Based Financing
PEPFAR	:	President’s Emergency Plan for AIDS Relief
PMTCT	:	Prevention of Mother-to-Child Transmission of HIV
PSCBS	:	Public Sector Capacity-Building Secretariat
PSC	:	Public Service Commission
QA	:	Quality Assurance
QC	:	Quality Control
QI	:	Quality Improvement
RBC	:	Rwanda Biomedical Center
RHCC	:	Rwanda Health Communication Center
RHA	:	Rwanda Housing Authority
RMH	:	Rwanda Military Hospital
RPPA	:	Rwanda Public Procurement Authority
SPH	:	School of Public Health
SPIU	:	Single Project Implementation Unit
SSF	:	Single Stream Funding
SMT	:	Stock Management Tool
GFATM	:	The Global Fund to Fight AIDS, TB and Malaria
TTI	:	Transfusion Transmission Infections
TB	:	Tuberculosis
UVRI	:	Uganda Virus Research Institute
VPPD	:	Vaccines Preventable Diseases Division
VCT	:	Voluntary Counseling and Testing
WHO	:	World Health Organization

EXECUTIVE SUMMARY

This report provides an evaluation of the RBC achievements during its first year of existence. The FY 2011-2012 saw RBC transform its structure into real operational departments, divisions, units and desks, following the successful merging of fourteen Institutions and several programs that were previously under the Ministry of Health. The strategic Direction has been set, detailing Institution's overarching goals, vision and mission. Human resources was established and recruited 355 existing staff under merged entities, in addition to 290 new recruits. The administration has ensured that RBC is centrally located and operating in a main office as of May 2012. This report describes the organization of RBC's financial management including cash management, financial controls, investment decisions and revenue. For medical and non medical procurement, it is observed that 64 and 69 tenders were issued, (medical and non-medical, respectively), at the time of this report.

This report also highlights programmatic achievements during FY 2011-2012. RBC's mandate is to improve health outcomes of Rwandans by improving quality of services, access and equity, providing integrated services, promoting research activities and ensuring financial stability and sustainability. In accordance with the above goals, activities allied to capacity building of health care providers and other health professionals, mentorship, supervision and quality improvement, quality assurance and improvement, quality audits, disease surveillance and response as well as outbreak management were conducted resulting in visible results. More than 2,148 estimated outbreak cases have been managed at zero deaths. New LLINs were distributed to 202,226 households, 95% of children under five with fever received ACTs within 24 hours of the onset of the fever. 99% of confirmed uncomplicated malaria cases were treated with ACTs at the community level. This report highlights results in other diseases prevention and control. Of those eligible, 108,207 HIV positive individuals receive antiretroviral therapy. - 95% of HIV positive pregnant women received antiretroviral therapy to reduce the risk of mother-to-child transmission. 88% of MDR-TB patients are successfully treated according WHO guidelines, and with the same percent of new sputum smear positive TB cases were treated successfully. HPV vaccination coverage rate nation-wide has reached 98.8%. A number of campaigns and other health promotion activities also were initiated and executed during FY 2011-2012, including HPV vaccination, rotavirus vaccination, World AIDS Day, a deworming campaign, and World Cancer Day. More than 20 researches have been initiated together with research conferences and peer-reviewed publications including a pediatric conference and others.

Recommendations discussed in this report include improving visibility into the supply chain mechanism, construction of further new buildings and warehouses, maintaining international

accreditation status and ensuring re-accreditation, establishing superior data management and training in research methods, informed by the RBC strategic plan and staff retention strategy.

1. RBC development and integration process

1.1. Background

The Rwanda Biomedical Centre (RBC) was established by law on 25th January 2011. It initiated the merger of fourteen Rwandan health related agencies to eliminate duplication of work, increase output and improve efficiency of delivery of services. The merged agencies are:

- National Commission against AIDS (CNLS);
- Center for Treatment and Research on AIDS, Malaria, Tuberculosis and other epidemics (TRAC Plus);
- National Medical Referral Laboratory (NRL);
- National Centre for Blood Transfusion (CNTS);
- National University of Rwanda School of Public Health (NUR/SPH), Faculty of Medicine of the National University of Rwanda; Kigali Health Institute (KHI)¹;
- Procurement agency for medical equipment, drugs and supplies (CAMERWA);
- Pharmaceutical Laboratory of Rwanda (LABOPHAR);
- Central workshop and maintenance (ACM);
- Rwanda Health Communication Center (RHCC);
- Expanded Program of Immunization (EPI);
- Psychosocial consultation services (SCPS);
- King Faisal Hospital (KFH)

Other programs formerly under the Ministry of Health were merged, including Mental Health programs and Non-Communicable Diseases.

The law establishing RBC defines its functions as²:

1. To coordinate and improve research activities in the field of disease prevention, education and provision of treatment to people at all levels;
2. To enable Rwanda to participate in the vital regional and global health activities, that it is beneficial to all people living in Rwanda;
3. To act as a biomedical center in the region;
4. To coordinate various biomedical and research activities with a view to generating income in health activities;

¹ Not merged

² Official Gazette n° special of 05/01/2011

5. To provide Rwanda with a vision and coordinate joint activities of various organs in the fight against HIV/AIDS and other diseases;
6. To coordinate activities geared towards treatment, control and management of consequences of HIV and AIDS and other contagious and non contagious diseases;
7. To put at the disposal of all people living in Rwanda drugs and medical equipments;
8. To provide highly classified medical expertise;

To establish relationships and collaborate with other regional and international institutions with similar missions. Most of the RBC Senior managers were appointed in July 2011 and Board of Directors in November 2011 started the process of institution and integration process together with establishing new mission, vision and guiding goals

1.2. RBC Vision, Mission and guiding values

During FY 2011 - 12, the RBC drafted its overarching goals, vision and mission for the future governance of RBC operations and programs. The formal vision and mandate of the newly merged Rwanda Biomedical Center, as per these discussions, is **to become a Center of Excellence ensuring quality health service for the prosperity of the country**. The formal mission statement of RBC is **to promote quality affordable and sustainable health care services to the population through innovative and evidence based interventions and practices guided by ethics and professionalism**.

RBC guiding values, as agreed up on in FY 2011 - 2012 include:

- **Client-centered:** our mission and vision is driven by a desire to provide comprehensive quality **services to meet our client expectations**
- **Quality and Excellence:** Assure continuous quality improvement in all aspects of our mission; commit to excellence in all we do
- **Service:** Provide excellent service to patients, students, staff, and all others who use, work in, or visit our facilities; recognize and value the contributions and potential of the entire RBC community
- **Synergy:** Collaborate in a way that enhances the health of our people and nation
- **Integrity:** Maintain the highest standards of ethical and professional conduct
- **Compassion:** Recognize an individual's basic rights to respect, privacy, dignity, understanding, and spiritual guidance
- **Accountability:** Manage all resources in a fiscally responsible and prudent manner

During its tenure, RBC aims to:

- **Improve quality**
 - Implement CQI, QA/QC projects across all services
 - Sustain availability of quality and affordable pharmaceuticals and blood products
 - Sustain quality health infrastructures and med equipments
- **Improve access and equity**
 - Improve access to health services in areas in need and based on specific needs
 - Provide sub-specialized health care
- **Improve customer service**
 - Provide integrated services
 - Management of clients complaints
- **Excel at research, education and capacity-building**
 - Mainstream research culture in health care delivery and generate resources
- **Achieve financial stability and sustainability**
 - Additional revenue due to expanded program and new sources
 - Cost reduction through services integration
- **Enable Rwanda to make a regional and global health impact**

The consolidation of the administrative and supporting functions has been successful, and is playing a key role in underpinning the merger as described below:

1.3. RBC Human Resources Management and Capacity-Building.

The Human Resource (HR) management functions, previously located in all the divisions under Rwanda Biomedical Center (RBC) have merged and are now being run under one, single unit. For smooth running of the transition, Human Resource Managers were assigned as focal points in different divisions and now coordinate through weekly meetings under Corporate Services. Their functions consist mainly of training and capacity building, carrier development and Personnel Management duties.

The critical task during fiscal year 2011/2012 was to fill all the positions that were approved, recruit and hire suitable candidates for all the vacant positions under the RBC structure and also under RBC donor funded projects. Overall, out of 1,066 staff planned within the entity, 355 existing staff under merged entities were positioned. This process was done in a transparent way through a selection committee set up by the Honorable Minister of Health and the RBC leadership. The new organizational structure was sent to the Public Service Commission for

approval, and recruitment for vacancies is addressed on a rolling basis. The recruitment of both civil servants and contractual staff is done in consideration of Public Service Commission (PSC) and the Ministry of Public Service and Labour (MIFOTRA) guidelines. 290 staff were recruited at the time of this report, with 40 positions open for current recruitment.

An electronic system has been put in place to monitor staff attendance on a daily basis through an electronic finger print identification which is registered in RBC/ IT servers. With the support from the Government of Rwanda, the Index Value raised from 250 to 400 to be applied with the new financial year 2012-2013, thus strengthening the retention capacity in RBC. For a more efficient and centralized system and in collaboration with MIFOTRA, an Integrated Personnel and Payroll Information System (IPPIS) was installed. By September 30, 2012 all personnel data will be centrally managed in this platform.

The HR unit, in collaboration with the Planning Division and the Strategic Partner Implementation Unit (SPIU) is assessing the mechanism by which RBC can have a sustainable system of Performance-Based Financing (PBF), which will in turn maximize funds from development partners and internally-generated resources. Through the Single-Stream Funding (SSF) HIV and TB reprogramming, RBC has managed to solicit for PBF at the current level of staffing and funding proposals are in review under the SPIU at the time of this report.

The staff capacity development was robust in RBC programs on different levels and fields throughout Fiscal Year (FY) 2011 - 2012. Thirteen out of fifteen resident students currently enrolled in Masters Programs in Field Epidemiology Laboratory Training Program (FELTP) are RBC employees. Seven employees are enrolled in different universities on Masters Programs, with financial support from RBC. The RBC/National Reference Laboratory (NRL), with support from the World Bank Project, has started the processes of sponsoring 2 PhD students and 5 masters' students. RBC/Mental Health assisted some staff with enrollment in specialization programs. At the time of this report, eight staff are pursuing specialization in mental health with RBC support. RBC submitted a capacity building plan to the Ministry of Finance and Economic Planning (MINECOFIN) through the Public Sector Capacity Building Secretariat (PSCBS) for FY 2012 – 2013. 10 staff from RBC/MPD were trained in Environmental and Biochemical Analysis, in partnership with The Kigali Institute of Science and Technology (KIST). Further, 11 staff of RBC/MPD were, at the time of this report, engaged in an education level upgrade from A3 to A2.

RBC provides clinical placement for medical, nurses and medical allied sciences students. RBC/King Faysal Hospital (RBC/KFH) provides 388 clinical placements for one year in medical and allied sciences programs and 391 clinical placements for 3 years in nursing programs.

RBC/KFH staff provided teachings include 12 clinical staff in medical and allied sciences and 4 clinical staff in nursing.

RBC/IHDPC, in partnership and collaboration with NUR/SPH (National University of Rwanda/ School of Public Health) is hosting a professional intern for two years to increase practical knowledge and skills for management of health programs.

1.4. Administration and Logistics Management

With the successful completion of the RBC merger, the administration functions, including management of logistics, management of buildings and estates, and functioning of the central secretariat are combined within one unit to maximize efficiency and reduce duplications.

Among several accomplishments in its first year, RBC appointed administrative focal persons in the divisions to facilitate logistics coordination, and employed the use of 90 vehicles to assist with the facilitation of programmatic activities. As per the Government of Rwanda zero fleet policy, outside vehicles were hired to support program implementation for outreach and supervision activities at the peripheral level.

Currently RBC manages office supplies and consumables through a bin card system, but this system will be automated in the near future.

With the support from Rwanda Housing Authority (RHA), RBC is centrally located in a main office as of May 2012. The rent budget for headquarters was allotted to RHA as per the government regulations in force. Currently all RBC entities operate in headquarters, excepting MPDD, KFH, NRL, NCBT, MMC, RHCC, MRC and MPD due to their working space and equipments requirements . The following services/divisions are operating from the Head Quarter building:- Office of the Director General, Office of the Deputy Director General and head of IHDPC, Planning, M&E Division, Internal Audit Unit, Epidemiology and Infectious Diseases Division, Mental Health Division, Non-Communicable Diseases Division, Vaccine Preventable Diseases Division, Malaria and Other Parasitic Diseases Division, TB and Other Respiratory Diseases Division, HIV, STI and Other Blood borne Diseases Division, Impact Mitigation Unit and the Corporate Services Division.

RBC will continue to be housed in the temporary location until the permanent headquarters site, located opposite King Faisal Hospital in Kacyiru, is prepared. Strategic plans for the construction of the new headquarters, including architectural drawings and sophisticated

concept designs were created near completion of the fiscal year, and residents have been compensated accordingly and vacated the land in preparation for construction.

Acquisitions of assets, when required, were facilitated through a tendering process managed by the Procurement Unit. Old and irrelevant assets are being disposed of in accordance with the provisions of the law. In conjunction with this process, a new and comprehensive fixed assets register is being compiled to accommodate the total provision of the new RBC umbrella.

1.5. Financial Management

Financial Management at RBC was organized to respond to a number of objectives of organizing, directing and controlling the financial activities. This includes but is not limited to: budget preparation, cash management required for payment of wages and salaries, payment of electricity and water bills, payment to RBC creditors/suppliers and meeting current liabilities. The RBC finance management structure is built to handle financial controls including procurement, utilization of funds and exercising control over finances, investment decisions and revenue generation. As a result of the successful merger, RBC now houses one schedule in reporting, minimum standards of supporting document, and a single stream of spending processes, thus decreasing duplications and inefficiencies in the financial management system.

The RBC finance unit, currently operating with 31 staff, includes 10 accountants under the formal RBC umbrella, and 18 current operating under different projects. Development Partner funds are managed by staff on their prospective budgets. Strategy development for facing key financial challenges is integrated into the operational capacity of the new financial management structure.

RBC budgeting operates in tandem with the government budget control office and issues parallel reports on grants and income generated on various activities rendered to different clients. The 2011/2012 RBC budget was prepared and adopted at the same time as the government budget. The preparation and revision of the provisional budget merged all RBC entities, encompassing activity plans and itemization of needed inputs to achieve objectives. In the future, following delineating of concurrent budgeting processes in each division, individual budgeting entities will complete requisition forms specifying the activity implementation and cost, verified by a budget officer, approved by the Head of the Beneficiary Division and finally authorized by the Chief Budget Manager. Every month a report of budget execution is prepared and submitted as part of financial report.

Public Financial Management under RBC is executed following international standards and according to the Public Financial Manual set by MINECOFIN in accordance with the Rwandan Organic Budget Law. After the services/goods are offered, suppliers submit invoices for payment, which are registered and then authorized by the Director of Finance who submits them for payment. The payment is made after requisition to pay is approved by the budget officer after confirming that the expense to be made is budgeted for and funds are available.

After payment preparation and approval from the budget officer, payment is submitted to the Financial Controller for verification and then submitted to the Director of Finance for further verification then submitted to the Head of Corporate Services for approval and signature together with the Head of Division where the payment relates.

SAGE PASTEL software, international standard software recommended by MINECOFIN, is used to record expenses and produce financial statements. Consolidated financial reports are produced and verified by the chief accountant, then checked by Finance Director and approved by the chief budget manager and before monthly submission to MINECOFIN.

Under the new merger, several innovative ideas were implemented to improve management of finances. Included in these improvements was the use of common software linked to a server in order to reduce errors in financial transactions and to quicken the reporting process. Additionally, Separate software was employed to record all payments and avoid inclusion of fraudulent cheques. New fiscal management software, adopted in March of 2012, will help manage project funds and ordinary budget by components and support the follow-up and monitoring of budget implementation. Software test management will continue for the new platform throughout the next fiscal year.

As of January 2012, the budgeting exercise was run collaboratively, involving all RBC implementing units in strategic execution of prioritization and development of action plans and budgets. RBC consolidated financial reporting was submitted to MINECOFIN and executed 97% of the ordinary budget for the budget year 2011/2012. A general improvement of the budget execution for project budgets that were ending 30/06/2012 compared to previous period.

1.6. Auditing

RBC, as a public institution, is entitled to efficiently manage all the funds and other acquisitions, both from the Government of Rwanda and from external sources. One of the mechanisms put in place to forward this agenda includes the set up of the Internal Auditing Unit (IAU).

The Internal Auditing Unit is an independent, objective assurance and consulting unit designed to add value and improve the entity's operations overall. Established in October 2011, the unit is composed of 5 staff and is mandated to provide independent, objective and systematic evaluation and improvement of risk management, control and governance processes semi-annual and quarterly audits. The unit reports directly to the Board of Directors.

Among its achievements, a number of audit assignments were conducted during FY 2012 – 2013, and by the end of June 2012, five internal audit reports were signed and issued to senior RBC management for implementation of audit recommendations therein. The majority of the audits carried out during the year included not-for-profit organizations merged into the RBC merger, encompassing high risk due to the lack of an internal audit function in place to independently and objectively check internal transactions. Further, given that the RBC was established in the middle of FY 2010-2011, it was deemed necessary to audit the whole fiscal year 2010-2011 to ensure that the balances consolidated by RBC on 1st July 2011 were correctly stated.

