



Ross School of Business at the University of Michigan

Independent Study Project Report

TERM : Winter 1998

COURSE : BA 750

PROFESSOR : Andrew Lawlor

STUDENT : Alisa Lask

TITLE : Managed-Health Care in Kenya

Managed-Health Care in Kenya

April 1998

by

Alisa Lask

**A research paper submitted in fulfillment of the requirements for three credits,
GRADUATE INDEPENDENT RESEARCH PROJECT, Winter Term 1998,
Andrew Lawlor, Faculty Advisor**

MBA LASK

Faculty Comments

The Managed Health Care in Kenya Study reviews the state of the industry in Kenya as part of a greater African and Asian study to compare and contrast specific countries managed health care system evolution with that of the MediKredit system in South Africa.

The study was sponsored by a large multi-national firm who is evaluating the strategy to expand their reach into managed health care consulting business units with a portfolio of products and services based on the successful MediKredit model in South Africa.

Ms. Lask worked on the domestic (U.S.) portion of the study with secondary research tasks here at the University of MI and key management of the liaison role with the multi-national firm before heading off to Switzerland, South Africa, and Kenya as part of her team's overall Global Project course initiative.

As part of her Winter term course load, Alisa was responsible for logistics and trip planning with the multi-national firm as well as in-country interview planning and set-up. The attached paper on Kenya was also part of the Independent Study commitment.

For the effort, Ms. Lask should receive an "EX" grade.



**Andrew F. Lawlor, Faculty Advisor
May 4, 1998**

Country Report

Kenya

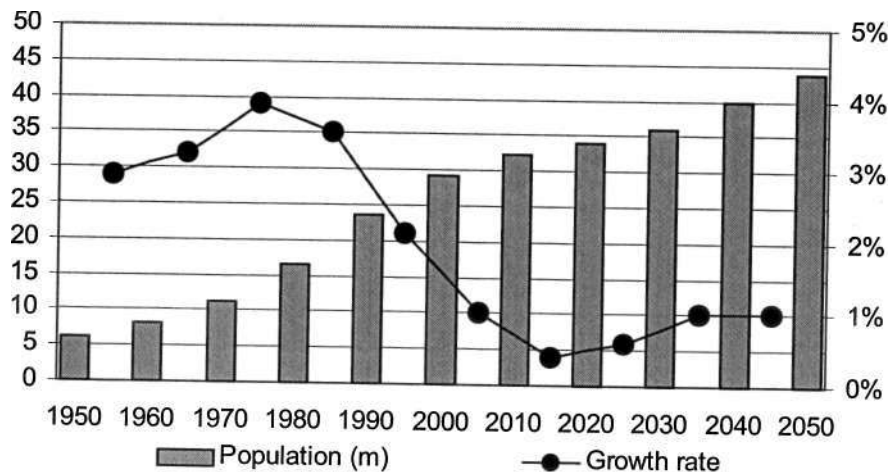
1.1 Environmental Assessment

1.1.1 Demographics

1.1.1.1 Population Size and Growth

The population of Kenya is estimated to be 30,812,000, 33rd in terms of world population rank¹ Kenya's population growth rate, at 2.13%,² has traditionally been one of the highest in the world; this has been a key factor affecting economic growth and the government's ability to provide free health services. However, the growth rate is expected to stabilize. Population growth rates for the years 1995-2000 are expected to be between 2.6-3.5% per year. Kenya's population growth rate decreased from 3.8 percent in the mid-eighties to 2.7 percent in mid 1996', partly because more Kenyan women are now using family planning methods. Education is playing a key role in the declining birth rate by helping people make more informed decisions about family planning methods.

Experts predict that the population rate will continue to stabilize as the country moves toward the final stage of the population transition period. Kenya has moved from the early stage, which is characterized by high birth and death rates, to the middle stage, when the death rate declines but the birth rate remains high. Although Kenya's population is expected to rise from the present 30 million to 36 million by 2025, experts believe that the population will eventually reach the stabilization stage, where the number of births will roughly harmonize with the number of deaths.³



Picture 1: Population size and growth Kenya

Source: U.S. Bureau of the Census, International Database, "Demographic Indicators for Cote d'Ivoire" April 4th, 1998
www.census.gov

¹ <http://web.lexis-nx.com/universe/document3>

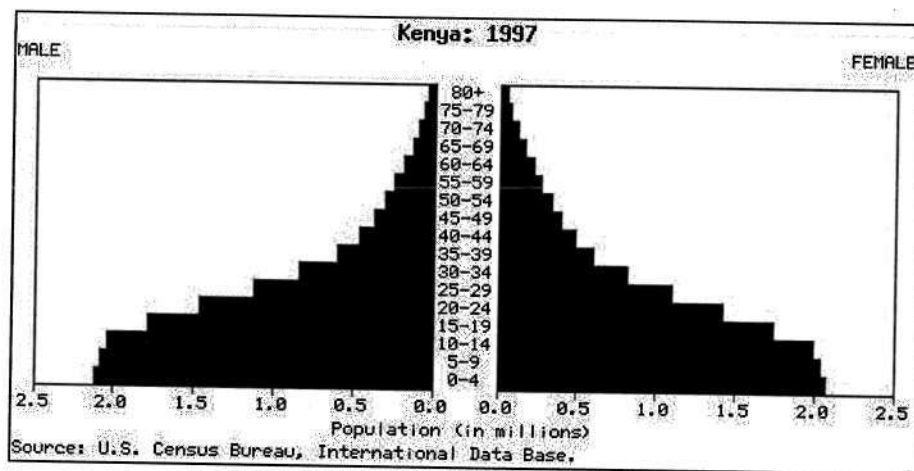
² www.odci.gov/ciq/publications/factbook/ke

³ Xinhua News Agency, *Kenya's Population Heads for Stability*, April 4, 1998

Kenya has a very diverse population that includes most major language groups of Africa. The African population in Kenya is represented by the following groups: Kikuyu 21%, Luhya 14%, Luo 13%, Kalenjin 1%, Kamba 11%, Kisii 6%, and Meru 5%. Non-Africans, which makes up about one percent of the total population, are comprised of Asians, Europeans and Arabs⁴ Other basic statistics (1997 estimates) are⁵: birth rate: 32.44 births/1,000 population; death rate: 10.83 deaths/1000 population; net migration rate; -0.34 migrant(s)/1,000 population; life expectancy: total population: 54.39 years, male: 54.21 years, female: 54.59 years; total fertility rate: 4.26 children born/woman.

