Hospital Autonomy in Kenya: The Experience of Kenyatta National Hospital

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Executive Summary

Introduction

In Kenya, as in many other countries, public hospitals consume large portions of scarce health sector resources and do not always use them effectively or efficiency. Faced with difficulties in funding health services, some governments have granted greater autonomy to some hospitals to facilitate management improvements, which are expected to lead to better quality of care, increased revenue generation, and/or reduced cost. An example of this was Kenya's conversion of Kenyatta National Hospital (KNH), the government's large national referral and teaching hospital, to a state corporation in 1987.

For some years, KNH had experienced problems with overcrowding, quality of care, and shortages of equipment, supplies, and committed, well trained staff. This was attributed mainly to management weaknesses, both in structure and staffing; to the absence of good controls and systems; and to the fact that decision-making was centralized in the Ministry of Health. With the change to a state corporation, overall ownership of the hospital was retained by the government through the Minister of Health, but a hospital board was given responsibility for the assets, liabilities, and development and management of the hospital. The government continued to provide annual development and recurrent funding, and retained control over board appointments, funding levels, fee structures, and staff remuneration levels. The Board was given the authority to generate revenue through cost sharing; to procure goods and services, including hiring and firing staff; and to use available resources to accomplish the mission of the Hospital.

Implementation

Although the new Board took legal responsibility and authority in April, 1987, a *lack of preparation* for the change to state corporation meant that it was some months before the Board was operational. Longer delays occurred in strengthening KNH management, due to the reluctance of some managers to accept change, and to salary limitations which made it difficult to attract experienced managers from outside the MOH. With this situation, the hospital continued to be run by the MOH and the hospital director for some time. Delays in implementation also resulted from the *limited experience and ability* of staff to take on more responsible roles,

and from the lack of preparation to strengthen the critical areas to be taken over by KNH from the MOH, such as planning, personnel, finance and accounting, procurement, and benefits management. This was compounded by the lack of information provided to staff about the changes and the resulting unease felt by many staff about job security, pensions, and pending promotions.

With increasing government concern about slow progress in achieving the desired improvements, a *management contract* was awarded by the government to a European hospital management firm in late 1991 to speed up the implementation of change. There was considerable internal resistance to the management firm, due partly to the exclusion of the Board and senior management in the development of the contract and partly to the inexperience of some members of the contracted management team, and the contract was rescinded in August 1992.

Until 1992 the Board had little involvement in management, with the director, in conjunction with the MOH, making most of the decisions. In mid-1992, however, a new director was appointed, and he involved the Board more in the managerial decision-making process. The Board, with its blend of experienced private sector representatives and senior civil servants, began to help with internal issues, such as personnel, and with external issues, such as government funding. A number of *management improvements* resulted. Senior administrative management was strengthened with the transfer of qualified personnel from other government departments. Clinical management was also improved with greater involvement of medical specialists from the College of Health Sciences in hospital management, a more clearly defined departmental structure, and more delegation of authority to department heads. KNH specialists were no longer subject to transfer by the Ministry of Health and their salaries were leveled with those of their public university colleagues.

While some staff elected to leave KNH in order to remain MOH employees, the majority elected to become KNH employees and remain at the hospital. Those government staff who elected to become KNH employees retained the right to their government pension, but also joined the new KNH contributory pension scheme in 1991. Later increases in *government salary grades* meant that KNH could begin to attract nurses away from the private sector, although it still could not compete with the private sector for skilled staff in areas such as computers, finance, and information management. All of the administrative managers and staff are still from the public sector, in part because even the upgraded government salaries are too low to attract people from the private sector.

The *supplies situation* also improved, mainly due to increased financial resources, speedier payment of bills, freedom to procure directly, and some internal decentralization of supplies management. Nevertheless, problems with slow, inappropriate, and irregular procurement and with internal leakages have persisted because some staff continue to resist change and because staffing skill levels are

inadequate for handling more sophisticated, computerized systems.

Government funding to KNH has changed to a block grant, which has increased budgetary flexibility, and this, with greater control, has resulted in more effective internal use of funds. *Financial management* improvements have been reflected in more timely, detailed, and accurate financial statements. Financial accountability has improved, as demonstrated by a satisfactory audit of USAID funding. As a state corporation, KNH gained the ability to prosecute staff for fraud, and several staff have been prosecuted, which has served as a deterrent to others. Further improvements, such as computerizing the accounting system and decentralizing financial responsibility, have been constrained by the limited ability of existing staff and the difficulty of attracting experienced new staff because of low government pay scales.

KNH's share of MOH development and recurrent *funding allocations* has risen significantly since it became a state corporation, which may have helped KNH to improve quality of care, but gives rise to concern about the impact on funding for other MOH services, such as primary and preventive care. The main problem seems to be that the allocation of funds to KNH and to other MOH services is made in somewhat of a vacuum, since there is no clear definition of the range, level, and volume of services for each type of facility which can be used as a basis for determining the most cost-effective distribution of resources.

Since it became a state corporation, KNH has been able to retain all of its *cost sharing revenue*, which has become an important additional source of funding, increasing from 1% of KNH's recurrent income in 1986/87 to approximately 10% in 1993/94. A wider, more complex, and higher schedule of fees has been introduced by the Board.

The *role of KNH in the national health care system* has benefitted somewhat from its increased autonomy. Reductions in outpatient attendances and in the size of the hospital have freed hospital resources and increased KNH's ability to serve as the national referral hospital. Although a shift of primary health patients to other facilities in Nairobi was planned, it is clear neither if the reduction in use related to poor or other vulnerable groups nor where those patients actually went for services. Staff believe that improvements in *technical efficiency* and *quality of care* have occurred, mainly due to the increased availability of supplies and improvements in building and equipment maintenance, and the beneficial impact of these factors on staff productivity. An example of this is the restoration of respiratory support to the newborn babies unit.

The overall bed occupancy rate appears to have increased slightly, but has varied considerably among departments, with Pediatrics having risen significantly. The overall average length of stay figure has stayed fairly constant over the years - although the Medicine Department and Private Wing show a clear reduction. The overall number of staff seems to have declined compared with the services provided,

and staffing imbalances have been addressed to some degree, with increases in nursing, for example, and decreases in subordinate staff. Expenditure on staff has risen in local currency terms, but has fallen as a percentage of total recurrent expenses, and appears to consume a much smaller share of the total budget than the equivalent figure for the MOH. Operating costs appear to have fallen in real terms, but it is not clear to what degree that relates to efficiencies, funding shortages, or other reasons, and financial and service data have not always been reliably or consistently collected and reported by KNH.

Increased autonomy at KNH has improved its ability to *negotiate, plan, implement, and be accountable* for donor assistance projects and to report on performance. At the same time, the increased managerial flexibility and skill achieved as a result of autonomy has helped KNH to appreciate and apply lessons learned under such donor projects. The increased autonomy has also allowed KNH to deal directly with public relations issues, which has enabled the hospital to achieve a greater balance of press coverage, with fewer disaster stories and more positive ones.

The role of *donor assistance* has been an important factor in the changes which have occurred. The use of agreed-upon conditions on grant and loan assistance has helped to encourage the government and MOH to adhere to funding agreements and to encourage the Board and management to focus on both long-term structural and system needs and capacity building. In addition, while increased autonomy has provided a foundation for management improvement, the provision of donor-funded *technical assistance* has contributed to improvements in system development and capacity. This technical assistance includes the early assistance in developing management options and priorities (under the REACH project), assistance of management consultants engaged under the World Bank project, and assistance with cost sharing, financial management, efficiency, management, and training provided through the USAID's Kenya Health Care Financing Project, which includes the development of KNH's own management training unit.

Recommendations for KNH

Although KNH has derived significant benefits from its increased autonomy, a number of steps can be taken to progress further towards the goals of improved quality of care, revenue generation, and cost containment. **First**, government control may need to be further relaxed to allow KNH to pursue external funding and to hire better-qualified staff. **Second,** given the type and level of services provided at KNH and the difficulty most patients have in covering these costs through fees, the government must ensure that as much of the cost as possible is covered by social insurance, leaving the balance to be covered through targeted government funding. **Third,** the role of the Board remains critical, and the government must seek to maintain a good balance of skilled, experienced private-sector representatives and civil servants, and should continue to avoid appointments

resulting from patronage. **Fourth,** KNH continues to need stronger mid-level management capacity and better systems, especially in the areas of finance and supplies, so that efficiency and quality can be maximized. **Fifth,** KNH's role in the national system, and its desired type, range, and volume of services and expected client profile, must be defined so that there is a sound basis for determining donor inputs and government capital and recurrent funding levels. **Finally**, the government should establish and monitor coverage, efficiency, quality of care, and financial performance targets for KNH.

Recommendations for Replication

A number of lessons and questions emerge in terms of the replication of this model of autonomy at other hospitals in Kenya. **First**, it is not clear if the government can or should follow the model of KNH, since it may not make sense to expand the number of parastatals by making each hospital a state corporation. Therefore, there is a need to explore alternative legal mechanisms for granting autonomy, perhaps within the context of other reforms, such as decentralization. In addition, hospitals which serve specific communities will need to have boards with local representatives which are accountable to both the national and/or local governments and the communities. **Second**, the benefits of autonomy will not be achieved unless sufficient funding is generated. No hospital in Kenya will be able to fully finance the development and operation of services from fees while ensuring access to all those in need. Given the constraints on public funding, social insurance must be mobilized more effectively and government allocations must be targeted in accordance with need and performance. Funding ceilings must be more flexible so that hospitals can seek, negotiate for, and receive funds from other bodies, such as donors, without affecting government funding for health. **Third**, as part of strengthening its policy-making and coordination roles, the government must define the role of the hospitals, in terms of both the type and volume of services provided and the range of patients served to ensure that public and donor funding is used cost-effectively. **Finally**, there must be a significant investment in preparation for autonomy to be implemented successfully. New boards and managers must be appointed in advance and in a fair and open way to ensure that the best-qualified persons are chosen. Standard systems should be developed in advance for critical management areas so that each hospital does not have to re-invent the wheel. Board members, managers, and staff will have to be properly oriented and trained, and the MOH should set and monitor targets for key aspects of financial performance and service coverage, efficiency, and quality.

1. Introduction

In many developing countries, public hospitals consume large portions of scarce health sector resources, and do not always use them effectively or efficiently. Faced with difficulties in funding health services, some governments have considered granting greater autonomy to hospitals as a way to improve quality of care, increase revenue generation, and/or reduce or contain costs (Stover 1991, Newbrander 1993). This study looks at the experiences of the national referral hospital in Kenya which was given increased autonomy in 1987, and makes recommendations regarding future autonomy for both that hospital and other public hospitals in Kenya. The study methodology follows guidelines prepared through the Data for Decision Making Project (Chawla 1995). Information was gathered primarily from interviews with persons who have been involved in the process (see Annex 1), with additional information from relevant documents and available statistics.

