

Knowledge Management and Human Resources for Health: Using Quality Information to Make Better Decisions

Corinne Mahoney Farrell and Rebecca Rhodes, IntraHealth International



What Is Knowledge Management?

Knowledge management (KM) connects people with the best available information to impact a decision. KM is about building capacity to make more informed decisions. Even in well-resourced settings, KM requires conscious effort. Dueling challenges of information overload and information scarcity present obstacles to overburdened health workers, managers and policy-makers. Successful KM initiatives incorporate knowledge-seeking, use, generation and sharing into a workflow, allowing users of the KM system to work more productively with better quality information.

KM does not come in a one-size-fits-all model. Designing KM initiatives without consideration for how people currently seek and use information, the processes they follow to accomplish their work and their ultimate goals leads to failed efforts. The following questions are a starting point for a well-designed KM initiative:

- What decisions are being made?
- What information, tools or resources, if available, would impact the decisions?
- Who are the people making and affected by the decisions? Are they represented in the group collaborating on the initiative?
- Is the information available and easily accessible to the people who need it?
- Do they know how to find and use it? Are they motivated to do so?
- What is the best way to integrate knowledge-seeking into their current workflow and support this behavior on an ongoing basis?

This brief, highlighting a selection of Capacity Project KM initiatives, illustrates how to weave KM successfully into human resources for health (HRH) programs. The Capacity Project works to strengthen human resources to implement quality health programming in developing countries by focusing on planning, developing and supporting the health workforce. All of the Project's initiatives focus on strengthening the role of human resources in the health sector by leveraging existing knowledge to impact decisions, whether we are working with HRH planners and policy-makers, strengthening educational systems or supporting health workers to make better clinical decisions.

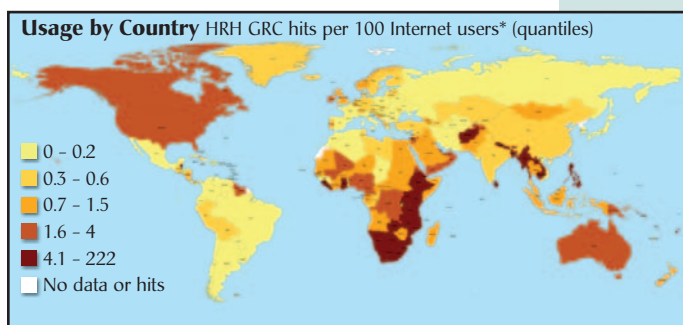
The HRH Global Resource Center

Early in the Capacity Project it was clear that information and resources about HRH were scattered across multiple organizations and websites. As HRH evidence grew, the need for a one-stop shop for HRH information increased. A few websites aggregated HRH information, but most contained very selective collections or were organized for a specific purpose, such as to publish the work of the hosting organization. It was time-consuming for Project staff to find HRH resources and evidence, and even more challenging for busy practitioners in developing countries. To address the problem, the Project designed the HRH Global Resource Center (GRC) to help HRH practitioners quickly identify resources to meet their needs from a comprehensive collection of free and low-cost resources.

The Project designed the GRC to assist a broad spectrum of users, while taking into consideration the technological requirements of HRH practitioners in developing countries. Users can browse resources by subject, geographic focus or resource type as well as conduct targeted searches, even in areas with low bandwidth.

While the design and usability of the website are essential to its success, even the best-designed site can languish on the web with little impact. The Project attributes the GRC's success to two factors: collection development and user outreach.

Figure 1: 30,000 visitors from more than 170 countries visit the GRC each month



*Period of GRC hits observation is two years (February 2007 - February 2009) Internet usage based on 2006 data per 100 population (United Nations MDG indicators)

Collection Development

The site is continually updated as Project staff survey online resources and contacts for new additions. Resources must strictly adhere to the topic of HRH and meet the site's resource selection policy (available on the site). The GRC receives a steady stream of suggestions

HRH Global Resource Center

The HRH Global Resource Center (www.hrresourcecenter.org) is an online digital library created to maintain a global exchange of HRH evidence, tools and innovation.