1.1.1.2 Age Profile and Urbanization

The Kenyan population is concentrated in 9 major cities. Almost 10% of the population reside in Nairobi and its surrounding villages. There are 8 other major cities in Kenya, with the following population estimates : Mombassa (623,000), Kisumu (185,000), Nakuru (162,800), Eldoret (104,900), Nyeri (88,600) Meru (78,100), Thika (57,100), Kitale (53,000) and Kisii (44 000)



Picture 2: Population pyramid for Kenya

1.1.2 Political Assessment

1.1.2.1 Domestic Situation

Kenya became a multiparty democracy in 1992, after several decades of single-party rule. However, the government of Daniel arap Moi, president since 1978, has been increasingly criticized in recent years, both at home and abroad, for its repressive tactics and its corrupt bureaucracy. Elections were held in December 1997, and the results provided no surprises.⁷ The number of opposing candidates, many of whom were competing for the same votes, as well as the numerous advantages naturally available to the incumbent, left little doubt as to who would emerge victorious.

The pervasiveness of government corruption has recently dealt a serious blow to the Kenyan economy and business environment. The International Monetary Fund (IMF) canceled a major loan to the Kenyan government, largely due to President Moi's failure to take decisive action

⁴ www.odci.gov/ciq/publications/factbook/ke

⁵ World Population Prospects, 1995

<http://web.lexis-nx.com/universe/document3>

⁷ Economist Intelligence Unit, Country Report Kenya, 1st Quarter 1998.

over high level corruption.⁸ The IMF is particularly concerned about the government's failure to prosecute those suspected of involvement in the notorious 1991 Goldenberg scandal.

Goldenberg's company received as much as \$400 million in export compensation for allegedly fictitious consignments of gold and diamonds. Although Goldenberg's owner Kamlesh Pattni, a former permanent secretary in Treasury and senior officials of the Central Bank of Kenya were charged with numerous offenses, the case has never come to court. In June 1997, the High Court discharged all of the accused on technical grounds.

The ethnic dimension of Kenyan politics centers around the difference between the large groups that led Kenya to independence, most notably the Kikuyu and Luo, and the smaller groups, including the Kalenjins who feel they should access a larger share of the national pie. Some of the latter are now leading the movement for "majimbo" or federalism, which in the Kenyan context has been used to promote ethnic uniformity within certain regions.

The political environment in Kenya can best be characterized as restless. Though Mr. Moi promised a more "people-sensitive" term at his swearing-in ceremony, there is little reason to believe there will be many substantive changes. Corruption is such an entrenched feature of political behavior that few expect the president will make a commitment to deal with it.

1.1.2.2 Foreign Relations

The government has maintained close ties with the United Kingdom and the United States, allowing both countries to use Kenya for military training exercises.⁹ The United Kingdom or other European governments supply most military hardware. The U.S. makes funds available annually for military training as well.

The Kenyan government can, however, become very sensitive to what it perceives to be interference in its affairs.¹⁰ Former U.S. head of mission in Nairobi, Smith Hempstone, was highly unpopular for his many public outcries of corruption both before and during elections. The U.K. government has traditionally practiced 'quiet diplomacy', which it believes has the greatest influence on Kenyans. Both the UK government and the U.S. administration view Kenya as a haven of stability in a troubled sub-region.

Despite internal tensions in Sudan and Ethiopia, Kenya has maintained good relations with its northern neighbors. Recent relations with Uganda and Tanzania have improved as the three countries work for mutual economic benefit. The lack of cohesive government in Somalia prevents normal contact with that country. Kenya serves as the major host for refugees from turmoil in Somalia.

Kenya maintains a moderate profile in Third World politics. Kenya's relations with Western countries are generally friendly, although current political and economic instabilities are often blamed on Western pressures

⁸ The Economist, "Remaking Kenya", August 1997 (volume 344, number 8029)

⁹ Economist Intelligence Unit, Country Profile Kenya, 1997-98.

¹⁰ Economist Intelligence Unit, Country Profile Kenya, 1997-98.

¹¹¹¹¹¹ nfoInformation Please™, Almanac Info Corporation

1.1.3 Economy

1.1.3.1 Economic Trends and Outlook

Tourism and agriculture form the mainstays of Kenya's economy. The economy operates on a mostly free market basis, despite some government intervention. The GDP in 1996 was US\$ 9.1 billion, which represents a growth rate of 4.6% over 1995,¹² and was produced by the following sectors:

In 1993, the Government of Kenya began a major program of economic reform and liberalization. A new minister of finance and a new governor of the central bank undertook a series of economic measures with the assistance of the World Bank and the International Monetary Fund (IMF). As a part of this program, the government eliminated price controls and import licensing, removed foreign exchange controls, privatized a range of publicly owned companies, reduced the number of civil servants, and introduced conservative fiscal and monetary policies. From 1994-96, Kenya's real GDP growth rate averaged just over 4% a year. However, estimates show GDP growth dropped to around 2% in 1997 due in part to adverse weather conditions and reduced economic activity prior to general elections in December 1997.¹³ In July 1997 as previously stated, the government refused to meet commitments made earlier to the IMF on governance reforms. As a result, the IMF suspended its Enhanced Structural Adjustment Facility (ESAF) with Kenya that totaled \$218 million. The World Bank also put a \$90 million structural adjustment credit (SAC) on hold. To date, Kenya has not fully met conditions to negotiate a new ESAF or SAC.¹⁴

Currently Kenya faces a growing budget deficit, high interest rates (treasury bill currently at 26.8%), rising inflation (currently 11.2%,) and deteriorating infrastructure. Although many economic reforms that were put in place in 1993-94 still remain, additional reforms, particularly in governance, are needed if Kenya is to increase GDP growth and combat poverty among the majority of its population.