2. Historical Background

2.1. Status Before 1987

Kenyatta National Hospital (KNH), originally called the Native Civil Hospital, was built in 1901 with 45 beds. Extensions made in 1939, 1951, and 1953 increased bed capacity to 600 (Abdullah et al, 1985). It was renamed the King George VI Hospital in 1951. In 1957 the Infectious Disease Hospital was added with 234 beds, and in 1965 the British Military Hospital in Kabete was taken over as the Orthopaedic Unit, and later a Dental Wing was added. After independence in 1963, it was renamed Kenyatta National Hospital, and it was decided that it would be a national teaching hospital. An expansion program was carried out in three phases which included the main hospital, the clinical science blocks, the medical students hostels, and the hospital service blocks. A new ward tower block was completed and put into use in 1981, which brought the bed capacity to 1,928 (REACH, 1989a).

KNH was envisioned as having three main functions (Abdullah et al, 1985), which were:

- to serve as the national referral hospital;
- to provide facilities for teaching;
- to provide facilities for research.

Until 1967 KNH had a casualty department which handled all emergency cases. There was also an admissions procedure which was operated by senior staff and which handled only patients who had been referred for further specialized care. This made it possible to regulate admissions and outpatient workload. After 1967 it was decided to have filter clinics screen patients for admission or referral to the specialized clinics. A number of peripheral health units were taken over to become part of KNH (Abdullah et al, 1985) to facilitate this process.

Before 1987 KNH and most of the other government hospitals were under the direct control and management of the Ministry of Health. The MOH assigned staff to KNH and handled the calculation and payment of salaries and allowances. The MOH set and controlled KNH's budget by line item and procured supplies, equipment and services for KNH. Any revenue received by KNH in excess of the

budgeted amount was turned over to Treasury. Construction and maintenance were carried out by the Ministry of Public Works at the request of the MOH. The KNH director was answerable to the Director of Medical Services and the Permanent Secretary as the medical and administrative heads of the MOH. Other senior KNH staff were also answerable to technical heads in the MOH. For example, the senior Hospital Secretary, the top administrator of KNH, was answerable to the Chief Hospital Secretary of the MOH, and the Matron was answerable to the MOH's Chief Nursing Officer. KNH had an advisory board which had neither managerial nor institutional responsibility.

2.2. Reasons for Autonomy

During the early 1980s two major problems were identified as seriously affecting quality of care at KNH. First, KNH was **overcrowded** as a result of providing services to patients who should be treated at lower levels, which was attributed to insufficient supply of affordable, good quality, alternative primary and secondary services in the Nairobi area. Second, there was a **shortage of appropriate inputs**, in particular working equipment; drugs and supplies; and committed, well trained staff. This was partly due to funding constraints due to national economic problems, but was also attributed to management weaknesses in both structure and staffing; the absence of good controls and systems; and the fact that decision-making was centralized in the Ministry of Health.

A report prepared by a special committee reviewing health care delivery in Kenya in 1985 (Abdullah et al, 1985) described the status of KNH at that time and identified a number of problems:

- KNH was comprised of many components which did not have a clear relationship to the main hospital.
- KNH was too large and complex to be managed by the small, over-centralized administration which had not significantly changed in terms of calibre or number from 10 years before, when the hospital was half the size and much less complex. The Hospital Director had limited authority and no job description, and there was no established post for that office.
- The centralization of managing and accounting for KNH's large share of government funding at the MOH headquarters made it very cumbersome to operate the hospital properly. The MOH staff, who made most of the decisions affecting the hospital, had a remote relationship with the hospital and did not take advice from health personnel.
- KNH had a limited role in the recruitment, deployment, and discipline of its staff. Staff were transferred in and out of the hospital with neither consultation nor consideration of suitability, and at short intervals, which

made it difficult to apportion responsibility and expect accountability. The allegiance of staff to other institutions, such as the Ministry of Works, the University of Nairobi, and the Ministry of Health, made the maintenance of discipline extremely difficult.

- The lack of a hospital tender board and central supplies department, combined with poor procurement and management of supplies and equipment, resulted in significant losses.
- There were no clear guidelines governing the sharing of roles and responsibilities between the clinical staff of KNH and staff and students of the University of Nairobi (College of Health Sciences) and the Medical Training Centre.
- Some wards had bed occupancy rates exceeding 200% due to the lack of basic equipment, drugs, and supplies. Inpatients were received without referral, and problems such as premature discharge, long waiting lists, and cancellation of operations were common. Sophisticated equipment was unusable and maintenance staff (employed by Ministry of Works) were low grade and poorly trained and deployed. The lack of supplies and equipment made it difficult to teach medical students.
- The outpatient department was severely overcrowded with unnecessary delays and mishandling of patients - partly due to the unimpeded flow of patients with minor ailments. The overcrowding caused reduced quality of care, eroded the efficiency of the referral system, created excessive demand for limited resources, and lowered staff morale.

The report went on to say that KNH needed a different management strategy from other government hospitals due to its size and complexity. It recommended establishing a statutory board of management, and a technical evaluation committee and tender board for procurement; setting up revolving funds for specialized units; and bringing maintenance staff under the control of the hospital. The report also recommended that other hospitals and dispensaries be removed from KNH's management and that Nairobi services be improved so that KNH could revert to dealing only with referrals. It further recommended that a memorandum of understanding be drawn up between KNH and the University College of Health Sciences and other collaborating bodies to define relationships between KNH and these bodies, in particular the roles and responsibilities of their staff in the administrative and medical management of KNH.

Despite the findings and recommendations of the Abdullah report, no changes in KNH's status were made during 1985 or 1986. The issue of managerial autonomy was raised again in a review of expenditure issues and health financing options carried out by the World Bank during 1986/1987 (World Bank, 1987)[1]. This study noted that KNH continued to absorb a large share of the MOH budget at a time

1/ The report appears to have been completed in February, 1987, before KNH was granted state corporation status.

when primary and preventive services were greatly underfunded and government resources could not keep up with the rising demand for health care and increasing costs. At the same time, it was recognized that KNH was actually getting less government funding in real terms each year, which had a negative impact on the hospital's service availability and quality. This negative impact on services was magnified at KNH and other MOH hospitals because increases in the number and salaries of public health sector workers meant that areas such as drugs, medical supplies, equipment, and maintenance suffered most from the funding shortages. The study recommended that the government seek ways to improve revenue generation, cost containment, and efficiency of service delivery, and identified KNH as the best institution to start a move to increased managerial autonomy, especially in planning, budgeting and fee collection.

3. Process of Granting Autonomy

3.1. Gazettment

In early 1987, after deliberation at the level of the Office of the President, it was finally decided to grant greater managerial autonomy to KNH, with the expectation that this would facilitate the achievement of improvements in service delivery. The state corporation model, which was the preferred model for the management of public enterprises in Kenya, was chosen as a mechanism to provide this autonomy. On the 10th April, 1987, KNH was established by presidential order as a state corporation under The State Corporations Act of 1986. The order was made in the Kenya Gazette Supplement No. 29 under Legal Notice No. 109 (see Annex 2). The order established a Kenyatta National Hospital Board to consist of between six and eleven people:

a) a non-executive chairman appointed by the President;

b) the Director of KNH;

c) the Permanent Secretary of the Ministry of Health;

d) the Permanent Secretary to the Treasury;

e) the Principal of the College of Health Sciences of the University of Nairobi;

f) the Principal of the College of Health Professions;

g) not more than five other members, of whom not more than two shall be public officers, appointed by the Minister of Health.

The chairman and the five members appointed by the Minister hold office for three years and are eligible for re-appointment. The Director of KNH serves as chief executive and secretary to the Board and is also appointed by the Minister of Health.

The Board is responsible for the administration, management, and development of KNH and became “the successor of the Government in respect of all rights, duties, obligations, assets concerning the Hospital” at the date of the order. The Board:

- administers the assets and funds in the best interests of the hospital in accordance with the State Corporations Act;

- has the power to receive, on behalf of the hospital, gifts, donations and grants;
- promotes the welfare of patients and staff;
- has the power to enter into associations with other hospitals, health institutions, and institutions of higher learning within or outside Kenya;
- makes by-laws for the proper and efficient management of the hospital, which shall be issued by the Director.

The functions of the hospital were set out as follows:

- to receive patients for specialized health care on referral from other hospitals or institutions within or outside Kenya;
- to provide facilities for medical education for the University of Nairobi and for research either directly or through other cooperating health institutions;
- to provide facilities for education and training in nursing and other health and associated professions;
- to participate, as a national referral hospital, in national health planning.

The order further stated that the Board would receive every financial year, on behalf of the hospital, out of money appropriated by Parliament, such sum as the Minister of Health may determine necessary to enable the Board to carry out its functions, having regard to the estimate approved under section 11 of the State Corporations Act.

3.2. State Corporations Act

In addition to the authority and responsibility imposed in the gazettment notice, other provisions are laid down in the State Corporations Act of 1986. Some of the relevant provisions of that Act are as follows:

- The President shall assign responsibility for any state corporation to a Minister.
- The Board shall be responsible for the proper management of the affairs of a state corporation and shall be accountable for the moneys, the financial business, and the management of a state corporation.
- The corporation may employ staff, including the chief executive, on such terms and conditions as the Minister may determine in consultation with the State Corporations Advisory Committee.

- The corporation may establish pensions and other funds for employees and dependents, with the approval of the Minister in consultation with Treasury and the Committee.
- Financial estimates shall be approved by the Minister with the concurrence of Treasury.
- Prior written approval of the Minister and Treasury is required for any expenditure not provided for in the annual estimates.
- Assets may be disposed if they are provided for in the annual estimates, otherwise approval of the Minister and Treasury are required.
- Proper books of account shall be kept, recording all property, undertakings, funds, activities, contracts, transactions, and other business.
- The accounts shall be audited and reported on annually by the Auditor General (Corporations) in accordance with Part VII of the Exchequer and Audit Act.
- Every state corporation shall make provision both for the renewal of depreciating assets, by establishing sinking funds, and for contributions to such reserve and stabilization funds as may be required.
- Surplus moneys shall be disposed of in such manner as the Minister, in consultation with the Board, shall determine.

4. Changes in Status

4.1. Distribution of Authority

The legal status of the ownership of the hospital is somewhat unclear from the wording of the State Corporations Act and the Legal Notice No. 109. According to the State Corporations Act, it appears that the hospital is a state corporation and the Board, like other Boards under the Act, is "responsible for the overall direction and management of a state corporation." However, Legal Notice No. 109 states that the state corporation is "to be known as the Kenyatta National Hospital Board" and that "the Board shall be the successor of the Government in respect of all rights, duties, obligations, assets and liabilities concerning the hospital," implying that the Board is the state corporation and not the hospital.

