AKHS Kenya
Community Health Department

Policy Brief No.5

Best Practices in Community-Based Health Initiatives

Leading the Information Revolution in Kwale District

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The Health Management Information System (HMIS) in Kwale District, Coast Province is Kenya's first computerised district-level HMIS. A joint effort of the Ministry of Health and the Community Health Department of the Aga Khan Health Service, Kenya, the system uses simple, user-friendly software developed by Data Dynamics Limited to collect and analyse data from local health facilities. Benefits to date include a significant increase in reporting by local health facilities, more timely information for planning and decision-making, and evidence that the reports have enhanced immunisation coverage.

This publication is the fifth in a series of policy briefs prepared by the Community Health Department of the Aga Khan Health Service. It is intended for managers of community-based health care programs working in the public, donor, and non-government sectors. It deals with key issues related to developing and implementing an HMIS and addresses the following questions:

- What is the Kwale HMIS? How was it developed and implemented?
- What has been the impact of the Kwale HMIS?
- What are the prospects for replication, expansion and improvement?
- What are the policy implications for developing a national HMIS based on the model developed in Kwale?

Introduction

For much of medicine's history the focus has been on treating illness, maintaining health, and understanding the inner workings of the body and mind. Now, after centuries of medical revolutions, the health system as a whole is undergoing a new revolution, an information revolution.

In the new era of evidence-based information, services statistics and information systems play as important a role as double-blind tests and treatment regimes. Health service managers need accurate and timely information to gauge the impact of their programs, the effectiveness of their operations and to understand and monitor the prevailing health conditions of their communities.

Using information to improve health care planning and provision is a global practice. As Dr. Salim Sohani, Director of the Community Health Department (CHD), Aga Khan Health Service Kenya (AKHS, K) explains, "an information infrastructure must be in place to guide and inform the future of Kenya's health care system, improve its efficiency, and most importantly, improve the health of Kenyans."

Developing an information infrastructure and a 'culture' of collecting and using data is critical for the developing world, where the lack of effective information management has hindered decision making and contributed to the ineffective use of resources. In Kenya, for example, child mortality has increased over the last decade, while immunisation coverage has fallen from 79% in 1993 to 57% in 2003 (Annual Report, Institutional Capacity Strengthening Report (1999-2003). The effective use of timely, accurate information can reverse this decline by spurring corrective actions.

Background

Since independence in 1963, the Kenyan government has worked to prevent, eradicate and control disease while providing adequate and effective diagnostic, therapeutic, curative and rehabilitative services. The government's 1994 Health Policy Framework seeks "to promote and improve the health status of all Kenyans through the deliberate restructuring of the health sector to make all health services more effective, accessible and affordable."

Kenya's Ministry of Health (MoH) recognises the value of sound information management. However, the existing system has grown over the years on an ad hoc basis. Information is collected at local health facilities by nurses and other providers, and summary data is recorded on more than 40 forms required periodically by the government, donors, the World Health Organization (WHO), Non-Governmental Organisations (NGOs) and others. District data are compiled at the provincial level and forwarded to the MoH in Nairobi.

The MoH's 2003 "Needs Assessment Study for Health Sector Monitoring and Evaluation" found that:

- Kenya lacks an overall framework at the country level that clearly defines information requirements and is responsive to changes in the health system and health priorities.
- The unco-ordinated manner in which information systems have evolved or developed has led to duplication in data collection and data sets.
- The system is fragmented, with little capacity to analyse, interpret, or use data at all levels of health service delivery.
- The absence of two-way communication. While data is forwarded from the facilities to the district to the

national level, there is no significant feedback.
- The system is compromised by inaccurate and incomplete information, and low reporting rates[1].

The situation in Kenya's Coast province mirrored that of the nation. In 2001, only 40% of facilities completed and forwarded forms on time, and only 76% of forms submitted were complete. Consequently, managers throughout the province had to direct their programs without complete and reliable information.

The Community Health Department of AKHS, Kenya has supported community health initiatives in the Coast Province since 1989. In 1997 CHD began working with the MoH and the local community to upgrade local dispensaries in Kwale District[2]. The result is the Dispensary Model, a system that uses practical, responsive and easy-to-use systems and procedures to collect the health statistics and management data needed to operate a dispensary effectively. As CHD developed the model, the need for better health information became apparent.