The Kenyan economic structure is marked by strong regional variations. The North Eastern Province and large parts of Eastern Province are arid and semi-arid areas, the small populations of which lead predominantly nomadic lives. Industrial activity is concentrated around Nairobi and Mombasa, while the agricultural wealth of the country is confined to approximately one-quarter of its surface area.

1.1.3.2 Foreign Trade

The Kenyan government encourages foreign trade and direct investment, as it has done since independence. Article 75 of the Constitution prohibits the nationalization of private property without prompt and full compensation. There are solid sales potential for foreign goods and services in Kenya. However Kenya is a developing country with a complex market. Exporters should keep certain factors in mind to achieve maximum success.

The best export prospects to Kenya are electric power systems, telecommunications equipment, computers and peripherals, agricultural machinery, industrial chemicals, automotive parts and '

¹² Economist Intelligence Unit, Country Profile 1997-98

¹³ Business Day (South Africa), "Gloomy Outlook for Embattled Kenya Economy", March 3, 1998.

¹⁴ Business Day (South Africa), "Africa - In Brier, March 3, 1998.

service equipment, plastic materials and resins, laboratory scientific instruments, aircraft and parts, and food processing equipment.

1.1.3.3 Foreign Direct Investment

By encouraging private foreign investment, the Kenyan government has committed itself to making the private sector Kenya's engine of growth. The government gives investment preference to private firms expected to earn or save foreign exchange, increase the country's technical knowledge and employment, and use local resources. There are no formal requirements for minimum local participation in either equity or management, although the government seeks higher levels of Kenyan participation in all investments. Investment opportunities exist in the tourism, eco-tourism, power generation equipment, telecommunication equipment, agricultural inputs, and food processing and packaging equipment. With 75 U.S. firms operating in Kenya, total U.S. direct investment is approximately \$290 million.

1.1.3.4 Monetary and Fiscal Policy

In the current budget year, recurring expenditures have risen substantially above the level projected in the budget following pay awards to public sector employees. The Central Bank of Kenya's (CBK) Monthly Economic Review for January shows that in the first five months of the current fiscal year (July-November), revenue and grants showed an increase of 4.7 over the same period last year, but \$120 million below target.¹⁵

The CBK's data shows that the government managed to contain total expenditures in the period. Wages and salaries accounted for 37.4% of total spending in the first half of the fiscal year, compared to 28.4% in 1996/97.¹⁶ However, this increase was achieved at the expense of spending on operations and maintenance. The effects of the reallocation of budget spending can be seen in the deterioration of the Mombassa-Nairobi highway and the neglect of other essential infrastructure projects. Once the interest on public and foreign debt is paid there are few funds left for development spending. The target of a fiscal deficit of 1.7% of GDP for the full fiscal year now seems a lofty goal.

1.1.3.5 Currency Restrictions and Stability

The abolition of the official exchange rate for the shilling in October 1993 and the dismantling of the CBK controls in the foreign exchange market were expected to lead to a rapid depreciation of the shilling on the interbank market. The reverse has happened. The exchange rate has stabilized since the sharp fall in the first two weeks of August, following the cancellation of the IMF loan. The government's high domestic funding requirement will keep the yields high on Treasury paper, which will in turn attract foreign investors, boost reserve levels and provide a floor for the currency.

1.1.4 Technology and Infrastructure

Government policy is now focusing on building infrastructure that will enable the private sector to stimulate growth in selected small towns and market centers, and on strengthening the links between these towns. Priority is given to infrastructure investments that promote the growth of production and employment in small-scale agricultural/industrial, manufacturing, and commercial ventures.

¹⁵ CBK, Monthly Economic Review, January 1998.

¹⁶ CBK, Monthly Economic Review, January 1998.

¹⁷ Economist Intelligence Unit, Country Report, 4th Quarter 1997.

The telecommunications sector is the key to the sustained development of Kenya. The government of Kenya has accepted that liberalization of this sector is essential. The state-owned monopoly, Kenya Post and Telecommunications Corporation (KPTC) operate telecommunications. The corporation provides subscriber trunk dialing to all major towns, while its external telecommunications department provides international direct dialing, telegraph, telex, facsimile, photo telegram, international television, data communication and related services.¹⁸

1.1.5 Labor Market

Kenya's labor market is very well educated but extremely underutilized. Economic conditions have caused unemployment to rise to levels around 43%. This number is often disputed, as it is difficult to quantify the informal employment sector. Many college educated citizens are unable to find employment which fully utilizes their skills. This high unemployment has forced many to turn to crime as an alternative. Overall, the labor market here is very strong. They are just waiting for the economy to turnaround, so more jobs will be available.

¹⁸ Walden Publishing Company, Country Report Kenya, 1995.

1.2 Healthcare Sector

1.2.1 Overview

Originally based on the British system, Kenya has not kept pace with its peers in the region. Primary healthcare is a concern for the majority that do not have private insurance. The National Health Insurance Fund (NHIF) is a national scheme covering all residents. However, often times the funds from the NHIF are not sufficient to even cover surgery and follow-up care. Families have fund raising parties to make up the difference. Evidence of this is seen as the government controlled healthcare system has been overloaded mainly with HIV related expenditures, depriving many of access to primary care. As the population continues to grow and poverty deepens, many Kenyans are finding the access to healthcare is also deteriorating.

1.2.1.1 Health Expenditures

The Ministry of Health (MOH) is the main institution that provides health services in Kenya. In 1997, 56% of the health facilities and 43% of Kenya's total healthcare expenditure were financed through the MOH. The Ministry of Health quoted that on average 8-9% of GDP was spent on Healthcare in Kenya. However secondary sources put the amount spent as closer to 2% of GDP, the same amount that was spent in 1995/96. Approximately 63% of the Ministry of Health recurrent expenditure is spent in hospital and 21% of the government expenditure is spent on primary health services.

The NHIF, a semiautonomous organization, receives contributions from most of the people in formal employment. This insurance scheme covers approximately 5.6 million people (1/6 of the Kenyan population), although the original intent was to cover the entire population.¹⁹ About 3 percent of the average monthly salary of those that are formally employed is deducted from their paychecks each month (the calculation is complex to attempt to explain it). The maximum that can be deducted each month is about \$5 (320 Kenyan Shilling). Since such a small majority of people are formally employed and the amount withheld is minimal, it is not feasible for them to support the rest of the population.