Despite the confused wording, it appears that the intent is that the hospital be a state corporation with the Board directing and managing its activities. It also appears that the government has retained overall ownership of the hospital through the Ministry of Health. Although the Board took over responsibility for the assets, liabilities, development, and management of KNH, the government retained control over the appointment of the Board, the level of government funding, the level of donor funding, and the authorization of fees structures and staff remuneration levels. Other areas of control, such as staff establishment levels, hiring and firing, procurement of supplies, and use of resources, passed to the Board and management.

The main changes in the distribution of authority before and after KNH became a state corporation are shown in Table 1. It should be noted that none of these functions were carried out by the Hospital before autonomy was granted, and the general effect of autonomy was that many of the functions previously carried out by the central MOH or other bodies, such as the Ministry of Works, were transferred to the Board, and were then carried out by Hospital management.

5. The Implementation Experience

5.1. Hospital Board

Although management authority legally passed to the Board in April, 1987, in reality KNH was managed mainly by the MOH and the Director during the early years after autonomy was granted. This was partly because of the lack of preparation for the transfer of authority. The Board was not actually constituted until some months after April 1987, and its specific roles and responsibilities were not clearly defined until some time after that. Even after the Board became functional, it did not play a significant role until 1992, when a new Director set out to get the members more involved. Since that time it has met regularly and has played a positive role by approving appointments for senior management positions, dealing with cases of disputed dismissal, lobbying for funding, and reviewing and approving financial statements. The Board's role in the hiring and firing of staff appears to have been particularly critical.

The Board has maintained an appropriate balance of civil servants, appointed by virtue of their position with government, and private-sector representatives. Having representatives from the Ministry of Health and Treasury has been important, and the experience of the private-sector representatives (leadership, senior management, finance, and engineering) has been relevant and useful. The chairman, for example, was a senior executive of an international oil company. The involvement of the civil service in the Board through the Permanent Secretaries of the MOH and Treasury, and access to the Directorate of Personnel Management (DPM) have apparently been useful to offset any political pressure for patronage. Although the Minister of Health has the authority to appoint the Director and five members of the Board under the Act, such appointments are reviewed by the Office of the President, and alternatives are suggested where deemed appropriate. However, the fact that there has been a delay in appointing a new Chairman and other Board members to replace those whose terms have recently expired indicates some weakness in the appointment process.

Table 1

Distribution of Authority Before and After KNH Became a State Corporation

Area	***Before State Corporation***	***After State Corporation***
Ownership	Government	Government
Management	MOH	Board comprised of civil servants and persons appointed by the government
Hospital Policy	MOH	Board
Allocation of Government Resources to Hospital	Treasury & MOH (line item budget)	Treasury & MOH (block grant)
Donor Funding	Treasury & MOH	Board with approval of Treasury & MOH within ceilings set by Treasury
Allocation of Resources Within Hospital	MOH	Board
Use of Cost Sharing Revenue	Treasury (excess over budgeted amount)	Board
Setting User Fees	MOH	Board with approval of MOH
Allocation of Financial Surplus	MOH	MOH
Community Input	None	None
Accounting Procedures	Government	Board
External Audit	Auditor General	Auditor General
Hiring and Firing Staff	MOH	Board
Salary and Benefit Levels	Government	Government
Prosecution for Fraud	Government	Board
Pensions	Government	Board
Procurement	MOH	Board
Maintenance	Ministry of Works	Board

The Board serves as a mechanism for public accountability for KNH, but only to the degree that it is accountable to the government through the Minister of Health. There is no separate community or public body which has oversight of, or involvement in, the management of the Hospital. There appear to have been more positive public statements and press meetings in recent years (as opposed to only responses to criticism) due to more openness by both the Board and management. However, it should be recognized that the Board and management have had more freedom to make statements since autonomy was granted.

5.2. Hospital Director

The power and authority of the Hospital Director have been greatly strengthened by the change to a state corporation. The appointment of the Director by the Minister of Health with endorsement by the Office of the President has made the Hospital Director much stronger than when the Director was assigned by the Director of Medical Services. The presence of the Board has further strengthened the position, as has the greater access to other government departments, such as Treasury, and to the press and donors. Greater authority over resources, such as funds and personnel, resulting from the change to a state corporation has further increased the Director's power. In recent years, the presence of a dynamic, empowered Director with public confidence and a strong, supportive Board have proved to be somewhat of a buffer against political pressure.

5.3. General Management

General management suffered initially from the lack of prior planning for the increased responsibility and authority emanating from autonomy. No preparations to strengthen the critical areas taken over by KNH, such as planning, personnel, finance and accounting, procurement, and benefits management had been made before granting autonomy, and continued weaknesses in these areas slowed down the effective implementation of autonomy. New managers were not brought in, and existing ones were accustomed to old ways and found it difficult to accept change. Over the last few years, significant improvement seem to have been made with the addition of more senior, experienced administrative managers from other government departments; clarification of roles and responsibilities; an ongoing process of delegation of responsibility to department levels; and an increased sense of "ownership" of the hospital. The delegation of some financial authority and responsibility to departments appears to have served as a catalyst for improved management. Some weaknesses remain at the level of middle management which are delaying the delegation process, for example in generating and using information. Attempts to introduce responsibility centers are under way, but the complexity of charging departments for goods and services and crediting them for revenue requires computerization, which in turn requires more capable staff at the middle-manager and clerk level.

5.4. Management Contract

In late 1991, following continued political concern over the lack of progress made in improving hospital services, the Office of the President arranged for the MOH to contract a European company with experience of managing hospitals in the Middle East to supply three managers for three years to run KNH. The decision was made at the highest political levels, and the Board and management of KNH were not involved in the process and had little participation in determining how the contract would be implemented. The funding was provided by the Government of Kenya and came from the regular allocation to KNH. The new team was comprised of a Hospital Manager, a Finance Director, and a Nursing Manager, all of whom were technically experienced, but, except for the Nursing Manager, had not worked much in developing countries. The existing Hospital Director and management stayed in place as counterparts, with the understanding that the expatriate team would transfer skills to them over the course of the contract. The expatriate team was given full management responsibility, including procurement, hiring and firing of staff, and collection and disbursement of funds, and was expected to develop improved management systems.

There was immediate considerable resistance from senior hospital staff at what was perceived as an imposed team. This was heightened a few months later when the team came into conflict with some of the medical specialists over their terms and conditions. While the team was able to achieve some successes, for example with the direct procurement of drugs and medical supplies, it was only a matter of time before the considerable negative press reporting took its toll, and the contract was terminated in August 1992. They were not there long enough to have a significant impact in improving staffing, transferring skills to their counterparts, or developing systems; and had to spend most of their time dealing with daily crises, such as obtaining funds from the MOH, replenishing drug supplies, and paying creditors. In summary, the use of the management contract as a way to accelerate the implementation of change at KNH was not successful due to both the exclusion of the Board and senior management in the development of the contract and the inexperience of the contracted management team. Nevertheless, some KNH staff believe that the idea of bringing in an external management team to speed up progress towards autonomy has some merit if it is planned and implemented with the involvement of those responsible for managing the hospital in the long run.

5.5. Clinical Management

Clinical management appears to have improved in many ways as a result of the increased autonomy of KNH. For example, specialists were able to stay longer at KNH when they ceased to be subject to arbitrary transfer by the Ministry of Health. Salaries of KNH doctors have now been leveled with those of the staff from the

College of Health Sciences (University of Nairobi) who, within the teaching ambit of KNH, share the clinical management role. A more clearly defined departmental structure is in place, which helps with the coordination of KNH and the College of Health Sciences, and more authority has been given to department heads. Management training has helped to prepare nursing staff for their increased participation in clinical management (Seltzer, 1995) and the Chief Nursing Officer now has budgetary power for surgical supplies, which has apparently resulted in improved availability and quality of those supplies. Further delegation of authority and responsibility to the departments is planned but the need for more skilled mid-level staff and clerks for the management of computerized information remains a constraint.

5.6. Personnel

Personnel were greatly affected by the granting of autonomy. With the absence of planning before April 1987, neither managers nor staff were well informed about the meaning of the change, and roles and responsibilities were unclear. Many staff were confused during the first months, and job security, pensions, and pending promotions were particular issues of concern.

Staff were given 3 to 4 years in which to decide whether to stay on the MOH payroll or to transfer to KNH. Some nursing and administrative staff opted to stay with the MOH because they needed more flexibility in terms of location, since they were married to government employees who were transferred periodically. Once such staff left KNH, the staffing situation became stable, with less turnover than before 1987. Most of the remaining staff were still MOH employees until the grace period expired on 30 June, 1991, but at that time opted to become KNH employees.

For pension purposes, KNH was declared to be a “public service” which meant that staff who opted to become KNH employees did not lose their government pension rights. Participation in the government scheme is free. Starting in July 1991, those people who became KNH employees joined the KNH Provident Fund, into which they pay 5% of their salary, matched with a 10% contribution from KNH funds. Upon retirement, these staff have the right to both pensions, and part of the KNH pension can be taken as a lump sum on retirement. Staff who leave KNH before retirement age and who do not stay in “public service” lose the right to both pensions.

During the year after autonomy was granted, a government team interviewed senior and department managers, and used the managers’ opinions as a basis for defining the management structure, roles and responsibilities, and administrative and medical staffing needs. However, this exercise was of limited value since most of the managerial and administrative staff in place at KNH in 1987 only knew how to operate within the MOH system, where the structure is rigidly traditional and where staffing norms are not properly used.

Initially, many KNH managers and staff were not prepared to take on more responsible roles, but since 1991, with the appointment of better-qualified senior personnel and financial and other administrative managers from other government departments and the training of mid-level managers, responsibility and accountability have improved. Job descriptions have been developed and performance appraisal is being introduced; poor performers have been disciplined or dismissed, while good performers have been rewarded through promotions, more responsibility, and professional incentives, such as attending conferences and submitting research projects for funding. Financial incentives cannot be given because KNH is still tied to civil services pay and allowance scales.

The total numbers of staff by category are shown in Table 2 for the years 1987-1995 (the figures for 1987, which are not from KNH records, probably include figures for College of Health Sciences staff). As Table 2 shows, numbers of staff have changed over the years, with reductions in subordinate staff and increases in nursing, clerical, and security staff (see Annex 3 for more details). There are currently 4,106 staff positions including 145 board doctors, 25 dentists, and 1270 nurses of all categories. Most of these positions are filled. This does not include doctors from the College of Health Sciences who work at KNH in their teaching capacity.

The ability of managers and the Board to hire, discipline, and fire staff has resulted in improvements in the quality of staffing. External recruitment was introduced in 1991 with advertisements in the newspapers. However, many of the managers are from the public sector because of salary restrictions. Patronage has not been a significant problem in recent years due to the more independent nature of the hospital, the additional power held by the director and the Board, and the ability to seek direct support from the civil service, such as PS Health, PS Treasury, Department of Personnel Management (DPM), and the Head of the Civil Service. KNH now has the ability to prosecute staff for fraud and has used that ability on several occasions. Under the MOH it is much more difficult to take such action and there is accordingly less deterrent.