In compliance with the requirements of Ministerial Order N°002/09/10/GP/A of 12/02/2009, the internal controls were assessed and an overall financial audit was carried out to determine the overall adequacy and effectiveness of the internal control system.

External audits on project funds are also conducted. We hosted external auditors for SSF funds and the Centers for Disease Control and Prevention (CDC) funds and financial statements prompted few managerial reforms during FY 2012 – 2013.

1.7. Procuring and Tendering of Medical and Non-Medical Acquisitions

1.7.1. Medical Procurement

In an effort to sustain the availability of pharmaceutical products, RBC/MPDD has developed and implemented a Medical Products Procurement Plan for the FY 2011-2012. During this period, 31 tenders for essential medicines, bed nets and nutrition supplements, 30 tenders for laboratory reagents and consumables, and 3 tenders for HIV products were conducted, concluding in a total spend of approximately 26bn RWF as detailed in the table in the annex 2.

1.7.2. Non-Medical Procurement

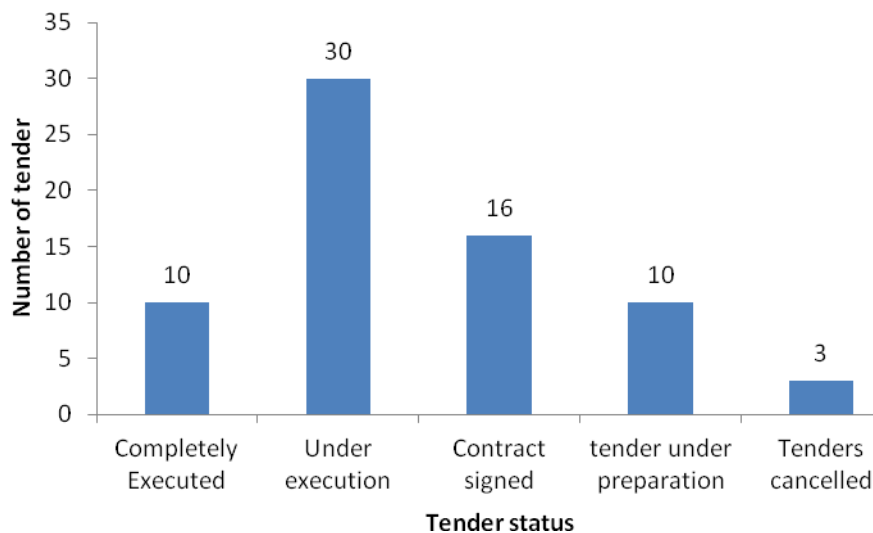
The merger of the procurement functions in RBC became active in October 2011 after the appointment of procurement staff was formalized. Of the existing staff, one of the officers was

appointed to be a focal person of RBC/KFH and the remaining three were positioned at RBC headquarters. Three more staff came on board to reinforce the procurement unit of RBC.

At inception, RBC merged procurement plans of the former institutions and consolidated them into one comprehensive procurement plan for RBC which was submitted to the Rwanda Public Procurement Authority (RPPA). The internal tender committee was established, mechanisms of ensuring timely submission of monthly procurement reports to RPPA was instituted, and weekly and monthly progress reports were submitted to higher level for formal review.

Eighty four tenders were brought under the consolidated procurement plan, 69 of which were handled (83.3%). Out of 69 tenders launched, 3 were cancelled due to bidders not responding to invitation to bid and failure to fulfill the evaluation requirements.

Figure 1 : Level of annual procurement plan execution, FY 2011/12



1.8. Information, Communication and Technology (ICT)

In order to augment the efficiency of new entities merged under RBC, Information, Communication and Technology (ICT) functions previously located in all merged entities were consolidated under one functional unit. This unit provides a full range of ICT services including strategic planning, project management, software development, maintenance computer systems, telephone use, IT security policies and help desk support and training to the users.

The ICT unit comprises seven staff, three network administrators, one system administrator, one IT officer, one data manager and a Unit Director. For those projects not pulled under the RBC merger, focal people including system administrators, network administrators and webmasters were appointed.

During the FY 2011 - 12, the ICT unit consolidated and managed all ICT equipment from all institutions merged under the RBC umbrella. Currently RBC has 17 servers (8 at RBC headquarters, 4 at NRL, 2 at KFH, 2 at MPD and one at NCBT). RBC uses routers for internet connectivity and firewall for internet security. The majority of staff received a protected desktop or laptop to fulfill his or her duties and networked printers are available at headquarters, along with teleconference lines.

Data management was consolidated under the new RBC joint entity. Those joined into a single unit included financial payments, RBC Financial and Budget Execution Application which serves to facilitate accountants and administrative assistants to process budget monitoring and check processing, and for administrative assistants to process e-document (courier management), JIVAA, an application software that works in RBC/KFH as Hospital Management Information System, Asset Management System which facilitates in the management of all assets in RBC/KFH, Leave Management System that facilitates in the management of staff's leaves of RBC/KFH, Stock Management System that facilitates in the management of stock in RBC/KFH, SAGE 500 which is used in RBC/MPDD and facilitates in the medical sales and distribution, HMIS (Health Management Information System) application software being used in the RBC/NCBT.

RBC/Vaccines for Preventable Disease Division has started using a Stock Management Tool (SMT) for vaccines management and forecasting. This is a computerized tool employed by WHO and UNICEF that improves forecasting ability.

1.9. Legal Compliance and Framework

At the time of this report, RBC is in the process of creating its legal Instruments to ensure effective implementation of the law. At the time of this report, RBC had negotiated MOUs (Memorandum of Understandings) with 6 different suppliers, services providers, partners and stakeholders during FY 2011 – 2012, including the areas of pharmaceuticals including anti-malarial and ARV drugs, and information management systems including LMIS and NAPIER.

The RBC legal instruments include the following:

- RBC Internal Rules and Regulations
- RBC Corporate Procedure Manual
- RBC/MPDD Procedure Manual

2. Programmatic achievements

2.1. Improvements in Quality

2.1.1. Capacity-Building of Health Care Providers and Other Health Professionals

Continued capacity-building of clinical and non-clinical health professionals in Rwanda is vital to improve the quality of services provided. In this vein, in collaboration with partners, RBC conducted several training sessions for trainers and health care providers as summarized in the table below.

Table 1: RBC conducted trainings, July 2011 to June 2012

Training name and Material	Number of trainees	Topic
health facilities care providers (Doctors and nurses) nurse's schools teachers, data managers, M&E officers and supervisors of TB activities at District Hospitals, coming from public, faith based or private health facilities	2151	TB control activities (TB, TB/HIV, Chest X-ray reading, PAL, and TB data management), and Leprosy control activities
Community health workers across the country were trained on the screening and management of TB patients.	6,229	Screening and management of TB patients
Technicians in charge of maintenance in hospitals	30	Biomedical Equipments Technician Training (BMET) focused on Healthcare Technology Management (HTM), Biomedical Technician Assistant (BTA), Equipment Troubleshooting (ET), Electronics, Mathematics, Preventive and corrective maintenance, Anatomy–Physiology and Medical terminology and Professional Development
Health care providers from hospitals and health centers	1094	Training of trainers and Health care providers for good introduction and use of new vaccine, Rotateq

Media practitioners, Students from Institute of Catholic of Kabgayi and School of Journalism and Communication at National University of Rwanda and Local authorities in Northern, Eastern province and Kigali City	339	Increasing awareness of trainees on how they can promote BCC, HIV prevention, PMTCT, reproductive health and TB prevention
IEC implementers at village, cell level	7702	Vector control with indoor Residual Spraying techniques, applied IEC to IRS campaigns and entomology surveillance
Sprayer Operators	77	Vector control with indoor Residual Spraying techniques, applied IEC to IRS campaigns and entomology surveillance
Entomology technicians	18	Vector control with indoor Residual Spraying techniques, applied IEC to IRS campaigns and entomology surveillance
Sector coordinators of IRS	62	Vector control with indoor Residual Spraying techniques, applied IEC to IRS campaigns and entomology surveillance
DH participants (health care providers), Referrals and private clinics	50	Revised malaria treatment guidelines
Health care providers (nurses and physicians) from DH	1,206	Malaria case management in public and private sector, new guidelines, malaria diagnosis
Health providers in Ngarama and Nyagatare DHs	95	Malaria control and prevention
Community health workers	46,687	Trainings and refresher trainings CCM including the use of RDT
Lab technicians from Health Centers and District Hospitals	741	RDT use for malaria diagnosis and RDT Quality Control
Nurses from Health Centers and District Hospitals	924	RDT use for malaria diagnosis
Community Health Supervisors at Health Center level	485	Refresher trainings on CCM

Biomedical Laboratory Technologists in the Lab Network	1,463	Integrated training in TB, Malaria, HIV and Gram Staining, clinical chemistry and hematology, Early Infant Diagnosis (EID), DBS sample collection and management, HIV rapid testing and malaria testing as corrective action of HFs with QC discordant results, CD4 counting using Flow Cytometer, Full Bacteriology, Surveillance and confirmation of priority outbreak prone diseases, TB, on GLP
Directors of DH and Head of HC	122	New sample transportation system
Laboratory Personnel	91	Accreditation process
Nurses	183	Early Infant Diagnosis (EID), DBS sample collection and management
Trainers of trainers in HIV (MD, nurses and psychosocial)	39	Enhancing the training skills of those shaping and implementing HIV prevention, care and treatment in Rwanda
Health care providers in HIV (MD, nurses and psychosocial)	536	Training of Providers on HIV National Guidelines 2011
DH Health care providers in HIV (MD, nurses and psychosocial)	85	HIV Drug Resistance Management
Health care providers	25	Mental Health /HIV integration
Health care providers from Southern and Northern Provinces	74	Psychosocial care and support
Central level and DH Health care providers	54	Comprehensive care and treatment of Adolescent living with HIV/AIDS
Nutritionists and social assistant from DH and HC	174	Care and nutrition support to People Living with HIV

Newly recruited EMR personnel from 12 DH and 126 health facilities	266	Electronical Medical Record (EMR) system
Central level, IPs and DH Health care providers	101	Prevention care and treatment on cervical cancer (VIA and Cryotherapy)
Health care providers	155	Increasing the capacity of health care providers on VCT and PMTCT services
Health care providers	134	Couple HIV counseling and testing (CVCT)
DH diseases surveillance focal person, Head of laboratory and data manager		Integrated disease surveillance and response
Health professionals from DH and HC	122	strengthen capacity of mental health service, decentralization and integration of mental health care
MDs and nurses working in emergency departments from Ruhengeri, Nemba, Shyira and Kabaya DHs	25	Suicide prevention and management
Nurses from health centers in Kigali, members of the student survivors of the Genocide association (AERG), volunteers from the Rwandan Red Cross, staff from referral services, mental health professionals from District Hospitals, students from the Medical student association for mental health in Rwanda (Butare).	513	Improve skills of professionals and non professionals for interventions during the period of 18th commemoration of Genocide against Tutsi
Doctors and nurses from each facility in Rwanda designated for specialized Cancer Care, specifically national referral	61	Immersion training in cancer, impart a guiding approach of how to think about cancer with respect to epidemiology, pathophysiology, diagnostic and staging work-up, and management including palliative care

MDs, nurses, laboratory technicians, social workers, nutritionist, clinical psychologist, physiotherapist and pharmacists from 4 referral hospitals and Kibagabaga hospital	40	Build the capacity of national level trainers to be able to equip health care providers with the knowledge, skills, and attitudes to provide holistic care and management of adults and children living with life-limiting illnesses.
Health care providers from Provincial and Butaro Hospitals	37	Training of providers in palliative care
Quality assurance officer and BECS manager, Staffs mostly in managerial position	20	Quality Assurance or Blood Establishment Computerized System (BECS)
Members from District consultative committee (8 covered), veterans in Musanze district (Mutobo camp)	226	Sensitization on HIV and AIDS, STIs of veterans to get update Preventive knowledge
Members from District consultative committee (8 covered), veterans in Musanze district (Mutobo camp)	377	Sensitization on HIV and AIDS, STIs of veterans to get update Preventive knowledge
HIV focal points/Umbrellas/EDPRS sectors from the Public	115	Monitoring and Evaluation and Transformational Leadership as regards HIV and AIDS

2.1.2. Mentorship, Supervision and Quality Improvement Activities

Monitoring and Evaluation of program implementation of different policies, protocols and guidelines was facilitated during FY 2011/12 through the rigorous performance of many supervision visits, outreach sensitization campaigns and clinical mentorship activities to health facilities.

The tuberculosis (TB) program completed its goal of carrying out planned quarterly visit at each district hospital with 96 out of 120 planned visits, or 80% of the total. Those formative supervisions visits were aimed at discussing with DHs problems that hinder TB control, mainly focused on TB detection and notification and management. Specific emphasis was placed on the respecting of TB diagnosis and treatment guidelines, robust tracking of patients who have been transferred out and verifying if sputum cultures were performed for all MDR-TB high risk groups. Supervisors from RBC concluded that in general, TB guidelines are well followed;

however there is need to improve the quality of suspected clinical TB case management on a facility-specific basis.

RBC/VPDD conducted regular supervisions of vaccination activities at hospitals and health centers, and completed supervision of vaccination campaigns against Human Papilloma Virus (HPV) and Polio. The main objective of the supervision was to help health facilities to improve quality of vaccination activities. In total, 23 hospitals were supervised for routine supervision and all hospitals were supervised during the HPV and Polio vaccination campaigns.

The Malaria and other parasitic Diseases program conducted 12 visits to district pharmacies focusing on the management of malaria commodities. The facilities visited were selected based on history of stock-outs. Supervisions focused on checking stock level of each commodity provided by Malaria & OPD Division. Drug consumption was monitored and compared with requisition to evaluate the potential for stock outs, sufficient stock or over stocking in each facility. The majority experienced ACTs during the FY, due to central-level stock expiry in October. In preparation for employing an active distribution network, the M&E team noted discrepancies in the physical stock and theoretical stock on stock cards at the district pharmacy level caused by improper documentation. As a result, ACT stock was limited and could not meet need in some instances. Over-ordering of some consumables resulted in over-stock of those products at the central MPDD supply during the FY. To support the district hospitals' planning process, 297 participants from all district hospital district hospitals and health centers attended a meeting to discuss the GF SSF catch-up plan to be implemented by district hospitals and health centers. This strategy help the program to achieve planned targets as activities implementation at decentralized level began with a delay of 9 months due to the delay bring out by the GF Geneva where funds were disbursed to the Principal Recipient (MOH) with a delay of 7 months.

The RBC/NRL conducted 108 mentorship visits to health facilities during 2011 - 2012. 39 district hospitals were evaluated on Performance Based-Finance (PBF). 116 Private laboratories were also supervised. Nine district hospitals and 70 health centers were selected for corrective action of HFs with HIV quality control discordant results.

Beginning in 2010, the President's Emergency Plan for AIDS Relief (PEPFAR) successfully transitioned HIV activities that were formerly implemented through AIDS Relief and International Center for AIDS Care and Treatment Programs (ICAP) implementing partners to complete government implementation control. The HIV Division, along with its partners, conducted an integrated clinical mentorship effort to foster ongoing professional development of staff and to yield sustainable high-quality clinical care outcomes. This unique on-site clinical

mentorship program was directed at sites that recently transitioned, and also Global Fund to Fight AIDS, TB, and Malaria (GFATM)-supported sites. In all, 25 district hospitals and 39 health centers were visited during the supervision period, resulting in the mentorship of 181 health care providers.

The RBC/HIV Division also performed visits to train health facility staff on data collection tool use to evaluate the level of realization of supervision for supervisors from DH, increase the capacity of district hospital supervisors in HIV/AIDS supervision, improve the quality of HIV/AIDS services provided to patients, and to supervise the site using a standardized feedback report. This supervisory process was completed in a total of 42 district hospitals and 224 health centers during FY 2011-2012.

The RBC/EID Division organized formative supervisions on eIDSR data quality evaluation and improvement for five cross-border district hospitals and 72 health centers. The supervision evaluated the acceptability and feasibility of the ongoing implementation of the new electronic reporting system. Findings showed that the tool is well utilized by facility staff, and further training on improving data analysis and reports generation using the electronic tool is needed.

The RBC/MOPDD Division conducted an inventory of malaria commodities to enable the preparation of the quantification exercise and forecast the needs for the following year. Sample collection of anti-malarial drugs in health facilities was one component of the quality control of malaria commodities performed. Samples were collected in 91 sites in 11 districts plus central Medical store ,the Medical Procurement and Distribution Division (MPDD) including 3 randomized health facilities per district. Districts where samples were collected are the following:

Kirehe, Burera, Rusizi, Nyamagabe, Ruhango, Karongi, Kayonza, Kicukiro, Musanze, Nyanza, Rutsiro.

The MOPDD began a QC/QA of RDT use at health facility and community level and 180 tests were sent to a WHO pre-qualified laboratory and all tests passed positively. The next sampling will be done by November 2012 and April 2013.

