The Integrated Health Systems Strengthening Project (IHSSP) improves the health of Rwandans through its five components: Health Information, Health Finance, Human Resources for Health, Quality Improvement and Decentralization.
Launching of the IHSSP Newsletter

Dear Reader,

We are delighted to share the USAID Integrated Health Systems Strengthening Project’s (IHSSP) first newsletter. This bulletin will be published quarterly and will provide information on the project’s activities and achievements.

Funded by USAID and led by Management Sciences for Health (MSH), IHSSP combines evidence-based approaches, proven service delivery strategies, and extensive public health expertise to support the Rwandan Ministry of Health in building its health system.

We hope you will enjoy reading this edition. Please send comments or suggestions to prugumire@msh.org.

Dr. Apolline UWAYITU

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Credits

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Improving Health Outcomes of Rwandans through Health Systems Strengthening

Launched in November 2009, IHSSP is a five-year project that improves the health of the Rwandan population through its five components. Teams from each component use the Performance Improvement Process (illustrated at right) to strengthen health systems within the Ministry.

The health information component improves data use for decision-making, thereby contributing to improved resource allocation and policy formulation across all levels of the health sector.

The health financing team strengthens and harmonizes Rwanda’s health financing mechanisms to obtain efficient and viable provider payment mechanisms while offering quality health services. Performance-based financing (PBF) and community-based health insurance figure among its successes.

The quality improvement (QI) unit improves the quality of health services through an ambitious program of health facilities accreditation.

The human resources for health component improves management, quality, and productivity of human resources for health and related social services. The project also provides crucial support to the national professional health councils.

The decentralization component helps build a fully-functional district, able to achieve the goals and implement extended health and social services at the district level and below.
New Information System Increasing Access to Data in Rwanda

Rwanda, like many developing countries, faces major challenges regarding access to accurate health information. Before IHSSP, multiple systems were in place, sometimes collecting the same data, which overwhelmed the health workers in charge of reporting. To increase access to quality health information, the Rwanda Ministry of Health, in collaboration with IHSSP, launched the Rwanda Health Management Information System (R-HMIS) in February 2012. The new R-HMIS, based on the open source District Health Information System (DHIS-2) web application, consolidates data from different sources into one platform, which facilitates access to information by national level health program managers, district health management teams, health center and hospital staff, and even the general public.

This powerful software is used world-wide, and has been chosen due to its flexibility, which allows system managers to make modifications according to the country’s needs without programming and produce output in the form of tabular, graphic and geographic analyses.

It is also open source, which means that it can be used at no cost and is supported by a strong community of users and developers around the world. Another advantage of this technology is that it is web-based, making it easy to access.

IHSSP assisted the ministry in the introduction, customization, and roll-out of R-HMIS and has trained more than 700 data managers countrywide.