1.2.1.2 General Remarks and Outlook

Most people that we interviewed openly discussed and agreed upon the fact that the healthcare system in Kenya was failing. Where most people disagreed was on how the healthcare system should be managed in the future. Certainly, the government is making a move toward privatization in hospitals and as this takes effect, conditions should improve for those that are not insured. In addition, because of the high incidence and cost of treating AIDS, the healthcare system has been heavily burdened. In private hospitals, however, costs are rising disproportionately fast, as doctors are not restricted in what they charge. Overall, the system is begging for a structure and management that will carry it into the next century.

It should not be overlooked that in fact the government does have intense plans to reform the status of healthcare in Kenya. Whether this will take priority over other burning issues is

something that has yet to be answered. Corruption may impede any large capital commitments to this area. An important initiative of the MOH has been the 6 priority areas that were recently approved to move forward. These areas without a doubt address key issues of future success for the healthcare system.

Overall it can be said that there are things within the healthcare sector that are moving in the right direction. First, is the fact that there is a fairly established network for health services. Hospitals and doctors are located in key areas, as well as a multitude of health clinics in the rural areas. The main problem is management issues or what is going on inside of them. In addition, Kenya also has a strong referral system, which allows patients access to doctors that specialize in specific areas.

1.2.2 Health Status

1.2.2.1 Health Statistics

In recent years Kenya has experienced one of the highest natural population growth rates. The enormous movement of nomadic groups and Somalis back and forth across the border can partially explain this. In 1995 it was estimated that there were 41.66 births per 1,000 people. The life expectancy for the Kenyan population is 54.39 years; males averaging 54.21 years and females averaging 54.16 years.²⁰ Infant mortality is also high at approximately 73.5 deaths per 1,000 births.

Cause of death	Share
Prenatal/maternal	27.2%
Diarrhea	12.8%
Malaria	12.2%
Pneumonia	8.5%
Cardiac Disease	4.7%
Aids	3.6%
Injury	3.0%
Tuberculosis	2.1%
Malnutrition	1.7%
Measles	1.3%
Total	66%

Table 3: Kenya: 10 Major Causes of Death (Source: MOH, 1996)

1.2.2.2 Disease Landscape

HIV incidence is high. The official government rate of incidence is quoted as 20%, while the hospitals estimate the rate at a much higher rate of 40%. Regardless of which statistic you choose, the problem is staggering. It is estimated that 50% of Kenyan hospital cases are HIV related.²¹

Malaria and Cholera are also prevalent in the area. This is due to the fact that only 50% of the rural population and 75% of the urban population have access to potable water. When traveling

²⁰ www.tradeport.org/ts/countries/kenya/sectors.shtml

²¹ Kenya, The lonely planet, April, 1997

to the region, it is mandatory to present proof of Yellow Fever Vaccination before entering. Also contributing to this problem is the fact that 22% of children, on average, under the age of 5 were found to be malnourished.

Other diseases that Kenya must deal with are diabetes, hypertension, typhoid and upper respiratory track infections. These are health issues that the country must learn to both prevent and manage the long-term care of patients dealing with them.

1.2.3 Medical Infrastructure

1.2.3.1 Providers: Doctors and Nurses

Kenya has 1 doctor per 6,800 people, which compared to a 1/18,000 ratio for the rest of Africa is favorable.²² There are between four and five thousand medical doctors. The average doctor makes Ksh 40,000-50,000 per month.

The majority, 80%, of doctors work in clinics or hospitals. This is considered the Public Sector of healthcare. As the spirit of entrepreneurialism begins to spread, Kenya will witness the increase in the number of physicians having a private practice for their career. Most of the remaining physicians participate in private practices. The group practice concept is new in Kenya and consists of less than 2% of the number of doctors.

In addition to physicians, there are other support specialties employed in Kenya. Physician's Assistants and nurses are the other two most populous careers. Physician's Assistants presently number about 7,000. They have prescribing authority and often work in clinics. Nurses in Kenya also have prescribing and practicing authority. Registered Nurses number between 12,000 and 15,000. RN's are often the ones who manage the clinics outside of the heavily populated regions. This makes influencing the prescribing habits challenging for any drug manufacturer. When attempting to change prescribing habits, the manufacturers must be concerned about the nurses and PA's, not just the doctors and hospitals.

1.2.3.2 Pharmacies

In Kenya, there are about 4,000 pharmacies. Approximately 97% are owned by individuals, with about 3% owned and operated by a chain. In total these retail outlets fill approximately 2,000 prescriptions a daily.

Training to become a pharmacist is a long and challenging process. Pharmacists are trained under the Bachelor of Pharmacy degree program, which is a five-year curriculum, followed by 1 year of internship. In Kenya, pharmacists are entitled Dr., due to the fact that they take an oath during their graduation ceremony along with qualifying doctors. The law allows pharmacists to prescribe a drug in case the patient goes directly to the pharmacy. Depending upon his judgement, he can refer him to a physician as well. Pharmacists are allowed to change Rx from branded to generic changing time is approximately 15 months. The average attendant pharmacist makes Ksh 10,000 per month.

Many of the pharmacies are owned in part by doctors. This gives doctors an incentive to prescribe more pharmaceuticals as they are also making a profit on the sale of the drugs. Most

pharmacies operate in conjunction with a clinic though there are also plenty located in busy areas of town that are independently operated.

However the majority of pharmacies in Kenya are family owned. They may have physicians as co-owners, but the dispensing doctors and pharmacists must finance their own inventories. The majority of inventory and customer records are maintained manually. Computers are not prevalent in pharmacies throughout Kenya. Those pharmacists that are fortunate to have a computer system are using ones with a 486 processor. In comparison to South Africa and the United States, Kenya pharmacies are antiquated.

Although not encouraged to do so, many pharmacists will substitute generic drugs for branded products anyway. They often do this to keep the patient's business. They recognize the fact that if they do not fulfill the patient's request, another pharmacist will. This is primarily due to the large number of patients incurring the cost of pharmaceuticals out of pocket. In Kenya, the price of generics often saves the patient about 50% off the cost of branded drugs. Patients with insurance are not as price sensitive and will not insist upon generics. In fact, since many insured patients are well educated, they will request that the branded drugs be distributed to them.