Additionally, follow-up on stock levels of malaria commodities at the central level and district levels was regularly performed during FY 2011-2012. .

The RBC/Mental Health (MH) Division conducted 42 clinical supervision visits to improve the quality of mental health care and 42 mentorship sessions were provided by a psychiatrist at CHUK. 24 clinical supervisions of mental health services in district hospitals were conducted.

The RBC/NCBT Division performed routine supervision at regional centers focused on standardizing routine practices and increasing the strength of the sequence of activities following the quality assurance plan.

The RBC/NCDs Division conducted a joint field visit with MoH/Clinical Services to assess the preparedness of Butaro Cancer Center of Excellence (CoE) for delivering quality cancer services. This CoE was slated to open in July 2012.

2.1.3. Quality Assurance and Quality Improvement Activities

The International External Quality Assurance for Laboratory Diagnosis (EQA in South Africa periodically assessed all NRL sections during FY 2011 – 2012. The National External Quality Control (PT) sent updates to the laboratory network.

The RBC/NRL received and analyzed 12 panels in clinical chemistry from the National Health Laboratory Service (NHLS), resulting in an overall score of 95%. It also received and analyzed 24 panels in Hematology from NHLS, resulting in an overall score of 95%. The Immunology Service at the NRL received two CD4 proficiency testing panels consisting of eleven samples from the National Center for Infectious Diseases (NCID). The panels were tested and results submitted to the WHO/NCID.

The molecular biology section is subscribed to three different external quality assessment programs using proficiency testing panels for its various testing services that include Centers for Disease Control and Prevention (CDC) and the WHO Collaborating Centre for External Quality Assurance Program in Hong Kong. The cumulative performance score in all three proficiency testing panels was 100%.

The Measles Surveillance Service participated in the international external quality control scheme with Uganda Virus Research Institute (UVRI). The NRL sent one panel of EQC to UVRI which contained 10% of specimens received (once per term) and UVRI sent one panel to NRL which contained 20 specimens once per year. Forty-eight samples (10% of samples received at NRL) were sent to UVRI for retesting and feedback scored 100%.

The serology section participated in EQA administered by WHO-AFRO (NICD, South Africa). Two panels of 10 samples each were received and analyzed and results sent to South Africa. In both cases, serology laboratory results were 100% concordant with those of NICD, South Africa. The microbiology unit was evaluated for TB and Malaria using Proficiency Testing by NHLS South Africa and received acceptable note.

The microbiology unit was also evaluated for bacteriology culture, identification and antimicrobial susceptibility testing by NHLS and received an acceptable note.

To monitor the performance of HIV diagnosis using rapid testing by the laboratory network, a national PT panel program, comprising 40 health centers, was instituted during FY 2011 – 2012. During this time the NRL conducted two distributions of tests where 79 sites participated; 47 sites got 100% and 26 got more than 80% of test concordance with the NRL.

All District Hospitals have been evaluated for TB and malaria microscopy by retesting and proficiency testing and corrective action was taken for discordance results. In TB laboratory testing, 776 sputum examination quality control tests were expected to be done at the onset of FY 2011 - 2012, and 672 (87%) were executed during this time. In 97% of those quality assurance visits, no error was detected.

Thirty six district hospitals were evaluated for gram staining and seven district hospitals were evaluated for bacteriology culture, identification and antimicrobial susceptibility testing and corrective action was taken for discordance results.

The RBC/NCBT began a QA program during FY 2011 – 2012. Blood samples are transported following NCBT quality assurance requirements and all units are tested for Transfusion Transmission Infections (TTI) markers. The NCBT also participates in an external quality assurance program with Australian and South African laboratories and has been holding excellent scores since the inception of the quality assurance program in 2007.

Among other quality assurance activities completed in FY 2011 - 2012, MPDD put in place a standard quality assurance policy, developed a supplier prequalification system, managed expired drugs, conducted regular visual and physical inspection on procured pharmaceutical products and suspected ones have been sent for further test in Quality Control Laboratories. Pharmaceutical products have been sampled and sent for testing in WHO accredited Quality Control Laboratories.

Malaria Rapid Diagnosis Test Quality Control

To ensure the maintained quality of RDTs used at the community level by community health workers in CCM, the MOPDD has introduced since January 2012 the RDTs QC activities.

Lab technicians at DHs and HCs level have been trained on RDTs QC and the MOPDD availed all required materials to implement that activity. A certain percentage of CHWs (not less than 10%) was selected by Health Center and has been trained on blood smear preparation and transportation.

To ensure the effectiveness of the intervention, the MOPDD put in place a parallel reporting system to capture information on the RDTs QC activities and now the data base is being harmonized to be friendly usable by all involved stakeholders.

As part of the QA and QC improvement efforts, the RBC/MPDD began the formal process to acquire national accreditation. At the time of this report, they were finished with refurbishment of buildings, and training of staff.

In order to assess the RBC/Medical Production's products compliance with the quality standards of medicines, five representative products were sampled and sent to two accredited laboratories in Belgium for QC testing and tests results received from the Laboratory of Analytical Chemistry/Department of Pharmacy - University of Lieges and the Service de Contrôle des Médicaments (SCM)/Association Pharmaceutique Belge (APB) – were good as summarized table in annex.

Quality Improvement (QI) activities were conducted through the HIV Division with the goal of improving and sustaining quality of HIV/AIDS clinical services at health centers and district hospitals in Rwanda. Further, the aim was to build national capacity in quality management and integrate QI into the existing clinical mentorship system. A QI team was established in the RBC/HIV Division in conjunction with the creation of a site level QI plan was developed in collaboration with HEALTHQUAL-International (HQ-I) and implemented in 21 health facilities which were selected during the piloting phase of implementation of the site level QI plan. QI indicators were selected to facilitate the implementation of the site level QI plan. Baseline data was collected on six QI indicators and onsite and offsite basic QI training was given to the QI team members at the remaining nine health facilities.

2.1.4. Disease Surveillance and Response

During FY 2011 - 2012, 18 diseases were under surveillance according to WHO standards (weekly and immediate epidemic prone diseases reporting). On weekly basis, the epidemiological bulletins were generated and shared with all concerned institutions. We also ensured avian influenza surveillance at six sentinel sites with the objective of tracking the circulating species of influenza in the country.

Quarterly, evaluation meetings were organized at district hospitals level. During those meetings, data from registers were reported on reports tools, compiled in the national TB report format, so that we were able to capture epidemiological trends of TB. Trends were analyzed according to key TB performance indicators, like notification rate, treatment success rate, HIV testing among TB suspects and TB patients, etc. Additional, special surveillance activities are conducted among TB high risk groups, like TB screening upon entry for prisoners,

TB screening among PLHIV, TB contacts investigations, MDR-TB surveillance by systematic culture and DST for all new SS+ TB cases in Kigali City.

Four hundred nine cases were suspected for measles and samples were sent to the NRL for testing during FY 2011 – 2012. 10 cases were confirmed as measles IGM+. As Rubella is tested using the same samples, 63 cases were confirmed positive for Rubella. All samples received at the NRL were entered in the database using einfo, and the Measles/Rubella weekly report was generated to share with WHO/AFRO. 163 suspected cases of wild polio virus were identified and sent to the WHO Sub-Regional Reference Laboratory in Uganda for testing and all samples came back negative.

The RBC/HIV Division conducted the HIV, syphilis, hepatitis B and hepatitis C sero-surveillance effort among pregnant women attending antenatal care services in 30 health facilities. The major preliminary results indicated that national HIV prevalence in Rwanda decreased from 4.3% in 2007 to 3.3% in 2011. The overall prevalence of syphilis, hepatitis B and hepatitis C was 2.1%, 3.5% and 2.6% respectively. Behavioral Surveillance Survey (BSS) among high risk groups (truck drivers, men who have sex with men, fishermen, youth and female sex workers) were initiated to measure behavioral tendencies of the high risk groups regarding HIV/AIDS and sexually transmitted infections.

HIV drug resistance surveillance activities were continued in FY2011/12. These include:

- A threshold survey to evaluate the transmitted HIV drug resistance. This survey yielded a result of less than 5%, which is classified by the WHO as low level
- HIV drug resistance monitoring to evaluate the acquired HIV drug resistance (among patients who had been on antiretroviral (ARVs) for less than 12 months. This survey showed that the potential drug resistance (V.L >1000 copies/ml) is 12%.
- HIV drug resistance early warning indicators intended to evaluate the status of 6 indicators elaborated by WHO which are predictors of HIV drug resistance. Findings showed that, in Rwanda, 4 indicators among 6 are higher than WHO target.
- The MOPDD conducted quarterly meeting with DH in order to discuss on data reported at central level, to give a feedback to the decentralized level on activities implemented, to plan targets for the next quarter.

The RBC/NCBT Division reported 100% of distributed blood tested for Transfusion Transmitted Infections (TTIs) during FY 2011 – 2012.

Table 2. Blood units collected and results for initial screening of Transfusion Transmitted Infections

RCBT	Blood collected (#)	HIV (#, %)	HCV (#, %)	HBs (#, %)	Syphilis (#, %)
Kigali	18,213	92 (0.5)	471 (2.6)	258 (1.4)	280 (1.5)
Huye	7,207	47 (0.7)	255 (3.5)	107 (1.5)	117 (1.6)
Musanze	4,797	31 (0.6)	78 (1.6)	93 (1.9)	104 (2.2)
Rwamagana	5,590	22 (0.4)	271 (4.8)	106 (1.9)	132 (2.4)
Karongi	2,004	11 (0.5)	38 (1.9)	45 (2.2)	35 (1.7)
Total	37,811	203 (0.5)	1,113 (2.9)	609 (1.6)	668 (1.8)

2.1.5. Outbreak Management

The RBC/EID provided appropriate drugs and other consumables in each case of outbreak and supervised affected health system components with management guidelines for infectious control and recommendations for prevention and control measures. A buffer stock is available at MPDD and it is renewed each year to facilitate quick response in the case of an outbreak.

Table 3 : Outbreaks investigated and responded to during FY 2011-2012

Start Date	Disease or Event	Location	Estimated # of Cases	# of deaths	Etiology Identified?	Impact/Outcome of Investigation
24/10/2011	Cholera	Kibogora, Nyamasheke District	14	0	yes	Health education Isolation and treatment of cases
26/12/2011	Food Poisoning in Gisagara	Gisagara	117	0	yes	Health education
13/2/2012	Cholera in Rubavu	Rubavu	13	0	yes	Health education
8/3/2012	Rubella in Academie De la Salle	Byumba, Gicumbi District	66	0	yes	Health education Isolation of cases Treatment of cases
5/5/2012	Acute hemmorrhagic Conjonctivitis	Country wide	≥1500	0	no	Health Education, isolation and treatment of cases
27/5/2012	Food poisoning in Kigeme	Nyamagabe District	129	0	no	Health Education Treatment of cases
6/6/2012	Influenza in	Rusizi	309	0	yes	Health

2.1.6. Development of Standard Operating Procedures

The following Standard Operating Procedures (SOPs) were developed during FY 2011 - 2012:

- TB M&E procedural manual
- PAL (Practical Approach to Lung health) guidelines, one for health centers and one for district hospitals
- Guideline of vaccination activities (including new vaccines)
- National Behavior Change Communication sub-strategy on Maternal, Newborn and Child health
- Validation of 5 modules of IEC. Documents and messages were validated (HIV/AIDS Training manual and handbook from:
 - The IMBUTO Foundation
 - Training Manual for Men in Uniform from MOD
 - Training Manual Dialogue parent Children from MIGEPROF
 - User Manual of the booklet "*Ese Teta Ntiyumvira*" submitted by GIZ In the same framework, messages related to WAD campaign for street banners, billboards, lollipop, posters were approved by CNCCC.
- Guidelines and training manuals for MIP (new born and pregnant women)
- National Malaria Guidelines
- NTD Strategic Plan 2012-2017,
- Malaria Strategic Plan 2012 -2017, M&E plan 2012 -2017 and IVM strategic plan.
- Integrated Vector Management strategic plan 2012-2017 and IVM guidelines policy.
- National Malaria Case Management guidelines (including the use of Artesunate)
- laboratory manuals, including:
 - Quality manual
 - Biosafety manual
 - Norms and Standards
 - Lab techs training module
 - Supervision tools
- HIV Manuals including:
 - ART Guidelines
 - Nutrition Guidelines
 - Standards of Care for Adolescents Living with HIV in Rwanda
 - Task shifting Guideline 2012

- Finger Prick Trainer’s Manual
- Finger Prick Provider’s Manual
- Finger Prick Aide Memoire/Job Aids
- HIV Booklets
- Cervical Cancer Guidelines
- Cervical cancer action plan, trainers and providers manual
- HIV communication material for people living with disabilities
- HIV care and treatment registers and patients files
- HIV prevention registers
- SOP for highly communicable diseases such as cholera, meningococcal meningitis, typhoid fever, and shigellosis and for rabies reporting, management and prevention.
- Reporting tool (weekly reporting tool, immediate reporting tool, laboratory reporting tool, line listing manual tool)
- National technical guide for integrated diseases surveillance and response
- Training manual for training of CHWs on mental health
- Palliative Care Tools including:
 - Palliative Care file with Palliative Care patient assessment
 - Pain assessment tool
 - Pain chart
 - Ongoing patient visit record
 - Psychosocial and spiritual assessment
 - PC monthly report
 - Patient-held record for home-based care
 - Referral carnet to palliative care team
- Cervical cancer guidelines including:
 - Booklet for CHWs
 - Prevention Flipchart Guideline
 - Brochure for women
 - Cervical cancer M&E Tools
- Five pediatric and 10 adults cancer treatment protocols
- Guidelines for rational use of blood in hospitals, including:
 - Quality plan
 - Policies and corporate procedures
 - SOPs
 - Forms and records related to blood collection and transportation
 - Immune-hematology and serology testing and distribution
- Revision of RBC/MPDD Procedures Manual

2.1.7. International Accreditation Activities Implementation

King Faisal Hospital (KFH) was awarded a full 2 year accreditation status during FY 2011 - 2012 after a 4-year process of training and facilitation, with an overall score of 99%. This accreditation was awarded on the 22nd February, 2011 to all Heads of Departments and Nursing Unit Managers during an award giving ceremony on the 25th February, 2011 which was graced by the Hon. Minister of Health and held at Kigali Serena Hotel. The new target set is to maintain this accreditation and achieve a 3 year accreditation.

KFH now has in place 74 committees that are monitoring compliance with the COHSASA standards and they are guided by Terms of Reference to ensure the committee meetings are properly prepared for.

A few of the committees are highlighted below:

- **The Management and Leadership Committee** is comprised of the senior management and key staff. In FY 2011 - 2012, meetings to negotiate the hospital structure, post establishment, salary scale and job profiles took place and the committee revised and approved the KFH structure in line with the accreditation requirements.
- **The Safety, Health & Environment Risk Management (SHERM)** is an important component in Continuous Quality Improvement which ensures that the hospital complies with the overreaching requirements of its standards. The SHERM Service is managed by the SHERM Coordinator who identifies potential hazards and risks in the working environment, including everything from health and hygiene to occupational injuries and diseases.
- **Incident reporting and investigation.** All KFH services carry out incident reporting projects which are then used to monitor the incident reporting, investigation and solving trends. This monthly analysis and these tools are then used to reduce the incidents from occurring.
- **Patient Safety:** The Patient Safety Coordinator, a new position under SHERM, will have primary oversight of the hospital-wide Patient Safety Programme within the overreaching risk management framework. **The Disaster Management Committee (DMC)** was set up with the Head of KFH as the Chief Commander and a disaster plan was assembled.

- **The Hospital Infection Prevention and Control Committee (IPC)** has been monitoring the Infection control practices (e.g. hand washing and Nosocomial Acquired Infection rates), in an effort to keep these rates to the minimum. This committee also works closely with the Drug and Therapeutic Committee (DTC) to monitor antibiotic sensitivity and ensure that the drug formulary is being implemented as well as the SHERM Committees.

RBC/KFH has been working closely with a facilitator from HQS Consultation to help with the accreditation maintenance program in order to maintain current status compliance and achieve a 3 year accreditation status at the end of the following year. A Training of Trainers is planned for KFH staff on issues pertaining to Quality Assurance.

Despite great achievement recorded in committees, few challenges remain. There is clear evidence that committees are not holding meetings regularly as per their working procedures and staff have raised the concern that they do not have protected time for quality activities, particularly those that apply to clinical areas. The implementation of the credentialing and privileging process was slow because it is a fairly new concept that needs external facilitation before KFH carries on itself. The review and development of guidelines was also slow, yet trainings were still held. The participation of physicians also needs more improvement. Clear terms of reference, job profiles and structure were also highlighted as urgent needs to be completed to enable the RBC/KFH to implement quality improvement initiatives and comply with standards.

In the RBC/NRL; two Strengthening Laboratory Management Towards Accreditation (SLMTA) trainings were completed with regards to acquiring accreditation and included 30 personnel from 5 central labs (NRL, CHUK, CHUB, KFH and RMH). Also, two mentorships and assessment have been conducted in 5 satellite laboratories.

The RBC/NCBT applied for an international accreditation and at the time of this report it had not yet been awarded. This accreditation is given by the American Association for Blood Banks (AABB), an internationally renowned accreditation board for blood transfusion services based in United States of America.

