Republic of Kenya

KENYA WORKING PAPERS

Decentralizing Kenya's Health Management System: An Evaluation

January 2009

Based on further analysis of the 2004 Kenya Service Provision Assessment Survey

P.M. Ndavi

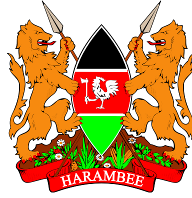
S. Ogola

P.M. Kizito

K. Johnson

No. 1

The *Kenya Working Papers* series is an unreviewed, unedited prepublication series of papers reporting on studies in progress. This paper is based on further analysis of data collected in the 2004 Kenya HIV/AIDS and Maternal and Child Health Service Provision Assessment (KSPA). The 2004 KSPA was supported by the United States Agency for International Development (USAID), the United Nations Children's Fund (UNICEF), and the U.K. Department for International Development (DFID). It was implemented by the Kenya National Coordinating Agency for Population and Development (NCAPD), the Ministry of Health (MOH), and the Central Bureau of Statistics (CBS). Additional funding for the development of these papers was provided by the USAID, President's Emergency Plan for AIDS Relief (PEPFAR), and UNICEF, which took place under the auspices of NCAPD. The MEASURE DHS program at Macro International Inc., Calverton, Maryland, USA provided technical support for the main survey and for the preparation of these papers. The views expressed in this paper are those of the authors and do not necessarily represent the views of the Government of Kenya, NCAPD, USAID, UNICEF, DFID, or the organizations with which the authors are affiliated.



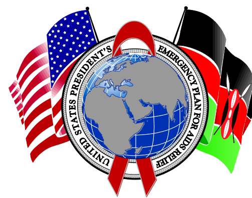
KENYA WORKING PAPERS No. 1

Decentralizing Kenya's Health Management System: An Evaluation

P.M. Ndavi[1]
S. Ogola[2]
P.M. Kizito[2]
K. Johnson[3]

JANUARY 2009

BASED ON FURTHER ANALYSIS OF THE
2004 KENYA SERVICE PROVISION ASSESSMENT SURVEY



Corresponding author: Patrick Ndavi, University of Nairobi, Department of Gynecology and Obstetrics, P.O.BOX 30197-00100, Nairobi, Kenya. Phone: +254-20-2726300.

[1]University of Nairobi
[2]National Coordinating Agency for Population and Development
[3]Macro International Inc.

Suggested citation:

Ndavi, P.M., S. Ogola, P.M. Kizito, and K. Johnson. 2009. *Decentralizing Kenya's Health Management System: An Evaluation.* Kenya Working Papers No. 1. Calverton, Maryland, USA: Macro International Inc.

SUMMARY

Kenya's Ministry of Health (MOH) commitment to address the inherent constraints in the health sector has included deliberate decentralization efforts aimed at strengthening the effective implementation of activities at the district level, and fostering closer coordination and collaboration amongst the line ministries, donors, organizations, and other stakeholders. Among these efforts, local District Health Management Boards (DHMBs) and District Health Management Teams (DHMTs) gradually assumed responsibilities for the operation of the facilities under their jurisdiction through a single line grant, annual work plans, and procurement plans. To assess the current effectiveness of the district health management systems in meeting their responsibilities, we analyze data from a special District Health Management module of the 2004 Kenya Service Provision Assessment Survey to discern the degree to which the DHMTs and DHMBs meet norms and standards in the areas of governance and management, human resource development and management, commodity management, infrastructure development, health care financing, budgeting and management, and performance monitoring.

Notably, data on DHMTs and DHMBs were missing for 20 percent of the districts. This level of nonresponse has the potential to weaken the validity of the findings, particularly when the excluded DHMTs are in provinces with some of the worst health indicators in the country. Their exclusion was due to difficult terrain and insecure environment, both of which imply that the right of the population to health care services is compromised.

The results of this descriptive analysis indicate that although most of the DHMTs hold meetings frequently, the unavailability of the guidelines on the functioning of the DHMTs made it difficult to determine compliance of DHMTs with any existing norms and standards. The survey missed the opportunity to assess the activities and achievements of the HFMCs and

HCMTs, which are important for decentralization. Although most of the DHMTs had documented plans for improving reproductive health, less than a quarter reported implementing their plans on time. Lack of funds and transport were the most cited reasons for failure by DHMTs to meet their supervision targets despite the near universal existence of documented supervision plans. In terms of support of human resources, continuing professional development is an accepted norm in the districts, but there is urgent need to strengthen and expand the scope of updates to serving staff through the establishment of district health training committees and regular monitoring of their activities. An assessment of available infrastructure indicated that repair and maintenance units existed in most districts, with nearly all of the districts contracted with the provincial workshop for repair and maintenance work. Communication facilities between most district hospitals and close to three quarters of the health centers with referral facilities under government management had capacity to communicate easily by telephone or two-way radio with a referral facility to arrange transport during emergencies. The situation was much better for NGO/mission-run facilities. Regarding financing issues, despite existence of both recurrent and development funds, funding for medicines, equipment, and maintaining buildings was inadequate for most districts. Sources for funding for district health services included central government funding supplemented by local government, revolving funds, and other sources. Increased annual budgetary allocations to the agreed 15 percent to ministries of health, in agreement with the Abuja accord, may increase financial resources required for medicines, equipment, and maintenance of buildings.

INTRODUCTION

Despite decades of strong advocacy for the decentralization of health administration, health care systems decisions are taken in central divisions of the ministries of health in most African countries. These decisions are then conveyed top-down through the provincial (or regional) health administration to the operational services at district level (department, prefecture): hospitals, health centers and vertical programme centers (Blaise and Kegels, 2004). Historically, Kenya has also had a centralized approach to health care systems decision making (MOH, 2002). Centralized functions at the headquarter level in the Ministry of Health (MOH) include policy formulation, coordinating activities of government and non-governmental organizations, managing implementation of policy changes regarding government services such as user charges, and monitoring and evaluating the impact of policy changes (MOH, 2002).