Kwale is a disadvantaged area, a sprawling landscape with a range of poorly integrated health services operated by government and NGOs, resulting in low immunisation coverage rates. To track key health status indicators and gauge the operations of Kwale District's health facilities, the new automated HMIS had to be simple, effective and sufficiently robust to operate in the local environment.

Building the Kwale HMIS

Objectives

In 2000, with the support of the Provincial Medical Officer (PMO), CHD began to develop a computerised HMIS[3] capable of serving individual institutions in Kwale as well as the district health system as a whole. The MoH and CHD had five key objectives:
- To develop a simple, user-friendly information system capable of providing accurate and timely information to support evidence-based management and decision making.
- To provide an enabling environment for effective implementation, consulting users on their information needs, helping them get computer resources, providing training, technical support, and building an information culture for effective implementation of the Kwale HMIS.
- To build the capacity of the District Health Management Team (DHMT) to process and use the information to shape services, improve performance and increase accountability.
- To promote accountability and learning in the broader health sector.
- To build a best practice model that can be replicated in other parts of Kenya and influence the development of a national HMIS.

Description of the System

The Kwale HMIS is a simple, computer-based information system that provides the DHMT with timely information on preventative, promotive and curative services, as well as on finances and governance from government dispensaries, health centres and hospitals.

Based on four HIS forms already in use, the database incorporates information drawn from these standard reports:
- Monthly outpatient morbidity return, containing statistics on various morbidity cases found in the population visiting the facilities.
- Monthly immunisation summary, containing statistics on immunisations administered, drop-out rate, coverage, and stocks.
- Monthly child health and nutrition summary, containing data on nutrition status drawn from growth monitoring activities.
- Monthly workload and revenue report containing statistics on services offered, finances, governance, and the number of days without priority drugs.

In addition, the system logs health education activities, although this information is not currently used. A village population module provides each facility with information on the villages in its catchment area. The system produces reports, graphs and information on key indicators at the click of a button. The system also exports data for further analysis.

1. The percentage of forms received compared to the forms expected from each facility.
2. Dispensaries are peripheral health facilities within the formal health system offering minimal promotive, preventative and curative care.
3. A Health Information System (HIS) integrates data collection, processing, reporting, and the use of information to improve health service effectiveness and efficiency through better management. A Health Management Information System (HMIS) is designed to aid in the management and planning of health programs, as opposed to the direct delivery of care. The Kwale HMIS includes both components.

Steps in Developing and Implementing the Kwale HMIS

The Kwale HMIS was implemented in a seven-step process:

1. Reviewing the existing system**.** During the first stage, a working group including the Provincial Medical Officer (PMO), District Medical Officer (DMO), and the Director and MIS Specialist from the CHD, reviewed the District's Health Management Information System. The process included a review of forms, log books and other tools as well as the measures used to record and summarise data; a consultation with facility nurses about the problems encountered with the current system; and an assessment of the quality of data collected, including its accuracy, completeness, and timeliness.
2. Defining data needs. To keep the system simple, yet effective, designers decided the HMIS should generate adequate minimal information on key indicators of health status and the operations of the dispensaries, health centres and hospitals. The system incorporates four forms already in use on preventative, promotive & curative services, finances and governance from district facilities.
3. Determine the most appropriate and effective data flow. Designers opted for a system where facilities forward aggregate data to the District Health Records Information Officer (DHRIO) by the 5th of each month. The DHRIO then enters the data and ensures it is complete. At present the data is transmitted manually (the facilities do not have email/internet access). Omissions or errors are referred to the health facilities for correction. Within the month the DHRIO produces routine reports for facilities and processes information for DHMT management decisions.
4. Software development. During the automation stage, the working group hired Data Dynamics Limited to develop the software. The process included defining the specifications for software development in consultation with different levels of data users. Aspects to be decided were: summary reports to be routinely generated, data quality control mechanisms/checks to be incorporated within the software, and data analysis needs of users. The result is a user-friendly system in Microsoft Visual Basic with a comprehensive user's manual. The system was installed at the Kwale District MoH office, as well as the PMO and AKHS offices.
5. Capacity building. Capacity building involved training facility staff to fill out forms, and training district and provincial health information officers to use the system. Training programs also instructed PMO and District MoH staff in ways to interpret information and produce reports. (One result of the consultation was the surprising discovery that health facility staff had never before been trained to use MoH reporting forms.)
6. Implementation. The HMIS computer system was developed in five prioritised stages, carried out in stages over a five-month period. The approach maximised training time for users and allowed designers to improve the software during the process.
7. Data dissemination and feedback mechanisms. The HMIS is structured to provide feedback throughout the system. Summary reports from the DMO not only give individual facilities an idea of their effectiveness, but also compare their operations to those of their peers. The DMO also forwards data to the province. An annual report is provided to help the facilities, DHMT, Provincial MoH and donors to plan services, make timely decisions and evaluate the impact of their interventions. Throughout the process, the AKHS provided assistance as a technical resource.