Rwanda is hosting the Programmatic Management of Drug Resistant TB-Center of Excellence (PMDT-CoE) for Eastern Africa Region. More so, the national Integrated diseases surveillance and response was adopted from the World Health Organization Afro 2002 and 2010 (WHO) standards guidelines and the International Health Regulation(IHR) requirements. Additionally, RBC/NCBT abides to the international standards of the World Health Organization (WHO) regarding blood safety.

2.1.8. Maintenance of Medical Equipment and Infrastructure

In order to increase the geographical accessibility of health facilities, with funds provided by the Ministry of Health, Ntongwe hospital in Ruhango District was constructed during FY 2011 – 2012. Kinihira hospital is constructed up to 97%, Bushenge hospital is executed up to 95%, architectural and technical design of Nyabikenke hospital is done and five isolation TB blocks were constructed in 5 Districts hospitals (Gisenyi, Murunda, Kirinda, Mugonero, Mibilizi, Nyanza and Remera Rukoma). Construction is underway at the time of this report for an industrial incinerator at Mageragere in Nyarugenge District in order to improve solid waste management from health facilities.

The activities of preventive maintenance for medical equipment were driven according to a planned schedule. The beneficiaries consist mainly of health facilities across the country. Laboratory equipment maintenance was mostly focused on repairs at the health center level. In addition, in district hospitals, preventive maintenance was performed. Similarly, teams of technicians visited the sites to carry out preventive maintenance in 415 health centers and 40 district hospitals. Given the volume of equipment at each site, a team made up of 2 technicians covered approximately eight sites each week. 2500 devices were repaired during FY 2011 – 2012, or approximately 90% of laboratory equipment that underwent periodic preventive maintenance across all health facilities. Curative maintenance has been done in two ways: 1) in person at the health facility, or 2) in a central workshop. Preventative and curative maintenance of the laboratory network and its equipments has been ensured. Assessment of laboratory equipment within the lab network conducted, gaps identified and corrective actions were proposed by or to MMC throughout the year.

2.1.9. Supply Chain Management and Access to Health Commodities and Blood Products

Consultation between RBC/MPD and RBC/MPPD for integration of the existing stock of both finished products and raw materials were ongoing at the time of this report. External Quality Control of the existing stock of finished products was conducted in a WHO prequalified laboratory to positive result.

Prior to the merger, RBC/MPDD procured essential medicines based on its average consumption rate. With FY 2011 – 2012, MPDD began basing procurement plans for essential medicines on data from District Pharmacies procurement plans. For distribution, MPDD formerly distributed its products to the decentralized level, which required to do active distribution to health facilities with trucks donated by MoH in May 2012, resulting in capacity lost to logistics management.

At the end of 2009, an active distribution program was initiated to assist with this problem. During FY 2011 - 2012, RBC/MPDD maintained the delivery of its procured products to all 30 districts pharmacies on a monthly basis. All district pharmacies are now grouped into eight routes with approximately three or four facilities located on each. The active distribution program has saved the facilities medicine transport fees, per diems, and time since its inception.

In FY 2011 - 2012, quantification exercises for 1st and 2nd line TB drugs and laboratory network reagents, consumables and equipment as well as malaria commodities quantification were conducted. During this time cold chain capacity for vaccines was also improved.

The RBC/MPDD provides essential medicines and medical supplies for all health facilities. According to internal review, RBC/MPPD is currently capable of meeting 85% of all needs and in FY2011-12; it provided 97% of the most commonly used medical products.

The RBC/NCBT was providing blood and blood components to all health facilities that transfuse in Rwanda. In total more than 37,811 blood and its components were collected in FY2011- 12.

The vaccines procurement and distribution was well completed and we noted the introduction of the new vaccines (Rotateq) in routine immunization programme.

Table 4. Procurement, distribution and management of vaccines as per 2011-2012 FY

Vaccines	Stock on July 1 st 2011	Doses received in 2011	Total stock in 2011- 2012	Distributed in 2011-2012	Stock on June 30, 2012
BCG	375,300	600,000	975,300	628,800	346,500
OPV	1,301,700	1 60,000	2,461,700	1,358,400	1,101,600
DPT-HepB+Hib	206,400	1,344,800	1,551,200	1,060,420	490,780
PCV	506,225	1,324,800	1,831,025	1,002,200	828,825
Measles	274,360	443,900	718,260	408,160	310,00
TT	156,700	530,000	686,700	473,500	213,200
Rotateq			428,000	240,000	180,000

2.1.10. Waste Management

RBC carried out the following activities in pharmaceutical waste management during FY 2011 - 2012:

- Incineration of 90,253 kgs of expired drugs
- Identification of new disposal method to destroy infusions (Sewer method)
- Identification of new incinerators and signing contract agreements with incinerator Holders
- Data collection and compilation of waste management protocol, establishment of a comprehensive work plan to dispose of pharmaceutical waste
- RBC/MPD also formed an agreement with a private company to recycle waste pouches in Polyvinyl Chloride during FY 2011 – 2012, and is in the process of developing an Environmental Management Plan to be put into effect during the following fiscal year.

2.2. Improvement in Access and Equity

2.2.1. Availability and Accessibility of Prevention and Treatment Services for Communicable and Non-Communicable Diseases

The distribution of Long-Lasting Insecticide Treated Nets (LLINs) was performed through routine services (Antenatal Care and children under one year vaccinated against measles) and households campaigns distribution. Distribution was based on the assessment of the gap between the number of beds and LLINs received by households in the past three years. With the goal of achieving universal access to LLINs, different campaigns were organized demonstrating a variety of distribution methods. However, in the following 6 endemic districts Nyagatare, Gatsibo, Bugesera, Gisagara, Rusizi, Nyamasheke, the distribution was based to two LLINs per household regardless of the number of beds in households. In total, 357,995 LLINs were distributed to 173,261 households. Additionally, 11,750 LLINs were distributed to Kaduha and Gitwe hospitals to cover a gap of LLINs for households reported during the campaign of LLINs distribution conducted in 2010. Through routine distribution, 573,150 LLINs were distributed countrywide to health centers for routine EPI and routine antenatal care respectively. Other distributions were conducted to achieve special targets: 18,726 LLINs were distributed to all health facilities for inpatient wards and 28,754 LLINs were distributed to members of associations of People Living With HIV/AIDS (PLWHA) in some districts.

An Indoor Residual Spraying (IRS) initiative was carried out in 5 districts (Nyagatare, Gisagara, Gasabo, Kicukiro and Nyarugenge). Deltamethrin insecticide (K-Othrine® WG 250, Bayer), a pyrethroid, was used to spray houses. 98.6% of the planned structures found were sprayed. Spray operators found 364,108 structures, of which 358,804 (98.6%) were sprayed,

using a total of 237,805 Deltamethrin sachets. Approximately 1,571,625 people were protected from malaria.

From July 11 to June 12, 65,291 persons were treated from malaria among them 9,919 children under five years. The treatment was done according to the revised malaria treatment guidelines based on the treatment after the laboratory confirmation. 75 deaths due to malaria were registered and among them 18 under five children

Malaria cases finding and management activities continued as per the figures below.

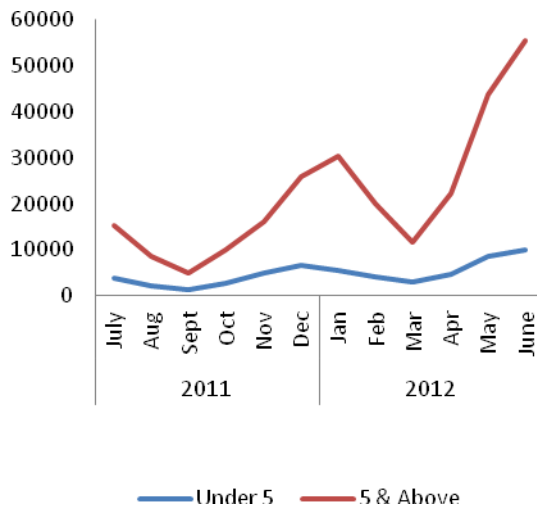


Figure 2 Malaria cases trends in under and above 5years, June 2012

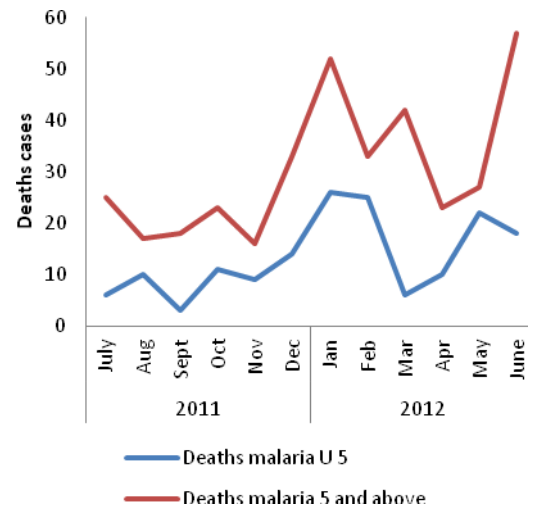


Figure 3 Malaria deaths trends in under and above 5years, June 2012

Sputum samples or patients suspected to have TB are transported between the 194 CDTs across the country, and CTs of their catchment areas. Three multi-drug resistant TB (MDR-TB) specialized care centers are in operation in Rwanda at the time of this report. Each newly diagnosed MDR-TB a patient is hospitalized within those centers for approximately 3-4 months on average before follow-up treatment begins at the nearest health facility.

All 14 prisons were sensitized on TB symptoms and prevention and in total 1,687 peer educators and 180 nurses, administrative staff and social workers attended.

TB infection (transmission) measures continued to be implemented and, by the end of the 2011-12 FY, 170/194 CDTs (87, 6%) were applying those measures. Similarly, TB-HIV coinfection efforts continued to be implemented which yield results presented in the figure below.

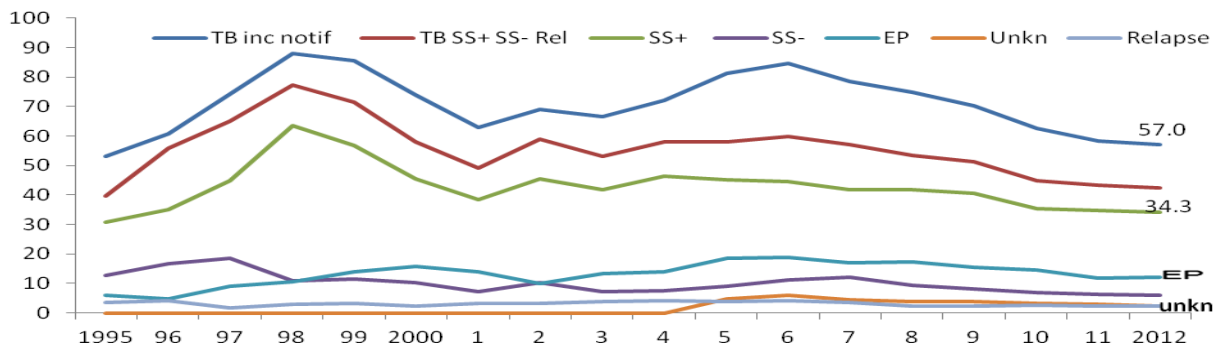


Figure 4 Trends of TB notification in Rwanda, 1995-2011

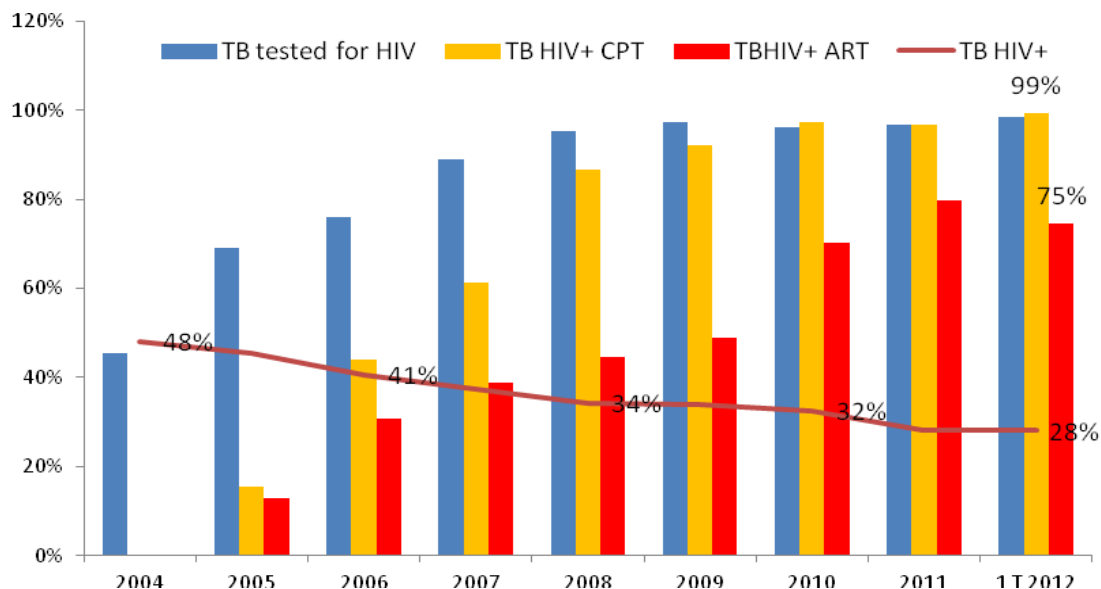


Figure 5 Trends of TB/HIV collaborative activities indicators in Rwanda, June 2012

To facilitate access to TB health care in their community, the community DOT has helped to manage 55% of all TB patients. The majority of TB patients are followed-up-on in the nearest health facility. Few are in need of referrals services, but when in need, they are transferred.

To increase accessibility for mental health services, the RBC/Mental Health Division organized a celebration of World Mental Health Day on 10th October 2011 in Rwamagana District. The main activities conducted during the World Mental Health Day campaign included a March and press conference given by mental health experts on specific topics to raise awareness and decrease stigma towards mental patients. During the 18th commemoration period, approximately 4000 people received trauma care services.

During the 18th commemoration of Genocide, RBC/Mental health division organized awareness sessions for general population in order to increase knowledge on existing services for psychological trauma cases.

A total of 11,668 samples from Health Centers and District Hospitals countrywide were analyzed using Polymerase Chain Reaction (PCR) assay for early infant diagnosis (EID) of HIV and the prevalence with a positivity rate of 3.5%. A total number of 46,121 samples from health centers and district hospitals countrywide were analyzed using HIV-1 RNA assay to monitor the efficacy of antiretroviral (ARV) therapy of patients under treatment. A total of 1,137 samples from 6 sentinel surveillance sites and any other health facilities countrywide were analyzed using RNA- RT PCR assay to detect and monitor the incidence and prevalence of human seasonal (Flu A and Flu B) and pandemic influenza viruses in the population. The lab also acquired an automated nucleic acid extractor (QIAcube) to improve on the throughput of the testing. 498 eligible plasma samples were tested for HIV-1 Sequencing and Genotyping using 24 capillary sequencer machine and all suspected drug failure sample analysis, results given and feedback sent.

Results from the recent 2010 RDHS show that condom use at last sexual intercourse among both the youth aged 15-24 and CSWs has increased at 43% and 83% respectively as compared to previous 2000 and 2006 surveys. To address the issue of supply following the successive efforts in demand generation, UNFPA supported IHDPC to review the condoms supply chain system for the public health sector to ensure condom access to all groups at-risk in Rwanda under the new RBC merger.

These at-risk groups include but are not limited to populations at higher risk of HIV, people in organized community groups such as associations, cooperatives, youth groups, youth centers, employees in government and private institutions, NGOs, students, women without partners, and people living with HIV/AIDS and vulnerable groups of adolescents and young people in and out of school that are at risk of being HIV infected or re-infected, acquiring STIs or becoming involuntarily pregnant.

In order to complement existing systems, a condom distribution system for at-risk groups was created in order to employ the full supply chain system and ensure enough supply at the national level. Additionally, a standard operational procedures manual for the revised supply chain system was also developed to adequately guide all stakeholders involved in the storage, distribution and reporting of condoms at central and decentralized levels.

MoH in partnership and support of the social marketing sector initiated the rapid sales outlet creation to increase availability and accessibility of condoms. With the support of UNFPA, 700 condom vending machines have been procured to support the social marketing sector in increasing the number of condoms sales outlets especially in hotspots including bars, hotels, motels, lodges and restaurants. In partnership with the Private Sector Federation through the Rwanda Hotel Association, UNFPA and PSI-Rwanda, 685 machines have been installed countrywide.

Though faced with the challenge of accounting for condoms distributed in the private commercial sector, Rwanda is on course to achieve its target of distributing 26 million condoms annually by 2012. Distribution reports from both the public and social marketing sectors show a substantial increase in annual condoms distribution i.e. over 24 million condoms from 15 million in 2009. See trends analysis below.