Centralized decision making has been blamed for, among other things, regional or provincial disparities in the distribution of health services, inequities in resource allocations, and unequal access to quality health services, with resultant regional or provincial differentials in the indicators of health (MOH, 2002). The tragedy of exclusion of the contribution of other stakeholders in centralized decision making has been acknowledged in the development of many national health sector strategic plans (MOH, 2006).

In order to resolve the inherent constraints in the health sector, appropriate structural, financial, and organizational reforms within the sector have been implemented within a sector-wide approach (MOH, 2002). Through the various health sector strategic plans, the MOH committed itself to decentralization by providing increased authority for decisionmaking, resource allocation, and management of health care to the district and facility levels. This was intended in part to allow greater participation of the community in the management of health

funds and the implementation of the essential clinical and public health package at the lower levels (MOH, 2002; MOH, 2006). Decentralization efforts further aimed to strengthen the implementation of activities at the district level and foster closer coordination and collaboration amongst the line ministries, donors, organizations, and other stakeholders.

Effectiveness of health service provision, especially within a decentralized health framework, depends on the strength of the district-level institutions. To assess the current effectiveness of the district health management systems in meeting their responsibilities, we analyze data from the District Health Management Team survey, which was a component of the Kenya Service Provision Assessment 2004 (KSPA 2004). The survey was conducted at the end of the First National Health Sector Strategic Plan (NHSSP) 1999-2004, thus evaluating the achievements of the plan at the district level (MOH and HSRS, 2005).

Conducted by the National Coordinating Agency for Population and Development (NCAPD) with technical assistance through the MEASURE DHS project, the KSPA 2004 provided national- and provincial-level representative information for all types of health facilities. The objectives of the assessment included, among others: description of the preparedness of health facilities in Kenya to provide quality child, maternal, reproductive health, STI, tuberculosis, and HIV/AIDS services (NCAPD/CBS/ORC Macro, 2004; NCAPD/CBS/ORC Macro, 2004); identification of gaps in support services, resources, and processes used in providing client services that may affect facilities' capacity to provide quality services; description of tasks used in providing child, maternal and reproductive health services; and the extent to which accepted standards for quality service provision are followed (NCAPD/CBS/ORC Macro, 2004; NCAPD/CBS/ORC Macro, 2004). The survey further

included an assessment of the district health management systems and structures; these results form the basis for this report.

The key questions addressed in this analysis are as follows:

1. To what level do DHMTs and DHMBs meet the norms and standards on governance and management stipulated in their establishment?

2. To what level do DHMTs and DHMBs meet the norms and standards on human resource development and management stipulated in their establishment?

3. Do procurement plans and mechanisms for management of stores exist in the districts and are they followed?

4. What is the state of infrastructure, equipment and communication in the districts?

5. What is the source of funding for medicines, equipment, and maintaining buildings in the districts?

CONTEXT

The focus of this paper is on appropriate health systems and improved coordination necessary for the delivery of efficient and effective health services at the district level. This is with emphasis on improvements in district level planning, budgeting, and financial management and control systems. Most notably, commitment is made to transferring financial management through the release of block grants, enhancing the capacity of the local District Health Management Boards (DHMBs) and District Health Management Teams (DHMTs), and extending "guided autonomy" to a few hospitals. The DHMTs and DHMBs gradually assume responsibilities for operation of the facilities under their jurisdiction through a single line grant, effective annual work plans, and procurement plans. Meanwhile, central support is restricted to technical, logistic, and administrative issues.

Reforms have tended to focus on organizational change (such as decentralization, purchaser-provider separation, and managed markets), financial reform (such as a shift to user fees or health insurance), and a restructuring in the relative roles and relations between the public and private sectors (Wang et al., 2002). In spite of the important role played by human resources in achieving the objectives of the health sector reform and decentralization including those related to performance, efficiency, and equity, they have not received due attention (Wang et al., 2002). While changes in human resource management have not been always absent, they nevertheless have received secondary attention (Wang et al., 2002).

The policy initiatives of the Kenya Health Policy Framework (KHPF) (MOH, 1994) , its Kenya Health Policy Framework Implementation Action Plan (MOH, 1996) , the resultant Health Sector Reform Secretariat (HSRS) and the National Health Sector Strategic Plan 1999-2004 (NHSSP 1999-2004)(MOH and HSRS, 2005) were a response to several constraints within

the national health care system, two of which were centralized decisionmaking and inadequate management skills at the district level.

To increase decentralization and improve health facilities management skills at the district level, the Ministry of Health established Kenya's District Health Management Teams (DHMTs) and the District Health Management Boards (DHMBs). Attempts to obtain written guidelines on the functioning of DHMTs were not successful. Hence, discussions were held with serving and former district medical officers of health. These discussions revealed that the composition of DHMTs includes the District Medical Officer of Health (DMOH), District Public Health Nurse, District Clinical Officer, District Public Health Officer, and District Laboratory technician. Some of these District Medical Officers of Health have never used the guidelines, if any exist, developed for their functions and are not aware of their existence.

The DHMTs and DHMBs are charged with managing public health services at the district level, in cooperation with the Public Health Unit of the district hospitals. In particular, the DHMT is responsible for planning and coordinating health activities in the district. It prepares the cost sharing spending plans, which are scrutinized and approved by the DHMB. The DHMTs plan and coordinate health activities, and work closely with DHMBs to ensure that health policies are implemented, resources are well utilized, quality standards are upheld, and performance is monitored and evaluated for better results.

