



GOOD CARE INTERNATIONAL TEACHING HOSPITAL FEASIBILITY STUDY

Preliminary Findings, September 2017



Good Care Uganda Foundation

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Executive Summary

Good Care Uganda Foundation carried out a feasibility study with the aim of planning and establishing a European-African University Teaching Hospital in Uganda. The study lasted from April 2016 to October 2016. The data and information obtained was derived from public secondary sources such as the Uganda Ministry of Health, the World Health Organization (WHO), the World Bank (WB) and the African Development Bank (ADB). Additionally, the study was supplemented by primary data and views collected from top academic experts at Makerere University Medical school, Mbarara University of Science and Technology (MUST) as well as some international medical institutions.

With a total population approaching 45 million, Uganda is currently undergoing a fast-economic transition. Major factors have contributed to this phenomenon. One of them is population growth, a feature which is dependent on global development in terms of economic progress, political environment, and academic challenges. The transition from high to low mortality and fertility that accompanied socioeconomic development has also meant a shift in the leading causes of disease and death. Demographers and epidemiologists describe this shift as part of an “epidemiologic transition” characterized by the waning of infectious and acute diseases and the emerging importance of chronic and degenerative diseases. High death rates from infectious diseases are commonly associated with the poverty, poor diets, and limited infrastructure found in developing countries. Although many developing countries still experience high child mortality from infectious and parasitic diseases, one of the major epidemiologic trends of the current century is the rise of chronic and degenerative diseases in countries throughout the world— regardless of income level.

Evidence from the multi-country Global Burden of Disease project and other international epidemiologic research shows that health problems associated with wealthy and aged populations affect a wide and expanding swath of world population. Over the next 10 to 15 years, people in every world region will suffer more death and disability from such non-communicable diseases as heart disease, cancer, and diabetes than from infectious and parasitic diseases. The myth that non-communicable diseases affect mainly affluent and aged populations was dispelled by the project, which combines information about mortality and morbidity from every world region to assess the total health burden from specific diseases. The burden is measured by estimating the loss of healthy years of life due to a specific cause based on detailed epidemiological information. In 2008, non-communicable diseases accounted for an estimated 86 percent of the burden of disease in high-income countries, 65 percent in middle-income countries, and a surprising 37 percent in low-income countries.

The following feasibility study consists of four parts: (A) the European-African University Teaching Hospital, (B) the Master Plan and (C) the Financial Evaluation.

Firstly, the introduction illustrates indicators such as demography, macro-economic and political development for the part University Hospital, which forms the basis for further planning. Based on macro-and micro economic evaluation, the actual determination of demand of a University Teaching Hospital on international standard and a School of Medicine in the project area have been established.

Subsequently, existing health care services are explored. The second part discusses the functional overview of the facilities with its corresponding clinical services. Further steps include the quantification of human resource requirements, and the section is concluded with an anticipated management and operation principles for the best possible functioning of a University Teaching Hospital on international standards in Uganda. The following issues were revealed in Part A:

The University Teaching Hospital planning is divided into Phase 1 and Phase 2 and will reach a total of 1000 beds; At full capacity, inpatient medicine beds total 490, inpatient surgery beds 510;

Medicine	# Bed	Surgery	# Bed
Cardiology	65	Cardiothoracic Surgery	80
Respiratory	35	Vascular Surgery	40
Neurology	45	Orthopedics	85
Nephrology	40	Neurosurgery	35
Gastro-intestinal Medicine	60	Urology	35
Endocrinology	15	Dental / Oral and Maxillofacial	40
Oncology – chemotherapy	60	ENT	40
Oncology – radiotherapy	60	Plastic and Reconstructive Surgery	40
Rehabilitation / Geriatrics: Orthopaedics (Combined with Stroke)	60	Intensive Care Unit	35
Coronary Care Unit	50	Gastro-intestinal Surgery & Other Surgery	80
Total	490	Total	510

Total staffs running at full capacity in year eight sum up to 1686, out of which 300 are Employed as Doctors, 848 as Nurses & Allied Health, 410 as Non-Clinical Support and 128 as Administrative Staff. The medical staff includes physicians (General Practitioners), dentists, psychologists, psychiatrists, podiatrists and specialty/sub-specialty physicians (e.g. Cardiologists). New medical staff are appointed by the Board of Trustees upon recommendation by the Medical Advisory Committee (MAC). The medical staff are organized into departments (e.g. internal medicine, surgery, family practice, obstetrics and gynecology, pediatrics). Clinical departments have a department head who oversees functioning of its department.

	Phase 1	Phase 2	Total
Employed Doctors	220	80	300
Nurses & Allied Health	504	344	848
Non-Clinical Support	236	174	410
Admin Staff	116	12	128
TOTAL	1076	610	1686

Secondly, part B depicts the Master Plan, which displays the architectural design and the layout of the rooms. The sight plan explains the building adjustment by taking traditional background, climate, and actual local needs into consideration. The implementation schedule is based on accurate planning estimates obtained from previous project experiences in Europe. Based on the clinical departments, in line with clinical and academic requirements, medical equipment planning assures the optimal performance of a University Hospital and a School of Medicine. The second part B includes following outcome:

Master Plan: Total square meters encompass the following figures for the University Hospital, School of Medicine and Associated infrastructure:

	Phase 1	Phase 2	Total
University Hospital	88,172	21,342	109,514
Medical School	31,756	8,100	39,856
Senior Care Estate	14,982	29,442	44,424
Sports Academy	10,567	12,329	22,896
Supermarkets	2,368	2,368	4,736
Production	12,856	13,264	26,120
TOTAL	160,701	86,845	247,546

In conclusion, part C reveals the Financial Evaluation, and takes the methodology of local macro-economic indicators into account. Investment costs by area type are defined, including a dynamic investment cost over a 10-year period. Operation costs estimates have been divided into two major groups: direct cost and other cost. Ultimately, the revenues on assumptions accomplish this financial section, to arrive to subsequent conclusion:

Financial Evaluation: Total investment costs amount to a grand total of EUR101,569,648, out of which approximately 60% account for Phase 1 and the remaining 40% for Phase 2.

Costs in USD	Phase 1	Phase 2	Total
Hospital & University Construction	41,712,000	27,808,000	65,520,000
Furnishing and Machinery	2,092,867	1,395,245	3,488,112
Hospital Administration	583,577	389,051	972,628
University Administration	335,359	223,573	558,932
Associated Infrastructure	17,107,800	11,405,200	28,513,000
Transportation Equipment	1,510,186	1,006,790	2,516,976
TOTAL	60,941,789	40,627,859	101,569,648

It has been further noted, that there will be demand-side benefits caused by:

- Epidemiological change that “western disease patterns” become “eastern” due to life style factors, which will require advanced health care services and biomedicine for the future.
- Accelerating population growth requires additional health care services.
- A rise in the number of affluent citizens, who will require enhanced medical services.
- The development of the oil sector comes with specialized treatment of expatriates

The following factors affect the supply-side benefits, which include:

- Provide state-of-the-art biomedical equipment, which allows early detection of diseases.
- Improve the country’s severe shortage of medical doctors.
- Offer clinical knowledge through advanced academic exchange programmes.
- Supply health care facilities outside the city centre, which will lead to a reduction in traffic congestion.
- Use of Air Ambulances due to existence of international airport in the implementation area.

In General, the feasibility study revealed that;

- The hospital will be built without major problems and within the overall budget and time frame.
- The hospital will operate without serious worry of disruption (for example, power shortages, lack of necessary personnel, floods, social unrest, nearby construction or serious pollution).
- The hospital will generate enough cash to pay for all its operating expenses, increases in working capital, and capital expenditures required for proper upkeep of its facilities; service its debts; and pay dividends and other obligations associated with share capital.
- The base case financial projections are realistic and reasonable enough to allow a high level of confidence that the estimated cash flows can be generated as expected.
- The hospital will operate without serious concern about environmental or health hazards and/or worker safety issues.
- A sufficient amount of funds will be sourced in time and on terms and conditions that the hospital's cash flow can afford.

Introduction

The development of hospital health care provision has recorded a great leap in recent years. This has mainly been caused by the progressive introduction of new highly specialized diagnostic and therapeutic procedures, introduction of a comprehensive electronisation of hospitals and improved process management. In context of this development, hospitals in Uganda are run with a relatively low level of productivity, mainly due to their outdated infrastructure and poor logistics arrangements. The complex construction of a state-of-art University Hospital in Uganda is expected to create a new generation hospital on the African continent. Good Care Uganda Foundation attaches great importance to the development of modern health care delivery models both within the new hospital, as well as in terms of integration of care between this hospital, other hospitals in Africa and in the wider European region, and with other levels of care.

The concept of Good Care International Teaching Hospital was premised on this background to counteract the ravaging health situation particularly in sub-Saharan Africa. With serious physician shortfalls and inadequate facilities for medical doctors to train and practice in Africa and Uganda in particular, this concept comes with a remedial solution to the already existing health care problems. In Uganda alone, staffing levels are low by all standards: An estimated number of 2,919 physicians working in the country translates into 1: 8,373 people if spread throughout the country. Furthermore, the following pointers accelerated the need to establish an international state-of-art hospital in Uganda.

- Every year the government of Uganda spends at least \$150 million (about Shs377billion) on treatment of mostly top government officials abroad. This figure is almost equal to 40% of the country's health budget that is contributed by donors.
- Government of Uganda spends US\$50,000 (shs180m) on a single government official flown out of the country for treatment and this money excludes money for air tickets, hotel and other facilitation; which sometimes can go up to \$80,000 (shs288m).
- The common ailments for which this money is spent on are Neurology, Kidney diseases and Cancers representing 33%, 21% and 16% respectively which can be treated locally if the technologically advanced treatment methods are availed.
- The amount of money spent on treatment abroad by government is enough to build and equip a modern state-of-art hospital on international standards needed to attend to these ailments and the capital outflow in such medical tourism abroad largely contributes in weakening Uganda shilling.

Good Care in partnership with funders in Poland intends to establish a state-of-the-art international teaching hospital with one of the most environmentally friendly university hospitals in Africa and technologically advanced treatment methods. The hospital will offer teaching capabilities designed to promote even better collaboration between medical care, innovation & research, and education that will greatly transform the health care in Uganda and Africa. It will offer much more sophisticated and broader range of medical services to top government officials, foreign expatriates and tourists as well as higher and low-income local population.

Services such as highly specialized cancer and cardiac care, acute trauma care, neurology, kidney diseases management and pediatric care will be provided in the hospital. The strategy will be on value agenda - moving away from a supply-driven health care system organized around 'what physicians do' toward a patient-centered system organized around 'what patients need'. The hospital will focus more on the patient outcomes achieved rather than the volume and profitability of services provided. Emergency patients will arrive by ambulance or helicopter or by referral from care providers throughout East Africa - and in some cases, even from the rest of Africa.

Good Care looks forward to providing a range of treatments and services that are currently unavailable in Uganda, and to training and retaining health care leaders who raise quality standards within Uganda's health sector and Africa in general. The hospital will be a center of excellence in provision of medical services and training not only in Uganda but in Africa and will bring knowledge and competence of sophisticated science on an on-going basis as a whole. This will be achieved through collaborative arrangements with re-known universities across the world i.e USA, Poland, Japan, Europe (Germany & Poland) and Asian Countries. These arrangements will involve lecturer and student exchange programs which will greatly enrich teaching and research components to international standards. This will result into acquisition of modern technology treatment facility equipment.

This diagnostic equipment will keep patients within Uganda including those with non-communicable diseases (NCDs) particularly; cardiovascular (heart) diseases, diabetes, cancers and chronic obstructive pulmonary diseases which according to the ministry of health are becoming increasingly important as causes of morbidity (illness) and mortality (death) in the Ugandan population. This will reduce the government expenditure on treatment abroad annually hence saving for economic development in the country. Goodcare's vision for the international teaching hospital in Uganda include:

[A First Phase to Be Completed In 2021:](#) The ultimate vision is for the international teaching Hospital to grow toward 1000 beds in phases of development over time. The first phase of construction will be completed in 2021 with the establishment of a tertiary hospital of approximately 250 beds costing more than US\$ 150 million.

[Provision of Advanced Care:](#) As an international standard teaching hospital, the Hospital will provide advanced forms of care. It will include specialties in cardiology and cardiothoracic surgery, cancer, women and child health, stem cell and regenerative medicine, neurology and minimally invasive surgery, and have the latest in state-of-the-art medical equipment such as MRI and CT scanners and nuclear medicine. It will ensure that Ugandans have access to world-class care when they need it and where they need it. No longer will Ugandans need to leave the country to receive high quality health care. This will be of enormous economic and social benefit to patients and to Uganda. In addition to treating Ugandans, the hospital is expected to attract patients from across the region.