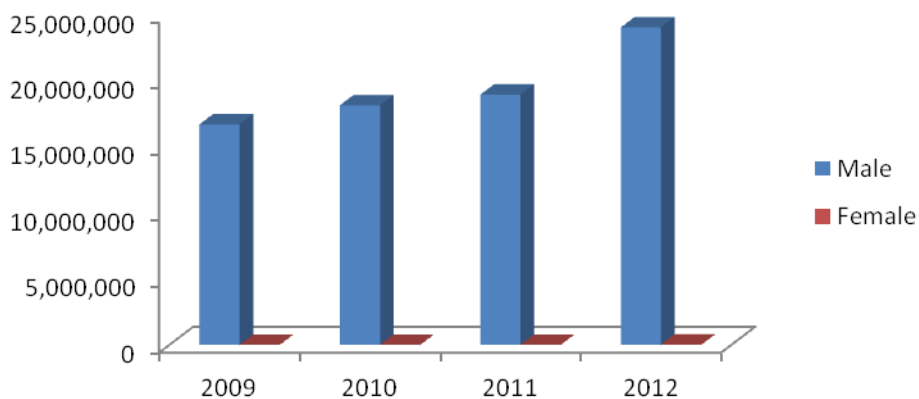


Figure 6 Trends analysis for condoms distributions, June 2012

Source: RBC/MPDD and PSI-Rwanda distributions data, 2012

HIV prevention activities targeting female sex workers included validation of draft preliminary results of participatory site assessment and population estimates for female sex workers in Rwanda. Further, initiation of a coordination mechanism for female sex workers was launched as a pilot phase in eight districts (Kicukiro, Gasabo, Nyarugenge, Rubavu, Ngororero, Karongi, Nyamasheke and Rusizi) during FY 2011 – 2012.

RBC/VPDD carried out several outreach activities providing vaccinations during FY 2011-2012. The figure below illustrates coverage by provinces for the HPV vaccination campaign during the past year.

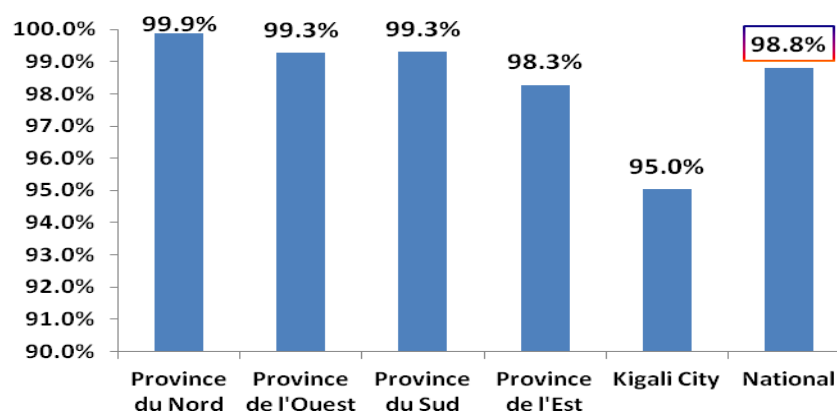


Figure 7 2011-2012 HPV vaccination coverage rate by Province, June 2012

2.2.2. Availability and Accessibility of Specialized Health Care and referrals services

RBC/KFH aspires to act as a medical referral hub for the region. The integration of specialty service areas increases the likelihood of cross-border referrals. As such, progress was made during FY 2011 – 2012 by incorporation of the following service centers:

- Radiology (Imaging center)
- Intensive Care Unit (ICU)
- Neonatal Intensive Care Unit (NICU)
- Obstetrics and Gynecology
- Orthopedics
- Surgery
- Internal Medicine
- Pediatrics

Table 5. RBC/KFH Performance Indicators: Ambulatory Care, 2010 – April 2012

	2010	2011	2012 ³
A & E	11,939	14,067	9,676
OPD	41,384	55,195	30,410
TOTAL	53,323	69,262	40,086
Overall combined growth		30%	108%

³ Data from January 2012-April 2012

Table 6. Hospital Performance Indicators: Inpatient Care, 2009 – April 2012

	2009	2010	2011	2012*
No. of admissions	-	7,201	8,467	2,669
Bed occupancy	63%	68%	67%	74%
ALOS	5		6	6
Turnover	-	-	4.5	4.4
OT utilization	-	54%	39%	55%
No. of beds	-	130	136	155
% Beds growth			5%	14%

However, there some highly needed services that are not fully available at this time. These services are mainly Oncology/Radiotherapy, Cardiac Surgery, Renal transplantation and Super-specialty surgery (Pediatric surgery, Neurosurgery, Retinal surgery, Hepatobiliary and Vascular surgery). In response to several specialty areas in need of quality service improvement, KFH has developed a strategic plan to resolve access issues present at the time of this report, including the provision of increased human resources, equipment, and improved supply chain management.

Analysis of internal versus external referrals shows an increase in internal referrals and a decrease of external referrals during FY 2011 – 2012.

Table 7. Patient referrals at KFH

Referrals	2008	2009	2010	2011	2012 ⁴
External referrals by KFH	89	58	25	35	16
National referral hospitals to KFH	-	-	7201	8476	4149
MOH referrals to KFH	20	99	228	365	114

To increase the quality of mental health services provided through availability and accessibility of specialized mental health care services for clients, 43 district hospitals have mental health services with at least one mental health nurse. Specialized mental health services are provided at CHUK in the mental health department and at Ndera Psychiatric Hospital. Mental Health referral services are provided at CHUK for outpatient care and at Ndera Psychiatric Hospital for inpatient care. For inpatient care, Ndera Psychiatric hospital performed 37,465 consultations during the reporting period. Ndera Psychiatric Hospital registered 3,384 hospitalizations, and 2,496 (73.75%) patients have been discharged from the hospital during the reporting period.

Epilepsy is the main cause of consultation with 52% of all consultations performed during FY 2011-2012.

2.2.3. Access to Social Support Services

RBC/IHDPC worked to improve access to social services for those affected or infected by communicable and non-communicable diseases during FY 2011 – 2012, including support to OVCs, PLWHA and at-risk groups.

RBC/IHDPC, in partnership with UPHLS developed an Inclusion Guide for People with Disabilities during FY 2011 - 2012.

The HIV prevention IEC materials have been adapted to different categories of disabilities like people with visual impairment, physical disability, and mental disability, among others. During this year six EDPRS pilot sectors (Agriculture, infrastructure, Justice, Education, Social protection and Youth) were evaluated to ensure that HIV was mainstreamed. After evaluation, guidelines and a checklist were developed to inform EDPRS II. NCDs guidelines and a checklist were also developed to mainstream Non-Communicable Diseases into EDPRS II.

Information on the number of OVCs, population characteristics, needs, and geographic distribution has traditionally been limited. Through the strengthening of district OVC coordination committees, RBC/IHDPC developed a structure and system to address the needs of OVCs and reduce duplication of efforts and wasting of resources. With financial support through SSF funds, districts assembled OVC committees that meet quarterly to coordinate the efforts of local government and stakeholders, review progress, and share lessons learned.

Through an OVC M&E technical working group based at NCC, IHDPC provided technical support on the development of a National OVC Database which aims to capture, store, process, manage, monitor, and report information on OVC and service providers (NGOs, CBOs, FBOs etc) in Rwanda. Moreover, interventions for OVCs are monitored through the progress against community indicators of successful implementation.

RBC through the ISM unit has supported ACPLRWA to conduct the “Rapid situational analysis on the availability of HIV/AIDS services for truck drivers and their sexual partners at stopover sites in Rwanda”. Currently the recommendations from the study are being implemented.

Fishermen in the Kivu region are one of key populations at risk of contracting HIV which IHDPC focused on during FY 2011 - 2012. In addition to health center training on sensitization, needs assessments on HIV/AIDS in the region and the basic education on HIV/AIDS implementation were instituted as part of a coordination mechanism and M&E system for this at-risk group.

All MDR-TB patients received nutritional support during both hospitalisation and ambulatory phases. During an ambulatory phase, they received in addition, transportation fees are provided for transportation to health facility. Leprosy patients are provided with community health insurance (for patients and their families), and are provided with financial support for their income generating activities.

2.2.4. Health Promotion

RBC implemented numerous activities related to improve access to health services through health messaging, hotlines and documentation services, media as well as campaigns during FY 2011 - 2012.

2.2.4.1. Disease Prevention and Control Messaging

The Center in Charge of Health Communication at RBC conducted mass sensitization on health issues as a cornerstone strategy towards improving access. Therefore, mass sensitization campaigns were conducted through a broadcast of 48 episodes of radio and TV program on subjects ranging from HIV/STI awareness, TB, hygiene and sanitation to condom use. Radio programs were diffused on 5 radio stations, 2 town hall meetings organized on sensitizing the general public on RBC, Mutuel de Santé, NCDs, and improved patient care by health providers. Booklets covering sensitization topics relating to HIV/AIDS were also produced, validated and disseminated.

The RBC/EID division produced cholera prevention and control posters which were provided at the border with the Democratic Republic of the Congo and at neighboring health centers and refugee camps.

The RBC/NCBT informed and educated the general public on safe blood donation through various methods including billboards, flyers, leaflets and small brochures. RBC/NCBT published over 40 articles in local and international news papers magazines and websites, in addition to the distribution of targeted social marketing materials to increase public awareness.

Regarding TB prevention messaging, each community health worker (CHW) was given a number of households where he/she provide messages on TB prevention to household members. Different IEC materials were printed and distributed by the TB Division which included leaflets, flip books and community brochures.

2.2.4.2. Social Outreach

As part of its social outreach efforts in FY 2011 – 2012, RBC conducted medical campaigns, along with administration of a documentation center and hotlines. In order to improve access and equity to health services, the Rwanda Health Communication Center produced and disseminated 1500 copies of the *Ubuzima* Magazine for the Health Sector. This magazine is intended to document and disseminate the success stories in the health sector with the aim of informing stakeholders on the progress of the sector as well as the opportunities for partnership. This magazine is also shared among the local and international media.

A toll free telephone line was established by the EID Division. Additionally, the Mental Health Division MH established hotlines which were used to respond to trauma-related questions during the 18th commemoration period. The NCBT Division has also put in place a hotline for blood donors' assistance.

Thirty seven radio programs were broadcasted on different radio stations by TB and 66 printed articles were published.

With an aim of increasing focus on Rwanda's health activities, RBC/RHCC has supported MOH with Media coverage of various campaigns and events. Health promotion activities were implemented through the *Urunana* Soap Opera, which focuses on safe sexual behavior, HIV testing and condom promotion, PMTCT, Care and Treatment, TB, Malaria, Pre-Exposure Prophylaxis (PEP) services, Male Circumcision (MC) and family planning.

Press conferences, TV spots and broadcasted messages were organized, including the launch of the rotavirus vaccine in Rwanda, a quarterly press conference on health sector performance, the signing of an MoU with MIOT hospitals of India, International blood donation day, World Cancer day, and World Mental Health Day.

Radio broadcasting messages were used by the Mental Health Division to increase community awareness both at the 18th commemoration period of Genocide against Tutsi, the World Mental Health Day campaign and the campaign for fighting against drugs use.

The MOPDD Division conducted four radio specials focused on malaria prevention and treatment, the benefits of the correct use of LLIN, proper hygiene and sanitation, and the benefits of indoor residual spraying etc. This was followed up with articles in local newspapers, the distribution of BCC modules, and other media dissemination of malaria sensitization information for patients.

2.2.4.3. Campaigns and Community-Level Interventions

World TB day and World Leprosy day were both commemorated during FY 2011 – 2012 to great success. RBC has organized a TB prevalence survey and it was officially launched by the Minister of Health in Ngoma District in May 2012. In July of 2011, the VPDD Division, in collaboration with the Maternal and Child Health Division in the Ministry of Health organized Mother/Child Health Week where different interventions were performed in communities countrywide.

Other campaigns of note conducted during FY 2011 – 2012 include:

- **HPV Vaccination.** In an unprecedented move for the region, beginning in December 2011, Rwanda achieved an average coverage rate of 97% for all three doses in the target population of young girls.
- **Rotavirus Vaccination.** The Rotateq vaccine was introduced into the routine under-5 immunization portfolio in May 2012.
- **World AIDS Day.** December 1, 2011, saw basic HIV/AIDS education programs launched in all thirty districts, including sensitization on HIV transmission prevention.
- **Deworming Campaign.** In May 2012, MOPDD, in collaboration with the VPDD Division, organized a deworming campaign integrated with HPV vaccination and rotavirus vaccine launching that covered 93% of eligible children.
- **World Cancer Day.** In conjunction with the cervical cancer vaccination campaign, Rwanda honored World Cancer Day in March of 2012.
- **World Blood Donor Day.** In June 2012, RBC organized an event for World Blood Donor Day. This event was organized in Rubavu district where over people attended. RBC/NCBT also organized in all its Regional Centers for Blood Transfusion (RCBT) an open week to showcase all its blood donation activities and over 1000 units of blood were collected during that period.
- **Counterfeit Medication Awareness Campaign.**

In 2009, 2010 and 2011, RBC/IHDPC and its partners engaged all stakeholders in successful national campaigns for the promotion of condom use and to dispel myths and misconceptions around condoms. These campaigns involved key political and religious leaders including Ministers, Parliamentarians, Governors, District Mayors, popular musicians and other artists, at all central and decentralized levels. Campaigns involved events organized at different levels including football matches, music festivals, radio and television shows broadcast at national and community stations, competitions and debates in schools, sensitization sessions, organized marching, rallies and use of promotional items like billboards and radio spots.

In addition to those listed above, RBC/RHCC supported in the organization of different RBC campaigns such as World Malaria Day, Genocide Memorial Week, Mental Health Day, Eradication of Malnutrition, Operation Smile, Anti-Tobacco Day, World Health Day, World TB Day, True love with Imbuto Foundation, counterfeit drugs, Police Week, and Anti-GBV campaigns.

3. Research

The National Health Research Committee (NHRC) was approved by GSMM on 26th of March 2012 to ensure the guidance of National Health Research.

3.1. Implementation of Research Activities

The following are the research activities currently being completed by RBC at the time of this report:

- Prevalence of TB, HIV and TB/HIV in Rwandan prisons
- Operating characteristics of the questionnaire used for screening of tuberculosis in adult outpatients with HIV infection”.
- All-cause mortality and associated risk factors among patients with TB during anti-TB treatment in Rwanda: A retrospective cohort analysis”.
- Potential impact of scale-up of ART services on TB notification rates in Rwanda.
- The provision of TB service, including prophylaxis in children and tracking of Lost-to-Follow-Up (LTFU) patients
- Knowledge and risk behaviour in TB patients
- Long-term follow-up of MDR-TB patients
- Evaluation of the effectiveness of artemether-lumefantrine in children with uncomplicated clinical malaria in rural Rwanda
- Integrated Research Partnerships For Malaria Control through an Ecohealth Approach In EAST AFRICA
- A Multi-country, Multi-site Evaluation of the Efficacy of Artemisinin Combination Therapy in East Africa: A World Bank- East Africa Public Health Laboratory Networking Project
- Tracking Long Lasting Insecticidal Mosquito Nets (LLINs) distributed via National Campaign: Monitoring LLIN Loss, Physical deterioration, and Insecticidal Decay in Rwanda.

- A Study to Determine the Current Prevalence of Malaria Detectable Among Pregnant Mother Registering for ANC in Six Districts in Rwanda
- Assessment of severe malaria and malaria deaths in patients admitted in district hospitals in Rwanda
- A study on the impact of marshlands commercial exploitation in collaboration with SPH
- Prevalence of malaria in pregnant women attending ANC services in Rwanda
- Malariometric survey June 2011
- Durability and efficiency of LLIN distribution and long-term implications
- 2nd Line ART Treatment outcomes
- PMTCT Effectiveness and sero- surveillance in pregnant women
- DBS as early detection technique for paediatric ART
- ART drug resistance
- Rwanda National Pediatric HIV ART Program outcomes
- AIDS Indicators and Incidence surveys
- Serodiscordant couples HIV transmission study
- At-risk populations interventions and strategies
- Antimicrobial resistance
- Access to adolescent-friendly services
- Salmonelle and Shigella infections resistance in Rwanda
- Detection of HSV1 and HSV2 using multiplex PCR in clear CSF from patient suffering from encephalo-meningitis in Rwanda
- Survey to determine the number of genocide survivors living with mental health problems

3.2. Grants Submitted and Research Partnerships

The RBC/EID submitted a 5-year grant proposal for sustaining Influenza surveillance networks. In the same framework, the RBC/Medical Research Center prepared and submitted the following research grant proposals for funds mobilization of 1m USD to the CDC and 7m USD to the Bill and Melinda Gates Foundation. Grant topics under the Bill and Melinda Gates Foundation (BMGF) include use of the Prepex for MC, scale-up of circumcision programs, and pilot of medical male circumcision in HIV prevention in Rwanda. Grants submitted to the CDC

include evaluating the effectiveness of PMTCT guidelines, analyzing mortality of Adult patients on ART, and understanding the cost-effectiveness of HPV DNA sampling approaches in Rwanda. Additionally, a funding proposal was submitted by RBC/NCDs, PIH and ICAP to evaluate the comparability, feasibility, cost effectiveness and acceptability of different HPV DNA sampling approaches in Rwanda. Two other research grants were submitted at the time of this report for HIV program evaluation in Rwanda. Another grant proposal conjointly drafted and submitted by MRC and HIV Divisions to Global Funds and targeting “AIDS Indicator Survey (RAHIS)” has been approved and funded at total of 2 millions USD. Apart from this grant, the above mentioned are still under review.