The DHMBs were established in 1992 by Legal Notice No. 162 of the Public Health Act (Cap. 242) (MOH, 2002). Each board consists of not less than seven nor more than nine members constituted as follows: a chairman appointed by the Minister from the members of the Board; the area District Commissioner or his representative; one person with experience in finance and administration from within the District; two persons nominated by the NGOs

recognized by the Minister, one of whom shall represent the interests of religious and the other private health services; one person nominated by the Local Authority having jurisdiction over the area; not more than three persons to represent community interests and the area Medical Officer of Health (MoH) who shall be the secretary to the Board. Under each board are the three committees for Primary Health Care, Finance, and Quality of Clinical Services, each of which has a chairman.

The core function of the boards is to oversee all health sector activities with functions not limited to the management of cost sharing funds. These functions include superintending the management of hospital services; supporting public health care programmes, preparation and submission to the minister for approval estimates of revenue and development expenditures; submission of recommendations to the minister on areas to levy user charges under the cost sharing programmes as provided for by the Exchequer and Audit (Health Services Fund) Regulations; tender advice to the minister on plans for development or promotion of the health services in the district and carry out such plans if approved; submission of statistical and financial and other reports as the minister may require; and fulfill such other functions as the minister may prescribe. The DHMBs may receive complaints of serious misconduct, negligence, illegality, or other misdeed on the part of the Ministry of Health employees working in the district. Together, the DHMT and DHMB provide management and supervision support to rural health facilities (sub-district hospitals, health centers, and dispensaries).

METHODOLOGY

While the KSPA was designed to survey a randomly-selected representative sample of health facilities in Kenya, the aim for the DHMT component of the data collection effort was to provide information for all 69 DHMTs in the country (there are a total of 69 districts in Kenya, each with its own DHMT). In total, it was possible to administer the questionnaire to 57 of the DHMTs (83 percent).

Distribution of the DHMT

The original plan was to cover all 69 districts in the country. However only 57 districts (83 percent) were covered. The other districts were not covered due to inaccessibility or security reasons.

Distribution of the districts covered by province

Province	Total no. of districts in province	No. of districts covered
Nairobi	1	1
Central	7	7
Coast	7	7
Eastern	13	10
North Eastern	3	2
Nyanza	12	7
Rift Valley	19	14
Western	7	7
Total	**69**	**55**

As shown in the table above, all the DHMTs in Nairobi, Central, Coast, and Western provinces were covered. The districts not covered in Rift Valley and Eastern provinces were mainly those in difficult-to-reach areas that required some special kind of transport and security arrangements. In Nyanza province, unlike the other provinces, only slightly more than half of the DHMTs were covered.

The DHMT members selected as the most appropriate respondents for the District Health Management questions were mainly the District Public Health Nurse (DPHN) or the District Medical Officer of Health (DMOH). However, the chairpersons of the DHMBs and the respective chairpersons of the three DHMB committees should have responded to their relevant sections of the questionnaire. Instead, the District Medical Officer of Health, who is the secretary to the DHMB and its three committees, responded to the DHMB components of the questionnaire. The District Population Officers were charged with administering the survey instrument. The survey covered issues of governance and management, human resource development and management, commodities management, infrastructure, transport and equipment, health care financing, budgeting and management, and performance monitoring.

Because the total number of cases is small, it was not possible to disaggregate our results according to background characteristics such as region. Thus we provide only univariate results (percentages) in this analysis.

RESULTS

Close to 20 percent of the DHMTs were not interviewed because they could not be reached due to either inaccessibility or insecurity. The implications for the representativeness of these findings are immense and future surveys must endeavor to reach these DHMTs. Indeed, the missing DHMTs are in provinces with some of the worst reproductive health process and impact indicators, like low utilization of health care provider during the antenatal period and childbirth, low tetanus vaccinations during pregnancy, low contraceptive prevalence rate, high prevalence of HIV, and high maternal and infant mortality (CBS/KMRI/NCAPD/ORC Macro, 2004). This implies gross abuse of the population's right to health care services through inaccessibility of health services and insecurity. Improvement of these conditions is a daunting challenge.

In this section, we present the findings of our descriptive analysis according to each of the six areas of assessment: governance and management, human resource development and management, commodity management, infrastructure development, health care financing, budgeting and management, and performance monitoring.

A. Governance and Management

While guidelines on the membership and functioning of DHMBs were available and used in the analysis, such guidelines for the DHMTs, if they exist at all, were not available even after contacting officers in the MOH headquarters. Thus, it is difficult to determine whether DHMTs followed the norms and standards required for their effective function. The appropriate questionnaire respondents for the DHMBs would have been their chairmen and the respective chairmen of the three committees (Primary Health Care, Finance, and Quality of Clinical Services), but these were not respondents for the relevant sections of the DHMT questionnaire.

Other district health management system structures not assessed were the health facility management committees (HFMCs) for hospitals and the health center management teams (HCMTs), whose membership is drawn from and appointed by the communities served by these facilities. These are some of the weaknesses in this survey that should be addressed in the future.

Holding sufficiently frequent recorded DHMT meetings and generating implementation plans at DHMT meetings – as well as reviewing the resultant actions of those plans – are important activities that assist the district management in reviewing district health care services. Meetings between the DHMT and DHMB are necessary to ensure that technical management of health services is relevant to the needs and aspirations of the local communities. Table 1.1 provides information on meetings and governance activities by DHMTs, DHMBs, and joint DHMT/DHMB activities with communities and other stakeholders.

In the assessment of the district health management system, data were collected on frequency and recording of meetings by DHMTs and DHMBs, as well as data on planning activities in the district. Table 1.1 shows that all DHMTs assessed held meetings, with close to 9 out of 10 of them holding such meetings every three months or more often. Most of them maintain records of the meetings, but the contents of the records were not assessed nor were any actions thereof. Meetings between DHMTs and other stakeholders on reproductive health and safe motherhood program activities occurred quarterly in about 32 percent of districts, but less frequently in 50.8 percent of the districts. It is noteworthy that 1 in 10 DHMTs did not hold meetings with other stakeholders on reproductive health and safe motherhood program activities.