Key success factors:

- Dedicated professional librarian
- Continual collection development
- User outreach.

"Ensuring that all the resources for HRH are in the same place makes everyone's lives much easier. It's a one-stop search for HRH. It ensures the most up-to-date policies are available."

—Hattie Begg
Research and advocacy officer,
AMREF UK

Dr. Gabou Mendy, American country director for the AIDS Relief Program in Haiti and faculty member at the University of Maryland, used the GRC while ramping up the program's staff in Haiti from three to 25. As he structured the hiring process, professional development requirements, retention policies and other HR policies, he quickly found guidance documents in the GRC to adapt to the country's context.

Feedback from users in other countries contain similar stories of how the GRC facilitated planning and policy-making and informed the work of a broad range of HRH practitioners. For example, it is being used to design HRH policy and a national training plan in Southern Sudan and a community health initiative in Bangladesh.

HRH Action Framework

Designed to help governments and health managers build an effective and sustainable health workforce, the HRH Action Framework (HAF) is a global effort to bring a shared approach and resources to complex HRH issues at the country level. The HAF website (www.capacityproject.org/framework) is available in English, French and Spanish.

Key success factors:

- Collaborative development
- Targeted user group
- Integration of KM into the workforce planning process
- Inclusion of KM component in workshops and trainings.

"[The HRH Action Framework] provided a very crucial visual of this integration process, and many people need that. It's one thing to talk about theories and practices and approaches, but when you see it in that visual framework, it's so useful."

—Allison Foster
Technical advisor, PAHO

from external users and Project staff, and adds approximately 50 resources each month. Ensuring that new HRH resources make it into the collection quickly is a key element of the site's success. An annual review of the resources by technical experts ensures that the quality of the collection remains high. The homepage features HRH news, events and resource spotlights to highlight new content.

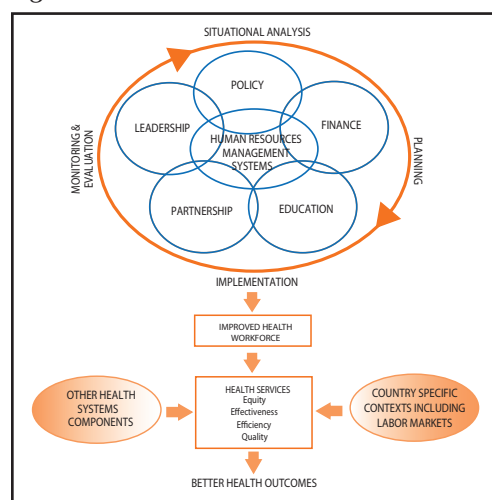
User Outreach

Engaging with the site's users is the most critical element of success. While the site has a professional librarian overseeing the collection, user input and support are essential. Project staff include the GRC in presentations, workshops and interactions with HRH stakeholders. Additionally, the site offers personalized librarian support to all users and issues a monthly newsletter. As a result of user feedback, the site continues to evolve. Quick access to new resources, subject guides and user ratings of resources are features added to improve the user experience.

The GRC also supports HRH knowledge-sharing in offline environments by hosting documents for organizations in developing countries that do not have websites and by providing resources on CDs for groups that lack reliable Internet access.

The HRH Action Framework

Figure 2: The HRH Action Framework



The substantive work to develop the HRH Action Framework (HAF) began at a meeting in 2005 sponsored by USAID and the World Health Organization and hosted by the Pan American Health Organization (PAHO). Representatives from multilateral and bilateral agencies, nongovernmental organizations and the academic community brought a variety of experiences and perspectives, and together they developed a common technical framework for HRH. The Capacity Project contributed to the development of the HAF and has been involved with applying the HAF at the country level to promote evidence-based decision-making and improve the KM skills of health workforce managers at all levels.