In total, 9 research grants have been submitted eight are still under review but one has been successfully approved.

3.3. Research Conferences and Peer-Reviewed Publications

During FY 2011 - 2012, RBC published articles on the subjects of surveillance data monitoring, influenza management, individual disease response and outbreak management. Peer-reviewed publications released during the past year ranged from such subjects as cancer epidemiology and clinical biomarkers to efficacy of male circumcision devices in cohort analyses. Further, the RBC/EID gave presentations at international conferences on the subject of disease outbreaks (botulism, measles, cholera, and typhus) and disease surveillance, monitoring, and response.

In collaboration with MoH/MCH, the RBC/NCD organized The International Conference on Pediatric Cancer to provide an overview of pediatric cancer and other pediatric non-communicable diseases. The conference resulted in the adoption of 5 pediatric cancer treatment protocols and an implementation plan to begin provision of pediatric cancer care at the Kigali Hospital Center (CHUK) and a strategic plan for strengthening capacity of cancer diagnosis, treatment and palliative care in Rwanda.

The RBC also organized the 7th Annual National Pediatric Conference on Children Infected and Affected by HIV/AIDS in order to promote the evidence based planning of services delivered to children infected and affected by HIV and AIDS.

4. Planning, Monitoring and Evaluation

4.1. Planning activities

During the fiscal year, the RBC drafted its overarching goals, guiding values, and mission and vision statements through the evaluation of key stakeholders at a leadership retreat. Further an action plan was developed, including a complete budget for the next fiscal year (please refer to

financial analysis section for details. The RBC also began a process of strategic planning including a functional analysis of the institutional structure. Last, RBC played a pivotal role in the development of the HSSP III and the EDPRS II.

4.2. Monitoring and Evaluation Activities

Routine data collection activities performed during FY 2011 – 2012, included but are not limited to, the following:

- Use of a NAPIER Hospital Management Information system to support operations at KFH
- The conduction of quarterly evaluation meetings to generate district-level progress on TB
- Assessment of yearly immunization coverage by disease area
- Monitoring of LLIN and IRS coverage by district

In an effort to inform routine planning through epidemiological understanding, during FY 2011/2012, RBC collected and analyzed approximately 30,000 lab tests for quality assurance, including chemistry, hematology, CD4.

Additionally, RBC collected and analyzed blood samples and cultures for the clinical staging and monitoring of the presence of diseases such as measles, rubella, and tuberculosis. Routine data were collected monthly through the TRACnet system. These data include patient figures on ART, PMTCT, VCT, male circumcision and serodiscordant couples follow up.

During FY 2011/2013, advanced quarterly meetings were organized by RBC/MOPDD aiming at correcting SISCom, HMIS, and the malaria indicator monthly report from the district hospital to central level. 235 participants from all DHs attended. From 14th June to 24th July 2012, RBC/MOPDD conducted a Data Quality Audit on main malaria indicators such as number of days of stock out in antimalarial drugs, number of simple cases reported, and number of blood smear done and number of positive results.

As it does annually, The RBC/TB Division conducted data audits in 52 health facilities selected from all provinces to check consistency between health facility reporting and data in source documents. The two were generally found to be consistent during FY 2011 – 2012.

In order to ensure quality of data, the RBC/HIV Division visited each district hospital twice during the reporting period and found that quality of HIV reporting data is generally high. The high volume of the ART records for facilities that have been providing ART for a long time poses challenges during the retrieval of follow-up information for patients.

In the same spirit, RBC/HIV-OBB organized a semi-annual evaluation meeting with district hospital supervisors and ART clinic staff on TB screening in PLWHA.

The RBC/EID Division conducted data audits for five district hospitals where the electronic reporting system (eIDSR) was piloted. Findings revealed that completeness and accuracy of reports were both high and The IHDPC/ISM Unit conducted audits in 25 out of 30 districts in order to improve community data quality.

4.1.2. Program Evaluation

During FY 2011/ 2012, the RBC/HIV Division conducted evaluations including progress along PEPFAR indicators, review of consistency with the 2009 HIV National Strategic Plan (NSP) and the HIV Division Annual Action Plan, progress towards achieving universal access to treatment, progress towards achieving 2011 UNGASS indicators, and the HIV Division quarterly progress reports. Progress in TB achievement was measured against the TB NSP and the TB NSA during FY 2011 – 2012.

5. Financial Stability and Sustainability

5.1. Financial Statements FY 2011 – 2012

Below are financial highlights for the fiscal year ending July 1, 2012. Between June 30, 2011 and July 1, 2012, approximately 30% of total cash outflows went toward the provision of wages and salaries for RBC staff. 52% were spent on the provision of goods and services, and the remaining 18% included capital expenditure, social assistance, medical referral debts, and internal transfers and other expenses. At the end of the year, 6 billion RWF remained in balance of funds.

Table 8. Financial statements FY 2011-2012

Statement of revenues and expenditure	FY 2011/2012, RWF
Revenues	
Cash transfers from Treasury & Direct Payment	6,147,767,724
Inter-entity transfers (transfers from other Budget Agencies)	15,411,775,032
Grants/loans from development partners	7,483,896,297
Other income (Including internally generated)	14,790,291,192
Total Revenues	43,833,730,245

Expenses	
Wages and Salaries	12,987,399,285
Purchase of goods and services	22,787,469,071
Capital expenditure	2,443,664,176
Social assistance	241,332,321
Medical referral debts	400,000,000
Other expenses	604,891,864
Funds paid from treasury but recognized previously	670,102,646
Subsidies	171,000,000
Inter-entity transfers (transfers to project)	1,160,390,625
Other transfers to Non Budget Agencies e.g. sectors, schools, high courts etc	2,467,691,854
Total expenses	43,933,941,842
Surplus/deficit	-100,211,597
Fund balance at beginning of year	6,182,199,678
Adjustment on opening balance	-60,558,647
Fund balance at end of year	6,121,641,031

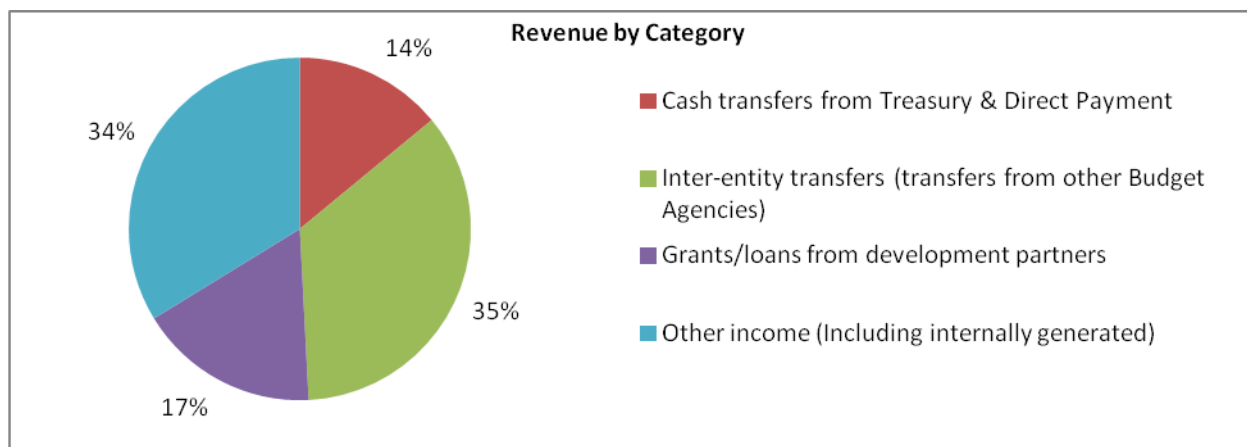


Figure 8 Revenue by Category, RBC, FY 2011-12

In accrued revenue by category for fiscal year 2011 – 2012, inter-agency transfers and other income, including internally-generated revenue, comprised approximately 70% of all revenue. Grants from development partners comprised 17% of total revenue during this time period. Internal revenues are projected to increase throughout fiscal year 2012 - 2013.

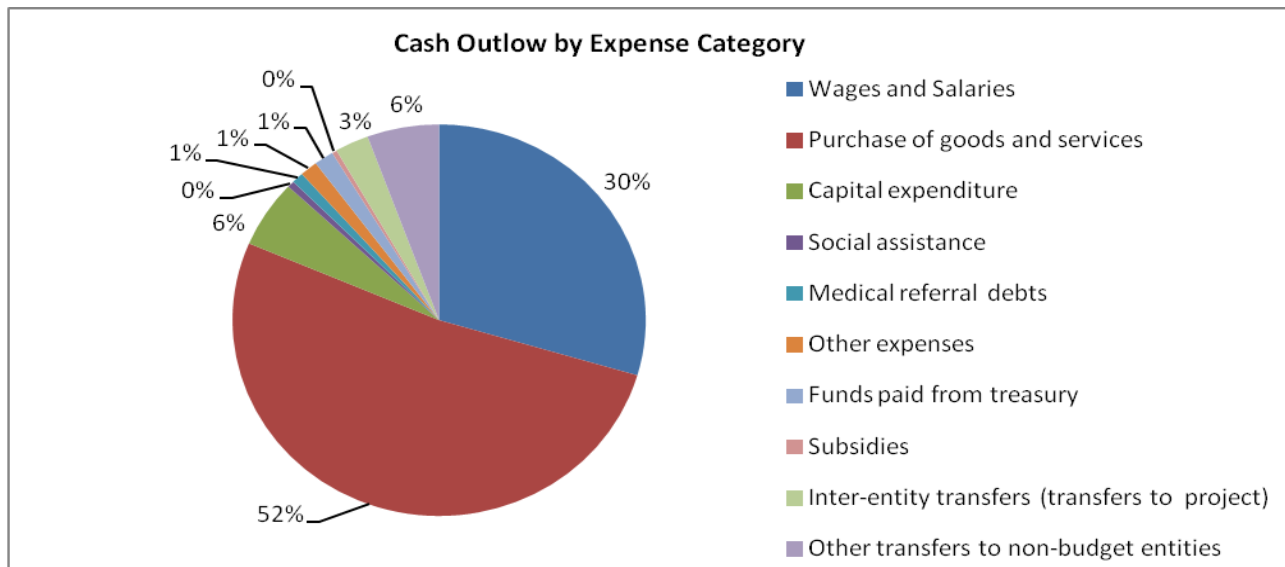


Figure 9 Cash Outflow by Expense category, RBC, FY 2011-12

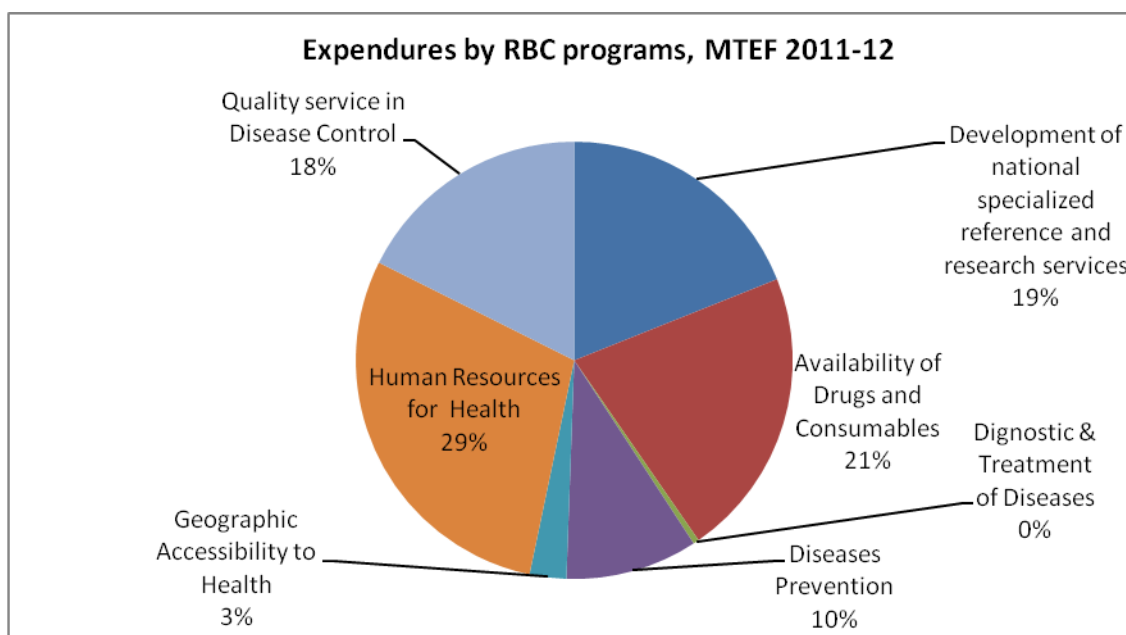


Figure 10 Expenditures by RBC programs, MTEF2011-12

Financial assets at the end of fiscal year 2011 – 2012 were comprised of cash, accounts receivables, and accounts payables, resulting in net 6 billion Rwandan francs. Through strategic financial rigor, RBC intends to conclude fiscal year 2012 – 2013 with substantially more revenue, through a bolstering of specialized health care services, targeted revenue generation initiatives, and cost-saving mechanisms by service area and department.

Table 9. RBC/KFH financial statements, FY2011-12

Revenue sources (million RWF)	2011/12	2010/11	2009/10	2009	2008
Internally Generated	6,728	5,731	4,621	4472	4,084
Annual Growth (%)	17%	24%	3%	10%	28%
Operational	2,908	2,544	3,563	3748	2,300
Support from Government					
Total Operational Revenues	9,636	8,275	8,184	8220	6,384
Staff costs	5,155	5,388	5,353	2,464	3,981
Cost of sales	1,713	1,584	1,874	826	990
Other operating costs	1,974	2,163	1,797	1,071	1,998
Total Operational Expenses	8,842	9,135	9,024	8,722	6,969
Total Revenues	9,636	8,275	8,184	4,110	6,384
Total Operational Expenses	8,842	9,135	9,024	4,361	6,969
Surplus/deficit	794	-860	-840	-251	-585

The above table illustrates the operational expenses and growth of RBC/KFH during FY 2011 – 2012. Total operational expenses went down from the previous fiscal year, and operational revenues saw a net increase of 1.3bn RWF during the same time period. Operating costs have remained consistent between 2008 and the present. Net surplus at the end of the fiscal year was 794mn RWF.

Table 10 Generated Income by RBC/Division, FY 2011-2012

Generated Income		
Division	Total Budget for 2011-2012	Budget received
RBC/MMC	-	209,386,097
RBC/RHCC	-	583,272,408
RBC/MOPDD	-	16,597,683
RBC/NRL	-	21,614,756
RBC/KFH	6,903,541,000	7,398,394,794
RBC/MPD	7,628,862,782	7,083,009,266
RBC/MP	-	40,086,857
RBC/IM	-	16,022,398
RBC/VPDD	-	33,783,000
Other	-	58,226,579
Total	14,532,403,782	15,368,384,259

Table 11. Financial Assets at the end of fiscal year 2011-2012

Financial Assets and Liabilities as at 30 June 2012	FY 2011/2012 RWF
Financial Assets	
Cash at Bank	14,574,373,653
Cash in Hand	1,816,708
Accounts Receivables and Advances	4,137,695,849
Accounts Payables	12,692,456,776
Net Financial assets	6,021,429,434
Surplus and Deficit, Previous Years	
Accumulated surplus (Deficit) from previous years	6,121,641,031
Net surplus / (Deficit) for current year	-100,211,597
Total closing balances	6,021,429,434

Fiscal year 2012 – 2013 saw a minimum of accumulated deficit from previous years, resulting in approximately 6 billion RWF in closing balance.

Included in the planning phase for fiscal year 2012-2013 are several key strategic objectives currently achievable under the projected funding envelope. These objectives include improving health outcomes of the population across several process benchmarks of success, including reduction in incidence, morbidity and mortality caused by communicable and non communicable diseases. At the same time, the Rwanda Biomedical Center aims to improve quality through the implementation of quality assurance and quality control techniques across all service areas, and improve access to health services and provide sub-specialized health care as a model of excellence for the region. In addition to continuous quality improvement, RBC will sustain availability of affordable pharmaceuticals and blood products, and sustain current levels of high-quality service provision, health infrastructure, and medical equipment.

Through a financial lens, RBC will accrue additional revenue through expanded programs and new sources, and to reduce cost through strategic service integration as the merger ramps up to its full functional capacity.