Table 1.1. Governance and management: percentage of DHMTS/DHMB that hold periodic meetings

	Percent
DHMT meetings	
DHMT holds meetings to discuss facility managerial and administrative matters	100.0
DHMT holds meetings every 3 months or more often	93.0
DHMT holds meetings less than every 3 months	7.0
Records of DHMT meetings maintained	94.7
DHMT holds meetings with other stakeholders on RH/Safe Motherhood program	89.4
DHMT holds meetings monthly with other stakeholders on RH/Safe Motherhood Program	7.0
DHMT holds meetings quarterly with other stakeholders on RH/Safe Motherhood Program	31.6
DHMT holds meetings every six months with other stakeholders on RH/Safe Motherhood program	14.0
DHMT holds ad hoc meetings with other stakeholders on RH/Safe Motherhood program	29.8
DHMT holds meetings on other basis with other stakeholders on RH/Safe Motherhood program	7.0
DHMB meetings	
Hold DHMB meetings to discuss managerial and administrative matters	86.0
Hold DHMB meetings every 3 months or more often	75.0
Hold DHMB meetings less than every 3 months	25.0
Records of DHMB meetings maintained	82.5
Joint DHMT/DHMB meetings	
Any routine annual general meetings with community	36.8
Any feedback to the community on committee/board management decisions	35.1
Organization and planning in the districts	
Has organizational chart	47.4
Has district priority list for implementing health activities	86.0
Assessment: Implementation of district health plans on schedule	22.8
Assessment: Implementation of district health plans behind schedule	64.9
DHMT has plans for improving RH/Safe Motherhood services in the district	94.7
Documentation of such plans present	84.2
DHMT system for feedback to community and health facility on supervision	
Feedback is given to community and health facility	96.5
Verbal feedback given	70.2
Written feedback given	73.7
Other type of feedback given	14.0
Total (N)	**57**

The main business of the DHMB is carried out in the full board meetings. Legal Notice No. 162 of the Public Health Act (Cap 242) stipulates that there shall be a minimum of four full board meetings per year and at least six meetings of the three stipulated standing committees (MOH, 2002). Eighty-six percent of DHMBs reported holding meetings to discuss managerial

and administrative matters. It is noteworthy that 75 percent of the DHMBs hold meetings every 3 monthly or more often. These responses were provided by the DMOHs, who serve as the secretaries to the full board and the three committees.

However, the data do not distinguish between full board meetings or meetings of the standing committees. Records were maintained for such meetings by about 83 percent of these management structures. To keep track of business conducted and to follow up on the agreed-upon decision, it is important that accurate and comprehensive minutes are taken for all meetings. The core element of the minutes should be a kind of action plan with stated components (MOH, 2002), none of which were assessed in this survey.

Board and committee members should seek opportunities for informing their communities of the benefits of cost sharing, explaining how the money people pay in fees is spent, and supporting health education campaigns targeted to the general public as a way of community mobilization to educate the public on the procedures in place (MOH, 2002). However, routine annual general meetings between the community and the DHMTs and DHMBs were infrequent (37 percent). Among those who held annual meetings, only about 35 percent provided the community with feedback of key management decisions.

The organizational chart or organogram displaying the administrative and planning linkages flowing from the community, NGO health providers, village health workers, health centre management teams, and committees through the DHMBs and DHMTs to the PMOHs office for onward transmission to the MOH headquarters is important. Less than 50 percent of the districts had an organizational chart showing the relationships between different sections and departments and their responsibilities for overall health care services management and delivery in the district. The survey did not assess the capacity of these structures to perform their roles:

for the section and departmental staff to perform effectively, members need to possess the relevant professional skills and experiences as well as leadership abilities and commitment to serve. A list of priority activities, operations, and action plans for implementing various health activities was observed in 86 percent of the districts. While close to 95 percent of the DHMTs had plans for improving reproductive health and safe motherhood services, with about 84 percent having documentation of these plans, only about 23 percent of districts reported that health plans were being implemented on schedule.

The existence of DHMT systems for giving feedback and sharing results of supervision with community staff and health facilities is an indicator that the DHMT is upholding the values of transparency and accountability, which underpin good governance in district health management. Close to 70 percent of DHMTs reported verbal communication and written correspondence as their feedback systems. Other systems of feedback were used by 14 percent of the DHMTs with only about 4 percent of them reporting no feedback given to community staff and health facilities.

As important structures in the health sector reform strategy, the DHMBs and Health Facility Management Committees (HFMCs) were established with the former (established through an act of parliament and and published through a gazette notice) being the communities' equivalent to the DHMT, while the latter (not gazetted) have the same community mandate but are confined to their respective health facilities. The DHMBs are representatives of various interest groups in the community within a district and serve in the management of health services in the respective district. A significant weakness in the assessment of the DHMTs was the omission of items exploring the activities and achievements of the HFMCs, which are important to the healthy functioning of the district health management system.

B. Human Resource Development and Management (HRD&M)

National governments need the resources to expand access to high priority programmes while investing in urgently needed improvements in the areas of drugs and general supplies, human resource development, and expansion of infrastructure, all of which underpin these programs (Blaise and Kegels, 2004; MOH and HSRS, 2005). With regard to HRD&M, the number of personnel, as well as their competency, skills, and motivation, influence the quality of health care services provided. Competency and skills require continuing professional development (CPD), and an appropriate working environment, along with proper remuneration and opportunity for promotion, all contributing further to the enhancement of staff motivation. The main strategic objective for human resource development and management in the NHSSP 1999-2004 was to "provide a well-motivated and committed health workforce with the relevant skills and competencies in the right numbers at all levels at the right time for the efficient delivery of health care services in the sector" (MOH and HSRS, 2005).