[The Education of a New Breed of Health Care Providers and Leaders:](#) The teaching hospital will use the facility to educate doctors, nurses, midwives and allied health professionals who are equipped not only to provide excellent care but to lead and transform health care institutions and systems to make them work more effectively. A Postgraduate Medical Education programme will train specialist doctors in a range of fields – including internal medicine, surgery, paediatrics and obstetrics and gynaecology – helping to alleviate the severe shortage of such specialists in Uganda.

[Retaining and Returning Ugandan Health Professionals:](#) By providing a working environment and training programmes that meet the highest international standards, the Hospital will attract Ugandan

health professionals working abroad back to Uganda, while retaining new graduates who might otherwise leave for advanced education or for work outside the country.

[A Research Programme:](#) Research will address a range of issues, including the growth of non-communicable diseases such as cardiovascular disease, cancer and diabetes, the need to improve maternal and child health, and the social and economic determinants of health.

In addition to establishing the Hospital, Goodcare plans to add to four Medical Centres in Uganda by building a dozen more over time across the country where patients can access basic care and receive referrals to the main Hospital. This will connect patients within and beyond Kampala to the main Hospital and make it easier for them to access its services.

The strategic objectives of Good Care Uganda Foundation, in connection with the new state-of-art hospital construction, are to provide a much higher efficiency (more output while maintaining cost levels), sustainable quality (of healthcare provision) respecting the principles of flexibility, so that the integrated facilities and services will be able to respond to changes in demographic development and epidemiology at increased economies of scale and economies of scope.

The basic framework of the proposed solution is defined as follows:

- The solution should include healthcare provision, education and R&D functions,
- The project should demonstrate greater efficiency and quality of provided healthcare,
- No additional public funding for construction and operation should be expected (except for the standard funding available through public health insurance),
- The project requires government performance guarantee
- All types of risks (legal, economic, market, financial, operational, organizational, behavioral, political, social and other) should be identified and minimized according to the priorities of Ministry of Health.

Overview of Health Care Facilities in Uganda

Uganda's healthcare expenditure amounted to \$25 per capita as of 2006. This is slightly higher than other countries in Sub-Saharan Africa (\$24), though lower than the average for all low-income countries (\$27). At the same time, it should be noted that Uganda spends a higher share of its GNI to healthcare, 7.2%, compared to 4.8% and 4.6% for sub-Saharan Africa and low-income countries respectively (WDI & WHO data).

The sources of healthcare expenditures are composed of three primary sources. Out-of-pocket expenses accounted for the largest share, with 37.9%, followed by the government with 33.6%, and external sources with 28.5% (World Bank, 2010). The Ugandan healthcare delivery system is composed of seven levels. Health Centers, categorized into levels I to IV, cover geographic areas ranging from villages to counties, with varying level of population coverage (1,000 for level I to 100,000 for level IV). Their roles also differ, from Health Center I focusing on prevention and health education to Health Center IV, which cover prevention, cure, rehabilitation, and emergency surgeries. The next level is District Health Services, which typically cover population of 500,000. Regional Referral Hospitals typically cover 2M people, providing select specialty care and outreach services, in addition to the functions provided by the institutions previously mentioned. National Referral

Hospitals, which cover 27M people, provides comprehensive specialty care, research and training, in addition to other roles (Markle, 2007).

Access to Health Care

Despite record investment over the past five years, the government expenditure on health has steadily increased from \$3.46 per capita in 1995 to almost \$9 per capita in 2006 (Keane, Kennan, Massimiliano, Massa, & Dirk, 2010), Uganda's healthcare performance is still ranked as one of the worst in the world. In 2009, Uganda ranked 186th out of 191 nations by the WHO in terms of health care performance (Sisay, 2009).

In terms of health facilities, the Uganda Ministry of Health reported 3,237 health facilities in 2006, with 71% public, 21% private-not-for-profit, and 9% private-for-profit (Okwero, Tandon, Sparkes, McLaughlin, & Hoogeveen, March 2010). Within these health facilities, there are 1.1 hospital beds per 1,000 people in 2006, 5.5 nurses per 10,000 people in 2004, and 1.17 physicians per 10,000 people in 2005 (World Development Indicators (WDI) & Global Development Finance (GDF)). In terms of physical access to these health facilities, 75.4% of respondents to a World Bank survey reported living within 5 km of a health facility or hospital in 1999, compared to 82.5% in 2006 (Okwero, Tandon, Sparkes, McLaughlin, & Hoogeveen, March 2010).

In terms of services availability, as of 2007, over two thirds of health facilities provide a basic package of health services, 88% provide immunization, 71% provide antenatal care, 80% provide family planning, 98% provide STI services and curative care for children (Kaijuka, et al., 2007). Among the general population, in 2008 48% has access to improved sanitation – 38% of urban population vs. 49% of rural population. 67% of the population has access to improved water source – 91% of urban population vs. 64% of rural population (World Development Indicators (WDI) & Global Development Finance (GDF)).

In terms of utilization, Uganda eliminated user fees at state health facilities in 2001, resulting in an 80% increase in the number of visits (The Elimination of User Fees in Uganda: Impact on Utilization and Catastrophic Health Expenditures, 2005). Today, 42% of the births in Uganda are attended by skilled health personnel vs. regional average of 47%, its antenatal care coverage is 94% vs. regional average of 73%, and 68% of Ugandan 1-year-olds receive measles immunization vs. regional average of 73%. Uganda's contraceptive prevalence is 24% vs. regional average of the same, its antiretroviral therapy coverage among people with advanced HIV infection is 33% vs. regional average of 44% (Department of Health Statistics and Informatics of the Information, 2010).

Health Equity

In Uganda, there exists considerable inequity in health outcomes across regions and socio-economic classes. Whereas some districts such as Kapchorwa and Bukwa have life expectancy rates exceeding 60 years, the national average is about 51 years and there are some districts such as Kitgum where the figure is less than 30 (Okwero, Tandon, Sparkes, McLaughlin, & Hoogeveen, March 2010). There are similar variations in infant and child mortality rates; in 2010, the under-5 mortality rate for the rural population is 147 deaths per 1,000 live births, as compared to 115 among urban population, 172 among the poorest 20%, and 108 among the wealthiest 20% (Uganda: Health Profile, 2010).

Overall, however, the government of Uganda has adopted a pro-poor attitude towards health spending. According to estimates by the World Bank, through utilization of various public health facilities, the poorest 20% of the population captures 24% of government spending while the

wealthiest 20% receives about 16.6% (Okwero, Tandon, Sparkes, McLaughlin, & Hoogeveen, March 2010). And as already discussed in the previous section, Uganda's elimination of user fees at state health facilities in 2001 has resulted in an 80% increase in visits; over half of the increase came from the poorest 20% of the population (Department of Health Statistics and Informatics of the Information, 2010). While the non-poor's utilization of public facilities did not change significantly, utilization among the poor increased substantially after the abolition of fees, but catastrophic expenditure did not fall. One possible explanation is that "frequent unavailability of drugs at government facilities after 2001 forced patients to purchase from private pharmacies, with the extra payments for pharmaceuticals offsetting the reduction in payments for consultations" (The Elimination of User Fees in Uganda: Impact on Utilization and Catastrophic Health Expenditures, 2005).

Disease Burden

According to WHO's estimates in 2011, the communicable, maternal, perinatal and nutritional conditions account for 70 % of the mortality causes, see Figure 1.

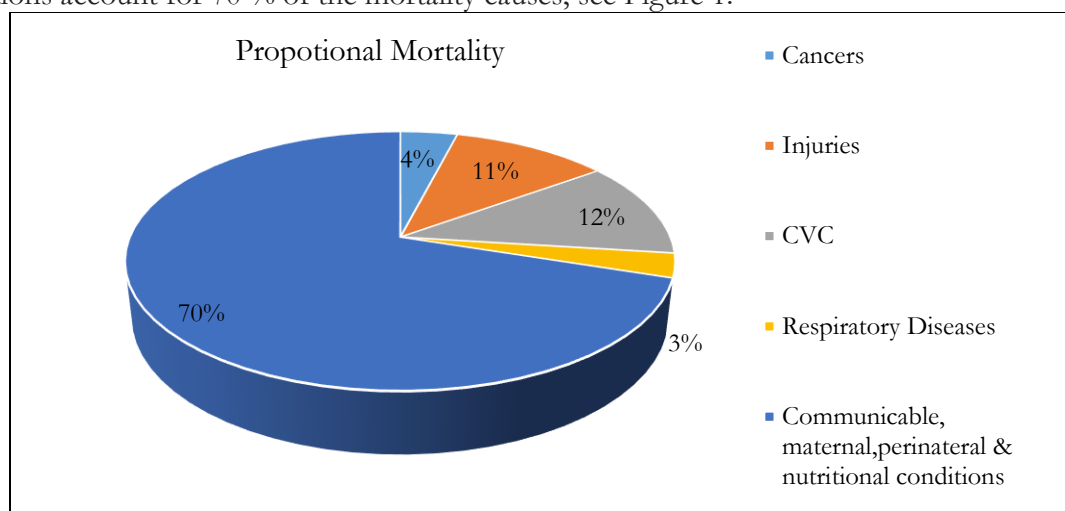


Figure 1. Proportional mortality as % of total deaths, all ages. WHO (2011) NCD Country Profiles Uganda 2011

Non-communicable diseases, account for 25 %. The infectious diseases in Uganda, which includes malaria, tuberculosis (TB) and HIV/AIDS, account for 54 % of the total burden of disease (MoH 2010a). Except HIV/AIDS, the indicators of the prevalence of infectious diseases are improving. This is the area where the donor-funded programmes are focused and where health education, public resources and policies are directed. Government implements national programmes, funded by donors, and results are followed up in WHO's reports on Malaria, TB and HIV/AIDS. Research programmes exist in cooperation with foreign institutions. However, continued innovation, improvement and new partnerships are still needed in the area, in particular in awareness-raising and prevention, management in health care system and supply chains, for smart and affordable supplies and equipment, and for human resources both in numbers and in training.

Infection Control is generally a problem in the health care facilities in Uganda. The Ministry of Health regards Infection Control to be important and the Health Sector Strategy and Investment Plan ensures that the issue is addressed in 2012/2013. Infection control standards will be developed, disseminated and implemented in all hospitals and Health Centre IVs.

Summary of the Health Sector in Uganda

- 44% of all health facilities are privately owned and the private sector provide for more than 50 % of the output, i.e. the services delivered.
- Primary care provided by public facilities is decentralized to district level which implies that decisions regarding General Hospitals and Health Centers are taken locally.
- Public health care is underfinanced and government contribution to health is low while out-of-pocket-spending is high.
- Private insurances contribute with less than 1% of the Total Health Expenditure, but the number of Ugandans with private insurances is increasing with a growing formal labour market.
- 60% of the imported medicines and supplies are procured through the private sector, donor's procurement agencies or directly by Ministry of Health. 40% is procured by the governmental National Medical Stores.
- Resources and human resources within health care are concentrated to the Central region. More than 70% of the medical doctors, dentists and pharmacists work in the Central region, while only hosting 27% of the population.
- Private sector is also concentrated to the Central region. 70% of the private health facilities are located there. Primary care facilities in the rural area are mainly publicly owned or by private-not-for-profit providers.

As most low-income countries, Uganda faces a heavy disease burden due to poverty. The critical health determinants constitute strong risk factors in Uganda. The fertility rate is among the highest in the world, 32.5 % of the population lives without proper latrines, discrimination against women is rife, the average schooling rate is 4.7 years for adults, and urbanization is rapid with growing slums. 39 % of the population in the rural areas lives further than 2 kilometers from a water source. However, in partnership with other nations, international organizations and public and private stakeholders, Uganda will seek to accelerate progress toward a world safe and secure from infectious disease threats and to promote global health security as an international security priority. The focus is on; preventing epidemics, detecting biological threats early, and rapidly responding to disease outbreaks, whether naturally occurring, intentionally produced, or accidentally caused.

In this regard, Good Care Uganda Foundation recognizes the right of everyone to enjoy the highest attainable standard of physical and mental health. Irrespective of where one lives, gender, age or socio-economic status being healthy and having access to quality and effective health care services is of fundamental importance for all people, while at the same time healthy populations are essential for the advancement of human development, well-being and economic growth.