1.2.3.3 Hospitals, Clinics, Health Centers

There are approximately 840 private health facilities. This includes 43 hospitals with the rest being mostly dispensaries and clinics based in rural areas. Religious missions provide about 600 health facilities of which 63 are hospitals mostly in rural areas to cater to poor with free services. The government has 2 teaching hospitals, 7 provincial hospitals, 87 district hospitals, 373 health centers and 1457 dispensaries, which provide health services.²³

There are four major private hospitals in Nairobi with a total of 650 beds. Because of the high prices, these are usually only used by the wealthy or formally employed sector of the population. The largest government hospital, Kenyatta has 500-600 beds. Kenyatta, once fully government owned is now being run as a profit enterprise. Patients also can choose from a series of nursing homes that are staffed with doctors and nurses but do not have a theater. Nursing homes tend to be primarily used for people who need an inexpensive place to stay for a week when recovering from cholera or typhoid.

In most of the private hospitals, about 75% of the patients carry insurance. The remainders pay out of their own savings. If the patient does not have enough private funds to pay for hospital expenditures their family will often have a fund-raising party in order to cover expenses. The average private hospital charges Ksh 2800 for a shared room. The government charges Ksh 650 per day as a bed rate. These are fairly expensive charges for an uninsured person or a covered patient with a yearly limit.

There currently exists no pressure for the hospitals to keep prices down. Though some hospitals have started investigating package rates for things like simple day surgeries, there is no evidence that there will be a move in this direction in the near future. The basic argument against packaging rates is: if a hospital can charge individually for everything, why would they want to take the risk of package rates (which could be priced too low for the services performed). There are also currently no groups of patients working together to reduce rates or get hospitals to

investigate moving toward package rates. Finally, doctors are often the major shareholders in hospitals and most likely discourage a move that could cut into short-term profitability.

1.2.4 Pharmaceutical Market

1.2.4.1 Market Assessment

Size and Growth

The Kenya pharmaceutical market size is between \$50 and \$70 million dollars per year. The majority of sales of pharmaceuticals happen in the retail sector. The remaining business about \$17 million occurs in hospitals.

The majority of pharmaceuticals consumed by individuals are still done on an emergency treatment basis. In other words there are few preventive prescriptions written. As more organizations move into the managed care arena and adopt preventative healthcare philosophies the pharmaceutical business can expect to grow. The purchasing habits of consumers will continue to drive sales in pharmacies rather than hospitals. Hospitals will continue to be the smallest supplier despite maintaining a lower price on both generic and branded products.

The retail sector is growing at fairly rapid rate of 5-8%, and is expected to continue at this rate for the next 5 years. This rate is expected to continue as healthcare becomes more accessible to individuals and people are offered quality treatments. The high population growth as well as the aging of the population will also support the growth rate.

Public Market Segment

The Ministry of Health (MOH) presently faces reforming a society that has not been able to provide quality accessible care. The simple fact is that the economy has not grown to support an investment in the social structure. Currently the MOH is focused on 6 key areas of reform in the government:

- 1) Strengthening public policy
- 2) Improving the delivery of service
- 3) Developing human resources
- 4) Finding the financing needed for healthcare
- 5) Involving the NGO in providing resources
- 6) Establishing an institutional framework for reforms.
- 7)

From the people we interviewed, it was seen that liberalization of government owned health institutions would radically improve the status. Currently they only operate one institution that is autonomous but they hope to see that grow in the future.

Hospitals purchase pharmaceuticals in the same manner as the retail pharmacists. Much depends on whether they are a private hospital or a public institution. Private hospitals have greater flexibility in the procurement of pharmaceuticals than public hospitals.

Private hospitals may either bid out contracts or work with previously established vendors. If they have a good relationship with the manufacturer they may purchase directly from them. Or if it better suits their needs, they may work through a wholesaler who can supply the entire necessary inventory. In addition, they may work directly with a pharmacy to maintain stock. Private hospitals have extreme flexibility in determining the most efficient and profitable manner to maintain stock.

At the other end of the spectrum, government hospitals receive distribution via Central Medical Stores. Missionary hospitals receive distribution through the Missionary Essential Drugs System (MEDS). Due in part to the more direct manner in which public hospitals receive their inventory, drugs are cheaper at public hospitals than in private hospitals. The average markup for pharmaceuticals in hospitals is between 20 and 25 percent.

Competitive Situation

Lilly has had a presence in Kenya since 1987 when they began working with a local distributor. Lilly established a marketing office in 1996. There are a total of 8 sales reps for the country. Ceclor comprises 40% of the Lilly sales, Humulin 29%, Prozac 8%, Keflex 7% and Axid 8%. The other 15 products make up the remainder of Lilly's sales. The antibiotics are especially popular, as a majority of the population is under 18 years old.

Most of the large pharmaceutical manufacturers have sales representatives in the Kenya market. Personal relationships with doctors and pharmacists are important in building sales in particular areas. Some of the biggest challenges facing pharmaceutical companies operating in Kenya are the pervasive patent problems. Most generic drugs are being imported from India and Pakistan. They copy popular branded formulas and price them approximately 80% below the normal price. Kenya does have laws to protect against these obvious patent infringements, but the government does not have the muscle to enforce them. For example, a Prozac pill that costs 160 shillings per pill would sell for 1.5 shillings in the generic format. Far worse in this instance, because the generic arrived in Kenya before the actual Prozac, Lilly can not take action against this copied formula.

Other large manufacturers that sell competitive drugs in Kenya are SmithKline Beecham and Glaxo Wellcome. They capture the majority of market share. After accounting for their share and generic drugs, Lilly has about 1 % of the prescription drug business.

Local Production

Kenya has a large number of local producers of pharmaceuticals. In total there are 55 such manufacturers. However, only three are considered large manufacturers and of concern to Eli Lilly. Included in this number are the local production offices of SmithKline Beecham and Glaxo Wellcome.

This information leads to the conclusion that there is a mixed quality of pharmaceutical manufactured in Kenya. Undoubtedly, the quality of SmithKline and Glaxo are the same or near US quality. The same can be said for the products of the other large manufacturers. However, although monitored by the government, the quality of other local producers remains inconsistent.