Salaries have improved considerably since 1987 due to a regrading of KNH from Parastatal type D to a type B from July 1990. This put salaries two grades higher than the equivalent at the MOH and on a par with those at the public universities. For example, an Enrolled Nurse 1 now earns between K Sh 5,964 and K Sh 8,383 at KNH, compared with between K Sh 4,092 and K Sh 6,066 at the MOH (between 38% and 45% more). With the increased salaries, KNH can now attract nurses away from the private sector. However, the hospital is less able to compete with the private sector for skilled staff in areas such as computers, finance, and information management.

5.7. Financial Management

With the change to autonomy, KNH was obliged under the State Corporations Act to change their accounting system from cash-basis to accrual-basis accounting (recording all property, undertakings, and depreciation). However, progress in changing the accounting systems was initially slow because the staff in place in 1987 were used to the government system, had no knowledge of other systems, and were unwilling to change. With assistance from USAID's Kenya Health Care Financing Project, the change to an accrual system was made in 1991. With further assistance under the World Bank project, fixed assets were valued and taken into the accounting books and depreciation was calculated. Over the last few years, financial statements have been produced in a more timely, detailed, and accurate fashion, providing much greater financial transparency. Improved accounting has led to increased donor satisfaction with KNH's accountability, as evidenced by USAID's disbursement of grant funding following a satisfactory audit review. Better financial control has also contributed to improved revenue collection.

With autonomy, KNH gained more control over the preparation of budgets, which were previously prepared at KNH but subject to modification by the MOH. KNH has since improved its own budget preparation process by decentralizing it to the departmental level. Budgets are still prepared on an historical basis and are not yet tied to service objectives, but this is part of the planned development of departments as responsibility centers.

Table 2

KNH Personnel Figures from 1987 - 1995

	1987	***1988***	***1989***	***1990***	***1991***	***1992***	***1993***	***1994***	***1995***
Doctors	*363	144	136	122	118	121	127	136	141
Nurses	959	1,059	1,052	1,030	1,311	1,170	1,114	1,174	1,219
Other Technical	*708	506	496	467	507	491	523	529	509
Total Technical	*2,03	1,709	1,684	1,619	1,936	1,782	1,764	1,839	1,869
Non Technical	1,692	1,769	1,734	1,687	1,621	1,639	1,741	1,682	1,784
Total	***3,72**	**3,478**	**3,418**	**3,306**	**3,557**	**3,421**	**3,505**	**3,521**	**3,653**

Source: KNH personnel statistics.

* These figures probably include College of Health Sciences staff.

An important benefit of autonomy has been greater flexibility in the use of funds due to the change of government funding from a line-item basis to a block-grant basis.

Before autonomy, KNH appeared in the MOH budget with detailed expenditure line items, which meant that funds could not be shifted among those expenditure categories without authority from the MOH. For example, if KNH underspent on salaries and needed to spend more on drugs, it could not do so without authorization from the MOH, which was time consuming. After autonomy, KNH appeared as a block grant in the MOH budget, which allowed KNH to shift expenditures freely among expenditure categories.

Further system improvements are planned, with the first priority being to computerize the accounting system to reduce accounting errors, improve financial control, and facilitate the attribution of costs and revenue to these responsibility centers. However, the limited capabilities of existing staff and the difficulty of attracting experienced staff with government remuneration scales are serious constraints to implementing system improvements.

5.8. Funding

The channel for government funding remained the same after KNH became a state corporation. Budgets continued to be submitted to Treasury through the MOH, and funding continued to go through the MOH to KNH.

The share of recurrent MOH funding *allocated* by the government to KNH remained around 12% over the years from 1984/85 through 1989/90, but now appears to be rising (see Table 3). It reached 13.8% in 1992/93 and is expected to be 16.4% in 1994/95. These increases are partly to cover the increased expenditure due to the upgrading of the salary structure.

However, KNH received less than was allocated during 5 of the first 6 years after autonomy, which contributed to the deficits and debts incurred by the hospital during that period. In the worst year, 1990/91, KNH only received 8.8% of MOH net recurrent funding (K Sh 224 million) compared with the 14.8% (K Sh 340 million) which was allocated. During those years, the MOH reallocated part of the KNH grant, mainly to other hospitals in the same section of the budget. Following pressure from KNH management, the Board, USAID, World Bank (through conditionality), Treasury, Office of the President and the Public Investment Committee, the MOH has started to hand over all the KNH allocation. KNH has also now been removed from the curative services section of the MOH budget and been given a separate category, with the result that the MOH can no longer shift KNH funds to other facilities or programs.

Despite the change to a block grant, the government has continued to provide some separate development funding for KNH, although the bulk of the figure shown in the MOH development estimates and accounts is donor funded. The government-funded component rose from 0.9% of the total MOH Development Budget in 1986/87 to

10.4% in 1992/93. This funding is intended primarily for new construction and equipment. Replacement of equipment and refurbishment of buildings for KNH is not generally included in the MOH Development Budget, and depreciation is not included in the block grant funding provided under the MOH Recurrent Budget. These costs must therefore be covered, where possible, from other revenue, such as cost sharing, or from donor funding. Until KNH has the freedom to recover the full cost of services through cost sharing, it may be difficult to cover depreciation completely.

KNH is still subject to the overall financial ceiling for the MOH, which means that there are limitations on the amount of donor funding that it can receive. Once the ceiling is reached, additional donor funding for KNH must be compensated with reduced donor or government funding for other health areas.

Since becoming a state corporation, KNH has been able to retain all of its cost-sharing revenue. Prior to autonomy, the MOH budget showed the total gross estimated expenditure for KNH less estimated cost-sharing revenue. Any cost-sharing revenue in excess of the amount estimated had to be handed over to Treasury, and while in principle this extra revenue could be obtained later by KNH, in practice it was very difficult to get. After autonomy was granted and funding changed to a block-grant basis, cost-sharing revenue was no longer shown in the MOH budget and KNH was allowed to retain all revenue. In effect, the ceiling for gross KNH expenditure was removed.

Cost sharing has been an important source of additional revenue. It has increased from 1% of KNH recurrent income in 1986/87 to around 10% in 1993/94 (excluding private wing revenue). With assistance from USAID under the Kenya Health Care Financing Project, revenue-collection systems have been improved and

Table 3

MOH and KNH Net Recurrent Budget Allocations 1984/85 - 94/95 (K Sh billion)

	Pre-Autonomy			***Post-Autonomy***							
	84/85	85/86	86/87	87/88	88/89	89/90	90/91	91/92	92/93	93/94	94/95
MOH Budget	1.41	1.58	1.88	1.99	2.03	2.04	2.30	3.09	3.39	4.44	6.00
KNH Budget	0.17	0.19	0.22	0.25	0.24	0.26	0.34	0.33	0.47	0.58	0.98
MOH Actual	1.43	1.55	1.89	1.95	2.22	2.26	2.54	2.91	3.36	n/a*	n/a
KNH Actual	0.16	0.18	0.24	0.23	0.25	0.22	0.22	0.27	0.40	n/a	n/a
KNH/MOH Budget %	12.0	12.0	11.7	12.4	11.6	12.8	14.8	10.6	13.8	13.1	16.4
KNH/MOH Actual %	11.1	11.8	12.9	11.6	11.2	9.7%	8.8%	9.2%	12.0	n/a	n/a

Source MOH Appropriation Accounts for 1984/85 through 1992/93, and Revised Budget Estimates for 1993/94 and 1994/95.

* n/a = not available

the cost-sharing program has been greatly expanded, especially since 1992. The Board has introduced a broader, more complex, and higher schedule of fees than other MOH hospitals. Although the fee structure still has to be approved by the MOH, and in the last case approval took several months, the large increase in cost-sharing revenue is partly due to the increased managerial freedom and initiative resulting from greater autonomy.

5.9. Supplies

Improvements in supplies have come from the freedom to procure directly through KNH's own Tender Board and through the decentralization of budget management and quality control. In contrast with previous years when KNH did not receive its full funding allocation, it appears that suppliers are now generally paid promptly and that lists of approved suppliers are used based on delivery and quality performance. This is believed to result in lower prices (mark-ups were previously put on to cover slow payment), better quality, and steadier supply. However, problems continue to exist with procurement, management, and control because some managers and staff have resisted change and others have lacked the skills to handle computerized systems.

5.10. Services

The role of KNH in the national health care system has probably benefitted from its increased autonomy. The Infectious Diseases Hospital (IDH), which was part of KNH, was recently transferred to the MOH as a district hospital for part of Nairobi, and is apparently starting to relieve some of the pressure on KNH for primary and secondary services. KNH outpatient attendances have fallen over the years, but it is not clear whether this is due to the introduction of fees, shortages of supplies, or other reasons. Total outpatient attendances fell significantly from 802,000 in 1987 to 558,000 in 1993, a fall of 30% (see Table 4). They fell again in 1994 to 396,000, which was probably mostly due to the prolonged doctors' strike that year, although new registration fees in the same year may have contributed. Most of the fall was in general outpatient attendances, which may relate to efforts made to decongest consulting clinics by referring appointment-seeking patients to the district hospitals. Casualty patients do not have appointments and cannot be turned away, and those attendances remained more or less stable until 1994, when they fell by half, probably because of the doctors' strike.

The number of beds increased slightly over the years 1986 to 1993 (see Table 5), but declined in 1994 with the closing of some of the IDH wards, and should fall by a further 131 with the transfer of IDH to the MOH in 1995. The number of inpatient admissions and bed days has increased slightly since 1986, as has the overall occupancy rate[2]. The overall Average Length of Stay (ALOS) has shown no significant change.

2/ It should be noted that the figures in the annual KNH inpatient statistics reports as shown in Annex 4 are probably not completely reliable, especially in earlier years. There appear to be some mathematical errors in the calculation of occupancy rates and ALOS figures, and the grouping of departments has varied over time. For example, in 1986, 1993, and 1994 no data is shown for "Others," and in 1991 and 1992 data for IDH and the Amenity Wards appear to be included in "Others".

It is not clear what impact, if any, increased autonomy has had on the role of KNH in the national referral system, although the freeing up of hospital resources by reducing lower-level services should have helped to strengthen KNH's ability to serve as the national referral hospital. With the maintenance of budgetary support from the government, the reductions in outpatient services should have meant increased resources for inpatient services, at least in terms of staffing, although, taking into account the impact of inflation, it is unlikely that there has been much increase in real non-staff funding for inpatient services. Nevertheless, with support from donors, the renal and cardiac units have re-opened after being closed for some years; other services, such as orthopaedic implants have expanded; and support units, such as the X-ray department, now have more supplies. However, the role of KNH as the national referral hospital has not been clearly defined in terms of the desired type, range, and volume of services and the expected client profile; and KNH does not appear to have been well represented in the national health-planning process, apparently because its participation in that process is not perceived as necessary by the MOH.