Global Demographic and Epidemiological Changes

Low- and middle-income countries represent 84 percent of the world's population and 93 percent of the disease burden, but only 18 percent of global health spending. Despite significant improvements in general health indicators, vastly advanced medical technologies, and increasing expenditures on health, serious challenges remain in the quest for universal and high-quality health care. Improvement in health indicators appears to have slowed in the 1990s, and at the present pace most regions did not meet the health-related Millennium Development Goals by 2015.

There has been a significant decrease in the share of communicable diseases. However, changes in mortality and morbidity are distributed unevenly throughout low-and middle-income countries. Although the means to control common communicable diseases are available and infection rates of tuberculosis, malaria, cholera, and measles have declined, these diseases remain a major burden to the poorest countries - many in Africa - and to rural and poor populations in several middle-income countries. Special emphasis needs to be placed on the emergence of the HIV/AIDS epidemic, which has brought increased pressure on often fragile health systems. In some high-prevalence environments, more than half of hospital admissions are related to HIV/AIDS¹.

The overlap of the epidemiological transition and the emergence of new threats such as HIV/AIDS exacerbates the pressures on national health systems at a time when public resources in many countries are increasingly stretched. Given the multiple demands on limited public funds, in several countries it appears that reliance on the public sector alone to address health challenges may not be a viable or sustainable option in the long term.

Expanding Role of the Private Sector

Given the capacity constraints of the public sector in meeting health care demand, many governments are beginning to turn to the private sector and for reliance on market instruments to enhance the efficiency and quality of health care provision². One of the earliest areas of private sector participation (in the public sector) was the subcontracting of auxiliary services such as laundry and cleaning. This was followed by subcontracting of more clinically oriented services and departments, such as radiology and pharmacy³.

More recently, health care reforms in various countries have sought to increase the role of the private sector as the provider (although not necessarily the financier) of comprehensive care, to complement the activities of the public sector. The general argument is that these reforms can retain equity in the financing of health care yet promote efficiency by introducing and encouraging competition. High-

¹ In Uganda, for instance, 54.3 percent of hospital admissions are due to HIV/AIDS-related illnesses. U.S. Agency for International Development, Bureau for Global Health, HIV/AIDS Country Profile: Uganda (Washington, DC: USAID, 2004), http://www.synergyaids.com/Summaries_PDF/UgandaprofileFeb2004FINAL.pdf.

² Until the twentieth century, most people paid independent health providers directly for their services. Thus, in most countries, private provision predates the development of publicly funded health care services.

³ International Finance Corporation, Investing in Private Health Care: Strategic Directions for IFC (Washington, DC: IFC, 2003).

performing health systems are typically characterized by mixed delivery of services, with private providers playing an integral role.

Table 1.1. Private Health Expenditure as a Share of Total Health Expenditure, 2002

Region	Percentage of total
Low-income	72.2
Middle-income	50.6
Lower-middle-income	54.6
Upper-middle-income	42.4
Low- and middle-income	53.8
East Asia and Pacific	62.2
Europe and Central Asia	34.4
Latin America and Caribbean	52.2
Middle East and North Africa	42.9
South Asia	76
Sub-Saharan Africa	59.5
High-income	36.7

Source: World Bank, World Development Indicators 2005 (Washington, DC: World Bank, 2005).

Today, the private sector increasingly serves as a partner with public health systems, particularly in the provision of clinical health care. In many low-income countries over 50 percent of health care provision and financing is now private (table 1.1). The increase in private sector participation in health care services, especially in developing countries where public sector capacity is constrained, makes Good Care international teaching hospital a viable and a timely project.

Global Epidemiology Overlap

Just as economic, political, social, and cultural relationships are emerging throughout the world, patterns of morbidity and mortality are also undergoing complex patterns of epidemiologic transition that vary among and within countries (Omran, 1996). But the particular path that epidemiological transition takes in a given case is closely related to social, economic, political, and cultural systems and processes that are, in turn, being redefined by globalization. Of particular relevance are the interrelationships among poverty, inequality, and health (Leon 2001 and Braveman 2003). These interrelationships are particularly germane in contemporary Uganda and throughout Africa.

The basic model of epidemiologic transition posits that mostly because of enhanced scientific understanding leading to the germ theory of disease and systematic improvements in sanitation infrastructure, four groups of what Omran called "traditional" health problems began to recede in industrialized countries in the 19th and early 20th centuries: (1) communicable diseases, including respiratory illnesses and tuberculosis, diarrheal diseases, vaccine preventable diseases, and vector-borne diseases such as malaria and dengue; (2) poor health outcomes in mothers and infants related to reproduction and childbirth; (3) nutritional deficiencies; and (4) illnesses related to poor sanitation, especially water-borne pathogens in public water supplies and deficient sewage disposal. These problems are exacerbated by health care systems that lack the resources and capacity to attend to more than the most basic health problems. According to the basic model, the "traditional" conditions are gradually supplanted by a different set of "modern" health problems: (1) cardiovascular diseases, (2) malignancies due to cancer, (3) stress and other mental disorders, (4) diseases related to aging (such as Alzheimer's disease), (5) accidents (both traffic and occupational), and (6) emerging and re-emerging

diseases and conditions, including overweight and obesity, diabetes, and hypertension. These conditions are exacerbated by health care delivery that is inadequate because of poor coverage, urban bias, limited outreach, poorly trained health care professionals, overly centralized operation, and an emphasis on curative rather than preventive care.

Evolving health profiles in industrialized and underdeveloped countries suggest that the epidemiologic transition involves more than the gradual replacement of one set of diseases with another and that the epidemiologic transition can be more accurately described as a double epidemiologic overlap, one internal and one global (Bacallao, 2000). The first overlap is represented by the continued high prevalence rates of both "traditional" and "modern" diseases in countries like Uganda. But the burden of disease (which includes mortality and morbidity) is not uniformly distributed within the population. Rather, differences within countries can be attributed to inequalities related to socioeconomic factors such as income, occupation, ethnicity, level of education, and rural/urban residence. The second overlap comes about because as a product of globalization, the health profile of different groups of residents in underdeveloped and industrialized countries overlap. In both cases, the wealthy experience relatively lower rates of disease because of access to globalized health services (within or outside their own borders), information, healthy diets, and protection from environmental and occupational risks. At the same time, the rural and urban poor in both cases experience higher rates of both traditional communicable and infectious diseases (many of which are related to poor sanitary conditions, unhealthy housing, and ineffective control of vectors) and modern diseases, which are exacerbated by limited access to health care and failed health care policies.

The second overlap is a product of increasing integration into global markets, for example, in the production and processing of export-oriented agricultural commodities (much of it involving non-traditional products like cut flowers, tropical fruit, and temperate vegetables). This process connects the rural and urban poor in Uganda (whose own consumption consists of increasingly more processed foods of poor nutritional quality) with new forms participation in global supermarkets by residents of the industrialized countries (McMichael M, 1994). But consumption patterns vary within populations: those typical of the tiny affluent elite in Uganda are similar to those of their northern counterparts—but in a lagged fashion. Among the imported consumer items available at high cost in elite supermarkets in urban Uganda are imported processed, canned, and frozen items. These items represent a unique form of prestigious consumption because they reflect the same kind of expensive, flexible, and niche-driven consumption in industrialized countries. Moreover, among the Ugandan elites, health behaviors and health status now approximate patterns found in the industrialized countries. This is not a coincidence, because these segments have the same level of health care, which is secured (and often paid for through private insurance) either in local, private clinics and hospitals that are indistinguishable from those in industrialized nations, or in facilities actually located in the industrialized countries, especially in the southern United States.

Market Demographic Analysis

Health care services in Uganda are delivered by both public sector (government) and private entities that include private-not-for-profit (PNFP) and private-for-profit (PFP) organisations as well as complementary health service providers such as the traditional medicine providers. The public health facilities make up 55% of the total health care facilities in Uganda, while PNFP and PFP make up 16% and 29%, respectively. Nearly all (90%) of the private-for-profit facilities are located in one district – Kampala district which also hosts Uganda’s capital city.

In Uganda’s health service delivery structure, the national level stewardship functions are performed by the Ministry of Health (MoH). In the public sector, health services are delivered through the national referral hospitals, regional referral hospitals and district health services. The national referral hospitals are autonomous and have a target population of 10 million people. They provide referral services for the regional and general hospitals across the country. National referral hospitals are expected to offer highly specialized medical and surgical services, advanced diagnostic services, advanced research and training for medical doctors, nurses and paramedical officers such as orthopaedic officers and laboratory technologists.

Regional hospitals are located in each of the 14 health zones and have a target population of 2 million people. They provide referral services and supportive supervision to the district level hospitals within each health zone. Services expected at the regional hospitals include 34 specialized medical and surgical care, basic research, and training of nurses and paramedical officers. The district-level health service includes the district health management team, general hospitals and an array of primary care facilities (also known as health centers (HCs)). The district health service is under a District Health Officer who is appointed by and accountable to the district local government. Because the decentralized system of governance adopted in 1995 devolved most functions and powers to districts, the district health services are administratively independent of regional hospitals and report directly to the MoH. A general hospital in Uganda has a target population of 500,000 people. It is expected to provide preventive and general medical and surgical services, with limited specialist services.

Uganda has three levels of primary care facilities: level II (lower-level primary care facility), III (mid-level primary care facility) and IV (higher-level primary care facility) all focusing mainly on prevention and treatment of infectious illnesses. A level II primary care facility is the lowest level of formal health care delivery. It is mostly staffed by nurse aides and qualified nurses. A level III primary care facility has provisions for basic laboratory services, maternity care, and inpatient care (often for onward referral). It is usually staffed by nurse aides, qualified nurses and clinical officers (physician assistants). A level IV primary care facility is the level immediately below a district hospital and has a target population of 100,000 people. It has provisions for an operating theatre, in-patient and laboratory services, and is a referral facility for 20-30 level II and III primary care facilities under its jurisdiction. A level IV primary care facility is staffed by nurse aides, qualified nurses, clinical officers and doctors, although the majority does not have doctors.

Uganda is in the process of creating a community hospital which is a level between a general hospital and a level IV primary care facility. A community hospital is expected to provide services similar to those provided at general hospitals but closer to the communities.

The organizational structure of the private health services in Uganda is not as elaborate as that of the public sector. Their level or amount of services they provide is also often not as clear as it is in the public sector. Private-not-for-profit health facilities (often faith-based) work very closely with the public sector and are heavily subsidized by the government. Although they are autonomous, they are often supervised by and report to the district health services.

Uganda's Population

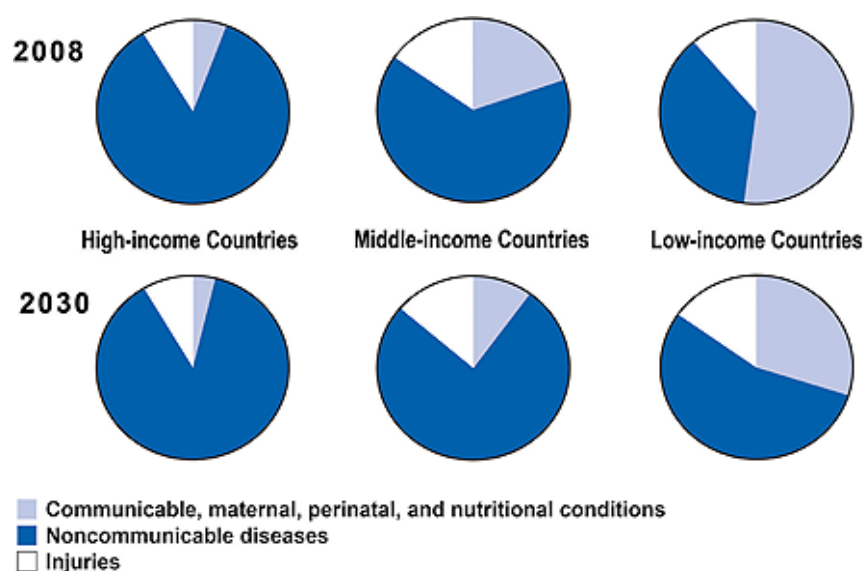
According to population and housing census (UBOS 2014), Uganda had close to 35 million people. The population in the districts ranged from 53,406 to 2,007,700; with a median of 243,876. On average, a district in Uganda had 308,467 people.

Global Disease Burden

The transition from high to low mortality and fertility that accompanied socioeconomic development has also meant a shift in the leading causes of disease and death. Demographers and epidemiologists describe this shift as part of an “epidemiologic transition” characterized by the waning of infectious and acute diseases and the emerging importance of chronic and degenerative diseases. High death rates from infectious diseases are commonly associated with the poverty, poor diets, and limited infrastructure found in developing countries. Although many developing countries still experience high child mortality from infectious and parasitic diseases, one of the major epidemiologic trends of the current century is the rise of chronic and degenerative diseases in countries throughout the world— regardless of income level.