MCH / FP Activities by Division and Month

Health Information System, Ministry of Health
Report for KWALE
Between 1/2003 and 12/2003

Month	Num Facilities Reporting	C.W.C. FA	C.W.C. RA	A.N.C. FA	A.N.C. RA	P.N.C. FA	P.N.C. RA	F.P. FA	F.P. RA
MSAMBWENI									
January 2003	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	14	[illegible]	[illegible]	[illegible]
February 2003	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
March 2003	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
April 2003	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
May 2003	20	857	[illegible]	551	862	3	16	[illegible]	823
June 2003	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
July 2003	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	14	[illegible]	[illegible]	[illegible]
August 2003	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
September 2003	18	[illegible]	[illegible]	558	526	[illegible]	9	[illegible]	824
October 2003	18	[illegible]	6720	[illegible]	561	[illegible]	7	[illegible]	[illegible]
November 2003	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
December 2003	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Total for MSAMBWENI	225	9021	61178	6614	11968	138	155	2972	10690

Management Indicators - Days without Drugs / Vaccine

Health Information System, Ministry of Health
Report for KWALE
Between 1/2003 and 12/2003

Province	Facility	Num Months Reported	Number of Days Without: Current Anti Malarials	Anti Biotic Tabs	Anti Biotic Syrup	Anti Biotic Inject	Vaccines
KWALE							
KUBO							
	[illegible] DISP	12	0	0	0	0	0
	[illegible] SIMBA MISSION DI[illegible]	6	0	0	0	0	0
	[illegible] DISP	12	0	0	0	0	13
	MKONGANI DISP.	11	0	0	0	4	20
	MWALUPHAMBA DISP	5	0	10	28	0	16
	MWALUWANGA DISPENSARY	11	0	0	0	0	0
	MWAPALA DISP.	12	0	0	0	0	3
	SHIMBA HILLS HC	12	41	14	[illegible]	35	0
	Total for KUBO	81	11	24	60	[illegible]	52

Recounting the HMIS development process makes it sound fairly simple and easy to replicate, but building an HMIS is a complicated process. The effort required months of close co-operation between CHD and DHMT to design and build the system, to develop training plans, and to address the inevitable glitches.

Key Accomplishments

While it is too early to assess the full impact of the HMIS, the following early accomplishments have been identified from interviews with stakeholders[4]:

Timely and accurate information is readily available: By encouraging facilities to submit their reports on time, the HMIS has increased the speed and quality of information reporting. The result is a significant increase in the reporting rate for Kwale's 43 health facilities. In 2000, only 49% of health facilities submitted their reports on time. By December, 2001, the rate had risen to 85% and reached 88% by December, 2003 (Kwale HIS records). "Kwale, which once had one of the poorest reporting rates now ranks among the best, and regularly produces accurate and timely data," said Dr. Anderson Kahindi, PMO.

Feedback encourages facilities to strive for excellence: Summary reports from the DMO give individual facilities an idea of their effectiveness, and gauge their operations against those of their peers. Facilities, in turn, use the information to improve performance and offer better health care. In one example, immunisation coverage rose from 40% in 2000 to 75% in 2003, while at the same time the drop out rate decreased from 24% in 2000 to 19% in 2003. (Source: Kwale HMIS). While other interventions may also have helped improve performance, the HMIS has focused efforts and encouraged staff to meet targets.

Quick response to problems: Because data can be quickly analysed at the district level, district managers can rapidly correct emerging problems. "One case I can point to is the discovery, through the use of the HMIS, that there was a wide disparity in the fees charged by dispensaries," says DMO Dr. Philip Mathoka. Based on this finding, Dr. Mathoka's office issued new guidelines on fee setting.