5.11. Efficiency

Allocative efficiency appears to have been affected by the change in status in that the portion of the MOH recurrent budget absorbed by KNH is now higher than it was before KNH became a state corporation. The additional autonomy given to KNH has helped them to provide additional services, hire more nurses, pay staff better, improve supply of other critical inputs, and lobby the government for the necessary funds.

However, with inadequate funding for primary and preventive services (Ministry of Health, 1994), KNH's increased share of limited government funding may be inappropriate. Without clear understanding and agreement as to what type, level, and volume of services should be provided by KNH and by other facilities, and which people are expected to use the services (rich, middle, or poor), it is impossible to determine the resources needed to run KNH or the other facilities and to establish how those resources will be generated.

There appears to have been some improvement in *technical efficiency* due to the increased availability of supplies and improvements in building and equipment maintenance, which have allowed staff to be more productive. Overall staffing levels fell between 1987 and 1995, although they have been rising slowly since 1992 (Table 2 and Annex 3). The balance of staff appears to have improved over the period. The number of nurses, believed to be in short supply in 1987, has grown over the period. The number of clerical officers and security staff decreased from 1987 to 1994 but increased significantly in 1995, partly reflecting the recognition of the need to improve collection and control of revenue and to

In addition, the way in which the numbers of wards and beds removed from service have been reflected does not appear to be consistent. Given these problems it is probably more meaningful to look at changes in statistics for individual departments than for the whole hospital.

Table 4

Annual Outpatient Attendances 1985 -1994 (thousands)

	Pre-Autonomy		***Post-Autonomy***						
	1986	1987	1988	1989	1990	1991	1992	1993	1994*
Casualty	153	163	154	171	142	148	134	133	78
General OP	379	381	322	341	315	277	265	247	200
Others	283	258	268	251	221	211	196	178	118
Total	**815**	**802**	**744**	**763**	**678**	**636**	**595**	**558**	**396**

Source: KNH annual statistics reports.

* In 1994 there was a doctors' strike for several months.

strengthen accountability. A large reduction was made in the number of subordinate staff, where KNH believed there had been overstaffing. The overall decrease in staffing seems to reflect an efficiency improvement when compared with the increase in inpatient bed days, even after taking into account the decline in outpatient services.

Table 5

KNH Total Inpatient Statistics 1986 - 1994 (figures for admissions and bed days are in thousands)

	Pre-Autonomy		***Post-Autonomy***						
	1986	1987	1988	1989	1990	1991	1992	1993	1994*
Beds	1,812	1,928	1,834	1,856	1,821	1,883	1,875	1,861	1738
Admissions	60	68	70	76	70	71	63	67	47
Bed Days	580	586	630	650	606	654	613	628	446
Occupancy	87%	83%	94%	95%	91%	95%	90%	96%	73%
ALOS	9.6	8.5	9.0	8.6	8.5	9.2	9.8	9.3	9.2

Source: KNH annual statistics reports.

* In 1994 there was a doctors' strike for several months.

Although the overall bed occupancy and ALOS rates have not changed much over the years, there is considerable variation among departments. For example, the figures for Pediatrics indicate an increase in the bed occupancy rate to over 120% due to an increase in admissions and a relatively unchanged ALOS (Table 6).

Figures for the Medicine Department (Table 7) indicate an increase in admissions but no increase in occupancy due to a falling ALOS. The Private Ward (Amenity) also shows a clear reduction in ALOS over the years (Annex 4).

Expenditures on staff has risen in K Sh terms, but fallen as a percentage of recurrent expenses (excluding depreciation) from 60% in 1986/87 to 53% in 1993/94 (see Table 8 and Annex 5 for more details), which compares favorably with the figure of 70% for the MOH (Ministry of Health, 1994, Page 14). During that period expenditure on staff rose by 143%, whereas drugs and medical supplies rose by 157% and other expenses rose by 241%. Expenditure areas which have significantly increased include fuel and gases, rent and rates, and staff development. Operating costs per inpatient day are reported by KNH to have fallen in constant 1990/91 K Sh from K Sh 513 in 1989/90 to K Sh 352 in 1992/93 (Kenyatta National Hospital, 1995). However, these operating costs may not be very useful indicators because of shortages of key inputs due to under funding, unreliable service data, and lack of consideration of outpatient service.

5.12. Quality of Care

Although data are not available, it is generally believed that quality of care has improved due to greater availability of drugs and medical supplies, better maintenance of buildings and equipment, and more productive and better motivated staff. Specific improvements in recent years include restoring respiratory support to the newborn unit and providing uniforms to patients and staff. A visual inspection of the hospital confirms improvements in maintenance and cleaning, especially since 1992. Patient waiting areas and corridors have been painted and are noticeably cleaner, and broken equipment is much less evident. Although these improvements may not always lead to improved quality of care, they do contribute to increased patient satisfaction. A department of quality assurance and infection control was set up in 1993, and an effort is currently being put into making it operational after delays caused by the departure of the department head to the MOH.

5.13. Role of the College of Health Sciences

The involvement of CHS with KNH appears to have improved with the change of status of KNH. For example, following a formal agreement made in 1991 by KNH, CHS, and the MOH, medical specialists from CHS have played a more important role in KNH management. They now participate in the Finance Committee, the Tender Board, and in interviewing candidates for senior staff positions, and are now full members of the Medical Advisory Committee. They are also involved in decision making for special projects and are consulted when there are hospital crises. Likewise, the Director of KNH is involved in deciding which CHS staff are seconded to KNH. Both KNH and CHS staff are involved in disciplinary committees, and

KNH has made CHS staff honorary consultants and Registrars and has given support to CHS staff to present papers. As a reciprocal arrangement, CHS is

Table 6

Pediatrics Department Inpatient Statistics 1986-1994

	Pre-Autonomy		***Post-Autonomy***						
	1986	1987	1988	1989	1990	1991	1992	1993	1994*
Beds	305	253	313	282	283	314	285	377	294
Admissions (thousands)	9.1	10.2	13.1	15.8	15.5	16.1	14.9	13.4	9.3
Occupancy	104%	107%	118%	96%	122%	121%	127%	120%	75%
ALOS	12.8	9.6	10.2	7.3	7.9	8.6	9.6	10.4	8.8

Source: KNH annual statistics reports.

* In 1994 there was a doctors' strike for several months.

planning to make KNH staff honorary lecturers. The financial relationship has also changed, as CHS is now being charged for the use of KNH facilities, although it has not yet made any payments.

Table 7

Medicine Department Inpatient Statistics 1986-1994

	Pre-Autonomy		***Post-Autonomy***						
	1986	1987	1988	1989	1990	1991	1992	1993	1994*
Beds	366	288	288	288	288	292	290	355	339
Admissions (thousands)	9.6	8.9	8.7	11.8	10.4	10.1	10.5	14.7	11.0
Occupancy	100%	114%	108%	121%	105%	108%	104%	86%	74%
ALOS	13.8	13.5	13.1	10.8	10.6	11.4	10.5	9.7	8.9

Source: KNH annual statistics reports.

* In 1994 there was a doctors' strike for several months.

Table 8/*

KNH Income and Expenditures 1986/87 - 1993/94 (K Sh millions)

	Pre-Autonomy	***Post-Autonomy***						
	86/87	87/88	88/89	89/90	90/91	91/92	92/93	93/94
Government Grants	244	244	233	219	228	345	453	596
Cost Sharing	3	8	12	21	21	23	48	77
Donations and Transfers	0	0	7	1	40	9	2	142
Total Income	247	252	252	241	289	377	503	815
Salaries & Allowances	145	159	161	147	139	196	291	353
Drugs and Medical Supplies	42	47	47	58	55	63	47	108
Other Expenses	60	59	85	74	66	119	95	205
Depreciation	0	0	0	0	0	75	68	156
Total Expenses	247	265	293	279	260	453	501	822
Surplus	0	-13	-41	-38	29	-76	2	-7
Cost Sharing/Government Grants Plus Cost Sharing	1%	3%	5%	9%	8%	6%	10%	11%
Salaries & Allowances/Total Expenses Less Depreciation	60%	60%	55%	53%	48%	50%	66%	53%

Source: MOH Appropriation Accounts for 1986/87, KNH Audited Financial Statements for other years.

* Caution should be used with interpreting these figures because of changes of accounting policies. For example the funding and purchase of fixed assets are included in the Income and Expenditure Account before 1991/92. Also, KNH has been unable to reconcile the figures for government grants in their books with those shown in the MOH Appropriation Accounts for some years

5.14. Relationships with MOH and GOK

Relationships with MOH have probably benefitted from the increased autonomy granted to KNH. The principal issue between the two has been the MOH's diversion of KNH funding for other uses, but recent negotiations with Treasury appear to have resolved this issue, with the MOH committed to passing on all of the KNH sub-grant. Relationships have also probably benefitted from improved press reporting of KNH - fewer disaster stories and more positive stories - which has probably improved the general public perception of the hospital. The representation of civil servants on the Board and the ability of the Director to seek support from senior civil servants in the MOH, Treasury, DPM, OP, and Head of Civil Service has been helpful in dealing with issues such as government funding and patronage.

5.15. Donor Assistance

Increased autonomy at KNH seems to have been very beneficial for donor relationships in that KNH's ability to negotiate details of assistance projects has improved; the strengthening of management has improved the planning and implementation of projects; accountability for use of donor assistance and other funding has greatly improved; and its ability to generate information on key indicators has improved. At the same time, KNH has been able to benefit more from donor projects as a result of increased autonomy due to its flexibility in adopting new ideas and systems and its improved managerial ability to plan, implement, and learn from projects.

The role of donor assistance has been an important factor in the improvements made after autonomy, especially in recent years when KNH management has been stronger. The use of conditionalities by USAID and the World Bank as part of their grant and loan-assistance projects has been beneficial in encouraging the GOK and MOH to adhere to funding agreements and in encouraging the Board and management to continue to focus on priorities.

In addition, while the ability of KNH to plan, use, and absorb technical assistance has improved as a result of increased autonomy, the provision of technical assistance has contributed to the successes achieved. This started with assistance in the development of management options and priorities through USAID's REACH project (REACH 1988a, 1988b, and 1989a). It was followed by extensive assistance in many management areas including cost sharing, financial management, efficiency, and quality of care provided through USAID's Kenya Health Care Financing Project (KHCFP, 1993). A significant amount of training of KNH managers was undertaken under the KHCFP Project, including attending overseas courses and serving internships in US hospitals with follow-up by US mentors (Seltzer, 1995). Under the project, a management training unit was developed at KNH, which has strengthened the skills of many managers and staff. The World Bank project provided other management assistance with planning, nursing, and fixed-assets management.

6. Conclusions

In summary, it appears that the granting of autonomy to KNH has been successful in many respects, although progress has been neither smooth nor fast, and some of the potential benefits are still to be realized.