Evidence from the multicountry Global Burden of Disease project and other international epidemiologic research shows that health problems associated with wealthy and aged populations affect a wide and expanding swath of world population. Over the next 10 to 15 years, people in every world region will suffer more death and disability from such non-communicable diseases as heart disease, cancer, and diabetes than from infectious and parasitic diseases. The myth that non-communicable diseases affect mainly affluent and aged populations was dispelled by the project, which combines information about mortality and morbidity from every world region to assess the total health burden from specific diseases. The burden is measured by estimating the loss of healthy years of life due to a specific cause based on detailed epidemiological information. In 2008, non-communicable diseases accounted for an estimated 86 percent of the burden of disease in high-income countries, 65 percent in middle-income countries, and a surprising 37 percent in low-income countries.

Figure 3. The Increasing Burden of Chronic Non-communicable Diseases: 2008 and 2030



By 2030, noncommunicable diseases are projected to account for more than one-half of the disease burden in low-income countries and more than three-fourths in middle-income countries. Infectious and parasitic diseases will account for 30 percent and 10 percent, respectively, in low- and middle-income countries (Figure 3). Among the 60-and-over population, noncommunicable diseases already account for more than 87 percent of the burden in low-, middle-, and high-income countries.

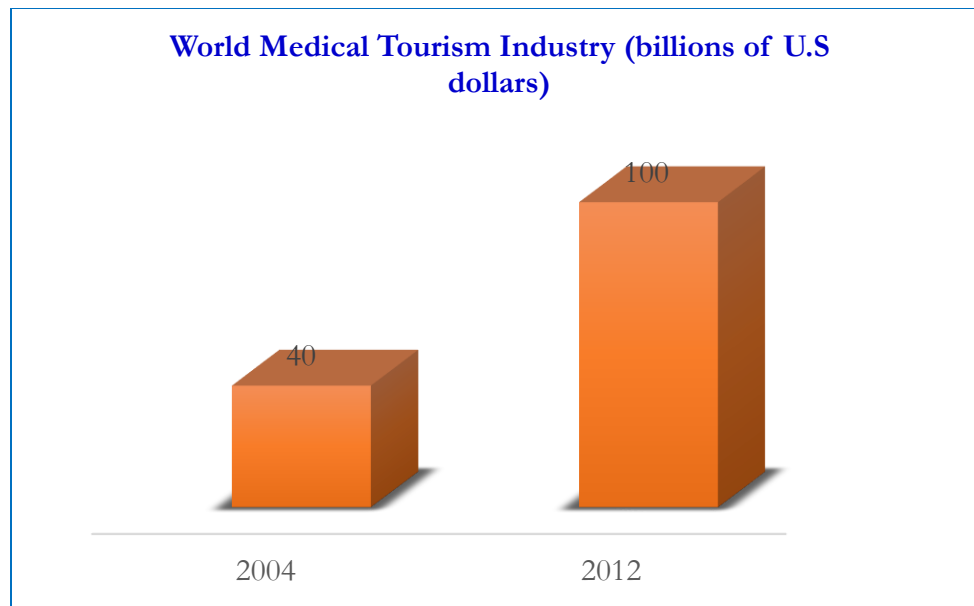
But the continuing health threats from communicable diseases for older people cannot be dismissed, either. Older people account for a growing share of the infectious disease burden in low-income countries. Infectious disease programs, including those for HIV/AIDS, often neglect older people and ignore the potential effects of population aging. Yet, antiretroviral therapy is enabling more people with HIV/AIDS to survive to older ages. And, there is growing evidence that older people are particularly susceptible to infectious diseases for a variety of reasons, including immunosenescence (the progressive deterioration of immune function with age) and frailty. Older people already suffering from one chronic or infectious disease are especially vulnerable to additional infectious diseases. For example, type 2 diabetes and tuberculosis are well-known “comorbid risk factors” that have serious health consequences for older people.

Global and Regional Competitor Analysis

Global competition is emerging in the health care industry. Wealthy patients from developing countries have long traveled to developed countries for high quality medical care. Now, growing numbers of patients from developed countries are traveling for medical reasons to regions once characterized as “third world.” Many of these “medical tourists” are not wealthy but are seeking high quality medical care at affordable prices. To meet the demand, entrepreneurs are building technologically advanced facilities outside Africa, using foreign and domestic capital. They are hiring physicians, technicians and nurses trained to global standards, and where qualified personnel are not available locally, they are recruiting expatriates.

Medical tourism is growing and diversifying. Estimates vary, but McKinsey & Company and the Confederation of Indian Industry put gross medical tourism revenues at more than \$40 billion

worldwide in 2004⁴. Others estimate the worldwide revenue at about \$60 billion in 2006⁵. McKinsey & Company projects the total will rise to \$100 billion by 2012⁶.



Source: McKinsey & Company and the Confederation of Indian Industry.

Hospital Service Competitor and Demand

Good Care underscores the fact that Internationally-known hospitals, such as Bumrungrad in Thailand and Apollo in India, report revenue growth of about 20 percent to 25 percent annually⁷. McKinsey & Company estimates that Indian medical tourism alone will grow to \$2.3 billion by 2012⁸. Singapore hopes to treat 1 million foreign patients that year.⁶ Reports on the number of patients traveling abroad for health care over the past few years are scattered, but all tell the same story. In 2005:

- Approximately 250,000 foreign patients sought care in Singapore, and 500,000 traveled to India for medical care⁹.
- Thailand treated as many as 1 million foreign patients¹⁰.
- The foreign patients treated in these countries included some of the 500,000 Americans who traveled abroad for medical treatment that year¹¹.

⁴ McKinsey & Company and the Confederation of Indian Industry, cited in Laura Moser, "The Medical Tourist," Slate, December 6, 2005, and Bruce Stokes, "Bedside India," National Journal, May 5, 2007.

⁵ See Dudley Althaus, "More Americans Seeking Foreign Health Care Services," Houston Chronicle, September 4, 2007.

⁶ McKinsey & Company and the Confederation of Indian Industry, cited in Laura Moser, "The Medical Tourist," and Bruce Stokes, "Bedside India."

⁷ Mark Roth, "\$12 for a Half Day of Massage for Back Pain," Pittsburgh Post-Gazette, September 10, 2006.

⁸ McKinsey and the Confederation of Indian Industry, Press Trust of India, 2005.

⁹ "Medical Tourism Growing Worldwide," U Daily (University of Delaware), July 25, 2005. Available at <http://www.udel.edu/PR/UDaily/2005/mar/tourism072505.html>. Accessed May 22, 2016.

¹⁰ Malathy Iyer, "India Out to Heal the World," Times of India, October 26, 2016

¹¹ Jessica Fraser, "Employers Increasingly Tapping Medical Tourism for Cost Savings," News Target, November 6, 2016.

Residents of countries with national health insurance, including Canada and the United Kingdom, often travel to other countries, including the United States, because they lack timely access to elective procedures due to rationing. In Canada, physicians cannot privately treat their fellow Canadians if those treatments are covered by the government health plan (Medicare). Also, national health systems sometimes deny treatment to particular patients (for example, because of age or physical condition), and some treatments may not be available to any patients (for example, because of cost)¹².

However, for most medical tourists, including those from the United States, the reason for travel is financial. The effect of financial incentives on Americans' willingness to travel for medical care is shown by a recent nationwide survey.

- Almost no one would travel a great distance to save \$200 or less.
- Fewer than 10 percent would travel to save \$500 to \$1,000.
- About one-quarter of uninsured people, but only 10 percent of those with health insurance, would travel abroad for care if the savings amounted to \$1,000 to \$2,400.
- For savings exceeding \$10,000 about 38 percent of the uninsured and one-quarter of those with insurance would travel abroad for care¹³.

Some American medical tourists are seeking lower prices for treatments not covered by insurance (such as cosmetic surgery and weight loss surgery). Uninsured patients paying the cost out of their own pocket travel because American hospitals often charge cash-paying, uninsured individuals inflated "list" prices, which can be much higher than government or private insurers have to pay¹⁴.

Also, a small but growing number of insurers are creating health plans that encourage enrollees to shop for better prices among approved vendors in other countries and allow them to share in the savings. There are "Medical tourists include residents of countries with national health insurance, where health care is rationed." For example, if a procedure cost \$4,000 less in another country, a patient required to pay 20 percent of the cost (through a copayment) would save \$800 out of pocket.

¹² Who Can Have Fertility Treatment?" BBC Health, undated. Available at http://www.bbc.co.uk/health/fertility/features_who-can.shtml. Accessed April 30, 2016. Also see "Cost of Fertility Treatment," 2006. Available at http://www.gettingpregnant.co.uk/cost_information.html. Accessed April 30, 2016

¹³ Arnold Milstein and Mark Smith, "Will the Surgical World Become Flat?" *Health Affairs*, Vol. 26, No. 1, January/February 2007, pages 137-41

¹⁴ Arnold Milstein and Mark Smith, "America's New Refugees — Seeking Affordable Surgery Offshore," *New England Journal of Medicine*, Vol. 355, No. 16, October 19, 2006

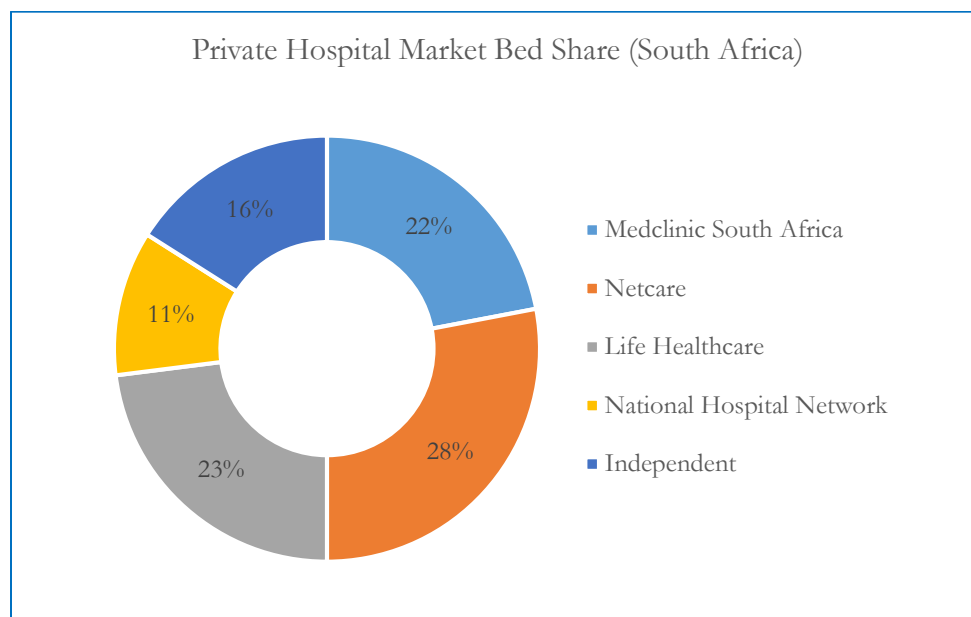
Market Overview

South Africa

The global healthcare market is facing both challenges and opportunities. Spend is forecast to grow by 5.2% per annum to US\$9.3 trillion by 2018¹⁵, with growing populations and rising incomes increasing demand for healthcare services, whilst increasing longevity and chronic diseases are creating pressure on funding.

Cost is the biggest healthcare issue facing most countries as they try to align supply to demand. Targeted therapies, personalized medicine, genetic-based medicine, medical devices and other technology advances are delivering significant advances in patient care but driving up costs at the same time. Healthcare providers are scaling up to address these opportunities and challenges, with consolidation becoming a key feature of the market to ensure access to technology and attract resources in an increasingly competitive market for highly qualified staff – especially doctors and nurses.

The global healthcare regulatory landscape is complex and evolving. The primary driver is patient health and safety, with government scrutiny varying widely from country to country. Patients are becoming more cost conscious and involved in healthcare decisions, with concerns about data security rising.



Private health expenditure covers approximately 16.3% of the national population, representing around 4.2% of GDP. Around 8,785,048 people were insured by medical schemes in 2015¹⁶.