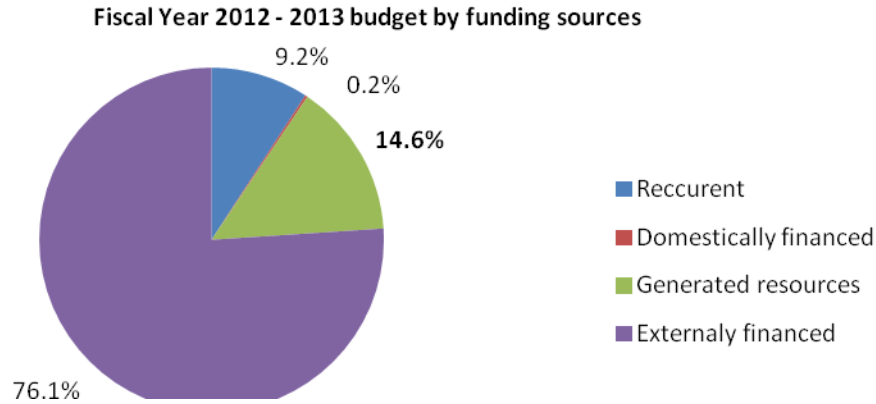


Figure 11 FY 2012-2013: Budget by funding sources

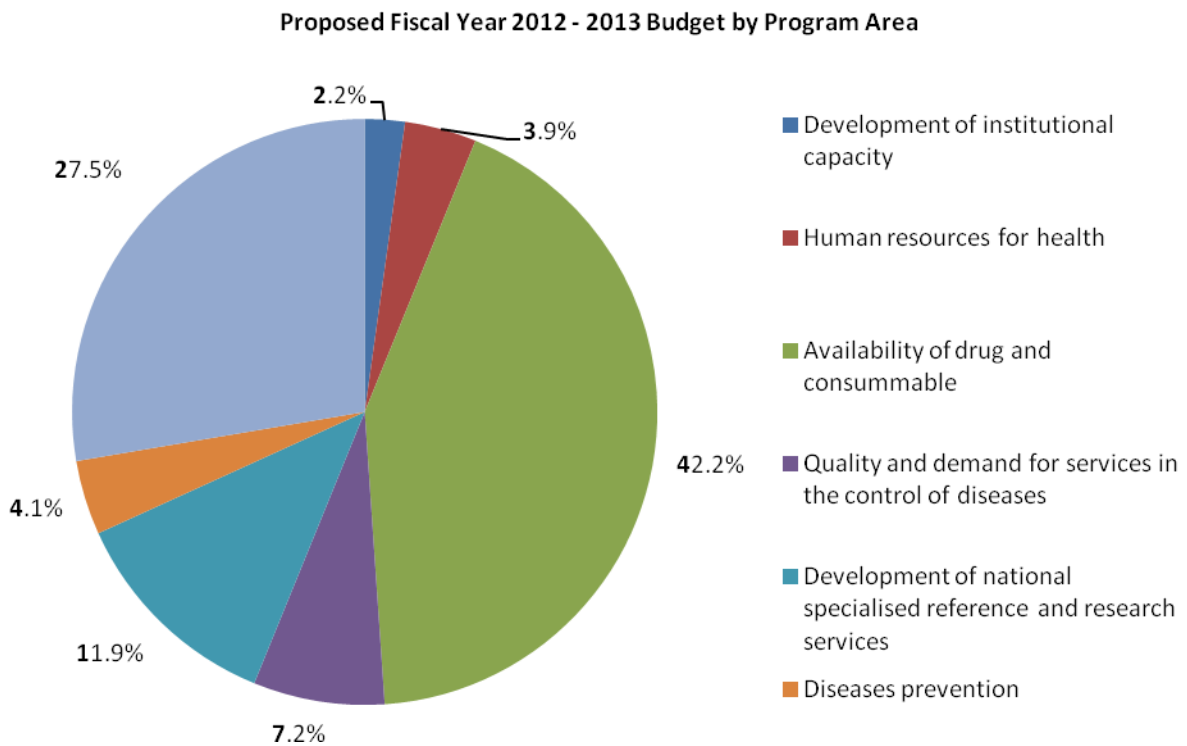


Figure 12 Proposed FY 2012-2013 budget by program Area

By program area, proposed spend for fiscal year 2012 – 2013 will encompass a preponderance of institutional capacity development so that RBC can further meet the health sector needs of an increasingly complex Rwandan population. Key strategic programmatic areas of spend, including disease prevention and diagnostic and treatment services will continue to make up a significant portion of the budget.

6. Innovations

During FY 2011/2012, CHWs executed a sensitization campaign that helped in identification of more TB suspects.

The RBC/EID Division moved to an electronic reporting system with the advent of the eIDSR. It was proven that the system improved timeliness and completeness of reports and this facilitated the data analysis at all levels and this will ease the prompt response

The creation, under IHDP, of the Impact Social Mitigation Unit during FY 2011/2012 helped RBC strengthen efforts to minimize and lessen the impact of risks and threat warnings. Its purpose is to ensure a sustainable social economic management of the impact of diseases (or burden of diseases). These diseases included but are not limited to HIV/AIDS, TB leprosy, respiratory illness, malaria, mental illness and non-communicable diseases.

The During FY 2011 – 2012, the MPD Division underwent a switch from a paper-based Logistics Management Information System (LMIS) to an electronic LMIS for better pharmaceutical management and information-sharing between health facilities and institutions. At the time of this report the project was near completion.

In order to improve warehouse operations and to assure safety and security of infrastructure, MPPD initiated fire detection and suppression initiative, a cooling system project, and the installation new drug storage infrastructure during FY 2011 – 2012.

7. Challenges

One of the key challenges associated with the launch of the successful RBC merger during FY 2011 – 2012 was the procurement and furnishing of viable office space, and the recruitment of adequate personnel. Additionally, RBC has few operational vehicles compared with need. During FY 2011-2012, RBC hired many vehicles for in-country transportation, amounting to significant expenditure. Additionally, warehouses used for storage of goods and supplies are scattered throughout the city, which also drives up transportation costs. RBC has not been able to get a plot of land on which it can re-locate the cold chains used by RBC/VPPD, but discussions are underway with MININFRA and the RHA to arrive at a solution.

Ramping up control of finances and coordinating activities across divisions at the inception of the RBC merger proved challenging.

Unplanned tenders turned into emergency orders when the activities were not well-planned for, created procurement delays and poor funds utilization over time. Similarly, parallel audits were conducted across divisions, creating duplication of efforts. The Internal Audit Unit was also understaffed, and office management was weak at inception, resulting in some disorganization that impacted outcome.

The current electric wiring and water installation at RBC/KFH is old and worn out. It was installed in 1987, and no available replacement as it has become obsolete, depleted with frequent electrical faults. This needs urgent overhaul for functional and safety reasons.

MDR-TB notifications remained low compared to targets set up earlier (based on WHO estimates). However these targets will be reviewed in line with the program evaluations done and with the availability of the TB prevalence survey results.

The current headquarters of VPDD needs to be relocated as the plot in which it is built to store cold-chain vaccines prior to distribution. Further, updated demographic information on immunization coverage need would assist with projections for coverage roll-out and scale-up.

Stock-outs of consumables and reagents were often cited as hindrances to RBC/NRL success throughout FY 2011 – 2012. Additionally, an increase in the number of samples for processing (both from separate labs lacking capacity, and due to an increase in program work requiring testing, such as serodiscordant couple testing for treatment as prevention) created a capacity problem at the NRL during the reporting period.

The lack of a qualified company in Rwanda available to perform adequate maintenance and calibration of biomedical laboratory equipment also greatly hinders progress.

Lack of incinerators for blood products waste management was a challenge together with Lack of sound financial sustainability plan for income generation

Lack of congruent data collection tools and management platforms hindered success of reporting activities in RBC during FY 2011-2012.

Additionally, lack of accurate information on client drugs and health commodities consumption hampered ability to appropriately forecast and procure to cover need. Transportation, both in the active distribution program and through the conscription of private transportation companies, was of inconsistent quality. Lastly, insufficient warehousing space was cited as a hindrance success during FY 2011 – 2012.

Challenges add

- Stock out
-

8. Future Strategic Direction and plans

HR improvements will be made system-wide under the new RBC umbrella. These include, but are not limited to:

- Finalization of the HR staff inventory and data entry into the IPPS software, to be completed by September 2012.
- Implementation of the salary harmonization process by the end of August 2012
- Filling of all vacant posts with consideration of funds availability
- Development and implementation of a staff retention strategy
- Development of a complaint and grievance management strategy for RBC

Throughout the next reporting period, King Faisal Hospital aims to maintain international accreditation status and become re-accredited for three years by March 2013. Additionally, KFH will implement a robust customer care program through the provision of institutional culture change, and ensure clinical service delivery is patient-centered and is of the highest quality. Last, KFH would like to enhance hospital reputation and visibility as a face of RBC and the health sector as a whole, and increase hospital capacity to handle customers. There exists a need for a new ultra-modern hospital in order to meet the country's vision. KFH envisions this facility as being the ideal corollary to the current level of service specialization provided within its walls, and both hospitals will be complementary in the same vicinity. At the time of this report, a plan is underway for the construction of a new hospital under a PPP (Public Private Partnership) with Tokushukai group.

During the next reporting period, RBC/VPDD will shift to new location after construction of a new facility is complete. In lieu of a sound figure on the number of children eligible for and currently lacking immunization coverage, the BCG figure on vaccinated children will be used as a proxy denominator until we have the new denominator with this coming census.

Recruitment of lab staff is a near-term priority for the NRL during the next reporting period. In collaboration with RBC/MPDD, RBC/NRL also aims to strengthen the supply chain management so as to avoid any stock-out of reagents and laboratory consumables that often lead to sample backlogs and delayed dissemination of test results. Further, there is a pronounced need to decentralize specialized testing of the molecular biology section such as VL and EID testing.

Encouragement of staff participation in the research activities through training in research skills and also continuation of the operational research that leads to publication are near-term priorities for 2012 – 2013. Training courses for staff on medical equipment maintenance would be highly beneficial for the quality of services throughout the lab network. Upgrading classes for medical laboratory technologist from A2 to A1 (higher education) should be also implemented.

Ideally, RBC/NRL will be able to procure additional funding for the renovation and construction of laboratories according to norms and standards. In addressing the needs for special laboratory tests in Rwanda, RBC/NRL will engage clinicians, pathologist and private laboratories in collecting information on these tests.

The RBC/EID division plans to roll out the eDSR to all public health facilities during the next reporting period. The electronic reporting system will ideally operate at the national level and will assist in implementing the community –based diseases surveillance and response..

During FY 2011 – 2012, the RBC/MRC developed its Strategic Plan for 2012-2017 to provide guidance and strengthen research in Rwanda. This strategic plan is composed of 5 aims:

- Research further grants funding for Rwanda
- National Research Agenda policy and rules and guidelines that govern research in Rwanda.
- Research data management
- Data Dissemination and research translation
- Research capacity building

In order to improve the data management for the next reporting period, MRC will:

- Establish a computer lab for data management and research training
- Install toolkit for the management of microdata
- Include the National Archive Data (NADA)
- Institute a comprehensive program of documentation of existing data

Immediate improvements made to RBC/MPPD in the next fiscal year include recruitment of new staff and review of the division organizational structure, acquisition of vehicles to improve transportation, implementation of LMIS projects in order to gain visibility into the supply chain mechanism, and construction of further RBC/MPPD warehouses.

9. Conclusion

According to critical indicators in the areas of disease prevention, care and treatment,, programmatic achievements under RBC during FY 2011- 2012 are on track to realize the Millenniums development Goals in 2015. We commended key successes in the areas of Social outreach campaigns, medical ventures (vaccines, new technologies, etc) and researches.

Despite significant achievement, limitations during this period included stock-outs of consumables and reagents, lack of office space and areas adequate staff, integration of services and synchronization of merged Institutions, legal compliance and the successful financial inclusions of all services under one umbrella. Appropriate resolution was sought to address each limitation, and many of the RBC divisions are now adequately staffed, RBC is housed in a new building, and infrastructural needs for supply chain, vaccines, and logistics are close to being met at the time of this report. In order to address the issue of stock-outs of consumables, reagents and other health commodities, LMIS projects were implemented, lending needed visibility into the supply chain mechanism and potential inefficiencies.

As a newly formed institution, RBC was lacking in a cohesive strategy across all divisions that would enable robust evaluation of synergies and areas of programmatic significance. FY 2012 – 2013 will capitalize on learnings from the previous year to integrate sound management practices and strategic execution into all entities. The first near-term priority is the crafting of a rigorous strategic plan for the next several years, which will harness the momentum of the first year of RBC’s growth and move forward into a new period of sophisticated health management, fiscal sustainability, and innovative growth.

ANNEXES

Annexe 1. Table 12. Summary of the financial report

Budget execution report by source Fund					
1. Project					
Source of funds	Total Budget for 2011-2012	Budget received	% of fund received	Budget executed	% Execution
	A	B	C=B/A*100	D	E=D*100/B
Global Fund	17,484,977,989	13,892,469,601	79.5%	13,186,408,750	94.9%
CDC	6,057,858,218	5,024,450,423	82.9%	5,299,972,928	105.5%
Other partners	2,683,751,172	2,459,745,874	91.7%	1,547,818,069	62.9%
S/total	26,226,587,379	21,376,665,898	81.5%	20,034,199,747	93.7%
2. Ordinary Budget					
Recurrent budget	5,646,485,330	5,642,499,062	99.9%	5,589,111,586	99.1%
Development budget	799,209,397	872,435,390	109.2%	872,435,390	100.0%
S/total	6,445,694,727	6,514,934,452	101.1%	6,461,546,976	99.2%
3. Income generated					
MMC		209,386,097		260,512,375	124.4%
RHCC		583,272,408		753,149,739	129.1%
MALARIA		16,597,683		0	0.0%
LNR		21,614,756		319,803,295	1479.6%
KFH	6,903,541,000	7,398,394,794	107.2%	7,398,394,794	100.0%
MPD	7,628,862,782	7,083,009,266	92.8%	8,358,152,460	118.0%
MP		40,086,857		54,082,916	134.9%
IM		16,022,398		0	0.0%
VPDD		33,783,000		222,986,951	660.1%
Other		58,226,579		71,112,589	122.1%
S/total	14,532,403,782	15,368,384,259	105.8%	17,438,195,119	113.5%
Total	47,204,685,888	43,259,984,609	91.6%	43,933,941,842	101.6%

Annexe 2. Table 13. Performance Indicators Matrix

PERFORMANCE INDICATORS MATRIX					
		Baseline	Targets	Actual Values July 2011 - June 2012	Data source
Services delivery areas	Indicator				
Epidemiologic indicators and trend for Malaria program in Rwanda					
Malaria prevention	% of HH of at least 1 LLIN			56	82 DHS
	% of HH with at least 2 LLINs				55 DHS
	% of U5 children who slept under LLINs the previous night of the survey		56		70 DHS
	% of PW who slept under LLINs the previous night of the survey		60		72 DHS
Malaria case management	Proportion of U5 children with fever that received ACTs within 24 hours of the onset of the fever		87%	90%	95% SISCOM
	Proportion of confirmed uncomplicated malaria cases treated with ACTs (community)		46%	100%	99% Malaria Report
	Proportion of confirmed uncomplicated malaria cases treated with ACTs(facility)		74%	100%	98% HMIS
	Proportion of severe malaria in Health facilities that are treated correctly according to the national treatment guidelines		68%	90%	81.6 0% Health facility survey
	Proportion of U5 children with fever that received timely, correct and affordable treatment within 24 hours of the onset of the fever at the community level		NA	90%	70% Health facility survey
	Slide Positivity rate in fever cases (SPR)		13.5	10%	15%o HMIS
	Incidence of malaria confirmed cases (all group of age) per 1000		24%o	44%o	37%o HMIS
	Number and proportion of deaths associated with confirmed malaria cases		432	473	425 HMIS
	Prevalence of malaria parasite infection in under-five children			<1%	1.4% HMIS
	Malaria prevalence in all women (confirmed)				0,7% DHS
			1,4%		
Epidemiologic indicators and trend for HIV/AIDS program in Rwanda					
	HIV prevalence in the population aged 15-49	3%		3%	DHS 2010
	HIV Prevalence in pregnant women	3.2%		2.8%	TRACnet

HIV treatment	Percentage of adult and children with advanced HIV infection receiving antiretroviral therapy	77%		94%	TRACnet
	Percentage of adults and children - with advanced HIV infection known to be on treatment 12 months after initiation of antiretroviral therapy	94,5%		94%	TRACnet
	Number of people in need receiving antiretroviral therapy	94,130	109,324	108,207	TRACnet
HIV Care and support	Pourcentage of orphans and vulnerable children whose households received free basic external support in caring for the child.			12.6%	DHS 2010
HIV Prevention	Percentage of young people (15- 24) who both correctly identify ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission	52%		12,4%	BSS 2009
	Percentage of pregnant women tested for HIV	98,3%		98,3%	TRACnet
	Percentage of HIV-positive pregnant women who received antiretrovirals to reduce the risk of mother-to-child transmission	68%		95%	TRACnet
	Number of condoms distributed	18,896,695		24,115,546	MPDD report
	Number of women reached with targeted HIV prevention	15,684 (2010-2011)		17,252	CNLSnet
	Percentage of Health Facilities with staff who can perform Male circumcision	22%	62%	90%	HIV report
Epidemiologic indicators and trend for Tuberculosis program in Rwanda					
	% of New Sputum Smear positive cases detected among all TB suspects examined with microscopy	3%	4%	2%	TB&ORD Division Report
	Smear conversion rate of confirmed MDR patients at month 6		80%	90%	TB&ORD Division Report