12.4.2 Distribution System

Distributors/wholesalers

In examining the pharmaceutical market, it is important to understand the distribution system. Kenya's pharmaceuticals are distributed primarily through wholesalers and distributors. Both the wholesaler and distributors are able to sell pharmaceuticals to retail pharmacies and to institutional pharmacies.

Eli Lilly works with a sole distributor. When Eli Lilly entered Kenya they did so through a distributor. Once the marketing office opened, they have maintained the relationship and still have an exclusive distributor. This office serves as the pipeline to the distribution to pharmacies for Eli Lilly.

Otherwise, there are 20 major distributors in Kenya. These distributors can either sell directly to the pharmacies or hospital or they can sell to other smaller distributors. For the more inaccessible area are reliant upon the larger distributor to sell to the smaller offices.

There does exist a black market for pharmaceuticals. While the team was in Kenya doing research, the Eli Lilly sales representatives learned of the robbery of their only distributor. This was disruptive to the process and interfered with the sampling process, as the reps could not secure samples for the physicians.

Promotions

Unlike in the US, sales representatives are not allowed to carry samples and must arrange for physician samples by using the local wholesaler. This also serves as a precautionary method to prevent physicians from distributing too many free samples and/or selling the samples themselves. This makes it difficult for sampling programs like in the US. Instead, the marketing team must make the most of their sales calls to the physicians and pharmacists.

Visits to the physicians are an extremely important part of Lilly's promotional efforts. Since Lilly does not have as strong a presence as its competitors it is imperative to keep its name in front of the prescribers and pharmacists. This is why Lilly has an eight person marketing effort aimed at solely visiting the major players in pharmaceutical decision making positions.

In addition to the office visits, occasionally, Eli Lilly and the distributor will offer a promotional program. In this promotion Eli Lilly and the distributor will give the buyer a free case in addition to their order. As the profit is greater for the distributor when they actually sell product, this promotion is not offered very frequently.

1.2.4.3 Legal Constraints

Import Regulation, Drug Registration and Pricing

The government committee responsible for approving pharmaceuticals for import and distribution meets 3 or 4 times a year. This is why the drug registration process can take up to 6 months to complete. During this process, the government is primarily evaluating the product on two criteria; legality in country of origin and efficacy.

The Kenyan government will first determine whether the proposed drug is available in the home country of the manufacturer. This serves as a preliminary screen for quality. It is the opinion of the Kenyan government that if a drug is not sold in the home country than it should not be sold in Kenya.

The government of Kenya will also run its own efficacy tests. This is performed to determine if the product is substantially different from the form sold in the country of origin. If the composition and efficacy of the product to be sold in Kenya is not identical or near the product composition in the home country, the government will not approve the drug for sale or distribution.

These are the two primary reasons that a drug will not be approved for distribution or sale. The government feels that these are objective ways of ensuring quality pharmaceuticals are for sale in the country.

There are no restrictions on pricing. Pharmacists are able to choose the price at which they would like to sell the pharmaceuticals. However, the markup from the manufacturer to retailer remains in the 30 percent range. This is a fairly moderate rate considering that the government does not put restrictions on the price.

There are also no restrictions on the quantities of drugs to be allowed for import. Once the government has approved a drug for sale, they have a hands-off policy of management. They are allowing market forces to determine which drugs will be bought. By allowing free pricing and unlimited quantities, market forces should determine the popularity and positioning of international pharmaceuticals.

Patent Protection

As a member country of the International Patent Organization (IPO), all patents and intellectual property rights are recognized in Kenya. If a company believes that its patents are being infringed upon they have the right to take the accused to court.

However, it is believed that patent protection is loosely enforced. Many manufacturers from India and Pakistan sell generic versions of drugs, which are still protected by patents. This is a major concern for branded drug companies wishing to protect their products.

Restrictions on Product Sales

A registered pharmacist must dispense all pharmaceutical products. Other than that, there are no restrictions on product sales. In fact, in order to make pharmaceutical products more affordable the Kenyan government has eliminated the Value Added Tax (VAT). The government usually adds a VAT of 17% to products. However, due to the potential cost and necessary expenditure the government has done its part in ensuring the affordability by suspending the tax on prescription

Branded vs. Generic Drugs

There are approximately 3,400 branded drugs available and 100 generics. Though many of the generic substitutes are readily available, those that have insurance or can afford the branded drugs usually opt for them. As a result, branded drugs capture 60% of the market. This happens despite the fact that often pharmacists will change a prescription without the consent of the doctor to a generic substitute if the client cannot afford to pay for the branded drug. Pharmacists

do this primarily to keep the customer from going to the pharmacist down the street who will fill the script with the less expensive generic.

The population of Kenya that can afford branded drugs will often request them. Since under most insurance schemes the cost of pharmaceuticals is included, the patient wants the most effective treatment, which they view as the branded product. The Kenyan population is also very well educated and those with insurance are more affluent. This also contributes to their desire for branded drugs.

The consumption of branded and generic pharmaceuticals varies across income level. Over 80% of the low-income patients consume generic products. At the middle-income level the level drops to 40-50% consuming generic. At the highest income level, the percentage of patients purchasing generic drugs sinks to 25%. The threat of generics is not strong as the image and quality of branded products will continue to make them attractive to the insurance and consumer base in Kenya.

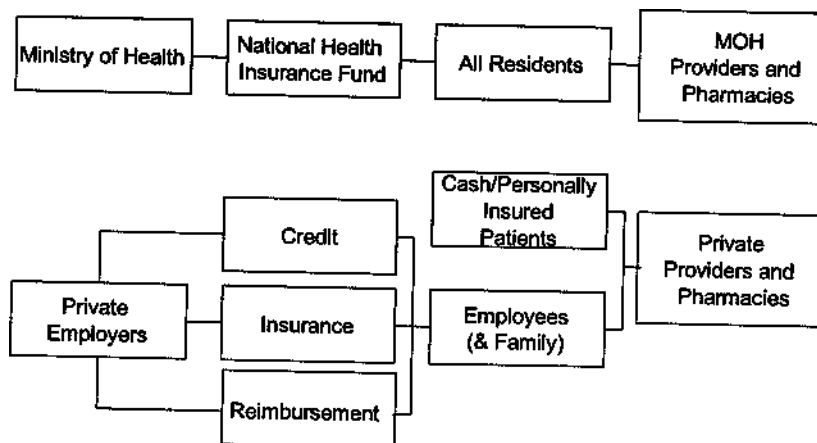
Since the markup on drugs averages around 30%, it is often more advantageous for a hospital to use the branded drug, as the profit margin is much higher than that on the generic drugs. As a result, the private hospitals sell more branded than generic pharmaceuticals.