¹⁵ Source: Deloitte 2015 Global healthcare outlook report

¹⁶ Source: Council for Medical Schemes Quarterly Report for the period ending 30 September 2015

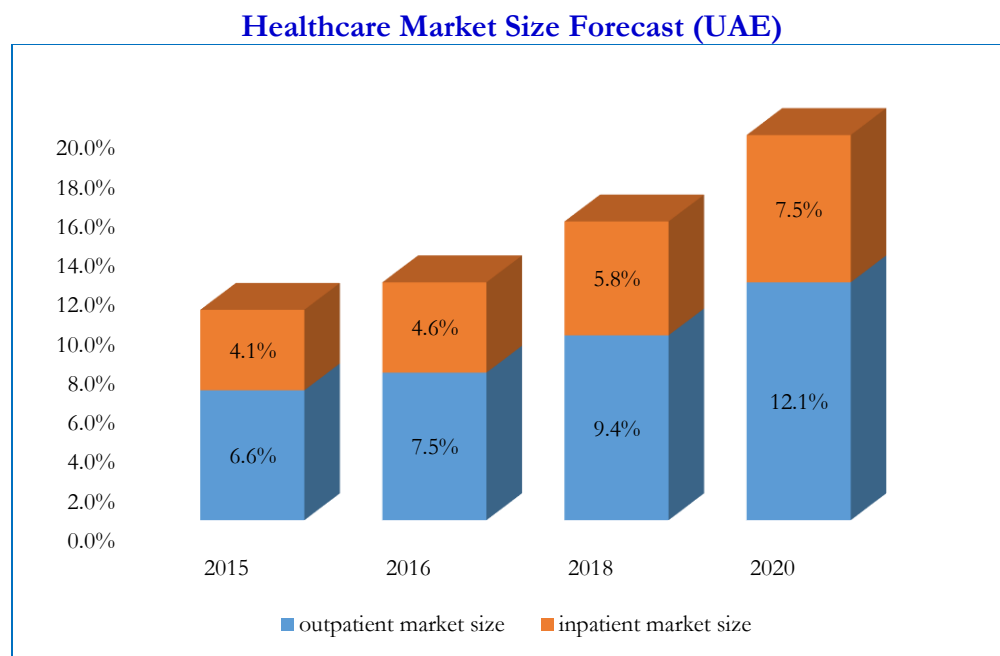
Switzerland

In 2014 the Swiss healthcare market comprised 289 registered hospitals with about 1.4 million hospital visits and an average length of stay of nine days. About 40% of hospitals are in the private sector, providing about one-fifth of hospital services and employing approximately 20 000 people. Switzerland spends around 11% of its GDP on healthcare costs, lying at second place in the ranking of OECD countries, with costs of healthcare rising to CHF71 billion in 2014. Approximately 32% of this is funded by the private sector.

SWOT Analysis

UAE

The market for private healthcare in the UAE reached US\$10.7bn in 2015, with predicted growth rates of 12.7% CAGR to 2020 and the number of beds forecast to rise from 12 007 to 13 881 over the same period.



Estimated health worker deficit by region and income

The actions required to have a fit-for-purpose and fit-to-practise health workforce in the 21st century amount collectively to a paradigm shift across several dimensions of HRH governance, financing, education, deployment and management. Applying a labour market framework to the health workforce discourse helps to understand the interconnectedness of these elements and to identify relevant policy levers.

Region	Demand based gap			Needs-based gap (3 .45/1000 threshold)		
	2012	2030	AEGR in supply	2012	2030	AEGR in supply
Europe & Central Asia	1,628,263	4,485,682	2.37%	0	0	NA
Latin America & Caribbean	629,735	2,240,624	6.01%	249,842	427,429	3.12%
Middle East & North Africa	311,899	1,814,130	5.05%	268,459	439,869	3.93%
North America	672,192	3,713,399	3.51%	0	0	NA
South Asia	398,190	3,432,044	3.87%	2,291,638	3,481,713	3.91%
Sub-Saharan Africa	466,113	2,356,154	6.68%	2,103,770	3,757,522	10.21%
Income						
Lower middle	2 251,233	10,658,754	5.63%	3,091,924	5,013,848	4.20%
Upper middle	9,929,267	24,871,142	8.52%	1,044,690	1,583,102	1.51%
High	2,243,762	8,723,184	2.97%	54,965	89,536	3.37%
World	14,612,068	45,371,281	5 .64%	6,400,362	10,124,528	3 .86%

Medical Staff and Workforce Availability

In May 2016, the sixty-ninth World Health Assembly (69th WHA) endorsed the Global Strategy on Human Resources for Health: Workforce 2030 and adopted a resolution (WHA69.19) in support of its implementation. The GSHRH has an overall goal of improving health and socioeconomic development outcomes by ensuring universal accessibility, acceptability and quality of the health workforce through adequate investments and the implementation of effective policies at national, regional and global levels. The vision is to accelerate progress towards universal health coverage and the UN Sustainable Development Goals. To achieve this, the GSHRH presents four objectives: 1) optimize the existing workforce; 2) anticipate future workforce requirements; 3) strengthen individual and institutional capacity; and 4) strengthen the data, evidence and knowledge.

The GSHRH resolution (WHA69.19) urges Member States to consolidate a core set of HRH data with annual reporting to the Global Health Observatory, as well as progressive implementation of NHWA to support national policy and planning and the GSHRH's monitoring and accountability framework. The aim of NHWA is to create a harmonized, integrated approach for annual and timely collection of health workforce information, improve the information architecture and interoperability, and define core indicators in support of workforce policy and planning and global monitoring. The concept was first presented at the Measurement and Accountability for Results in Health Summit (June 2015) and was identified as one of the priority action areas for strengthening country data and accountability systems. It was endorsed as part of the Roadmap for Health Measurement and Accountability and is currently part of the Health Data Collaborative – an initiative which aims for improved partner collaboration and joint action aligned around country health priorities. The implementation of NHWA is a progressive agenda in the period 2016 – 2030 and beyond.

Health Care Policy and Its Impact on The Project

Health Care Policy

The development of National Health Policy (NHP) is informed by the National Development Plan (NDP) for the period 2010/11-2014/15, the 1995 Constitution of the Republic of Uganda and the new global dynamics. The NDP places emphasis on investing in the promotion of people's health and nutrition which constitute a fundamental human right for all people. Constitutionally, the Government of Uganda (GoU) has an obligation to provide basic health services to its people and to promote proper nutrition and healthy lifestyles. The 1995 Constitution of the Republic of Uganda (as amended) further provides for all people in Uganda to enjoy equal rights and opportunities, have access to health services, clean and safe water and education, among many other things. Investing in the promotion of people's health and nutrition ensure that they remain productive and contribute to national development.

The NHP was developed through a participatory process involving twelve technical working groups (TWGs) whose membership was drawn from the Ministry of Health (MoH), relevant government ministries, Health Development Partners (HDPs), the private sector, Civil Society Organisations (CSOs) and local governments. Their task was to review the NHP I adopted in 1999, determine elements of the policy which were still appropriate and needed to be carried forward in the new policy and identify new and emerging issues that required policy guidance. The focus of NHP is on health promotion, disease prevention, early diagnosis and treatment of disease. It specifically prioritises the effective delivery of the Uganda National Minimum Health Care Package (UNMHCP), more efficient use of available health resources, strengthening public and private partnerships for health and strengthening of health systems. In the NHP and in line with global agendas, emphasis is placed on attempts to achieve universal access to a minimum health care package as well as equitable and sustainable financing mechanisms.

Organisation of the Health Sector

Both the public and private sectors are playing an important role in supporting communities to improve their health. Within the public sector, there exists multiple players namely ministries of Health, Local Government, Defence, Internal Affairs, Gender, Labour and Social Development which provide services; other ministries and departments also play a role in other aspects of health. At national level, the functions of the Ministry of Health (MoH) include resource mobilisation and budgeting; policy formulation and policy dialogue with HDPs, strategic planning, regulation, advising other ministries on health matters, setting standards and quality assurance, capacity development and technical support, provision of nationally coordinated services such as epidemic control, co-ordination of health research and monitoring and evaluation of the overall sector performance. Several functions have been delegated to national autonomous institutions, including some specialised clinical support functions (Uganda Blood Transfusion Service (UBTS), National Medical Stores and National Public Health Laboratories) and regulatory functions (the professional councils, the National Drug Authority and other regulatory bodies). Research activities are conducted by several research institutions and coordinated by the autonomous Uganda National Health Research Organisation (UNHRO).

Health Service Delivery

Health services are provided by the public and private sub-sector with each sub-sector covering about 50% of the reported outputs. The UNMHCP has been developed for all levels of the health system for both public and private sectors and service delivery is based on this package. The government of Uganda health system consists of the district health system (communities, Village Health Teams (VHTs or health centres: HCs I, II, III and IV and general hospitals, Regional Referral Hospitals (RRH) and National 52nd National Health Policy July 2010 Referral Hospitals (NRH). The RRH and NRH are semi-autonomous institutions. District health services are managed by local governments. The district health system is further divided into Health Sub-Districts (HSDs). Each HSD is supposed to have a referral facility being either a HC IV or a general hospital. Currently, 28% of the existing 154 HC IVs are fully operational (MoH, 2008c).

In general, district management capacity is still being built. Leadership skills, health services management and specialist skills are inadequate at all levels. High levels of attrition tend to curtail capacity development initiatives. While Community Health Departments (CHDs) exist at RRHs to support districts, systems to carry out this function are not yet fully operational. The increase in number of districts has placed more supervisory and monitoring responsibilities on MoH.

The increase in number of districts necessitates a re-examination of the standard service delivery model in the districts and supervision and support mechanisms. Although 72% of households in Uganda live within five kilometres from a health facility (public or PNFP), utilisation is limited due to poor infrastructure, inadequate medicines and other health supplies, the shortage and low motivation of human resource. The private health system comprises of the Private-Not-for-Profit organisations (PNFPs), Private Health Practitioners (PHPs) and the Traditional and Complementary Medicine Practitioners (TCMPs). Unlike government facilities, the private health facilities charge user fees which limits access to care. PNFPs are subsidised by Government and other donors. Seventy five percent of the facility-based PNFP organisations exist under four umbrella organisations: the Uganda Catholic Medical Bureau (UCMB), the Uganda Protestant Medical Bureau (UPMB), the Uganda Orthodox Medical Bureau (UOMB) and the Uganda Muslim Medical Bureau (UMMB). In the field of TCMPs, there is recent emergence of non-indigenous traditional or complimentary practitioners such as the practitioners of Chinese and Ayurvedic medicine.

Supervision, Monitoring and Evaluation

The Ministry of Health and other central level departments/agencies have the mandate to supervise the health sector. In line with the decentralization framework, district health offices have the responsibility of supervising the district health system. Technical supervision is provided at all levels of care with each level supervising the level below. Monitoring relies on the Health Management Information System (HMIS) and compilation of quarterly and annual reports which are verified during quarterly monitoring visits and reviewed by Joint Review Missions, the National Health Assembly and the Uganda Parliament.

Periodic evaluations of the sector's performance such as the mid-term review of the HSSP are also carried out. Health professionals' councils and the National Drug Authority are autonomous bodies charged with ensuring maintenance of professional standards and safety of pharmaceuticals, equipment and procedures. Challenges exist in terms of inadequate human, logistical and financial resources for supervision, monitoring and evaluation. Other additional challenges are limited mechanisms that incorporate private sub-sector performance into overall sector performance and lack

of coordination of community/civil society organisations and monitoring with mainstream health sector.

Legal and Regulatory Framework

MoH coordinates the drafting of bills to promote and regulate health services. Government has put in place policy analysis units to support sectors in this area. Various bills such as the Pharmacy Profession and Practice Bill, Uganda Medicines Control Authority Bill, Food and Nutrition Bill, Food and Drug Act, National Health Insurance Bill and the Traditional and Complementary Medicines Bill are at different stages of development. Gaps also exist in the legal framework for the adaptation of new health technologies and practices. The process of reviewing legislation and policies has been slow. Financial and human resources allocated for these processes have been inadequate. Structures mandated to enforce the health regulatory framework such as the Health Professional Councils and the National Drug Authority have limited capacity. Enforcement of legislation and policies remains a major challenge.

Health Resources

The health sector is a labour intensive sector and availability of adequate human resources for health is central in the achievement of the objectives. In November 2008 51% of approved positions at national level in the public sector were filled. There were however, variations among districts with some districts like Pader in northern Uganda having only 35% of its posts filled (MoH 2008c). Shortage of critical staff especially midwives, doctors, nutritionists, anesthetists, pharmacists, pharmacy assistants and laboratory staff has greatly compromised the delivery of quality health services. Reasons for the many vacancies include insufficient training capacity, unattractive remuneration and retention of health workers with the right skills. Attrition in PNFP organisations is high as health workers have in the past few years increasingly joined the public sector following government's decision to increase salaries and incentives for civil servants (MoH, 2008b). Migration of health workers is occurring at alarming rate due to more attractive salaries and opportunities abroad. An incentive scheme for human resource in hard-to-reach areas was initiated but sustainability remains a challenge. There are still weaknesses in leadership and management of human resources at all levels of the health system, poor and slow recruitment practices and poor distribution of health workers.