The *state corporation model* used to grant KNH autonomy seems to have been appropriate in that it gives responsibility and authority to the Board to run the hospital, yet the government retains an element of control; most notably over Board appointments, funding levels, fee structures, and staff remuneration levels. The model appears to have worked best when a dynamic Hospital Director has been combined with a strong, well-qualified, supportive Board, and when these individuals have had public confidence and respect. Under these circumstances, it has been able to balance the power held by the MOH and has been an effective buffer against political pressure.

Managerial changes which were supposed to happen when autonomy was granted actually took some time to be implemented because of the *lack of preparation*. The Board was not operational for several months, managers and staff did not have the necessary skills and experience to take on more responsibility, and plans had not been made to strengthen the critical areas to be taken over from the MOH, such as planning, personnel, finance, accounting, and procurement. The lack of preparation also meant that staff were not well informed about the changes and had concerns about job security, pensions, and pending promotions.

When the Board became more involved in management, the strength of the experienced private-sector members was useful, and the participation of senior civil servants was particularly helpful for dealing with issues such as government funding and patronage. In recent years, the combination of a *strong Director and Board* has resulted in the hiring of better senior managers, and the impact is being felt in terms of improved systems. Clinical management has also improved with a clearer definition of roles, more delegation to departmental level, and more involvement of teaching staff in management. Staff appear to be better off now, in that KNH salaries are now higher than the MOH and staff are not subject to the sudden transfers which were common under the MOH. Staff discipline has also improved, especially for subordinate staff who are now better supervised, for example by the nursing officers. In addition, when KNH became a state corporation it gained the power to prosecute staff who commit fraud. Several staff have been prosecuted, which has served as a deterrent for others.

The use of a *management contract* as a way to speed up the implementation of change at KNH was not successful, due to the exclusion of the Board and senior management in the development of the contract, and to the inexperience of some members of the contracted management team. Nevertheless, some KNH staff believe that the idea of bringing in an external management team to accelerate progress towards autonomy has some merit if it is planned and implemented with the involvement of those responsible for managing the hospital in the long run.

Improvements in *financial management and supplies* were slow to materialize because staff were reluctant to change from government systems, even though those systems were inadequate. Better accounting systems are now in place and financial statements are being produced in a more timely, detailed, and accurate fashion, which provides much greater financial transparency. The supply situation has also improved now that KNH is able to procure directly and is exercising more control over quality and price. Further improvements, such as computerizing the accounting and supplies systems and decentralizing financial responsibility, have been constrained by the difficulty of attracting experienced staff because of low government pay scales. Most of the administrative managers and staff are still from the public sector for the same reason.

The channel for providing *government funding* for KNH did not significantly change after autonomy was granted, with both budgets and funds continuing to pass through the MOH. However, an important benefit of autonomy was the introduction of a block grant which removed MOH restrictions on line-item shifts within the KNH budget. A later modification of KNH's category in the MOH budget eliminated the ability of the MOH to transfer funding from KNH to other hospitals.

The amount of government recurrent and development funding to KNH has been increasing as a *share of total MOH funding*. While this has helped KNH to improve its services, such increases for tertiary care may be inappropriate given the lack of funding for primary and preventive services. However, without a clear definition of KNH's role in the national system and its desired type, range, and volume of services and expected client profile, there is no proper basis upon which to allocate government funds. Since becoming a state corporation, KNH has been able to retain all of its *cost sharing revenue* and has taken more initiative to broaden and increase fees, with the result that this revenue has become an increasingly important source of funding.

The *role of KNH in the national health care system* has probably benefitted somewhat from its increased autonomy, in that it has been able to press successfully for a reduction in size which has helped to relieve some of the demand for primary and secondary service provision. However, it is clear neither which economic category of patients have ceased to use these services nor where they are now seeking care. It is likely that the improvements in maintenance, supplies and clinical management, and reductions in demand for lower-level services have helped to strengthen KNH's ability to serve as the national referral hospital.

There appears to have been some improvement in *technical efficiency* and *quality of care* due to the increased availability of supplies and improvements in building and equipment maintenance. The overall number of staff seems to have declined compared with the services provided, staff costs now absorb a smaller share of the hospital budget total expenditures, and staffing imbalances have been addressed to some degree. The overall bed occupancy rate appears to have increased slightly, although the picture varies considerably by department. The overall average length of stay figure has fluctuated between 8.5 and 9.8, although the Medicine Department and Private Wing show a clear reduction.

Increased autonomy at KNH has improved its ability to *negotiate, plan, implement and be accountable* for donor assistance projects and to report on performance. At the same time, the increased managerial flexibility and skill achieved as a result of autonomy has helped KNH to appreciate and apply lessons learned under such donor projects. The increased autonomy has also allowed KNH to deal directly with public relations issues, which has enabled the hospital to achieve a greater balance of press coverage with fewer disaster stories and more positive ones.

The role of *donor assistance* has been an important factor in the changes which have occurred. The use of contractual conditions tied to grant and loan assistance has helped to encourage the government and MOH to adhere to funding agreements and to encourage the Board and management to focus on long-term structural and system needs and capacity building. In addition, while increased autonomy has provided a foundation for management improvement, the provision of donor-funded *technical assistance* has contributed to the development of systems and capacity.

7. Recommendations

7.1. Increased Autonomy for KNH

Although KNH has achieved a significant degree of autonomy, the government has retained control over Board appointments, overall funding levels, fees, and exemptions and staff emoluments. The government appoints those Board members who are not present by virtue of office, which is appropriate given the need for public accountability. It is also reasonable that the government set a funding ceiling in order to encourage balanced development, both between health and other sectors and among the different health services. However, the presence of that ceiling can have a negative impact in that it limits KNH's motivation to seek research grants and donations, and it may be better to have more flexible targets and to base those targets on estimates of funding needed to provide a pre-determined level of services. The government should also retain final say over the fee and exemption structure, given the role that KNH plays in the national health system and in Nairobi area services. However, limitations on staff emoluments may need to be removed if certain skilled categories of staff, such as financial managers and computer specialists, are to be hired.

For autonomy to be effective at KNH there are other areas relating to funding and management which need to be in place. These are as follows:

Funding: It is vital that the government grant to KNH be provided in accordance with the allocation budgeted, or at least be protected as a proportion of the MOH budget. In addition, KNH needs to be able to raise its own funds through services and other means and should have the power to negotiate directly with donors and to seek research grants. It is also recognized that the type and level of services provided at KNH, as the national referral hospital, will always carry a high cost, and that in most cases the full cost cannot be covered through fees. As much of the cost as possible must therefore be covered by social and private insurance, leaving the government to pick up the cost of services to patients who are not covered by insurance and who cannot pay the full cost of services. Although it is important that the MOH approve KNH's fee and exemptions structure as part of the national cost sharing policy, discussions and approval must be handled by the MOH in a timely fashion to avoid unnecessary delays in implementing new fees or in increasing fees in line with costs.

Board: The government must seek to maintain a good balance of skills and experience on the Board, following the example of the previous Board, which had strong, senior private-sector members with experience in leadership, general management, financial management, and engineering. In addition, the government should continue to avoid appointments resulting from patronage, seeking only well-qualified Board members who act in the best interests of the hospital. The Board should be challenged to exercise its authority and fulfill its responsibility, so that it supports management and provides checks and balances at the same time.

Management: In order to see the full benefits of greater autonomy, KNH needs stronger management capacity and better systems, especially in the finance and supply areas. The focus should be on improving the supply department, giving more autonomy to departments (responsibility centers), and on strengthening equipment maintenance capabilities. Incentive systems should be put into place and budgeting should be related to outputs. Support should continue to be given to the quality-assurance unit to define and monitor critical indicators and to recommend quality-improvement measures. Demand for the units' services should encouraged by building its findings into the performance indicators of service departments, which in turn can be related to departmental incentives.

Service Role: The level, range, and volume of services to be provided by KNH, and the profile of clients to be served, should be clearly defined, taking into account that the hospital is a critical part of the national health system and cannot turn away patients in need. This definition of service role should be placed within the context of the national definition of services proposed by the MOH (Ministry of Health 1994, page 28). Staffing norms, standard costs, and expected revenues should then be estimated for KNH and should be used to determine the grant needed from the government. In the absence of this, the determination that future grants should be less than, or more than, current levels has no real basis. KNH should play a role in defining national health services through an increased role in national health planning. Finally, the government needs a way to monitor KNH performance in line with carrying out its role in the national health system.

7.2. Replication to Other Hospitals

The experience of granting autonomy to KNH appears to have been a positive one, although the process has been slow and many of the benefits have yet to be fully realized. In terms of replication at other hospitals in Kenya, a number of lessons and questions emerge.

Structure

In terms of structure, it is not clear if the government can, or should, follow the model of KNH, since it may not make sense to expand the number of parastatals by making each hospital a state corporation. Therefore, there is a need to explore alternative legal mechanisms, perhaps within the context of proposed decentralization (Ministry of Health 1994). In addition, hospitals which serve specific communities will need to have boards which have local representatives, and which are accountable not only to the national and/or local governments, but also to the communities.

Funding

The full benefits of autonomy will not be achieved unless sufficient funding is mobilized. However, no hospital in Kenya will be able to fully finance the development and operation of services from fees while ensuring access to all those in need of services. Given the constraints on public funding, social insurance must be mobilized more effectively, and government allocations must be targeted in accordance with need and performance. Funding ceilings must be more flexible so that hospitals can seek, negotiate, and receive funds from other bodies, such as donors, without affecting government funding for health.

MOH Policy Role

However much autonomy hospitals have, they remain a crucial part of a national health system. As part of the proposed strengthening of the policy and coordination role of the MOH (Ministry of Health 1993, and 1994), a vital area is the definition of the role of each type of hospital, both in terms of the type and volume of services and the range of patients served, so that there are no gaps or overlaps in the national health system. Other important aspects include developing standard mechanisms for the allocation of government resources; determination of fees and exemptions; and setting and monitoring quality standards.

Preparation

Whichever structure is used, it is clear from the KNH experience that there must be a significant investment in preparation if autonomy is to be implemented successfully. First, new boards and managers must be appointed in advance and in a fair and open way to ensure that the best-qualified persons are chosen. Second, standard systems should be developed in advance for critical management areas so that each hospital does not have to re-invent the wheel. Third, board members, managers, and staff will have to be properly oriented and trained. Finally, the MOH should set and monitor targets for key aspects of financial performance and service coverage, efficiency, and quality.