**Figure 1: Sample output from RHMIS Pivot Table**

<table>
<thead>
<tr>
<th>OPD new (Including IMCI)</th>
<th>East</th>
<th>Kigali City</th>
<th>North</th>
<th>South</th>
<th>West</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 2012</td>
<td>162 295</td>
<td>59 313</td>
<td>108 767</td>
<td>148 932</td>
<td>103 655</td>
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<tr>
<td>August 2012</td>
<td>150 689</td>
<td>64 537</td>
<td>92 129</td>
<td>131 305</td>
<td>106 685</td>
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<tr>
<td>September 2012</td>
<td>140 409</td>
<td>55 024</td>
<td>73 790</td>
<td>97 684</td>
<td>97 854</td>
</tr>
<tr>
<td>October 2012</td>
<td>175 132</td>
<td>59 455</td>
<td>93 124</td>
<td>123 965</td>
<td>112 639</td>
</tr>
<tr>
<td>November 2012</td>
<td>197 891</td>
<td>66 166</td>
<td>98 699</td>
<td>135 999</td>
<td>118 198</td>
</tr>
<tr>
<td>December 2012</td>
<td>227 148</td>
<td>77 520</td>
<td>104 897</td>
<td>156 623</td>
<td>128 985</td>
</tr>
<tr>
<td>January 2012</td>
<td>220 106</td>
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<td>116 287</td>
<td>186 554</td>
<td>162 228</td>
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<tr>
<td>February 2012</td>
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<td>97 316</td>
<td>127 541</td>
<td>203 864</td>
<td>178 343</td>
</tr>
<tr>
<td>March 2013</td>
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<td>88 541</td>
<td>147 516</td>
<td>215 962</td>
<td>204 364</td>
</tr>
<tr>
<td>April 2013</td>
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<td>219 945</td>
<td>206 249</td>
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<tr>
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<td>91 688</td>
<td>176 844</td>
<td>263 578</td>
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</tr>
<tr>
<td>June 2013</td>
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<td>80 980</td>
<td>148 189</td>
<td>230 505</td>
<td>191 054</td>
</tr>
<tr>
<td>Total</td>
<td>2 619 193</td>
<td>919 690</td>
<td>1 445 081</td>
<td>2 114 866</td>
<td>1 818 272</td>
</tr>
</tbody>
</table>
The R-HMIS has been operational countrywide since 2012 and collects data from over 500 public health facilities. Recently, IHSSP trained staff from nearly 70 private clinics and dispensaries in the Kigali Urban districts, who have started to report on their activities. IHSSP is creating additional modules to the system and a national data warehouse to store selected indicators from a variety of data sources. This will provide a one-stop shop for monitoring the overall performance of the Rwanda health sector.

Ms. Malka Karangwa, a data manager for the Maternal and Child Health Department at the central level, says a major advantage of this system is its accessibility. The previous HMIS required installing software in each of the computers using the system. There was no way to access data from other computers.

The new R-HMIS has improved reporting timeliness, completeness, and accuracy. Before, it sometimes took months to receive reports from remote health areas. Now, reports from every health facility can be immediately visualized. Validation rules also help to avoid erroneous data, which has considerably increased data quality.

Database manager, Venuste Nsanzumuhire, recalls that the software used between 2008 and 2011 was impossible to modify and had no built-in data visualization tools. The new system has made his work much easier and the local HMIS team is fully capable of creating new data entry modules from scratch.

“the software used between 2008 and 2011 was impossible to modify and had no built-in data visualization tools”.

Figure 2: Sample output from RHMIS data visualizer

![Graph showing trend of Couple Years of Protection](image)

Figure 1: Sample output from RHMIS Pivot Table

![Table showing data](image)
Performance-Based Financing Increases Health Workers’ Motivation

James Maniriho is a laboratory technician at Muhoza Health Center, in the Northern Province of Rwanda. James works nine hours a day, five days a week. His laboratory unit receives 120 to 130 patients each day, who are served by a laboratory of just four technicians. The work is tiring and the staff often feels overwhelmed. Previously, James and his co-workers used to feel underappreciated by their supervisors, but this changed when a PBF scheme launched in 2008 at the Muhoza Health Center.

Through this system, James receives a monthly bonus, which ranges from 60% to 100%, depending on the performance of his unit and the overall performance of the health facility. Performance measures include punctuality, technical accuracy and team work.

James has seen the benefits of the PBF scheme in both his workplace and his private life.

“This premium helps me very much, and recently permitted me to pay for additional schooling so I could earn a degree in public health. We are also more motivated at work, and the system challenges us to improve the quality of our daily tasks.”

James Maniriho, Laboratory Technician, Muhoza Health Center

IHSSP and its predecessor, the PBF/HIV project, have provided technical and financial support for the implementation and expansion of this financial scheme. PBF is now implemented countrywide, and all of the 499 public health facilities in Rwanda are currently implementing it.

By increasing the income of health providers, PBF can improve motivation, reduce emigration of qualified staff, and even encourage staff to work in remote areas.

The national PBF database, which stores information on quality assessment of each health facility, shows that the average quality of health services as measured by a set of quality indicators increased from 31% to 88% between 2006 and 2011.
In 2012, Rwanda’s MOH identified a number of strategies to improve quality and accountability throughout the national healthcare system. As part of this quality improvement process, the ministry has committed to completing a formal accreditation process for all district hospitals and recently approved a series of new quality management tools to be used at health facilities throughout Rwanda.