Medicines and Health Supplies

On average 28% of the health facilities in Uganda have a constant supply of medicines and health supplies throughout the year (MoH 2008b). Inadequate financial and human resources, capital investment and management issues have resulted in the public sector being unable to fulfil its mandate of providing medicines to meet the requirements of universal access to health care. Only 30% of the essential medicines and health supplies (EMHS) required for the basic package are provided for in the framework for medium expenditure. This has increased dependency on the private sector. When referred to a private facility with a prescription, patients often find that medicines are not affordable. Global initiatives provide the bulk of resources needed for malaria, HIV/AIDS, tuberculosis, vaccines and reproductive health commodities. For example, in 2006/2007, contribution from global initiatives was US\$2.39 per capita out of the US\$4.06 per capita spent. Weaknesses in supply chain management such as poor quantification, delays in procurement, inappropriate and late deliveries, late orders from facilities and poor record keeping contribute to shortage and wastage of medicines in the public sector. Shortage of raw materials for assistive devices makes them unaffordable to people with disabilities (PWDs). The private sector in this area is fragmented and comprises of dispensing hospitals and clinics, retail pharmacies and both legal and illegal drug stores. There is an emerging pharmaceutical industry in the country but with limited production. As a result, approximately 90% of all medicines

are imported and close to 95% of these are generic products. The challenge of counterfeit products on the market is becoming an increasing concern.

Health Infrastructure

The number of health facilities in the public sector and the PNFPs has grown from 1,979 in 2004 to 2,301 in 2010. However, inequity exists in the distribution of health facilities. There is a shortage of basic equipment in health facilities. Most facilities and equipment are in a state of disrepair. Inadequate transport is a major limitation especially in newly created districts. Rehabilitation of buildings and maintenance of medical equipment is not regularly done. Medical waste disposal is a major challenge in most health facilities. Shortage of basic medical equipment, accommodation of staff, ICT, and transportation remain a major challenge.

Health Financing and Sustainability

Not less than 9% of household expenditure is spent on out-of-pocket health expenditure. Studies have shown that 4.8% of households in Uganda have health expenditures that are deemed ‘catastrophic’ while 2.3% are pushed into impoverishment because of medical bills (Xu et al, 2007). In the past eight years, 9th National Health Policy July 2010 health expenditure as a proportion of government’s discretionary expenditure has been relatively stable at around 9.6%, thus remaining below the Abuja Declaration target of 15% (MoH 2008b). This does not compare favourably with the per capita requirement for provision of UNMHCP in all facilities which was estimated at US\$41.2 in 2008/2009 rising to US\$47.9 in FY2011/2012 (HSLP Africa Limited, 2008). This trend has important implications for service delivery during the NHP II period as it will imply the need for further priority setting based on the UNMHCP. The current population growth rate will have an escalating effect on the total resource envelope required. The health sector is financed through government revenue and development assistance under the Sector-Wide Approach (SWAp). Internal budget allocations are based on an agreed formula. The private-not-for profit providers receive a subsidy from the consolidated funds but this has stagnated at 20% over the last few years. The private wings of public hospitals, PNFP and Private Health Providers (PHP) are financed through user fees. The dependency on user fees as the main mechanism of financing for the private sector has created equity gaps with the poor unlikely to afford the services.

Priority Areas for The National Health Policy

More than 75% of the overall burden of disease is preventable. The focus for the NHP is on health promotion, disease prevention and early diagnosis and treatment of disease with emphasis on vulnerable populations. Cost-effective and affordable primary, secondary and tertiary preventive services shall constitute the core health interventions in this policy. In addition, the NHP focuses on health systems strengthening, specifically:

1. Strengthening health systems in line with decentralisation through training, mentoring, technical assistance and financial support.
2. Re-conceptualising and organising supervision and monitoring of health systems at all levels in both public and private health sectors and improving the collection and utilisation of data for evidence-based decision making at all levels.
3. Establishing a functional integration within the public and between the public and private sectors in healthcare delivery, training and research.
4. Addressing the human resource crisis and re-defining the institutional framework for training health workers, including the mandate of all actors.
5. Leadership and coordination mechanisms, with the aim of improving the quantity and quality of health workers production shall also be a priority.

The Project Implementation Modalities

The 1000-bed Good Care international teaching hospital will be constructed by Polish companies using 80% of the local labor. The hospital will be located in the central region of Uganda in close proximity to numerous prominent private and public institutions. The location of Good Care international hospital will afford a very central locale with access to a significant population base. Good Care seeks to use the hospital in establishing a regionally competitive specialist international teaching hospital, delivering a wide scope of healthcare services not currently available in Uganda. The scope of services will include specialties in cardiology and cardiothoracic surgery, cancer, women and child health, stem cell and regenerative medicine, neurology and minimally invasive surgery, and have the latest in state-of-the-art medical equipment such as MRI and CT scanners and nuclear medicine. It will ensure that Ugandans have access to world-class care when they need it and where they need it.

The feasibility study considered the commercial viability of the private sector operating Good Care international hospital and concluded that the hospital can deliver a reasonable profit margin.

Service Structure

The table below shows the types of services that will be delivered in Goodcare hospital.

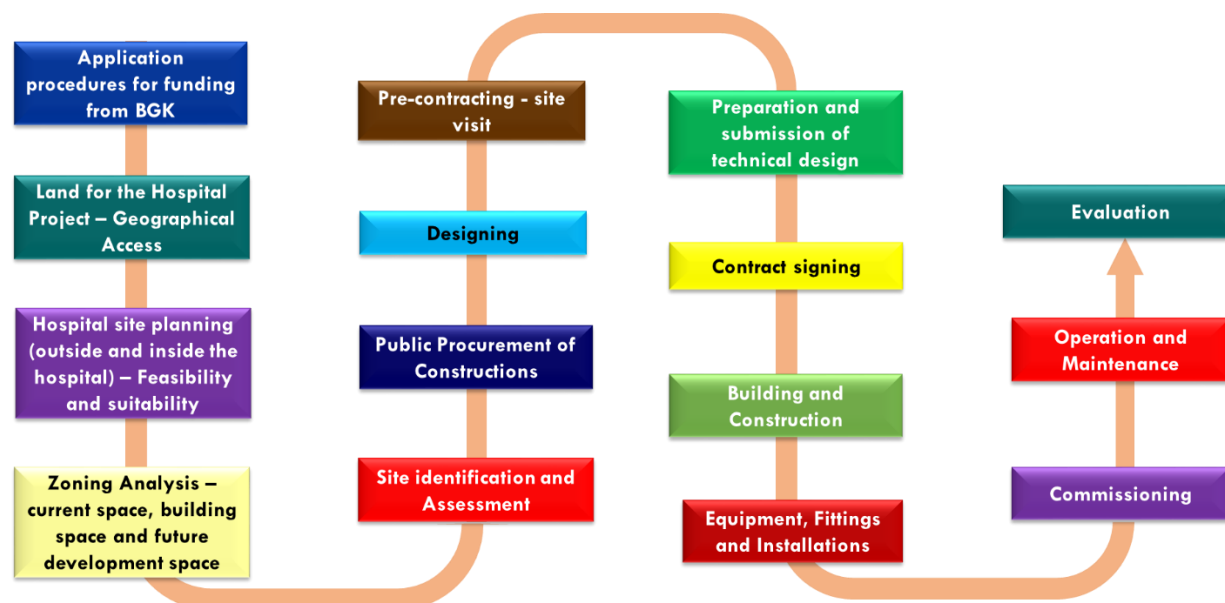
Medicine	# Bed	Surgery	# Bed
Cardiology	65	Cardiothoracic Surgery	80
Respiratory	35	Vascular Surgery	40
Neurology	45	Orthopedics	85
Nephrology	40	Neurosurgery	35
Gastro-intestinal Medicine	60	Urology	35
Endocrinology	15	Dental / Oral and Maxillofacial	40
Oncology – chemotherapy	60	ENT	40
Oncology – radiotherapy	60	Plastic and Reconstructive Surgery	40
Rehabilitation / Geriatrics: Orthopaedics (Combined with Stroke)	60	Intensive Care Unit	35
Coronary Care Unit	50	Gastro-intestinal Surgery & Other Surgery	80
Total	490	Total	510

As part of the feasibility study, we reviewed the existing services available both in Uganda and East Africa. Our research conducted through a household survey suggests that patients are willing to consider healthcare within Uganda provided the quality is assured. The key finding is that there are no comparably high-quality services of international standards currently offered in Uganda, and 17% of all respondents had traveled abroad for tertiary care services (rising to 40% in some middle-income brackets). Taken alongside the epidemiological analysis, this supports the case that demand is sufficient for an additional 1000-bed care hospital with international standards in Uganda.

A 600-household survey captured attitudes toward Uganda’s private health sector. Findings included a high utilization – over 98% - of private medical care across all income levels surveyed. Of those households surveyed, 17% had sought medical treatment abroad. A report compiled from a ministerial retreat which was convened by the Prime Minister’s Office in December 2011 to assess the government’s performance in the previous year, revealed that the government spends at least \$150m (about SHS400B) on treatment of mostly top government officials abroad annually. The key factors such as regular misdiagnosis and a lack of quality facilities currently available in Uganda are responsible for this medical tourism abroad.

Available epidemiological data were analyzed to establish whether sufficient burden of disease exists to support additional beds providing the proposed scope of services. Uganda suffers from very poor health indicators, common across the services envisaged for the Good Care international teaching hospital. The disease incidence data clearly show demand for services will be more than sufficient to support Good Care international teaching hospital.

Project Implementation Flow Chart



Site Assessment

The site will be fully assessed to grant an opinion on the facility’s suitability to serve in its intended capacity as an international teaching hospital. An expert was commissioned to fully document the extent of remediation work required as well as its suitability from a medical planning perspective. As per the MoH requirements, the following assets are included in the site assessment: Goodcare international teaching Hospital, Transformer/Switch Room and Stock Room.

Significant remediation work is required to bring the building to international standards. The site and building survey estimated the total work at 235 billion shilling (US\$ 67.2). In addition, the medical planning assessments showed the hospital would need to be structurally remediated to deliver the intended services. The cost of this work is estimated at 350 million shilling (US\$ 10m) and also

suggests the building's capacity be limited to 1000 beds, meeting international norms regarding beds per square meter.

Key remediation activities were undertaken and are identified within the detailed assessment. The "specification of the preliminary design" agreed with the Polish government is contained in the full site and building report.

There will likely be a number of alternative approaches to each remediation and the precise approach taken by any prospective bidder to deliver international healthcare services will depend on their service delivery model. In the financial analysis we compare the cost scenarios of remediation versus new build, allowing the MoH to make an informed investment decision for making the site operational.

These findings do not fundamentally affect the feasibility of a PNFP partner to operate Good Care international teaching hospital, but rather provide inputs into the financial model determining the financial feasibility.

Accreditation

Options for international accreditation were included. Accreditation aims at achieving the best standards with the available resources, placing emphasis on overall performance and patient safety. Hence the quality of the management team and the quality control is pivotal. The goal of accreditation can be reached within 3-5 years, but it is important to consider the high cost and the effect on service demand due to affordability.

Financial Model Assumptions

The financial model incorporated the following key assumptions:

- Full financial sustainability is maintained
- No burden on public funds for operational costs
- Achieving international standards of operations
- Full professional staffing to accommodate capacity projections and utilization
- Adequate level of equipment and maintenance
- Full cost recovery from patients

Organization and Management Structure and Staffing

Good Care International Hospital will be comprised of three elements that will be effectively integrated to ensure optimal patient care, these are; a well-functioning governing body, and both highly trained and competent medical staff and hospital staff members.

Governing Body

The Board of Trustees or Board of Directors will be the executive body that governs hospital organization. Members will be carefully selected from the community. Although members often have a business or health background, a wide range of skills and talent will be sought to fulfill the requirements of the Board. The Board will be responsible for the establishment of the hospital's by-laws and policies, enforcement of the Public Hospitals Act, according to the Regulations 729 and 965 concerning the management of a hospital. In a nutshell, the Board will be ethically, financially and legally responsible for 'everything' in the day-to-day operations of a hospital.