The HAF website, an initiative of the Global Health Workforce Alliance (GHWA) and hosted by the Project, disseminates the framework and operates as a dynamic planning and knowledge-sharing tool. Versions on CD or in booklet format are available for audiences without Internet access. The framework guides those tasked with addressing HRH issues through the components or action fields that need to be addressed in a comprehensive HRH strategy. On the website, each of the action fields is associated with accompanying resources that provide "how to" tools and guidelines as well as links to additional information.

While it provides a common approach to addressing HRH issues that aligns the efforts of various stakeholders, the framework is not prescriptive. It allows decision-makers to focus on the areas where they can immediately begin work and to contextualize their approach to the country's specific issues. The HAF highlights the complex, integrated components of HRH and provides a general roadmap supported by vetted resources. In Latin America, for example, the Capacity Project, in collaboration with PAHO and GHWA, conducted regional workshops with HRH practitioners who are now using the HAF as they develop country-specific strategic documents for their HRH departments.

The Uganda Ministry of Health's KM Portal

To build HRH knowledge-sharing capacity in Uganda, the Capacity Project partnered with the Ministry of Health to develop a KM portal. The portal integrates several of the Project's KM tools and resources (HAF website and GRC along with HR information systems software), a digital library for Ministry of Health documents and links to relevant journals in a unified and simple interface. The portal has a public space to provide general access to key resources such as data from the Uganda Nurses and Midwives Council and a private, secure environment for internal document-sharing.

When the Project began collaborating with the Ministry of Health to develop a KM portal, the working group identified the following needs:

- Quality information is essential for health care providers and health sector professionals to provide the highest quality care and make the best decisions about managing the workforce
- For this information to be effective, users at all levels must be able to find, use and share it easily, without having to learn multiple or complex systems
- Health workers in isolated areas should have the same access to critical health information as those in more developed areas through online access to documents that are currently only available on paper at the Ministry headquarters
- The Ministry of Health needs a convenient and secure way to collaborate on documents internally to facilitate sharing and feedback on HRH development, planning and policy.

The development process for the KM portal focused on ensuring that the product will be used and sustained. Created in a collaborative environment with a focus on user-driven design, the portal uses two integrated Open Source products (ensuring no expensive licensing fees) and is modular to make expansion and upgrades easy for local staff. The development team designed all features in direct cooperation with Ministry employees to ensure that it would meet their needs, be used by local stakeholders and merit the Ministry's interest in maintaining it. The portal also had strong leadership support from the Ministry's assistant commissioner of the resource center, who ensured that staff would have the time and support needed to develop and use the system.

Health Information Libraries

In Rwanda and Southern Sudan, the Capacity Project assisted partners with setting up or improving library facilities designed to increase access to up-to-date medical information for health workers, students and faculty.

Studies have shown that the availability of health information builds confidence in providers' clinical decision-making, improves practical skills and attitudes to care and can lessen professional isolation. The availability of information and the training of health workers in how to use information is severely lacking in developing countries (Pakenham-Walsh and Bukachi, 2009).

Rwanda

In 2007, five nursing schools in Rwanda welcomed the first students in new three-year, competency-based Registered Nursing and Midwifery A1 Programs. In addition to supporting the curriculum changes, the Project improved infrastructure by revamping reference libraries and computer labs. In collaboration with the five schools and Kigali Health Institute, the Project organized ongoing library management assistance to improve the availability of up-to-date information sources for students and faculty.

The Project provided books to the schools in preparation for their openings, and sponsored a training session for library staff that included presentations and exercises on all aspects of library management, including ordering, classifying and cataloging materials. After the session, the trainer made site visits to each library to assess progress and assist with questions and problems.

Southern Sudan

In Southern Sudan, the Project equipped, furnished and staffed a Health Information Resource Center at the Juba Teaching Hospital. It provides hospital staff, Ministry of Health officials and medical students with access to print, audiovisual and electronic resources as well as professional library services, computers and Internet access. Prior to the opening of the Resource Center in May 2008, staff had extremely limited access to authoritative medical resources.