On September 18, 2012, the Minister of Health, the Director General of Clinical Services, and IHSSP’s Chief of Party led a launch ceremony that emphasized Rwanda’s commitment to the accreditation process. In the Minister’s speech, she requested a commitment from all partners and stakeholders to the long-term process of accreditation, including embedding quality services into the vision, upholding the mission statements of health care organizations, setting measurable goals, and monitoring the achievement of these goals.

She said she is confident that the professional accountability of leaders and staff will lead them to success.

“Accreditation is not just about the infrastructure that we lack, but also about using what we have. ‘What can I do with less?’ is what we need to ask ourselves,” said Dr. Agnes Binagwaho, Rwanda’s Minister of Health.
In support of the government's commitment to quality improvement, IHSSP has mobilized medical professionals to develop tools for improving quality management and building institutional consistency throughout Rwanda’s health system. Some of the instruments include clinical protocols and treatment guidelines, district hospital operational policies and procedures, health service packages, and a standardized patient file.

Many health professionals who attended the launch enthusiastically welcomed the implementation of a facility accreditation process and updated, reliable, and comprehensive treatment guidelines. “It’s a positive step forward and will help us in our work,” said a medical doctor.

These tools, which have been in development for two years, were approved by the MOH at the accreditation launch and formally signed by the Minister to reinforce their use at health care facilities across the nation. The materials are central to outlining quality clinical expectations within the health facility and will propel the implementation of performance standards.

Health in Rwanda: A Promising Evolution

After the 1994 genocide, Rwanda continues to recover from the devastating loss of human capacity and destruction of much of its basic social and economic infrastructure. These past years, the country has showed impressive results in the health sector, especially regarding maternal and child health.

The 2010 Demographic Health Survey (DHS) indicates that, from 2005 to 2010, the percentage of deliveries in health facilities increased from 30 to 69 percent in Rwanda. The percentage of children fully immunized increased from 75 to 90 percent and the under-five mortality rate dropped from 152 to 76 deaths per 1,000 live births over the same time period.
IHSSP Achievements:

IHSSP is working with the Government of Rwanda to improve access to quality health services.

- **The performance-based financing (PBF) scheme** was rolled out throughout Rwanda during USAID’s previous PBF HIV project and is functioning in 499 public health facilities. This system, which provides monetary incentives to health workers according to their performance, increases both the quantity and quality of health services, as well as health workers’ motivation.

- **The community-based health insurance (CBHI) system**: Launched in 2004, reached nationwide coverage in 2005. From 2003 to 2010, enrollment into CBHI increased from 7 to 91 percent of the population. Consultation rates to medical facilities increased from 0.3 to 0.9 per citizen, for the same period. This figure is close to the World Health Organization’s standard, which recommends that each citizen should receive about 0.8 consultations per year.

- **RapidSMS system**: Funded by UNICEF and implemented with support from IHSSP, this mobile phone-based application improves maternal and child health using simple text messages. One year after initiating the RapidSMS system, prenatal care visits in the Musanze pilot district increased by 25 percent and health facility deliveries increased by 26 percent. Anecdotal evidence suggests that under-five mortality decreased significantly.

- **Rwanda health management information system (R-HMIS)**: Launched countrywide in February 2012 to facilitate access to health information, the new R-HMIS consolidates data from different sources into one platform. The system currently collects data from over 500 public health facilities. IHSSP is creating additional modules to the system and a national data warehouse to store selected indicators from a variety of data sources. This will provide a one-stop shop for monitoring the overall performance of the Rwanda health sector.

- **Continuing professional development (CPD) program**: In 2011, the Rwanda Medical Council, in collaboration with IHSSP, launched a CPD program to improve health care delivery. Workshops, seminars, practical sessions, and research help the physicians keep their knowledge up to date. So far around 1,585 doctors have participated in CPD activities.