Annex 1: People Interviewed

Mr. Bodo	Deputy Director - Clinical Services KNH 1980-1992
Mr. Chiuri	Personnel and Training Manager KNH 1993-present
Kate Colson	Project Officer - Kenya Health Care Financing Project - USAID
Mr. Gachie	Medical Records Officer in Charge KNH 1995-present
Dr. Githanga	Quality Assurance Manager KNH 1994-present
Dr. Mailu	Casualty Dept. Manager/Quality Assurance Manager KNH 1986-1995
Mr. Mbiti	Ex Permanent Secretary - MOH 1988 - 1994 (and ex-Board member)
Dr. Muita	Deputy Director - Clinical Services KNH 1992-present
Mr. Muriuki	Ex Chairman of Board KNH
Mr. Mwangi	Chief Accountant - KNH 1993-present
Mr. Noreh	Planning Officer/Deputy Chief Hospital Secretary KNH 1987-1993
Dr. Oduori	Director KNH - 1980-1983
Mr. Oluoch	Planning Officer 1993-present
Mr. Wamae	Medical Records Officer - Statistics KNH 1994-present
Mrs. Wangome	Chief Nursing Officer 1991-present

Annex 2: Legal Notice

Kenya Gazette Supplement: No. 29: *10th April 1987*

(Legislative Supplement No. 17)

LEGAL NOTICE NO. 108

THE LAND CONTROL ACT

(Cap. 302)

EXEMPTION

IN EXERCISE of the powers conferred by section 24 of the Land Control Act. I, Daniel Toroitich arap Moi, President and Commander-in-Chief of the Armed Forces of the Republic of Kenya, exempt the controlled transactions, details of which are set out in the Schedule hereto, from all the provisions of the Act.

SCHEDULE

Transaction	Description of Land
1. Proposed sale by Witeithie Farmers Company Limited to Minex Limited.	L.R.: Number 21-39/1 comprising 600 acres or thereabouts of leasehold land situate in the Kitale area of Kenya.
2. Proposed charge and debenture by Minex Limited to Standard Chartered Bank of Kenya Limited.	L.R.: Number 2139/1 comprising 600 acres or thereabout of leasehold land situates in the Kitale area of Kenya.

Dated the 2nd April. 1987.

D.T. ARAP MOI.
President.

LEGAL NOTICE No. 109

THE STATE CORPORATIONS ACT. 1986

(No. 11 of 1986)

IN EXERCISE of the powers conferred by section 3 of the State Corporations Act, 1986. I. Daniel Toroitich arap Moi, President and Commander-in-Chief of the Armed Forces of the Republic of Kenya makes the following Order: —

THE KENYATTA NATIONAL HOSPITAL
BOARD ORDER. 1987

1. This Order may be cited as the Kenyatta National Hospital Citation.
Board Order, 1987.

Establishment and Incorporation of the Board.

2. (1) There is hereby established a state corporation to be known as the Kenyatta National Hospital Board (hereinafter called "the Board") which shall be a body corporate in accordance with section 3 of the Act and which shall perform and exercise the duties, functions and powers specified in the Act and in this Order.

(2) The Board shall consist of—
(a) a non-executive chairman appointed by the President:
(b) the Director of the Kenyatta National Hospital:
(c) the Permanent Secretary in the Ministry for the time being responsible for matters relating to health or an officer designated by him in writing;

(d) the Permanent Secretary to the Treasury or an officer designated by him in writing;
(e) the Principal of the College of Health Sciences of the University of Nairobi;
(f) the Principal of the College of Health Professions:
(g) not more than five other members of whom not more than two shall be public officers appointed by the Minister.

(3) Members of the Board appointed under sub-paragraph (2) (a) and (g) shall hold office for a term of three years from the date of their appointment and shall be eligible for reappointment.

The Director.

3. There shall be a Director for the Kenyatta National Hospital who shall be the chief executive and secretary to the Board and shall be appointed by the Minister for the time being responsible for matters relating to health on such terms and conditions of service as the Minister shall, in consultation with the Board, determine.

Powers and Functions of the Board.

4 (1) The Board shall. under the control of the Minister for the time being responsible for matters relating to health, be responsible for the administration management and development of the hospital established in Nairobi by the Government known as the Kenyatta National Hospital (hereinafter referred to as "the Hospital").

(2) (a) The Board shall be the successor of the Government in respect of all rights, duties, obligations. Assets and liabilities concerning the Hospital existing at the date of publication of this Order.

(b) All such rights, duties, obligations, assets and liabilities shall be automatically and fully transferred to the Board and any reference to the Government or the Minister for Health or the Permanent Secretary. Ministry of Health or the Permanent Secretary to the Treasury or the Director. Kenyatta National Hospital in connection with the Hospital in any written law or in any contract or document shall for all purposes be deemed to be a reference to the Board established under this Order.

(3) Without prejudice to the generality of subparagraph (1) the Board shall—

(a) administer the assets and funds of the Hospital in such manner and for such purposes as will promote the best interests of the Hospital in accordance with the Act;

(b) have power to receive on behalf of the Hospital, gifts, donations, grants or other money and to make legitimate disbursements therefrom:

(c) promote the general welfare of the patients and staff of the Hospital;

(d) have power to enter into association with other hospitals, health institutions, institutions of higher learning and research organizations within or outside Kenya as the Board may consider desirable or appropriate and in furtherance of the purposes for which the Hospital is established;

(e) make by-laws for the proper and efficient management of the Hospital which by-laws shall be issued by the Director on behalf of the Board and shall not be published in the Gazette but shall be brought to the attention of all those affected or governed by them.

Functions of the Hospital.

5. It is hereby declared that the Hospital is established for the purposes-
(a) to receive patients on referral from other hospitals or Institutions withi outside Kenya f or specialized health care:

(b) to provide facilities (or medical education for the university of Nairobi and (or research either directly or through other co-operating health institutions;

(c) to provide facilities for education and training in nursing and other health and allied professions:

(d) to participate as a national referral hospital in national health planning.

Finances.

6. In addition to any gifts, grants, donations or other moneys which the B may receive on behalf of the Hospital there shall be paid to the Board by ... of grants, in every financial year, out of money appropriated by Parliament for the purpose, such sum as the Minister may determine as being necessary to enable the Board to carry out its functions, having regard to the estimate for that year approved under section 11 of the Act.

Made on the 6th April. 1987.

D.T. ARAP MOI,
President.

Annex 3: Numbers of KNH Personnel by Type (e.g. nurses and by dept)

KHN PERSONNEL

CATEGORY/YEAR	*1987*	*1988*	*1989*	*1990*	*1991*	*1992*	*1993*	*1994*	*1995*
TECHNICAL									
MEDICAL SPECIALIST/CONSULTANTS	22	30	29	28	22	22	26	23	83
REGISTRARS AND MEDICAL OFFICERS	341	114	107	94	96	99	101	113	58
DENTAL OFFICERS	51	32	32	26	24	21	26	23	18
REGISTERED NURSES	457	405	401	387	598	562	509	561	569
ENROLLED NURSES	502	654	651	643	713	608	605	613	650
PHARMACISTS	20	12	10	9	7	6	4	6	8
PHARMACEUTICAL TECHNOLOGIST	37	30	30	29	24	21	26	26	28
RADIOGRAPHERS	52	51	51	49	48	47	44	50	51
RADIOGRAPHIC FILM PROCESSORS	22	25	25	25	1	21	18	13	12
PHYSIOTHERAPISTS	52	31	30	25	38	36	42	53	53
OCCUPATIONAL THERAPISTS	29	16	15	15	28	27	28	34	31
CLINICAL OFFICERS	75	28	27	20	35	32	35	39	42
MEDICAL PHYSICISTS	0	3	3	3	3	3	3	3	3
ORTHOPAEDIC TECHNOLOGISTS	12	20	20	20	13	13	16	16	13
ORTHOPAEDIC APPLIANCE MARKERS	0	5	5	4	4	4	4	4	4
PLASTER TECHNICIANS	35	32	30	30	24	24	28	26	8
PLASTER ATTENDANTS	0	0	0	0	0	0	0	0	16
LABORATORY TECHNOLOGIST	80	82	81	76	82	79	88	78	74
LABORATORY TECHNICIANS	161	74	74	73	64	63	60	67	66
BIOCHEMISTS	2	4	4	4	3	3	3	3	3
SPEECH THERAPISTS	1	2	1	1	0	1	1	0	0
PUBLIC HEALTH OFFICERS	3	0	0	0	1	1	1	1	1
PUBLIC HEALTH TECHNICIANS	15	4	4	4	12	12	13	13	12
ECG/EEG TECHNOLOGISTS	4	5	5	5	5	6	5	5	5
NUTRITIONISTS	8	9	8	8	11	11	35	32	8
ASSISTANT NUTRITIONISTS	25	19	19	19	22	22	2	0	23
MEDICAL SOCIAL WORKERS	8	7	7	7	19	19	21	19	18
DENTAL TECHNOLOGISTS	16	15	15	15	19	19	19	18	12
TOTAL TECHNICAL	2030	1709	1684	1619	1916	1782	1764	1839	1869
NON TECHNICAL									
DIRECTORS	0	2	2	3	2	2	3	3	3
ADMINISTRATIVE OFFICERS	21	16	16	15	16	16	19	16	19
PERSONNEL OFFICERS & ASSISTANTS	6	7	7	7	4	4	6	10	11
TRAINING OFFICERS	0	0	0	0	0	0	0	4	4
ACCOUNTANTS AND ASSISTANTS	9	10	10	10	12	12	16	22	21
CLERICAL OFFICERS	188	182	179	175	213	205	165	167	256
MED. RECORDS OFFICERS & TECHNICIAN	51	34	34	33	51	51	56	57	57
SUPPLIES OFFICERS AND STOREMEN	29	40	37	36	33	33	51	61	70
MORTUARY SUP AND ATTENDANTS	17	14	14	14	15	15	11	11	18
CATERER. HOUSEKEEPERS & COOKS	33	107	106	104	23	22	96	91	19
TELEPHONE EXCHANGE STAFF	22	24	24	23	23	23	25	26	32
LAUNDRY STAFF & ARTISANS	61	79	79	79	35	35	75	81	48
MACHINE OPERATORS	0	0	0	0	0	0	0	0	2
HOSPITAL PLANNERS	0	0	0	0	0	1	1	1	2
AUDITORS	0	0	1	1	1	2	3	4	4
PUBLIC RELATIONS OFF/ASSISTANTS	0	0	0	0	1	1	1	1	1
BOILER STAFF	12	12	12	12	7	7	7	8	8
SECRETARIES AND TYPISTS	32	42	39	37	49	48	39	42	76
CHAPLAIN	1	2	2	2	1	1	2	2	2
SECURITY STAFF	86	76	76	76	50	80	67	61	118
MAINTENANCE/ENGINEERING STAFF	79	141	139	139	82	79	122	135	125
SUBORDINATE STAFF	1045	981	957	920	973	1002	976	878	748
STERILE SERVICES ASSISTANTS	0	0	0	0	0	0	0	0	115
THEATRE SERVICES ASSISTANTS	0	0	0	0	0	0	0	0	23
SENIOR SYSTEM ANALYST	0	0	0	0	0	0	0	1	1
LEGAL OFFICER	0	0	0	1	0	0	0	0	1
TOTAL NON-TECHNICAL	1692	1769	1734	1687	1621	1639	1741	1682	1784
GRAND TOTAL	3722	3478	3418	3306	3537	3421	3505	3521	3653