The Resource Center also hosts computer skills training courses, including an introduction to computers, Microsoft Word, Excel, Access and PowerPoint, Internet and e-mail skills. Participants are now able to access health information through various websites, obtain updated information as needed and enter patient and hospital data into databases. A professional librarian ensures that the collection is maintained and updated. He orients users to the Resource Center, demonstrating how to find and use physical and electronic materials, and facilitates access to quality health information.

Key Recommendations

The Capacity Project's KM work includes a broad range of activities and processes, both internal and external. Documenting and sharing information and resources via a website, listservs, publications and participation at conferences and meetings—so that others may build on our experiences—are the Project's fundamental contributions to the body of HRH knowledge. The examples above reflect a variety of ways that KM can strengthen HRH initiatives. Based on the Project's experiences, we offer the following recommendations:

- **Start with the people:** It is essential to collaborate early and often with the beneficiaries of the KM initiative. They should drive the process and be the ultimate evaluators of proposed KM solutions.
- **Ensure leadership support:** It is essential that the KM initiative has support from key leaders in the organization. Garnering their support should be one of the first steps in any KM initiative.
- **Be realistic about resources:** KM is an investment, requiring financial and human resources to launch successfully. Do not create an overly complex system, and do not forget to budget resources for training, maintenance and support for users of the system.
- **Make use of knowledge facilitators:** Information literacy, including searching and evaluation skills, is a learned competency. Making good use of local facilitators (e.g., librarians, workshop facilitators, peers with more advanced skills in using a KM system) who can help someone seeking critical or urgent information can lessen potential frustration with or abandonment of the KM system.
- **Develop a sustainable system for keeping information up to date:** If a KM system involves a repository of information, roles and responsibilities for keeping the information up to date must be articulated and assigned. A designated individual should also be ultimately responsible for overseeing or facilitating updates to content and ensuring the quality and relevancy of the collection. For example, the GRC has a librarian overseeing collection development,

Ministry of Health KM Portal

Key success factors:

- Leadership support and vision
- Collaborative development
- User-driven design
- Dedicated staff.

"[The KM Portal] virtually contains the most important documents and the valuable ones, and it will save [Ministry of Health officials] from coming down to the office. Even those who are going for conferences won't be going with documents, because you just open the portal. All our policy documents are already there, and those are the key things that people need when they go for those conferences."

—Moses Doka
Uganda Ministry of Health Library

Health Information Libraries

Key success factor:

- Focus on developing library staff's capacity to sustain the library and its services.

"[The Juba Teaching Hospital Health Information Resource Center] ushers in a new era, an era of Southern Sudan becoming part of the world. The significance of this is actually giving us the ability to acquire information, and of course someone who has given you information has really given you power."

—Dr. Monywa Arop Kuol
Undersecretary of health
Government of Southern Sudan

Visit the HRH Global Resource Center to find, share and contribute human resources for health knowledge and tools. For those working at the country or global level, the HRH Global Resource Center provides information to:

- Improve strategic planning and decision making
- Strengthen reports and presentations
- Support HRH advocacy
- Enhance professional development
- Save time.

and the Uganda KM portal has a Ministry-hired manager.

- **Expect change:** A good KM system is developed iteratively in response to user feedback and evolves as the people, processes and technology involved in the system evolve. For example, both the GRC and the HAF have undergone revisions based on stakeholder feedback.
- **Make it easy for stakeholders to seek just-in-time information:** While most people understand the value of making more informed decisions, many will not invest the time in learning a new system until the moment when they need information.

- **Build networks:** Capitalize on people's natural tendency to seek out the people they know to answer questions by introducing KM initiatives to groups with similar needs and roles.
- **Integrate KM into workflow processes:** Make it easy for people to find and retrieve information. Do not expect people to learn and access multiple systems to find information. Place physical libraries in areas that are convenient and visible to intended users.
- **End with the people:** A good KM initiative includes opportunities for feedback and interaction with users on a regular basis.

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The Capacity Project
 IntraHealth International, Inc.
 6340 Quadrangle Drive
 Suite 200
 Chapel Hill, NC 27517
 Tel. (919) 313-9100
 Fax (919) 313-9108
 info@capacityproject.org
 www.capacityproject.org

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