The Board will organize itself into a variety of committees, including those that encompass financial activities, community relations, planning, quality assurance and personnel. It will also be responsible for organizing medical, dental and midwife staff hospital privileges and duties. Board By-Laws provide details on the organization of the hospital management and administration, an occupational health and safety program, a health surveillance program, avenues for staff participation, organ and tissue donation policies and procedures and a fiscal advisory committee which offers recommendations on monies allocated to the operation of the hospital including staffing. Information regarding the Good Care International Teaching Hospital Administrative By-Law can be found [here](#).

Hospital Administration

The organizational structure of Good Care International Teaching Hospital will generally consist of several layers. The Hospital Administrator or President is at the top of the hierarchy (directly under the Board) followed by a second level of department managers often designated as Vice-Presidents and a third level of managers referred as Directors or Coordinators of various departments throughout the hospital.

The Hospital Administrator, also referred to as the Hospital Director, Executive Director, President, or Chief Executive Officer (CEO), will be responsible for creating a vision and mission statement for the hospital and its day to day management. The Administrator also will ensure that a budget is in place, maintains medical staff relations, reports to the Board of Trustees and carries out the directives set out by the Board of Trustees. The Administrator will ultimately be responsible for the staffing and operations of the hospital.

Second level managers will typically include a minimum of three, including a COO, a CFO and a Director of Nursing who report directly to the Administrator. The Chief Operating Officer (COO) will instead be referred to as the Vice-President of Operations or Assistant Executive Director of Operations. The COO will be responsible for daily the operations of the hospital. The Chief Financial Officer (CFO) will be referred to as the Vice-President of Finance or the Assistant Executive Director of Finance. The CFO will be responsible for the financial management of hospital funds. The Director of Nursing (DON) will instead be given the title Associate Director of Nursing, Vice-President of Nursing, or Assistant Executive Director of Nursing. This person will be in charge of supervising all patient care in the hospital

Staffing

Medical Staff Overview

The medical staff includes physicians (General Practitioners), dentists, psychologists, psychiatrists, podiatrists and specialty/sub-specialty physicians (e.g. Cardiologists). New medical staff are appointed by the Board of Trustees upon recommendation by the Medical Advisory Committee (MAC). The medical staff are organized into departments (e.g. internal medicine, surgery, family practice, obstetrics and gynecology, pediatrics). Clinical departments have a department head who oversees functioning of its department.

Staffing Formula (Standard Value of Nursing Care)

#	Cases/Patients	NCH/pt/day	Prof. to Non-Prof Ratio
1	Surgery	3.4	60:40
2	General Ward	3.5	60:40
3	Pediatric	4.6	70:30
4	Pathologic Nursery	2.8	55:45
5	Medical	3.4	60:40
6	OB	3	60:40
7	ICU/ER/RR	6	70:30
8	CCU	6	80:20

Clinical Department: Functions

The clinical departments of a hospital are responsible for establishing the standards of practice for their specialty, as well as providing continuing education, monitoring individual physicians' performance, and providing a forum for the exchange of ideas and new techniques. The medical staff have a unique relationship with hospital in that most are not hospital employees but rather they are in private practice and therefore self-employed. The medical staff may be faculty members at a school of medicine (e.g. Western University). Those who are employees tend to be the Emergency Room doctors, Pathologists, Radiologists and physicians in charge of Infection Control.

Medical Staff: Organizational Structure

The medical staff are directly linked to the hospital organization. An elected Chief of (Medical) Staff serves as a liaison to hospital Administrator. The Administrator and Chief of Staff work together to resolve issues, achieve mutual goals and most importantly to provide optimal patient care.

Medical Staff: Designations

Members of the medical staff are given various titles dependent upon their education, hospital privileges and duties. For instance, Honorary Staff are physicians who have provided an exemplary or long-standing service to the hospital. However, they do not have attendance or voting privileges at committee (e.g. MAC) meetings. Consulting Staff do have attendance and voting privileges at committee meetings. They are also specialists (e.g. Surgeons) who are in good standing within their field. Active Staff comprise the main body of physicians in a hospital and are responsible for committee work and the administrative duties on behalf of the medical staff. Active Staff attend and treat their private patients as well as patients in clinics at the hospital. They have committee attendance and voting privileges. Associate Staff are newly appointed physicians for a set period of time. Their status will be changed to Active once their commitment to patient care is proven. Courtesy Staff are physicians, typically Family Practitioners, who are given the opportunity to attend to their own patients who have been hospitalized. They are able to attend committee meetings but may not vote or hold office. Residents are physicians who are completing post-graduate training (3-4 years) in a specific field of medicine (e.g. oncology, neurology, dermatology).

Medical and Surgical Departments

Medical and surgical departments are categorized into specialty departments. Larger hospitals may subdivide departments to ensure that adequate representation and chain of command will happen. The number of divisions depends upon the services provided at the hospital. Typically, each division or department has a department head and each sub-division has a chief or chair of service who is responsible to the department head. Medical departments include the following: Internal Medicine,

Psychiatry, Neurology, Dermatology, Cardiology, Geriatrics, Endocrinology, Pulmonary Diseases, Rheumatology, Gastroenterology and Immunology/ Allergy. Surgical departments include: General Surgery, Neurologic Surgery, Ophthalmology, Urology, Orthopedic Surgery, Obstetrics and Gynecology, Plastic Surgery and Proctology. (Make sure you are familiar with the meaning of each of the above. e.g. the dermatology department deals with issues relating to the skin; orthopedic surgery deals with conditions relating to the bones and muscles)

Hospital Staff (Support Services)

Many other departments and support staff are required to keep a hospital running smoothly from day to day. They include:

- The Accounting department which is responsible for payables, receivables, payroll and materials management.
- Cardiopulmonary support services including Electrocardiogram, Holter Monitoring, Nuclear Cardiography and Echocardiography
- Pulmonary services including respiratory therapy and pulmonary function
- Neurology services such as performing Electroencephalography (EEG)
- Dietary services involving diet counseling and Total Parenteral Nutrition (TPN) consultation
- Educational Services for new employees and volunteers
- Health Records that are compiled and maintained for access by medical staff and patients or their families
- Diagnostic imaging including Radiography, Nuclear medicine and Ultrasound
- Chiropodist services
- Perfusionist services
- Laboratory services including Hematology, Pathology and Cytology
- Mental Health services such as an outpatient clinic
- Rehabilitation services such as a Sports Medicine Clinic, Physiotherapy, Occupational therapy and Speech and Audiology
- Renal Dialysis including Hemodialysis and Peritoneal dialysis
- Central Service Department which provides non-pharmaceutical supplies for nursing and specialized units (often called Supply, Porter and Distribution or SPD)
- Social Work which includes discharge planning, crisis intervention for Emergency Room patients and counseling services
- Volunteer services which organizes volunteers to conduct fundraising activities, provide in-patient library service and to staff the gift shop

Project Marketing Abilities

As increasing patient volume becomes tantamount to staying financially viable, marketing Good Care international teaching hospital developed a robust marketing plan to market its services to potential referring physicians and patients. Among others, exchange programs for students (university) and grants applications and operational research will provide the visibility of the hospital internationally. The provision of super specialized services and patient management in Africa and through targeting local and international companies for medical care to employees will also add an edge to the hospital in terms of marketing. Affiliations with ten international universities and the new innovative service lines to increase market share like dormitories, sports academy center and min supermarket will give the hospital the visibility. Additionally, government referrals for public servants and VIPs to the

hospital will form a strong marketing basis for revenue generation. Through government structures, exploiting the East Africa integration process to market specialized services will support the marketing strategy for the hospital.

It has been further noted, that there will be demand-side benefits caused by:

- Epidemiological change that “western disease patterns” become “eastern” due to life style factors, which will require advanced health care services and biomedicine for the future.
- Accelerating population growth requires additional health care services.
- High population density in major urban areas, in particular the south, creates requirements for additional health care services in HCMC.
- A rise in the number of affluent citizens, who will require enhanced medical services.

The following factors affect the supply-side benefits, which include:

- Provide state-of-the-art biomedical equipment, which allows early detection of diseases.
- Improve the country’s severe shortage of medical doctors.
- Offer clinical knowledge through advanced academic exchange programmes.
- Supply health care facilities within the east African community.

Regulatory Requirements

World Health Organizations’ Guidelines in the Planning and Design of a Hospital and Other Health Facilities

Good Care international teaching hospital will adhere to WHO guidelines for planning and designing a hospital as indicated. A hospital and other health facilities shall be planned and designed to observe appropriate architectural practices, to meet prescribed functional programs, and to conform to applicable codes as part of normal professional practice. References shall be made to the following:

Environment:

A hospital and other health facilities shall be so located that it is readily accessible to the community and reasonably free from undue noise, smoke, dust, foulodor, flood, and shall not be located adjacent to railroads, freight yards, children’s playgrounds, airports, industrial plants, disposal plants.

Occupancy:

A building designed for other purpose shall not be converted into a hospital. The location of a hospital shall comply with all local zoning ordinances.

Safety:

A hospital and other health facilities shall provide and maintain a safe environment for patients, personnel and public. The building shall be of such construction so that no hazards to the life and safety of patients, personnel and public exist. It shall be capable of withstanding weight and elements to which they may be subjected.

Exit:

Exits shall be restricted to the following types: door leading directly outside the building, interior stair, ramp, and exterior stair. A minimum of two (2) exits, remote from each other, shall be provided for each floor of the building. Exits shall terminate directly at an open space to the outside of the building.

Security:

A hospital and other health facilities shall ensure the security of person and property within the facility.

Patient Movement:

Spaces shall be wide enough for free movement of patients, whether they are on beds, stretchers, or wheelchairs. Circulation routes for transferring patients from one area to another shall be available and free at all times. Corridors for access by patient and equipment shall have a minimum width of 2.44 meters.

Corridors in areas not commonly used for bed, stretcher and equipment transport may be reduced in width to 1.83 meters. A ramp or elevator shall be provided for ancillary, clinical and nursing areas located on the upper floor. A ramp shall be provided as access to the entrance of the hospital not on the same level of the site.

Lighting:

All areas in a hospital and other health facilities shall be provided with sufficient illumination to promote comfort, healing and recovery of patients and to enable personnel in the performance of work.

Ventilation:

Adequate ventilation shall be provided to ensure comfort of patients, personnel and public.

Auditory and Visual Privacy:

A hospital and other health facilities shall observe acceptable sound level and adequate visual seclusion to achieve the acoustical and privacy requirements in designated areas allowing the unhampered conduct of activities.

Water Supply:

A hospital and other health facilities shall use an approved public water supply system whenever available. The water supply shall be potable, safe for drinking and adequate, and shall be brought into the building free of cross connections.

Waste Disposal:

Liquid waste shall be discharged into an approved public sewerage system whenever available, and solid waste shall be collected, treated and disposed of in accordance with applicable codes, laws or ordinances.

Sanitation:

Utilities for the maintenance of sanitary system, including approved water supply and sewerage system, shall be provided through the buildings and premises to ensure a clean and healthy environment.

Maintenance:

There shall be an effective building maintenance program in place. The buildings and equipment shall be kept in a state of good repair. Proper maintenance shall be provided to prevent untimely breakdown of buildings and equipment.

Material Specification:

Floors, walls and ceilings shall be of sturdy materials that shall allow durability, ease of cleaning and fire resistance.

Segregation:

Wards shall observe segregation of sexes. Separate toilet shall be maintained for patients and personnel, male and female, with a ratio of one (1) toilet for every eight (8) patients or personnel.

Fire Protection:

There shall be measures for detecting fire such as fire alarms in walls, peepholes in doors or smoke detectors in ceilings. There shall be devices for quenching fire such as fire extinguishers or fire hoses that are easily visible and accessible in strategic areas.

Signage

There shall be an effective graphic system composed of a number of individual visual aids and devices arranged to provide information, orientation, direction, identification, prohibition, warning and official notice considered essential to the optimum operation of a hospital and other health facilities.

Parking.

A hospital and other health facilities shall provide a minimum of one (1) parking space for every twenty-five (25) beds.

Zoning

The different areas of a hospital shall be grouped according to zones as follows:

- Outer Zone – areas that are immediately accessible to the public: emergency service, outpatient service, and administrative service. They shall be located near the entrance of the hospital.
- Second Zone – areas that receive workload from the outer zone: laboratory, pharmacy, and radiology. They shall be located near the outer zone.
- Inner Zone – areas that provide nursing care and management of patients: nursing service. They shall be located in private areas but accessible to guests.
- Deep Zone – areas that require asepsis to perform the prescribed services: surgical service, delivery service, nursery, and intensive care. They shall be segregated from the public areas but accessible to the outer, second and inner zones.
- Service Zone – areas that provide support to hospital activities: dietary service, housekeeping service, maintenance and motorpool service, and mortuary. They shall be located in areas away from normal traffic.