More effective targeting of programs and funding: The new system enables the DHMT to direct donor-supported interventions to sites where the assistance meets the greatest need. For example, nutritional intervention programs can be targeted at areas where malnutrition is highest. Without this information, some donors were focusing on areas where needs were less severe. The speed of the system also makes data available more quickly, and decision making more timely and effective. Kwale's annual report for 2003 was ready in April 2004, allowing the DHMT and dispensaries to develop timely work plans and to allocate resources based on information and evidence. "As managers and staff discover the system's value and make greater use of the system, the culture of evidence-based planning is reinforced," said Maria Kamau, MIS specialist, CHD, AKHS.

More effective disease surveillance: The HMIS will be a valuable early warning system for outbreaks and communicable diseases, helping managers target and track emerging problems. "Given that resources do not enable the DHMT to cover the entire district in detail, the HMIS effectively brings pertinent cases and significant threats to the attention of the DHMT," said District Health Records Information Officer Gilbert Nzomo.

[4] Interviews were conducted with the DMO, DHMT and DHRIO in Kwale District, PMO and PHRIT of Coast Province, Head of HMIS at the National MoH, and the Director and MIS Specialist from the CHD, AKHS. A standardised interview framework was pre-distributed and guided the conversations.

Immunization Summary by Division and Facility

Health Information System, Ministry of Health
Report for KWALE
Between 1/2000 and 12/2003

Facility	Num Months Reported	BCG	D.P.T.3	O.P.V.3	Measles	Completed	DropOut
KINANGO							
[illegible] DISP.	12	479	371	331	332	321	0.0
KIBANDAONGO DISP.	12	163	150	170	181	135	0.2
KINANGO HOSP.	12	1,310	1,063	1,028	982	951	0.2
[illegible] DISP.	12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.2
MTAA DISP.	12	262	207	242	208	190	0.2
NDAVAYA DISP.	12	503	396	600	495	422	0.2
VIGURUNGANI DISP.	12	484	356	357	302	296	0.4
Total for KINANGO	84	3,750	3,281	3,272	3,052	2,789	0.2
KUBO							
KIBUYUNI DISP.	12	251	288	292	221	230	0.0
KICHAKA SIMBA MISSION	6	41	33	31	28	31	0.4
LUKORE DISP.	12	150	148	146	128	126	0.1
MKONGANI DISP.	12	903	394	601	647	514	0.2
MWALUPHAMBA DISP.	12	564	549	504	461	333	0.2
MWALUVANGA DISPENSA	12	50	177	173	127	115	(0.2)
MWAPALA DISP	12	259	239	239	275	271	0.0
SHIMBA HILLS HC	12	137	176	176	159	154	0.0
Total for KUBO	90	2,345	2,224	2,172	2,005	1,925	0.1

Financial and Utilization Summary by Division and Month

Health Information System, Ministry of Health
Report for KWALE
Between 1/2003 and 12/2003

Month	Num Months Reported	Collections	Bankings	% Banked	Expend	Out-patients	Sha / Outp.
KINANGO							
January 2003	5	31,011	5,000	16%	30,370	3,073	10
February 2003	6	64,864	13,500	21%	43,920	1,482	44
March 2003	5	28,971	10,000	35%	24,719	1,201	24
April 2003	5	41,085	4,500	11%	38,051	1,071	38
May 2003	6	[illegible]	[illegible]	45%	[illegible]	[illegible]	14
June 2003	5	45,465	0	0%	31,382	1,129	38
July 2003	5	45,105	4,500	10%	38,497	2,684	17
August 2003	5	32,412	2,300	7%	23,896	1,219	27
September 2003	6	36,458	5,204	14%	15,658	1,564	23
October 2003	5	34,423	3,000	9%	45,148	1,191	29
November 2003	5	32,368	2,600	8%	31,046	1,382	24
December 2003	5	25,841	500	2%	24,295	1,160	19
Total for KINANGO	63	459,683	67,104	15%	368,774	19,734	23

Offers enhanced information for decision making: The system has already encouraged the development of new indicators, including the number of days without priority drugs. Other advantages include enabling individual dispensaries to gauge their performance against their peers, and linking individual facilities with the Village Population module to compare statistics to their catchment area.

Offers a model for other regions: The successful installation and application of the HMIS have caught the attention of the other District Medical Officers of Coast Province and earned the strong support of the Provincial Medical Officer (PMO) and the Head of HMIS at the National MoH. CHD is now working with the PMO, other DHMTs, facilities, donors and partners to introduce a modified Kwale-type HMIS in all the districts in Coast Province. "The Kwale HMIS demonstrates the value of an effective district HMIS and highlights the potential for a national system. A national HMIS can offer tremendous gains in performance, accountability, research, and the development of evidence-based policy," said Dr. Esther Ogara, Head of the HMIS at the National MoH.