- **Development of policies, procedures and guidelines**: To increase the quality of health services, IHSSP has developed 226 documents that include policies, procedures, and clinical guidelines in management, clinical, and patient-centered services. The project has also written treatment guidelines for obstetrics and gynecology, pediatrics, internal medicine, surgery, pain management, dermatology, ENT, oral and dental health, and ophthalmology.
Management Sciences for Health: A brief History

Early Presence

Management Sciences for Health (MSH) is a nonprofit international health organization composed of more than 2,000 people from 73 nations. Since 1971, MSH has worked in 150 countries worldwide.

Our mission is to save lives and improve the health of the world’s poorest and most vulnerable people by closing the gap between knowledge and action in public health. MSH has worked in Rwanda.

Our Major Partners in Rwanda

- The Rwanda Ministry of Health
- The Rwanda Biomedical Center
- The Rwanda Medical Council
- The National Council of Nurses and Midwives

MSH Rwanda and IHSSP would like to acknowledge support from the Rwanda Ministry of Health, the Rwanda Biomedical Center, and other national and international partners who have worked closely with us.
IHSSP Presentations at Conferences

EAST, CENTRAL AND SOUTHERN AFRICA (ECSA) BEST PRACTICES FORUM:
ARUSHA, TANZANIA AUG 10-14 2013
ABSTRACT ON:

“Extending access to non-communicable diseases through CBHI in Rwanda”

The new CBHI policy, established in 2010, introduced a system which stratifies the population according to their revenues. The poorest citizens, who are about 25% of Rwanda’s population, have now been identified and receive free medical care through CBHI. The referral hospitals at the highest level have also been included into the scheme, which now allows the poorest citizens with chronic diseases to afford specialized treatment. The USAID Integrated Health Systems Strengthening Project (IHSSP), led by Management Sciences for Health, supported the Rwandan Ministry of Health in the implementation of its new CBHI policy, by providing both technical and financial support and training.

Thérèse KUNDA, Community Based Health Insurance (CBHI) Technical Advisor, IHSSP
Joseph SHEMA, Head of PBF (MoH)

WORLD BANK RBF IMPACT EVALUATION CONFERENCE:
ISTANBUL, TURKEY 12-16 NOVEMBER 2012
ABSTRACT ON:

“Rwanda Community PBF: Implementation and Impact evaluation”

Results-based financing programs produce a continuous stream of reliable data. Reliable and timely data offer an opportunity to monitor results for progress and eventual negative effects. However, rigorous use of data is uncommon and data use capabilities need strengthening at all levels. IHSSP staff member, Randy Wilson, and former colleague Gyuri Fritsche, facilitated a session on developing operational electronic dashboards to help promote data use. This was done by presenting examples from Rwanda using the DHIS-2 platform and the latest version of and RBF web-application being used in Burundi, Zambia and now Nigeria (that was also originally designed in Rwanda). Session participants also identified key indicators that could be candidates for a generic PBF/RBF dashboard application being promoted by the World Bank.

Randy WILSON, Senior HMIS and Data Use, Advisor, IHSSP
Cathy MUGENI, National Community Health Desk Coordinator (MoH)

FIRST GLOBAL SYMPOSIUM ON HEALTH SYSTEMS RESEARCH
MONTREUX, SUISSE, 16-19 NOVEMBER 2010
ABSTRACT ON:

“Choice of indicator and amount paid is crucial in the Performance Based Financing revenues received at health centers in Rwanda”

Rwanda has implemented performance based financing (PBF) in health centers since 2006 to stimulate productivity and quality of the comprehensive package of health care services. Health facilities receive monthly payments based on reported and validated productivity of HIV and non-HIV services. These payments are adjusted by an overall quality score. Choice of indicators is guided by public health priorities, gaps in coverage and ability to measure indicators accurately and reliably. The amount paid is established on the same principles but also reflects the effort required to affect an increase for each indicator. It is unclear however if these principles lead to balanced revenue generation across the identified key target indicators of public health importance.

Dr. Cedric NDIZEYE, Team Leader, Health Financing (IHSSP)
Louis RUSA, National Coordinator PBF Project (MoH)
“Rwandans believe they can do it and they are doing it.”

- Dr. Ron O’Connor, MSH founder