Percentage of New Sputum smear Positive TB cases successfully treated	86.50%	87%	88.00%	TB&ORD Division Report
Percentage of TB patients (all forms) tested for HIV (numerator) of all TB patients (all forms) registered (denominator)	97%	97%	98%	TB&ORD Division Report
Percentage of TB/HIV patients receiving ART by the end of TB treatment out of all TB/HIV patients	68%	69%	70%	TB&ORD Division Report
Number of MDR-TB patient enrolled for 2nd line treatment	66	101	82	TB&ORD Division Report
Number and percentage of MDR TB patients who are successfully treated according WHO guideline	87%	88%	88%	TB&ORD Division Report
Epidemiological indicators for NCDs				
# and % of Hospitalizations due to Asthma			2142(0.9%)	HMIS
# and % of Hospitalizations due to Bone and joint disorders			7174(2.9%)	HMIS
# and % of Hospitalizations due to Cancer			2858(1.1%)	HMIS
# and % of Hospitalizations due to Cardio-vascular disease			6076(2.4%)	HMIS
# and % of Hospitalizations due to Diabetes			1824(0.7%)	HMIS
# and % of Hospitalizations due to Trauma (physical)			25238(10.1%)	HMIS
# and % of Hospitalizations due to Urinary infections			5362(2.1%)	HMIS
# and % of deaths due to Asthma			38(0.5%)	HMIS
# and % of deaths due to Bone and joint disorders			26(0.3%)	HMIS
# and % of deaths due to Cancer			168(2.2%)	HMIS
# and % of deaths due to Cardio-vascular disease			486(6.4%)	HMIS
# and % of deaths due to Diabetes			98(1.3%)	HMIS
# and % of deaths due to Trauma (physical)			518(6.8%)	HMIS
# and % of deaths due to			52(0.7%)	HMIS

	Urinary infections				
Epidemic Infections Diseases prevention	Number of outbreak investigated	1	11	7	EID Division Report
	Share of reported communicable disease outbreaks having laboratory confirmation of etiological agent (percent)	0	63,7%	71.4%	EID Division Report
	Number of outbreaks for which cross border investigation under taken	0	0	0	EID Division Report
	Quarterly publication in a regional surveillance bulletin by East Africa integrated disease surveillance network with country-specific data (yes/no)	No	Yes	Yes	EID Division Report
	Number of health personnel receiving training on outbreak reporting and management	0	38	216	EID Division Report
	Timeliness and completeness of IDSR weekly report	NA	NA	Timeliness: 82 % Completeness: 95%	EID Division Report
	Operational Research studies approved by the peer review panel completed (yes/no)	No	No	No	EID Division/ NRL Division
Vaccination	BCG coverage	96%	100%	100%	DHS
	Penta 3 coverage	90%	98%	98%	DHS
	Polio 3 coverage	86%	98%	98%	DHS
	Measles coverage among children aged under one year (denominator census 2002)	95 % (children 12-23 months)	95%	95%	DHS 2010
Mental health	% of trauma cases received appropriate care by skilled service provider	0%	100%	100%	MH Report
	% of mental patients (new and old cases) attending mental facilities or related health facilities and received appropriate care	70%	100%	80%	MH Report
	% of cases (new and old) with Epilepsy attending mental facilities or related health	70%	100%	80%	MH Report

	facilities and received appropriate care				
	% of new cases with Disorders due to use of alcohol and illicit drug attending mental facilities or related health facilities and received appropriate care	50%	100%	60%	
	% of psychotropic medicine of each therapeutic class is available in the health facilities throughout the year, according to the national essential drug list	50%	75%	55%	
	Number of Health Centers that have at least 1 nurse trained in mental health	118	433	220	
	Number of health facilities with trained professionals on suicide prevention	0	10	6	
	Number of DHs with mental health care and HIV integrated	9	43	11	
Health promotion	Number of campaigns conducted (IEC materials produced and disseminated, radio and TV campaigns, Out door advertising channels, community outreach)	95%		97%	RBC/RHCC Report
National Laboratory	Number of viral load tests performed			54,185	
Blood transfusion	Number of blood units collected and screened			37,831	
Medical maintenance	Number of District Hospitals fully built	42		44	
Medical Procurement and distribution	Number of stock out for vital and special medicine		0%	3%	MPDD report

Annex 3 Table 14: Pharmaceutical products procured

# of tenders	Designation	Source of funds
2	Sosoma CSB FORTIFIED sac 30 kg	GF/SSF-HIV/District and Hospital budget
13	Supply of Essential Medicines, Medical Consumables, Reagents and Laboratory Commodities	MPD GF/SSF HIV GF/HIV-R6
3	Supply of tests, reagents and consumables of medical laboratory	GF/SSF HIV PEPFAR
1	Supply of male condoms	GF/SSF HIV
2	Supply of Boold bagsTriple 450 ml	GF/SSF-HIV
70	Drugs and medical consumables	MPD GF/RCC MALARIA - PHASE I GF/SSD-TB RF CHUK
2	Determine HIV 100 tests + accessoires	PRIVATE SECTOR GF/SSF HIV
1	Phenobarbital 100 mg cp	MPDD
1	Diazepam 5 mg cp	GF/SSF HIV
1	Catheter court IV 18 G and 22 G	MPDD
2	Architect HBs Ag Qualitative Assay	MPDD GF/SSF-HIV
1	Amitrypline 25 mg cp	MPDD
1	SD Bioline HIV 1-2	MPDD
1	Carbamazepine 200 mg cp	MPDD
1	Metronidazole 250 mg cp	GF/SSF-HIV
1	DELTAMETRIN	GF/RCC MALARIA - PHASE I
8	Reagents and Consommables of Laboratory	GF/SSF-HIV MPD/LNR
2	Supply and delivery of Tests, Reagents and medical consumables	GF/SSF HIV
7	Supply and delivery of Laboratory commodities	MPD/LNR GF/SSF HIV RBC/IHDPC
1	Supply and delivery of Cholera camp materials (tents)	EID
2	TB Laboratory ragents (Hain Kits) for MDR TB detection	MPD NRL
2	Supply and delivery of Anti-Retroviral 3rd line	GF/SSF HIV
1	Supply of bed nets (rectangular)	GF/SSF MaLARIA
1	Supply and delivery of Cholera camp materials (Beds)	EID
1	Urgent Supply of RPR	MPD
1	Supply of IV Canula	GF/SSF MALARIA

2	Supply of Mebendazole tabs 500mg	GF/SSF MALARIA GF/RCC MALARIA
2	Supply of Antiretroviral drugs	GF/SSF HIV
2	Quality control of Bupivacain	MPD
3	Supply of Anti malaria commodities: Artemether + lumefantrine	GF/SSF MALARIA
17	Supply and delivery of essential drugs and medical consumables	RBC/MPD GF/SSF-HIV
1	Povidone iodine 10% fl de 200 ml	GF/SSF-HIV
1	Supply and Delivry of Gauze Roll 90 CM x 91 M	RBC/MPD
1	Supply and delivery of Influenza testing Commodities	IHDPC
2	SUPPLY OF PLUMPY NUT	GF
2	TB drugs : 1st TB medicines	GF/SSF-TB
5	Anti-malaria commodities and laboratory reagents for HPLC	GF/SSF-MALARIA
1	Supply and delivery of Hepatitis B Immunoglobulin 150 iu	MPD
1	Supply and delivery of laboratory equipments for ELISA System	MPD
2	Supply and delivery of Water - Based condoms lubricants for condoms, Male and female condoms	GF/SSF HIV
2	Supply and delivery of medicines for community treatment centres: Amoxicillin 125mg tab, Zinc sulfate tab and ORS	MPD
1	Solution liss	MPDD
1	Set de transfusion UU Aiguille	MPDD
1	Blood safety commodities: Blood Transfusion set	GF/SSF-HIV (RBC/NCBT year 2 SSF-HIV)
1	Art tips Molecular	GF/SSF/HIV
1	BACTEC	MPD/LNR
1	Supply of hematology reagents for Sysmex	NRL
6	Supply and delivery of reagents and medical consumables	MPD/CDC
6	ARV drugs	GF/SSF-HIV MPD
4	Architect HIV PRODUCTS	GF/SSF HIV MPD GF/SSF/HIV/CNTS

ANNEXE 4. HIV indicators

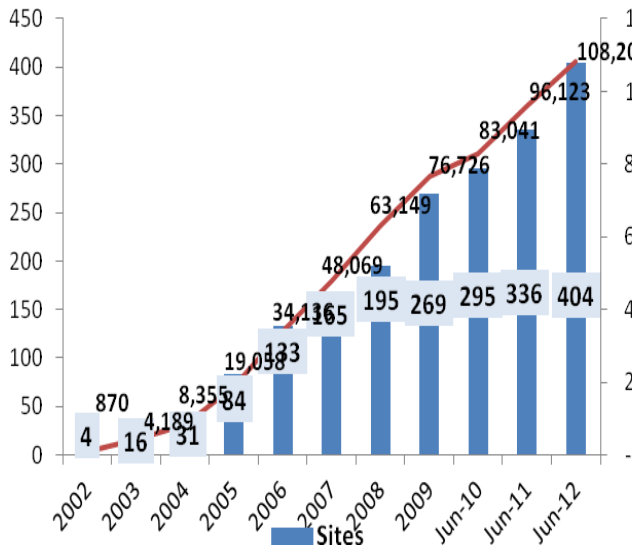
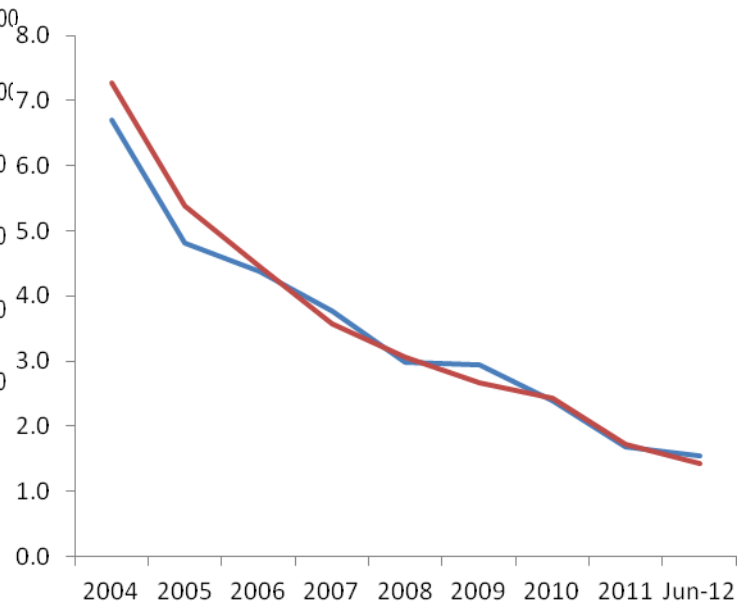


Figure 13 Trends of patients on ARVs



— Seropositivity rate of Women attending ANC...

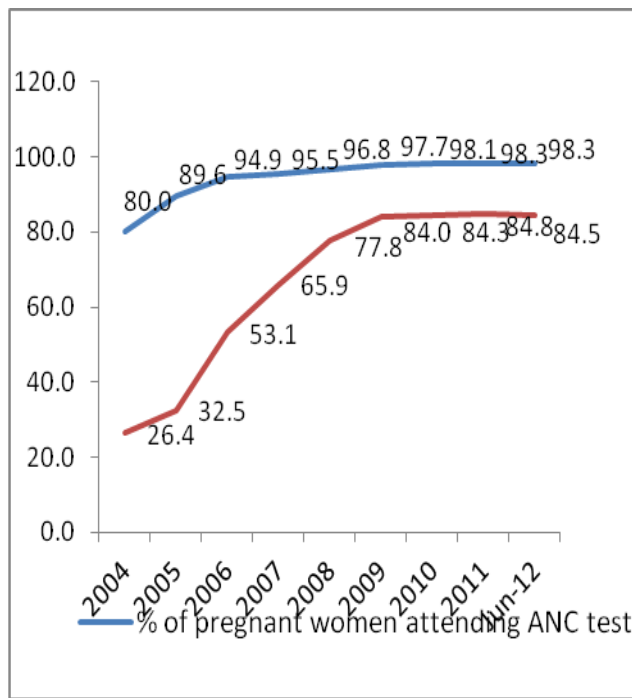


Figure 14 HIV testing in ANC

Figure 15 Seropositivity rate in ANC from 2004 to June 2012

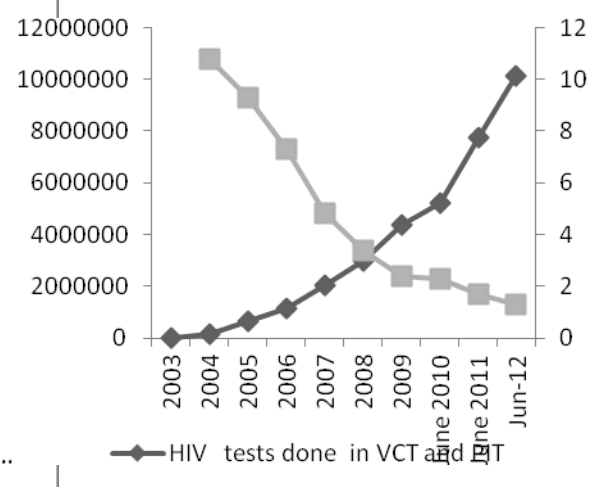


Figure 16 HIV test through VCT and PIT

Annex5 Table 15 RBC/MPD QC tests results from Laboratory of Analytical Chemistry - University of Liège and Service de Contrôle des Médicaments (SCM)/Association Pharmaceutique Belge (APB), May 2012

RBC/MPD product	Performed test	Result	Limits	Comment
1. Lactated Ringer's	- pH	5.7	5.0 - 7.0	Comply
	- Assay of chloride	3.95mg/ml	3.7-4.2mg/ml	Comply
	- Assay of CaCl ₂ .2H ₂ O	95.9%	93%-107%	Comply
	- Assay of sodium	2.71mg/ml	2.7-3.2mg/ml	Comply
	- Assay of potassium	0.21mg/ml	0.19-	Comply
	- Assay of lactate	2.56mg/ml	0.22mg/ml	Comply
	- Bacterial endotoxins	< 0.25IU/ml	2.3-2.8mg/ml	Comply
	- Sterility	Sterile*	< 0.25IU/ml Sterile	Comply*
<p><u>Sterile*/Comply*</u>: The inner product was found conform to the quality standards, but it was noticed that the external surface of the bag was contaminated. The real cause of this contamination is debatable, and we think that it was due to bad storage conditions in Custom services as the samples delayed there for more than one month before getting to the laboratory.</p>				
2. Co-trimoxazole suspension	- pH	5.5	5.0 - 6.5	Comply
	- Assay of Sulfamethoxazole	of 91.9%	90%-110%	Comply
		98.1%	90%-110%	Comply
	- Assay of Trimethoprim			
3. Amoxicillin 250mg/capsule	- Disintegration	< 30 min.	≤ 30 minutes	Comply
	- Uniformity of weight	37/40 ok	Minimum	Comply*
	- Assay of amoxicillin	103.7%	18/20 90.0%-120.0%	Comply
<p><u>Comply*</u>: The second checking of the Uniformity of Weight test confirmed that the test complies with the specification (limits).</p>				
4. Co-trimoxazole 480mg/tablet	- Friability	9.3%*	≤ 1%	Not conform*
	- Disintegration	< 15 min.	≤ 15 minutes	Comply
	- Uniformity of weight	20/20 ok	Minimum	Comply
	- Assay of Sulfamethoxazole	of 99.0%	18/20	Comply
		98.1%	93.0%-107.0%	Comply
	- Assay of Trimethoprim		93.0%-107.0%	
<p><u>Not conform*</u>: The Friability test is closely related to the tablets hardness and is designed to evaluate the ability of the tablets to withstand abrasion in packaging, handling and shipping (mechanical shocks). <u>Corrective and preventive measures were immediately undertaken on this case.</u> Furthermore, the test represents a MINOR EFFECT on the product quality as we don't distribute through very long and complicated channels. Thus, the risk of abrasion or breakage is practically very low.</p>				
5. Metronidazole 480mg/tablet	- Friability	5.5%*	≤ 1%	Not conform*
	- Disintegration	> 15 min.**	≤ 15 minutes	Not applicable**

- Dissolution	> 85.0%	≥ 85.0%	Comply
- Uniformity of weight	18/20 ok	Minimum	Comply
- Assay of Metronidazole	98.6%	18/20	Comply
		90.0%-110.0%	

Not conform*: The Friability test is closely related to the **tablets hardness** and is designed to evaluate the ability of the tablets to withstand abrasion in packaging, handling and shipping (mechanical shocks). Corrective and preventive measures were immediately undertaken on this case. Furthermore, the test represents a **MINOR EFFECT** on the product quality as we don't distribute through very long and complicated channels. Thus, the risk of abrasion or breakage is practically very low.

Disintegration / Not applicable**: When the Dissolution test is required, the disintegration test is not applicable as tablets should resist a little bit to the latter. Thus, the result of Dissolution replaces and covers the disintegration one.