Lessons Learned

Building an HMIS from the ground up: While initiating an effective national HMIS remains a daunting prospect, the Kwale effort demonstrates how a regional effort can design and build an information system that serves as a model for other regions and offers the potential to form the foundation of a broader system. Kwale's HMIS illustrates how a local effort can be built from the ground up, developed through incremental improvements, and produce a success that acts as catalyst for change.

Keeping it simple: The Kwale system's simplicity is the key to its success. By incorporating forms already in use, Kwale's HMIS designers avoided the temptation to reinvent the wheel, opting to make the system as familiar as possible and developing software that was simple and easy to input and manipulate data.

Implementing a successful HMIS is a balancing act. The natural temptation is to opt for more information. However, collecting too much information will overburden organisations that have limited human resources. The solution is to establish key goals at the outset of the design process, judiciously selecting indicators, data variables and a data collection system that will streamline the process.

Winning the support of leaders and champions at all levels: At its inception, the Kwale project benefited from the strong leadership and commitment of the PMO, backed by the technical and training support of CHD. As the system began to develop, the DHMT demonstrated a strong and valuable commitment to the process. Finally, as the project came together and the system began to operate, the interest and involvement of the DHRIO ensured success. The sequence displays the value of leadership with leaders emerging during different phases of the project to drive the effort forward.

Managing change: Because change can spark uncertainty and anxiety, managing that change to quell fears and achieve benefits were important aspects of implementing the HMIS. In the Kwale case, there was a concern that the new system would increase workload. As the system developed the DHRIO found the system not only made data handling easier, but also made his job more interesting and challenging. As the benefits of the HMIS were recognised, so, too were the efforts of the DHRIO, who gained new respect and influence among fellow DHMT members. The success of the system, in turn, motivated the DHRIO to make even more effective use of it.

Health facilities can feel threatened by the introduction of a new HMIS, because effective use of information also translates into greater accountability for health care provision. To overcome these anxieties, HMIS supporters must demonstrate the improvements that stem from the system. Particularly crucial is the front-line nurse who must – along with her many other duties – take the time to fill out the forms. The best way to win the support of staff is to demonstrate the system's value and effectiveness.

The initial focus of the Kwale system did not include consultations with donors, NGOs, and private organisations. Organisers now realise the value of having these groups at the table, because each plays a significant role in health care. Addressing their concerns will promote system integration.

Finally, when an obstacle appears, the Kwale group learned to go around it and continue efforts to put the HMIS in place. Actually getting the system up and operating was a key step in overcoming the inertia and fear that often accompany change. When the HMIS begins producing benefits, fear evaporates and support strengthens.

Building a culture that values, uses, and appreciates information: By illustrating the effectiveness of the HMIS and ensuring data and results flow up and down the information chain, the process builds and strengthens an "information culture" within the health system. The effectiveness of the system grows as the information culture takes hold. Employees begin making more effective

use of the HMIS. In one example, an upturn in malaria numbers helped a dispensary board member pinpoint a mosquito breeding area. The information culture cannot be transplanted, but must be built slowly as users understand and realise the potential of the HMIS.

Capacity building is an important component of building an information culture. Training, mentoring, asking questions to guide further analysis and providing feedback builds an information culture. The most important aspect of an HMIS is not statistics but the people who operate and maintain the system and the people who benefit from it. As a result, it is crucial to ensure the system has people who are properly trained and retrained.

Taking the time (and resources) to do the job properly: An effective HMIS cannot be assembled without sufficient resources. At the very least, the system relies on appropriately trained information management personnel, hardware, software and essential supplies, technical support, an institutional framework within which the system can operate, and the logistical support to convey data.

The Kwale experience illustrates the time and commitment required to establish the HMIS. During the HMIS development process, three CHD staff spent about six months dealing with technical issues, software problems, etc. Additional resources came from dispensaries, government, DANIDA (which provided additional funding) and Afri Afya (which donated a computer for the DHRIO.)

Reforming the national HMIS: Because the foundation of Kwale's automated HMIS is built on the national system, it has inherited problems associated with the national program including the lack of a national framework and policy guidelines on HMIS (goals, indicators, minimum data set with standardised definitions, data collection system, etc).