1.2.4.4 Information Management

Lilly is very committed to increasing education levels on issues concerning healthcare. In fact they recently sent a high level official in the Ministry of Health to UCLA for a training program. They also trained 860 nurses on diabetes issues in hopes of driving future sales with this education.

The MOH on the other hand does not have the resources to educate residents concerning healthcare. This may change in the future as HIV becomes less costly to educate and prevent, than to treat.

1.2.5 Process View on Healthcare



Picture 3: Overview for the Kenyan health care market

1.2.5.1 Public Sector

For those that do not have any type of private insurance and are native residents of Kenya the MOH has an operating healthcare system. The health insurance system is known as NHIF or the national health insurance fund. Those that choose it, which consists of most of the population

must receive all healthcare needs through MOH controlled organizations. These organizations as mentioned before are located throughout most urban areas of the country. The idea is that residents can receive free healthcare through these providers. Unfortunately, the system is not operating in that capacity now and often to get any type of hospitalization, patients are required to pay out of their pocket. The system is poorly managed and it is difficult to get in to see a doctor even for primary care. Often times, the pharmacies are not stocked fully and hospital rooms are not utilized. Doctors are so overloaded they must continually prioritize which cases they will see, often turning people away. In fact, many of the doctors originally trained for the government sector, choose to leave early on in their careers because of the low pay and slim resource selection.

The government is beginning to run many of its hospitals as "for profit" organizations but this transition has been slow. Current management structures are weak, thus making the change even more burdensome for the patients. As this transition progresses and more areas of the public sector are able to contract services out to private groups, the status of the public health process should improve.

1.2.5.2 Private Sector

The healthcare network in the private sector consists of 2 different categories: the employers who provide coverage and the people who pay in cash or are personally insured.

Employer Coverage

Most large employers provide some form of insurance for their employees (About 1.5% of people have private insurance coverage.) Private employers are mostly self-insured, but many have recently moved their coverage to an outside agency. This leaves the employee with three ways that they can receive coverage when they go for medical treatment. First, and most popular, employees are given identification cards that they present at approved hospitals and receive credit for their treatment. (Up to the maximum available for that person.) Dependents of the employee would also have similar cards. This is the most convenient way that patients have been able to receive treatment. There are also huge problems with this system in Kenya. First, many employers are finding that people outside the insured's family are receiving treatment illegally under the medical plan. This is causing costs to rise and employers to look for better ways to prevent fraud.

Personally Insured Patients

Those people that are not covered by an employer's medical plan can choose to purchase insurance through groups such as AAR, ALICO and Medivac. The coverage is typically similar to an employer's coverage, but generally slightly more expensive on a per person basis. Most of the plans do not cover any type of self-inflicted disease or pre-existing condition and many do not cover chronic diseases. Also, routine checkups are generally not covered. Though most do not have co-payment plans, many mentioned that they see things in the future moving in that direction.

Cash Patients

There are many people that cannot afford insurance and pay on a cash basis for their medical treatment. Often, this is borrowed from friends and relatives. Those that can afford to buy their medical insurance are usually part of the elite in Kenya, as coverage is expensive. Most

hospitals require cash patients to put a significant payment down in advance of their service, to ensure that the hospital is paid a majority of the bill before the patient incurs the expense.

1.2.5.3 Conclusion

Beyond the problems that are currently widespread, Kenya has the potential to become a success story in Africa. By far the most developed country of East Africa, with a prosperous location well educated population and a tourism industry awaiting revival, analysts estimate that real GDP growth could be as high as 8%.²⁴ But the challenges in accomplishing this will be immense. Though the government has been moving in the direction of economic liberalization since 1992, the pace has been slow. Corruption is still prevalent and public institutions are not well managed. Future growth depends on the government committing itself to investing in its people.

1.2.5.4 Multinationals

Analysis

Compared to many of its peers, Kenya has a liberal foreign investment policy. This has encouraged multinational companies to establish businesses without local partners. Currently there are more than 200 multinational corporations operating in Kenya.²⁵ Although not all choose to partner with the government or other Kenyan private enterprise, many such as General Motors have entered this way. General Motors in Kenya is 51% owned by the Kenyan government. Though foreign investment comes from the UK, the USA, India and other European countries, the UK dominates with an estimated 1 billion British pounds in investments.

Summary of Interviews

While there were many large multinational companies to choose from, we targeted Coca-Cola, Xerox and General Motors, Barclays Bank and East Africa Industries, which is owned by Unilever. Because of bank teller strikes, our appointment with Barclays was not feasible. The personnel manager at East Africa Industries was not able to make our scheduled interview as well. The other companies were all interviewed in person while in country. All of the companies we spoke with had some type of health insurance scheme in place, though the coverage and limits varied immensely .

General Motors. General Motors, with the largest number of employees, (260) offered the most sophisticated system of health insurance that we found. Their scheme covered approximately 800 lives. For all outpatient coverage, patients pay 25% of the cost (one of the few schemes we were exposed to that had a co-payment). This was recently instated to discourage abuse that was becoming prevalent. Relatives would use an employee's id card and receive care as though they were a GM employee. This caused GM's healthcare cost to rise significantly over the past few years. Bain Hogg, GM's management company for healthcare services for 5 years, has helped to control the fraud as well, through usage reports and complete payment control on GM's behalf. Employees are only faced with reimbursement when they go to doctors not on the approved list. In-patient care is covered 100% up to the total yearly limits imposed on a per person basis. There has been a huge pressure for cost reduction in GM's healthcare program, as the budget has increased every year by 10%.