To examine the ways in which DHMTs foster quality performance among staff in their local facilities, the KSPA, through the DHMT survey, assessed the elements of promotion, appraisal, motivation, supervision, adherence to code of conduct, and continuing medical education activities. Crucial components on human resource development and management for health that this survey did not assess included availability and use of clearly defined norms and standards for health service delivery at the different levels--dispensary, health centre and hospitals--in the areas of clinical service provision as well as health services management. An assessment of these two components would have explored the existence and operationalisation of norms and standards for optimum minimum number of staff required, their skills, and the mix of competencies for both technical and support staff for different facility levels (MOH, 2002).

Promotion of dedicated staff serves as a formal recognition of and reward for an employee's good performance, which in turn makes these staff feel appreciated, encourages continued good performance, and reduces costly staff turnover (MOH, 2004). Ideally, reasonably objective criteria based on performance and additional training, among other things, should be taken into account when considering promotions. Table 2.1 shows that 28 percent of the districts based promotions on performance, and 33 percent of districts based promotion on additional training. However, most districts (about 52 percent), either promoted staff automatically or had no criteria for promotion.

One of the main activities for realizing the strategic objectives of the NHSSP 1999-2004 on human resource development and management (HRD&M) was "reinforcing performance appraisal based on objective assessment." (MOH and HSRS, 2005) In the DHMT survey, mechanisms for staff appraisal were more objective than the criteria for staff promotion: 52 percent of districts used work plans and 61 percent of districts used job description for staff appraisal. It is important to note that all of the DHMTs reported mechanisms for staff appraisal.

Employers can offer small comforts or incentives to motivate their staff which, while not costly, fill real staff needs and make employees feel appreciated. When staff needs are met at the workplace, staff work harder and turnover is reduced. Indeed, it was the aim of the NHSSP 1999-2004 to enhance staff motivation (MOH and HSRS, 2005). Different mechanisms for staff motivation were cited by the districts, with tea for staff being the most common method (about 81 percent), followed by access to services like phones (42 percent); awards and letters of appreciation were each cited by 35 percent of the districts. This demonstrates positive attitudes towards rewarding and motivating staff in the districts, as well as the willingness of the DHMTs to participate in such personnel matters (MOH, 2002).

Table 2.1. Human resource development and management: percent of districts with criteria for promotion, staff appraisal, and motivation mechanisms

	Percent
Mechanisms for staff promotion	
Staff are promoted automatically	40.4
Staff are promoted based on performance	28.1
Staff are promoted based on additional training	33.3
Staff are promoted based on other criteria	14.0
There are no promotion criteria	12.3
Mechanisms for staff appraisal	
Staff are appraised by work plan	52.6
Staff are appraised based on job description	61.4
Staff are appraised based on other criteria	26.3
Mechanisms for staff motivation	
Tea for staff	80.7
Lunch for staff	8.8
Access to services like phone	42.1
Awards	35.1
Letters of appreciation	35.1
Other forms of motivation	19.3
No mechanisms for motivation	8.8
Total (N)	**57**

A review of the evidence on approaches to overcoming constraints to effective health service delivery cites the following elements as important: intervention to improve staff skills, supervision or follow-up, the introduction of quality assurance methods, and performance and incentive schemes (Oliveira-Cruz et al., 2003). The DHMT survey explored supervision activities and reported on mechanisms to ensure adherence to code of conduct for health staff in the district.

At the time of the KSPA 2004 survey, the reproductive health division in the MOH had been training staff and developing a manual for facilitative supervision (MOH, 2005). Facilitative supervision includes setting goals, providing leadership, motivating staff, linking with other systems, and fostering trust (MOH, 2005). While about 8 out of 10 DHMTs had

supervision plans, only about 2 out of 10 DHMTs reported meeting their supervision targets. Lack of funds and transport were the most cited reasons for failure by DHMTs to meet their targets (42 percent). Only 10 percent of the DHMTs had no reason for not meeting their supervision targets. Close to 65 percent of the DHMTs had policies or guidelines for supervision of reproductive health and safe motherhood activities. Regarding their own supervision, about 5 out of 10 DHMTs reported having been supervised by their respective Provincial Health Management Teams within the previous two months and the rest (44 percent) less frequently. Different mechanisms that ensure adherence to code of conduct were cited by DHMTs. Supervisory visits, staff meetings, and duty and leave rosters were reported by more than 90 percent of the DHMTs. Indeed, all DHMTs had some mechanism for assuring adherence to the code of conduct (Table 2.2).

The number of personnel in a facility, along with their competency and skills, influences the quality of health care services. The DHMT survey assessed several components related to training activities of staff: elements of training, continuing medical education (CME), and courses attended in the previous 12 months. About 5 out of 10 districts had a training committee and 4 out of 10 had criteria for selecting staff for CME, skills update courses or seminars. An assessment of the scope of courses attended by district staff as components of CME reflects emphasis on the most pressing public health issues. The top three courses staff had attended in the previous 12 months were on prevention of mother-to-child transmission of HIV (PMTCT), malaria, and family planning, as reported by 90 percent, 77 percent, and 68 percent of the DHMTs respectively.

Additional courses attended by staff were on Integrated Management of Childhood Illness (IMCI - 54 percent), as well as infection prevention, essential obstetric care, and

management skills courses, each reported by 51 percent of DHMTs. Between 40 and 49 percent of DHMTs reported that staff had attended courses in focused antenatal care, post abortion care, and logistics management training. Least-reported courses attended by staff in the districts were on decentralization, malaria in pregnancy, and postpartum care, cited by between 21 and 35 percent of the DHMTs.