The national interest in redesigning the HMIS, and the Kwale effort illustrates some of the benefits that can be realized at the national level. An effective national HMIS will link all levels of the health system, allowing the rapid flow of information and significant improvements in the system's ability to track effectiveness and manage change. The expansion of the HMIS will promote health system integration and allow managers to scrutinise the performance of individual institutions and to assess the impact of operations on the health status of the population. The result will aid the development of evidence-based health policies.

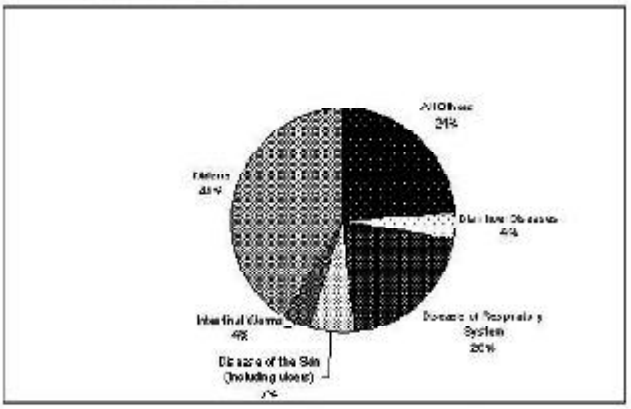
Improving design and implementation: Despite success, the Kwale experience raises issues that other regions

Leading OPD Morbidity Causes

Health Information System, Ministry of Health

KWALE

Between 1/2003 and 12/2003



Disease	Cases	Percent
Malaria	156,197	41%
Disease of Respiratory System	77,823	20%
Disease of the Skin (including ulcers)	23,660	6%
[illegible]	[illegible]	4%
Intestinal Worms	14,752	4%
All Other	90,100	24%
Total	388,471	100%

should consider before designing and implementing an HMIS:

- Include all parts of the system. While Kwale's system includes only government dispensaries, health facilities and hospitals, a more effective HMIS would include data from all providers (public, private, NGO, etc.) into a single repository with the capacity to collect data for local and national analysis.
- Do a thorough assessment of both the current (manual) system and the needs of users before designing the new HMIS and automating it. The new system should address concerns with the existing one, rather than carrying over problems associated with the older approach.
- Make the new HMIS flexible so it can be easily updated to include new facilities, revised forms, etc.
- Ensure a two-way flow of information. Formal mechanisms should ensure that analyses based on the HMIS are available to policymakers, management and operational staff.
- Develop standardised definitions for indicators, data needs and policies to eliminate confusion regarding the collection, analysis and use of information.
- Develop a networked system that links key users.
- Install security systems to prohibit access by unauthorised users, and develop an archiving program.
- Develop a quality control system to safeguard the use of standard case definitions, ensure timely and predictable transmission of data, check for errors at each level of aggregation, operate a quality control training program for staff, and ensure information disclosure.

Future Directions

The Kwale HMIS is undergoing development and improvement, and expanding to serve new areas. To share its benefits with a broader area, the MoH has authorised the Kwale HMIS to expand throughout the Coast Province. CHD will provide technical support for the expansion, reviewing and modifying the existing HMIS (in consultation with the users) and installation of the new system. Improvements such as email/internet access in the DHRIO offices to facilitate two-way transmission of reports from district to Provincial Ministry, including NGOs and private providers in the HMIS, and improved data collection forms will be implemented.

Health care providers must be at the forefront of information management and use. The success of the Kwale system reveals the tremendous benefits that can flow from even a modest, incremental effort motivated by a shared vision. The HMIS has helped transform a system from one that was navigating without a compass to one that is able to chart a course to improve operations and the impact of the programs. The results of the HMIS include huge benefits to patients and managers, as well as front-line workers.

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Contact Information:

The Aga Khan Development Network (AKDN) is an international group of private institutions supporting a broad, integrative approach to health and development. The health-related arm of the AKDN is the Aga Khan Health Services (AKHS), which operates four general hospitals, five primary medical centres and the Community Health Department (CHD) supporting community health initiatives in Kenya and East Africa.

The Community Health Department is responsible for testing and developing appropriate models of equitable and sustainable health systems to respond to the health needs of the community. The main focus of the department is to provide technical support to other community based organisations, non-governmental organisations and the Ministry of Health (MoH) in strengthening health systems.

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