Source: KHN Personnel Reports

Annex 4: KNH Inpatient Statistics by Department 1986-1994

INPATIENT STATISTICS BY DEPARTMENT

	1986	1987	1988	1989	1990	1991	1992	1993	1994
MEDICINE									
Beds	386	288	288	288	288	292	290	355	339
Admissions	9650	8887	11762	10390	10390	10091	10461	14652	10984
Deaths & Discharges	9950	8521	11794	10396	10396	9954	10675	14788	11957
IP-Days	133258	120267	127028	110460	110460	115037	110264	135074	95601
% occupancy	99.8	114.4	120.8	104.8	104.8	107.8	104	85.5	73.7
ALOS	13.8	13.5	10.8	10.6	10.5	11.4	10.5	9.7	8.9
PAEDIATRICS									
Beds	305	253	313	282	283	314	285	377	294
Admissions	9113	10333	13184	15816	15514	16116	14928	13376	9277
Deaths & Discharges	12866	10205	13217	16310	15980	14469	13842	13372	9115
IP-Days	116522	99146	135116	118816	126500	138598	132468	139358	80394
% occupancy	104.7	107.4	118.3	96.4	122.1	120.8	127.2	119.9	74.9
ALOS	12.8	9.6	10.2	7.3	7.9	8.6	9.6	10.4	8.8
OBS & GYNAE									
Beds	231	299	232	232	230	213	218	232	232
Admissions	26040	31538	31693	29842	27414	27257	22097	23970	15190
Deaths & Discharges	25702	31590	31709	29658	27656	27730	22456	24100	15553
IP-Days	101511	87779	98036	103628	93526	109028	90238	90244	64448
% occupancy	120.4	80.4	115.8	122.4	111.1	140	113.5	106.6	76.1
ALOS	3.9	2.8	3.1	3.5	3.4	4	4	3.7	4.1
SURGERY									
Beds	648	686	669	616	613	580	596	632	632
Admissions	10032	10171	10906	11021	11912	10275	9383	11180	9222
Deaths & Discharges	9932	10181	11337	11119	11494	10449	9454	11165	9299
IP-Days	215564	183252	211539	204307	196810	190080	181323	207741	164737
% occupancy	91.1	73.2	86.6	93.6	87.7	89.8	83.4	90.1	72.3
ALOS	21.5	18	19.4	18.4	17.1	18.5	19.2	18.6	17.7
IDH									
Beds	234	266	237	237	237			211	131
Admissions	5457	6496	4322	5844	3496			3263	1906
Deaths & Discharges	5581	7254	4247	4557	4214			3339	1833
IP-Days	54120	59926	46717	52629	38364			41493	26510
% occupancy	63	62	54	60.8	44.2			52.9	55.4
ALOS	10	9.2	10.8	11.5	9.1			12.4	14.5
AMENITY									
Beds	28	28	28	48	54			54	110
Admissions	250	226	327	644	696			775	875
Deaths & Discharges	241	218	310	517	670			751	855
IP-Days	8527	27859	8499	10431	12320			14627	14651
% occupancy	83.4	76.7	83.2	52.9	6203			74.2	53.4
ALOS	34.1	36	26	20.2	18.4			19.5	17.1
OTHERS									
Beds		108	67	153	116	483	486		
Admissions		947	1000	1626	1376	7386	6402		
Deaths & Discharges		1072	987	1519	1324	7258	6270		
IP-Days		7845	17012	31547	28400	101927	99162		
% occupancy		19.9	69.6	56.5	67.1	57.8	55.9		
ALOS		8.3	17	19.4	20.6	13.8	15.8		
TOTALS									
Beds	1812	1928	1834	1856	1821	1883	1875	1861	1738
Admissions	60542	68698	70111	76555	70798	71125	63271	67216	47454
Deaths & Discharges	64272	59041	70154	75474	71734	69860	62697	67515	48612
IP-Days	580794	586074	630516	650386	606480	654677	613455	628537	446341
% occupancy	87.8	83.3	94.2	95.6	91.2	94.7	89.6	95.6	72.8
ALOS	9.6	8.5	9	8.6	8.5	9.2	9.8	9.3	9.2

Annex 5: KNH Income and Expenses

KNH INCOME AND EXPENSES (K Sh million)

	1986/87	1987/88	1988/89	1989/90	1990/91	1991/92	1992/93	1993/94
INCOME								
Grants	244.42	244.09	232.62	219.13	227.89	345.12	452.72	596.31
Cost sharing	2.74	8.40	11.78	21.45	20.59	22.63	47.74	76.77
Transfers			6.64	0.52	0.00	0.00	0.00	0.00
Donations			0.67	0.00	40.50	9.40	2.97	142.11
TOTAL INCOME	247.16	252.49	251.70	241.09	288.97	377.16	503.43	815.19
EXPENSES								
Salanes & allowances	144.66	159.47	160.76	146.57	139.49	195.52	291.33	352.85
Electricity & Water	21.16	20.76	32.27	17.55	15.06	17.85	11.86	48.42
Fuel and gases			10.99	10.41	26.48	26.79	28.21	38.98
Drugs and supplies	42.10	47.39	47.33	57.88	55.39	63.30	47.19	108.01
Patient food	10.12	12.65	12.28	12.59	7.65	10.87	8.72	18.90
Rent & Rates	3.84	5.83	7.45	12.76	19.74	20.58	17.31	23.27
Staff development	0.00	0.11	0.36	1.00	0.95	2.29	4.15	31.55
Maintenance	2.44	4.42	6.72	6.63	4.15	8.48	7.41	13.75
Professional services	0.00	0.00	0.00	0.00	0.00	29.40	7.56	0.01
Other	16.38	14.82	14.35	13.34	20.00	15.04	16.62	28.70
Recurrent Expenses ex Deprecation	240.70	265.24	292.51	278.71	288.91	390.10	440.46	664.43
Deprecation	0.00	0.00	0.00	0.00	0.00	74.99	68.35	156.47
Recurrent Expenses	240.70	265.24	292.51	278.71	288.91	465.09	508.81	820.90
Spare parts								75.54
Closing stock					(28.60)	(12.19)	(7.59)	(74.48)
Fixed assets	6.46							
TOTAL EXPENDITURES	247.16	265.24	292.51	278.71	260.31	452.90	501.22	821.96
SURPLUS/(DEFECIT)	0.00	(12.75)	(40.80)	(37.62)	28.65	(75.75)	2.21	(6.78)
RATIOS	1.1%	3.3%	4.8%	8.9%	8.3%	6.2%	9.5%	11.4%
Cost sharing/Grant plus cost sharing								
Expense as a % of total expenses ex depreciation								
Salaries & allowances	60.1%	60.1%	55.0%	52.6%	48.3%	50.1%	66.1%	53.1%
Electricity & Water	8.8%	7.8%	11.0%	6.3%	5.2%	4.6%	2.7%	7.3%
Fuel and gases	0.0%	0.0%	3.8%	3.7%	9.2%	6.9%	6.4%	5.9%
Drugs and supplies	17.5%	17.9%	16.2%	20.8%	19.2%	16.2%	10.7%	16.3%
Patient food	4.2%	4.8%	4.2%	4.5%	2.6%	2.8%	2.0%	2.8%
Rent & Rates	1.6%	2.1%	2.5%	4.6%	6.8%	5.3%	3.9%	3.5%
Staff Development	0.0%	0.0%	0.1%	0.4%	0.3%	0.6%	0.9%	4.7%
Maintenance	1.0%	1.7%	2.3%	2.4%	1.4%	2.2%	1.7%	2.1%
Professional Services	0.0%	0.0%	0.0%	0.0%	0.0%	7.5%	1.7%	0.0%
Other	6.8%	5.6%	4.9%	4.8%	4.8%	3.9%	3.8%	4.3%
Recurrent Expenses ex Depreciation	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: MOH Appropriation Accounts for 1986/87 and KHN Financial Statements for other years.
The allocation was in the form of a block grant from 1987/88.

Annex 6: References

Abdullah Mohammed et al, 1985, *Delivery of Health Services: Report and Recommendations of Ad Hoc Committee Appointed by the Minister of Health,* Mohammed Said Abdullah et al, KEMRI, February, 1985, Nairobi, Kenya.

Chawla, Mukesh; Peter Berman, and Isadora Gil, 1995, *Improving Hospital Performance through Policies to Increase Hospital Autonomy - Methodological Guidelines,* Data for Decision Making, Harvard University, Cambridge, MA, USA.

Government Printer, 1987. *Laws of Kenya: The State Corporations Act - Chapter 446.* Revised Edition 1987, Government Printer, Nairobi.

Kenya Health Care Financing Project, 1993, *Final Report - Financial Management Support to Kenyatta National Hospital,* Kenya Health Care Financing Project, Management Sciences for Health, Nairobi, Kenya.

Kenyatta National Hospital, 1995, *Kenya Health Rehabilitation Project: Implementation Status Report on the KNH Component,* Kenyatta National Hospital, Nairobi, Kenya. September 1995.

Ministry of Health, 1993, *Strategic Action Plan for Financing Health Care in Kenya.* March, 1993. Ministry of Health and Kenya Health Care Financing Project, Nairobi, Kenya.

Ministry of Health, 1994, *Kenya's Health Policy Framework,* November, 1994. Ministry of Health, Government of Kenya, Nairobi, Kenya.

Newbrander, William, 1993, *Hospital Autonomy: Financing Issues for Hospitals in Pakistan: HFS Technical Trip Report.* Management Sciences for Health, Boston, MA for the Health Financing and Sustainability Project.

Newbrander, William, 1995, *Financial Reform and Autonomy for Hospitals.* Prepared for HFS Policy Brief. 1995. Management Sciences for Health, Boston, MA for the Health Financing and Sustainability Project.

REACH, 1988a, *Kenyatta National Hospital Board - Plan of Action for Reform, Volume II, Managers Guide to Implementation,* February, 1988, REACH Project, John Snow, Inc., Arlington, VA, USA.

REACH, 1988b, *Kenyatta National Hospital Board - Plan of Action for Reform, Volume I, Comprehensive Report,* May, 1988, REACH Project, John Snow, Inc., Arlington, VA, USA.

REACH, 1989a, *Kenyatta National Hospital - Master Plan,* July, 1989, REACH Project, John Snow, Inc., Arlington, VA, USA.

Seltzer, Judith and Patricia Weinberg, 1995, *Internal Evaluation of KNH Management Training and Administrative Internship Programs.* 1995, Kenya Health Care Financing Project, Management Sciences for Health, Nairobi, Kenya.

Stover, Charles C., 1991. *Developing the Management-Ownership Matrix:* Trip report to Manila, Philippines. Management Sciences for Health for the Health Financing and Sustainability Project.

World Bank, 1987, *Kenya: Review of Expenditure Issues and Options in Health Financing,* September 30, 1987, World Bank, Washington DC.