Table 2.2. Human resource development and management: percent of districts with supervision activities and codes of conduct for staff

	Percent
Elements of supervision	
District has supervision plans	77.2
Target supervision met	19.3
Why supervision target not met:	
Too much work	14.0
No funds	19.3
No transport	42.1
Other reason	42.1
No reason given	10.5
Not enough time	7.0
District has guidelines or policies for supervision for RH/SM	64.9
Supervised by PHMT within the last 2 months	54.4
Supervised by PHMT 3+ months ago	43.9
Mechanisms for assuring adherence to code of conduct	
Frequent supervisory visits	94.7
Frequent staff meetings	91.2
Frequent duty roster	98.2
Frequent leave roster	98.2
Other adherence code	17.5
No mechanism for adherence code	0.0
Total (N)	**57**

Several activities for achievement of the NHSSP 1999-2004 (MOH and HSRS, 2005) strategic objectives in HRD&M, included reactivation and strengthening of Ministerial Training Committee, Provincial Training Committees (PTCs), and District Training Committees (DTCs). At the same time, enhanced incentives to attract and retain staff through introduction of training

incentives (opportunities for further training) were to be based on merit and transparency in selection of candidates to ensure all deserving officers are considered for scholarships, refresher courses, and other continuing education programs. Table 2.3 shows about half (51 percent) of the districts had training committees, while about 40 percent of the districts had criteria for selecting staff for continuing education.

Table 2.3. Human resource development and management: percent of districts with training activities for staff

	Percent
Elements of training	
District has training committee	50.9
Criteria for selecting staff for CME, skills update courses, or seminars	40.4
Availability of resources for CME in RH/SM	61.4
CME resources for RH/SM	
Library	15.8
Electronic resource	22.8
Resource centre	12.3
Evidence-Based Practice in Training (EBPT)	24.6
In-house training team	49.1
Space	26.1
Guidelines	52.6
Funds	15.8
Other resources	1.8
Courses attended in the past 12 months	
Infection prevention	50.9
PMTCT	89.5
Essential obstetric care	50.9
Family planning	68.4
Postpartum care	21.1
Focused antenatal care	49.1
Post abortion care	45.6
Logistics management training	42.1
Integrated Management of Childhood Illness (IMCI)	54.4
Decentralization: health sector reform	35.1
Malaria	77.2
Malaria in pregnancy	29.8
Management skills	50.9
Other courses	40.4
Total (N)	**57**

The importance districts attach to continuing medical education (CME) is evidenced by the range of resources for district reproductive health and safe motherhood programs, which were available in close to 60 percent of the districts. The most available resources for CME in RH/SM were guidelines and an in-house training team. Next in availability were the modern electronic resources (23 percent) and Evidence-based Practice in Training (EBPT) in about 25 percent of the districts. Space, funding, and resource centers were available in about 26 percent, 16 percent, and 12 percent of the districts, respectively, for CME in reproductive health and safe motherhood.

C. Commodities Management

The poor quality of rural health services is a major challenge to the division of clinical services. This is a result of an inappropriate number of health workers, lack of skills, and lack of commodities (MOH, 2006), the latter having been identified as one of the most critical areas where policy reforms were required as far back as 1994 (NCAPD/CBS/ORC Macro, 2004). Thus, ensuring equitable availability of therapeutic and diagnostic commodities in Kenya is crucial (MOH, 2006). Adequacy of drug supplies, including contraceptive security, contributes to improved quality of health care services. Effective logistics systems, especially for contraceptives, will enable peripheral Kenyans to meet their reproductive health needs in a sustainable manner, thereby allowing for both regulation of fertility as well as reduction of a woman's lifetime risk of maternal morbidity and mortality. Notably, contraceptive users depend on ready accessibility of their preferred methods. Stock-outs are likely to encourage temporary or even permanent discontinuation, resulting in unintended pregnancies and sexually transmitted infections (STIs), including HIV/AIDS. There is a chance that ineffective logistics management

of contraceptives at the district level is partly responsible for the current stagnation of contraceptive prevalence in the country, which is at about 32 percent for any modern contraceptive method (NCAPD/CBS/ORC Macro, 1999; CBS/KMRI/NCAPD/ORC Macro, 2004) . In the opinion of those that make use of government health services, the availability of drugs is the most important local factor determining that use (NCAPD/CBS/ORC Macro, 2004).

The issues explored in the DHMT survey on commodity management included procurement and management of stores. Procurement plans for a sustainable system of supplies, drugs, and equipment are key results of a strengthened management system. In the MOH, procurement of drugs and dressings is accomplished through a Departmental Tender Board. Within the Ministry, there exists a drug storage and distribution system with a central warehouse in Nairobi and a well developed network of regional depots in the provinces (NCAPD/CBS/ORC Macro, 2004). The "push" system for procurement of drugs and supplies is applied for dispensary, health centre and hospital outpatient services in which drug kits were/are supplied ("pushed") from Kenya Medical Supplies Agency (KEMSA) without due regard to requirements. Hospitals use the "pull" system for inpatient drug and supplies requirements. In this system, the order for drugs and supplies depends on the rate of the utilization of these commodities. All these together describe the basis for district procurement of drugs and supplies. The DHMT survey did not recognize the existence of both the "push" and "pull" systems. Therefore, the survey did not provide data on their applications, which would have determined whether commodity management met any existing norms and standards.

All districts should have procurement plans, but only two thirds of districts had procurement plans for drugs and supplies; about 58 percent of them have quarterly to annual procurement plans and 21 percent have weekly to monthly plans. It is noteworthy that close to 1

out of 3 DHMTs had no procurement plans. About 95 percent of DHMTs had ledgers for monitoring stores and requisition forms as well as a system for distribution of excess supplies (Table 3.1). Security for stores for most districts was provided by regular facility security officers (88 percent). A system for distribution of excess stores was in place for about 95 percent of the districts. In a third of the districts, the stores were audited every 3 months or more frequently, with two thirds of the districts' stores audited less frequently.