Coca-Cola. Coca-Cola, was the next largest employer that we spoke to with 150 employees and 750 lives under their medical program. For in-patient care, American Life Insurance Company holds the policy that protects Coke. Coke pays a premium to the insurance company for each employee. The maximum coverage per person per year is Ksh 200,000 (\$3,448). Similar to GM,

²⁴ www.tradeport.org/ts/countries/kenya/mrr/mark0008.shtml

²⁵ www.lexis-nexis.com

employees must produce a company id card when going to receive medical treatment. If an employee chooses not to go to a preferred provider, they must pay from their own account and then later get reimbursed. For outpatient care, Coke is self-funded. The maximum allowable coverage per person per year is Ksh 40,000 (\$690). As with all of the other firms that we interviewed, Aids or any self inflicted type of disease is not covered here. A scheme administrator keeps a close watch on charges from doctors and monitors for excessive claims. Coke would be open to any sort of scheme that could improve the quality of coverage that the employees while maintaining the current costs.

Xerox. Xerox operates in Kenya with 115 employees for a total of 800 dependents in the healthcare program. Probably the most crude of all the schemes that we saw, Xerox self funds all of its healthcare expenditures. Employees pay out of pocket and are later reimbursed up to \$345 for outpatient and \$1,034 for in-patient services. For hospital treatment, the company sends the employee with a letter directing the hospital to bill Xerox for all services. Since 1992, Xerox has been experiencing a 39% increase in their healthcare expenditures and is finding that because of chronic care, more people are reaching the limits of the policy. At one time they did look into using the services of AAR (a form of managed care in Kenya), but found that the services were restrictive (only 3 centers that employees could go to for treatment) and the cost more expensive.

1.2.6 Managed Care

1.2.6.1 Current Trends

Managed care is just beginning in Kenya. Due in large part to the high cost of providing care, Kenya has begun to examine and consider managed care as an alternative to the current medical system. This has been due to the rising medical costs, difficulty in receiving payment, and increased demand for services.

Currently, the managed care system in Kenya consists of three types of group practices. These practices take on the following forms: self-funded insurance and services and contracted out insurance and services. Examples of these three types of managed care facilities are AAR, ALICO, and MEDIVAC. ALICO and AAR are the two largest insurance providers in Kenya. ALICO and MEDIVAC are self-insured while AAR out sources their insurance to Lloyds of London. Following are brief description of the companies and a bit of information about their operations.

1.2.6.2 Players

AAR

AAR is composed of three products: AAR Health Services, Mobile Causality Unit, and Outpatient Medical Centers.

Health Services: Price range from 5,400 Ksh to 22,000 Ksh per year. The general benefits are rescue, evacuation, accompanying parent, rehabilitation or funeral expenses limited to 100,000 Ksh. Prices differ on amount of hospital coverage from zero to accident hospitalization, illness hospitalization option to full Outpatient treatment (for additional charges), and personal accident coverage. AAR covers patients from age 3 months to 70 years old (no new members after 65).

Mobile Casualty Unit: This is a home visiting mini hospital on wheels and is available to households, schools, hotels and factories in certain areas.

Outpatient Medical Centers: A complete outpatient service, including family planning. They currently have 3 full-service centers. This is the product primarily for employees and dependents of corporations. Included in the price are in-hospital services referred by AAR's doctors. The fee per person is 12,800 Ksh. This includes 200,000 Ksh worth of in-hospital services.

Medivac

Medivac began as an emergency assistance program and has evolved into managing healthcare as well as providing basic healthcare insurance to their customers. They have approximately 10,000 clients, 3 clinics and 50 employees. The client base is equally split between companies and individuals. In the past they have provided cards and employees were given free rein up to a predetermined limit. This has caused abuses and now Medivac is considering instituting a 20% co-payment for all services. They have also had to scale down their AIDS coverage as it was draining a large percentage of their resources, especially given that Medivac could not control hospitalization charges. Overall, Medivac has been going through some tough times, with many outstanding balances at local hospitals. Much of this, when talking to others outside the organization, can be attributed to poor management.

ALICO

ALICO is a Managed Care Operation. They offer two products: the managed care product and the Preferred Provider Organization (PPO).

Managed Care Product: This consists of four benefit plans with prices range from 310,000 Ksh to 3,100,000 Ksh. These are fixed plans and Room and Board Limits, as well as doctors charges are reviewed periodically. All other expenses are payable within the Plan Maximum. Included in these covered costs are most hospital charges and the use of an ambulance, if necessary. The plan excludes AIDs and AIDs related diseases, maternity expenses (unless additional coverage is purchased), and many other non-essential doctor visits and "self-inflicted illnesses (alcoholism, anorexia).

PPO: This product is for ALICO employees and ALICO clients. This consists of a group of healthcare providers who agree to provide services to a specific group of individuals at a previously agreed upon fee. They have physicians, hospitals and pharmacies that are accessible to clients. The system is similar to PPO networks in other countries.

1.2.6.3 Summary

In summary, it is evident that Kenya could definitely benefit from a disease management operation. Though many of the above firms are doing some form of internal disease management or have the capability to do so, no one has emerged a leader in this market. A system modeled after MediKredit will provide several benefits. Among those benefits are the improvement of Eli Lilly's resource utilization, a reduction in the cost of treating chronic illnesses for insurance companies and care providers and measurement of Eli Lilly's product efficacy. Another strong benefit is the overall improvement in the care provided to Kenyans and the ability to manage chronic illnesses.

In terms of claims processing, there also exists a need, but at the present time this need is not as great as that for disease management. As seen above, no one is processing claims presently. But there are many factors that suggest that claims processing could be successful. Many payments to all parts of the healthcare network are in the 60 - 90 day range. This alone illustrates that drastic improvement could be made if a player was willing to invest in the network system required. The amount of return is difficult to quantify, but there was evidence that most firms were open to any methods that could help reduce their overall cost by better managing the system. Here is where someone with experience in claims processing could enter and be able to sell their services fairly quickly. The investment would more than likely be a slow payoff as margins may not be as profitable initially. In addition, we do not predict that any firm will be able to perform advanced claims processing in the short term as the infrastructure is not there to support it and few firms are willing to invest the capital needed to enter into the claims processing business.