Table 3.1. DHMT procurement plans: percent of DHMTs that have a procurement team or committee in place, periodic procurement plans, and supplies storage

	Percent
DHMT procurement plans	
Has procurement team/committee in place	66.7
Has weekly procurement plans	7.0
Has monthly procurement plans	14.0
Has quarterly procurement plans	36.8
Has annual procurement plans	21.1
Has other procurement plans	10.5
Has no procurement plans/don't know	31.6
DHMT mechanisms for storage and management of stores	
District has designated supplies safekeeping store	94.7
Ledgers for monitoring stores	96.5
Requisition forms	98.2
Bin cards	36.8
Security provided by regular facility security officers	87.7
Special security officers for stores	7.0
System for distribution of excess supplies	94.7
Frequency of auditing stores	
Every 3 months or more frequently	33.3
Less than every 3 months	66.7
Total (N)	**57**

D. Infrastructure, Transport, and Equipment

Certain infrastructure and health system components are necessary for a consistent standard of quality, and for access to and appropriate utilization of health services. The availability of

equipment, transport and communication facilities is critical in the provision of quality health care. The DHMT questionnaire sought information on repair and maintenance of equipment, and availability of communication and transport for emergencies, but the availability of required equipment and the state of their working condition was determined through the main KSPA 2004 survey. In Table 4.1, about 8 out of 10 districts had a designated unit for repair and maintenance of equipment and nearly all of the districts contracted with the provincial workshop for repair and maintenance work (98 percent). However, private contractors, local workshops, and other agencies did undertake significant repair and maintenance work in the districts. The availability of communication facilities and transport during emergencies can determine life or death for those in critical health, including maternity complications. All hospitals and health centers should have the capacity to communicate with referral facilities for transport during emergencies or have their own on-site transport for emergencies. Table 4.1 presents information on the availability of these two items. Most of the district hospitals (93 percent) and close to three quarters (74 percent) of the health centers under government management had the capacity to communicate easily by telephone or two-way radio with a referral facility to arrange transport during emergencies, while about half of the districts (54 percent) reported that government dispensaries had such amenities at their disposal. Close to 7 out of 10 districts reported that health facilities under NGO/mission/private health management could communicate by telephone or two-way radio in case of emergencies.

DHMTs reported that about 9 out of 10 district hospitals, 6 out of 10 health centers, and very few dispensaries under government management had on-site transport available for emergencies. On the other hand, districts reported that close to 86 percent of the NGO/mission/private health facilities had on-site transport available for emergencies.

Table 4.1. Repair and maintenance: percent of districts with capacity for maintenance of equipment, communication, and transport

	Percent
District health facilities with capacity for maintenance of equipment	
District has designated unit for repair and maintenance of equipment	77.2
District has repair and maintenance activities by private contractors	87.7
District has repair and maintenance activities by local workshop	93.0
District has repair and maintenance activities by provincial workshop	98.2
District has repair and maintenance activities by other agencies	94.7
District health facilities with capacity to communicate with referral facility for transport during emergencies	
Government:	
Hospitals	93.0
Health centers	73.7
Dispensaries	54.4
NGO, mission, private facilities	70.3
District health facilities with on-site transport available for emergencies	
Hospitals	92.8
Health centers	63.2
Dispensaries	3.5
NGO, mission, private facilities	86.0
Total (N)	**57**

E. Health Care Financing, Budgeting, and Management

Adequate financial resources are critical for the sustainable provision of health services. Indeed, the Kenya Health Policy Framework of 1994 identified several methods of health services financing. Health care financing in Kenya has evolved from government providing all funding, through supplementation of government funding by such schemes as taxation, cost sharing (also known as user fees), donor funds, and health insurance. In this regard, the National Hospital Insurance Fund (NHIF) has been strengthened by expanding contributions from outside formal employment. Table 5.1 provides information on availability and source of funds for medicines, equipment, and maintaining buildings.

Table 5.1: Percent availability of funds for purchase of supplies in districts

	Percent
Budget for recurrent and development funds available	86.0
Adequate funding allocated for:	
Medicines	7.0
Equipment	3.5
Maintaining building	1.8
Source of funding in the district:	
Government	100.0
Local government	24.6
Prepayment schemes	3.5
National Hosp. Insurance Fund	56.1
Private insurance	3.5
Donors	7.0
Revolving fund (Bamako type)	19.3
Other sources of funding	36.8
Total (N)	**57**

Close to 9 out of 10 districts had both recurrent and development funds that fiscal year (2004/2005). However, less than 10 percent of districts reported adequate funding for medicines, equipment, and maintaining buildings. The government provided funding for health care services in all the districts, with the NHIF, local government, revolving funds (Bamako type), and other sources contributing 56 percent, 25 percent, 19 percent, and 37 percent, respectively. Private insurance, donors, and prepayment schemes were cited as sources of funding for health services by less than 10 percent of the districts.

F. Performance Monitoring

An efficient and high quality health care system that is accessible, equitable, and affordable for every Kenyan requires strengthening district health service delivery. This should be accompanied by facilitation of the availability of funds at the point of use through an operational and effective

public financial management system, linked with an operational performance-based monitoring and evaluation system and results-based management (MOH, 2006).

The DHMT survey assessed the performance of districts in reproductive health (RH) and safe motherhood (SM). In particular, the assessment focused on if an official in the district monitored the performance of RH/SM and other health related activities (Table 6.1). Nearly all (97 percent) of the districts had an official designated to monitor the performance of health facilities in provision of antenatal care and childbirth services. About 9 out of 10 districts had an official for monitoring performance of health facilities in the provision of PMTCT services and services for mothers with complications. It is informative that 70 percent of districts had an official who monitored performance of facilities in the provision of postpartum care and 30 percent did not. At least 8 out of 10 districts designated officials for monitoring the implementation of district health plans, the financial performance of the government facilities, and the inventories of equipment and supplies in the district.

CONCLUSIONS AND RECOMMENDATIONS

Exclusion of 20 percent of the DHMTs in this survey has the potential to weaken the validity of the findings, particularly when the excluded DHMTs are in provinces with some of the worst reproductive health indicators in the country. Their exclusion was due to difficult terrain and insecure environment, both of which imply that the right of the population to health care services is compromised. Although most of the DHMTs hold meetings frequently, even with stakeholders on RH/SM, the unavailability of the guidelines on the functioning of the DHMTs made it difficult to determine if the survey assessed compliance of DHMTs with any existing norms and standards. There is urgent need to disseminate developed guidelines for effective functioning of DHMTs. The survey missed the opportunity to assess the activities and achievements of the HFMCs and HCMTs, which are important for decentralization. These need to be assessed in the future. Although three quarters of the DHMBs hold meetings frequently, it is not clear whether these are meetings of the full board or meetings of the three standing committees. Future assessment of DHMBs should include the three standing committees to exhaustively determine the functioning of this structure. This did not happen in the current survey. Perusal of the minutes from meetings of DHMTs and DHMBs and monitoring of implementation of actions from such meetings is required. Although most of the DHMTs had documented plans for improving reproductive health, less than a quarter reported implementing their plans on time, which may explain the poor reproductive health indicators in the country (CBS/KMRI/NCAPD/ORC Macro 2004).

Lack of funds and transport were the most cited reasons for failure by DHMTs to meet their supervision targets despite the near universal existence of documented supervision plans. Combining several programs for supervision will mobilize enough resources to facilitate meeting

of supervision targets, since supervision plans, guidelines, and policies exist. The existence and operationalisation of clearly defined norms and standards for staffing, skills, and competency levels in the country should form components for future DHMT surveys that would assess human resource requirements based on population needs. Well defined promotion and staff appraisal criteria should be developed for staff motivational activities, along with other strategies such as work environment and availability of the necessary drugs, supplies, and equipment. Leave and duty rosters, frequent supervisory visits and staff meetings should be strengthened to maintain and improve districts' adherence to code of conduct. Continuing professional development is an accepted norm in the districts, but there is urgent need to strengthen and expand the scope of updates to serving staff through the establishment of district health training committees and regular monitoring of their activities.

Reported district procurement plans should reflect stipulated guidelines such as the "push" and "pull" systems reportedly operational in the provinces and districts for procurement of drugs and supplies. Any future DHMT survey should assess compliance with the prevailing norms and standards. Availability of drugs is the most important local factor determining use of government health facilities, and strategies need to be developed to strengthen commodity security in Kenya.

Repair and maintenance units existed in most districts, with nearly all of the districts contracted with the provincial workshop for repair and maintenance work. Communication facilities between most district hospitals and close to three quarters of the health centers with referral facilities under government management had capacity to communicate easily by telephone or two-way radio with a referral facility to arrange transport during emergencies. The situation was much better for NGO/mission-run facilities. Despite existence of both recurrent

and development funds, funding for medicines, equipment, and maintaining buildings was inadequate for most districts. Sources for funding for district health services included central government funding supplemented by local government, revolving funds, and other sources. Perhaps increased annual budgetary allocations to the agreed 15 percent to ministries of health, in agreement with the Abuja accord, may increase financial resources required for medicines, equipment, and maintenance of buildings.

REFERENCES

Blaise, P. and G. Kegels. 2004. A realistic approach to the evaluation of the quality management movement in health care systems: a comparison between European and African contexts based on Mintzberg's organizational models. International Journal of Health Planning and Management 19: 337–364.

Central Bureau of Statistics, Kenya Medical Research Institute, National Council for Population and Development, ORC Macro,and Centers for Disease Control and Prevention. 2004. Kenya Demographic and Health Survey 2003. Nairobi, Kenya and Calverton, Maryland.

Ministry of Health (MOH). 1994. Kenya Health Policy Framework (KHPF). Nairobi, Kenya.

Ministry of Health (MOH). 2005. Facilitative supervision manual for supervisors of reproductive health services, Kenya. Nairobi, Kenya.

Ministry of Health (MOH). 1996. Kenya Health Policy Framework Implementation Action Plan. Nairobi, Kenya.

Ministry of Health (MOH), 2002. University of Nairobi, Population Council. A demonstration project on approaches to providing quality maternal care in Kenya: Findings from a baseline survey in four districts in Western province, Kenya. Nairobi, Kenya.

Ministry of Health (MOH). 2002. Guidelines for district health management boards, hospital management boards, and health center management committees. Nairobi, Kenya.

Ministry of Health (MOH). 2006. Reversing the trends, The Second National Health Sector Strategic Plan of Kenya: Annual Operational Plan 2 2006/07. Nairobi, Kenya.

Ministry of Health (MOH) and Health Sector Reform Secretariat. 2005 The National Health Sector Strategic Plan: 1999-2004. Nairobi, Kenya.

National Coordinating Agency for Population and Development, Ministry of Health, Central Bureau of Statistics, and ORC Macro. 2004. Kenya Service Provision Assessment Survey: Maternal & child health, family planning and STIs. Nairobi, Kenya and Calverton, Maryland.

National Coordinating Agency for Population and Development, Ministry of Health, Central Bureau of Statistics, and ORC Macro. 2004. Kenya Service Provision Assessment Survey: HIV/AIDS. Nairobi, Kenya and Calverton, Maryland.

National Council for Population and Development, Central Bureau of Statistics, and ORC Macro. 1999. Kenya Demographic and Health Survey 1998. Nairobi, Kenya and Calverton, Maryland.

Oliveira-Cruz, V., Hanson, K., and A. Mills. 2003. Approaches to overcoming constraints to effective health service delivery: a review of the evidence. Journal of International Development 15: 41–65.

Wang, Y. Collins, C., Tang, S., and T. Martineau. 2002. Health systems decentralization and human resources management in low and middle income countries. Public Administration and Development 22: 439–453.