Function:

The different areas of a hospital shall be functionally related with each other.

- The emergency service shall be located in the ground floor to ensure immediate access. A separate entrance to the emergency room shall be provided.
- The administrative service, particularly admitting office and business office, shall be located near the main entrance of the hospital. Offices for hospital management can be located in private areas.
- The surgical service shall be located and arranged to prevent non-related traffic.
- The operating room shall be as remote as practicable from the entrance to provide asepsis. The dressing room shall be located to avoid exposure to dirty areas after changing to surgical garments. The nurse station shall be located to permit visual observation of patient movement.
- The delivery service shall be located and arranged to prevent non-related traffic.
- The delivery room shall be as remote as practicable from the entrance to provide asepsis.
- The dressing room shall be located to avoid exposure to dirty areas after changing to surgical garments. The nurse station shall be located to permit visual observation of patient movement.
- The nursery shall be separate but immediately accessible from the delivery room.
- The nursing service shall be segregated from public areas.
- The nurse station shall be located to permit visual observation of patients. Nurse stations shall be provided in all inpatient units of the hospital with a ratio of at least one (1) nurse station for every thirty-five (35) beds. Rooms and wards shall be of sufficient size to allow for work flow and patient movement.
- Toilets shall be immediately accessible from rooms and wards.
- The dietary service shall be away from morgue with at least 25-meter distance.

Space:

Adequate area shall be provided for the people, activity, furniture, equipment and utility.

Good Care International Teaching Hospital SWOT Analysis

The hospitals' responsibility is to implement change that is beneficial to the patient, staff, and the community. The primary areas driving change in quality healthcare include quality improvement, customer satisfaction, improvement of working conditions, and diversification of the healthcare workforce.

INTERNAL	Strengths <ul style="list-style-type: none"> ▪ Outstanding Medical Staff ▪ Strong Commitment ▪ Excellent Hospital Facility ▪ Advanced health care ▪ High level of organizational efficiency ▪ Research programmes ▪ High tech equipment 	Weaknesses <ul style="list-style-type: none"> ▪ Structural inertia ▪ High transaction costs
	Opportunities <ul style="list-style-type: none"> ▪ Growing metropolitan community ▪ Increased managed care business ▪ Technological developments ▪ Insurance industry picking up 	Threats <ul style="list-style-type: none"> ▪ Highly regulated industry ▪ Ethical pressure ▪ Economic crisis ▪ Fluctuation of raw materials

The Master Plan

To understand the potential size of buildings and site improvements, the team worked with the consultants in hospital designs and construction to develop a base and ancillary program for a prototypical European standard state of art hospital and typical related medical support services. The prototypical program consisted of core hospital functions (base), and ancillary functions such as innovation center, long-term care facilities and medical educational components. Relative sizes of these functional components, as well as estimated associated parking requirements, were developed the consultants both in Europe and in Uganda. The functional components considered for this analysis consisted of the following:

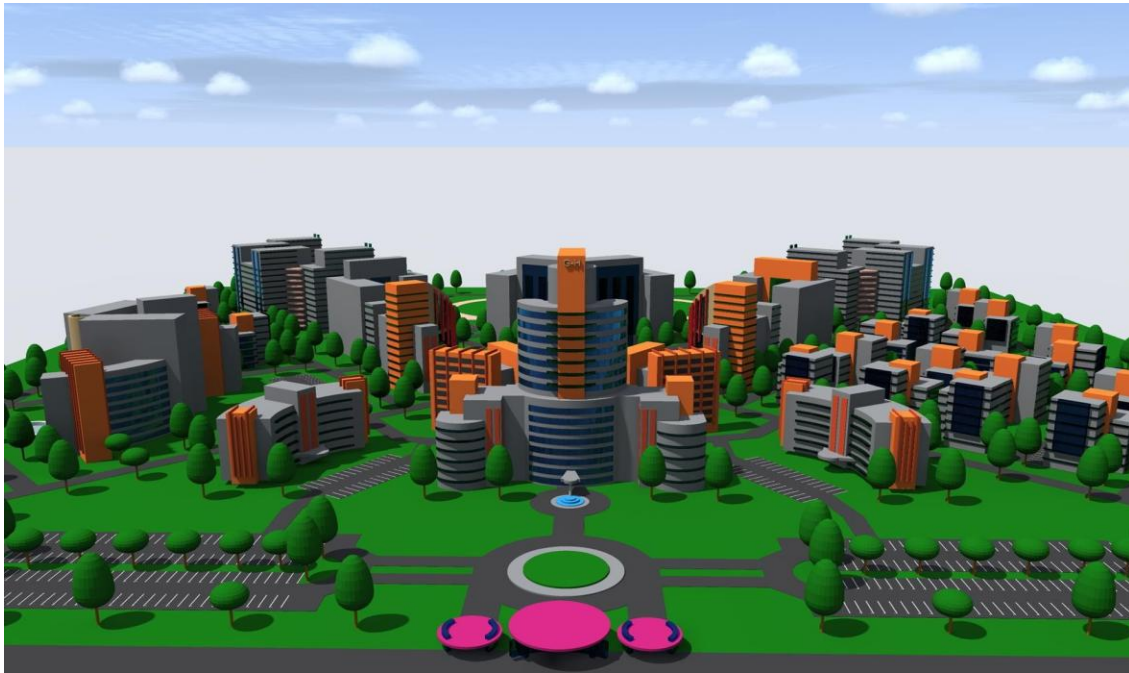
Base Program:

- Hospital Diagnostic and Treatment (D&T) and Bed Tower: this accounts for the primary hospital component and consists of both diagnostic and treatment components and a 250-bed bed tower. Required area was based on the consultants' benchmarks.
- Ambulatory Care Center and an Ambulatory Care Center (ACC) Program: this accounts for specialty physician offices, outpatient imaging, rehabilitation, clinics, and similar program
- Pediatric Emergency Department (ED)
- Medical Office Building (MOB): space allocated for medical offices
- Utility Plant: area reserved for cooling towers, emergency generators, and other large utility equipment

Ancillary Uses:

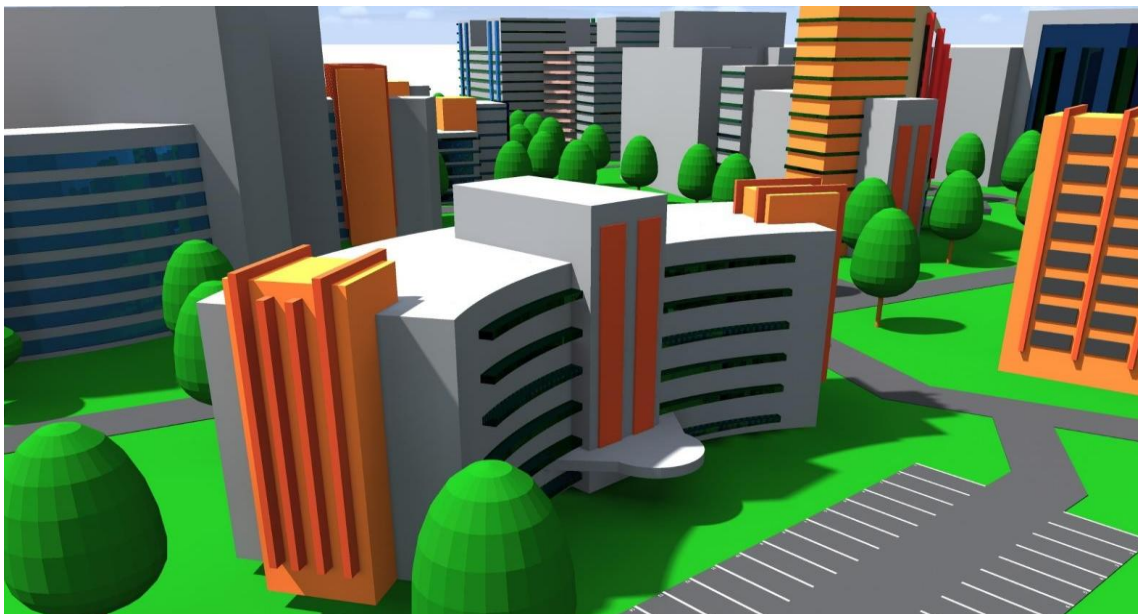
- Innovation Center: this accounts for office, laboratory, classroom, and other spaces associated with innovation center or incubator program
- Long-Term Care: space allocated for a 220-bed long-term care facility and associated program

The hospital Master plan consists of a General Hospital + parking, Children's Hospital which shall be at a distance from the General Hospital; a Cancer Ward; Tuberculosis care Center which shall also be isolated from other departments; Specialty Wards i.e. Dental, ENT, medical, surgical that includes orthopedic, neurology, GIT, ophthalmology, urology e.t.c.; Heart Institute; Leisure Room Block i.e. Banking areas, cafeteria, restaurants, lounges, recreation areas; Administration Block; Laboratories; the University Medical school; Staff Estates near campus & Guest residences at city, e.g. for Visiting professors, volunteers; Students Dormitories which will have rooms that are prohibited from sharing, shall have a single room, single apartment and single rooms in a shared flat; Lecture rooms; Infrastructure (roads, water, drainage, Gas, electricity, ICT, Emergency landing ground shall be near first class clinical Center); Emergency Power Supply-2MW; First aid center (at city center); Nursing and Medical Assistance Centre and a First class clinical center. Some of the unpacked facilities from the master plan are presented below.



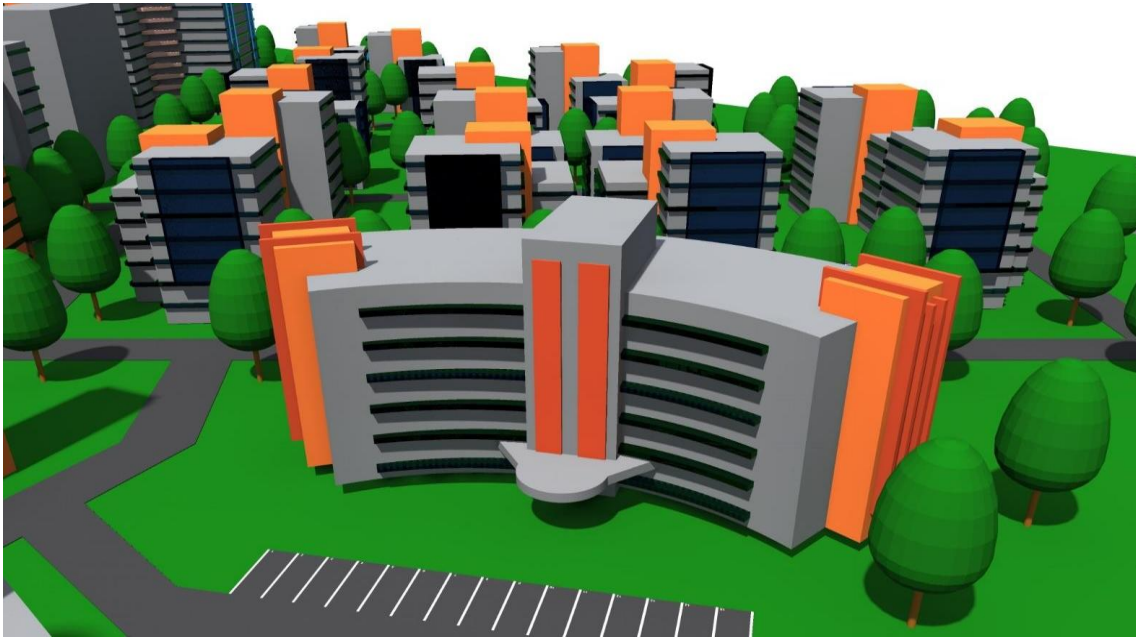
Children's Ward

The hospital Children's Ward will be a vibrant, 108-bed general paediatric unit caring for infants, children and adolescents with a variety of medical and surgical conditions. The unit allows for parents and carers to stay and be actively involved with their child's care during the admission. All rooms will have a accompanying bathroom and suites and sofa beds and there is a spacious parents room available complete with breakfast-making facilities, couches and television. A large children's playroom and a part time play leader are also features of the ward allowing patients and their siblings play time which is an important aspect of children's health and recovery. The unit will also have a paediatric home care program that enables continuity of care if required once a child is discharged home with the ability of nursing staff to conduct home visits to monitor progress and to support families.

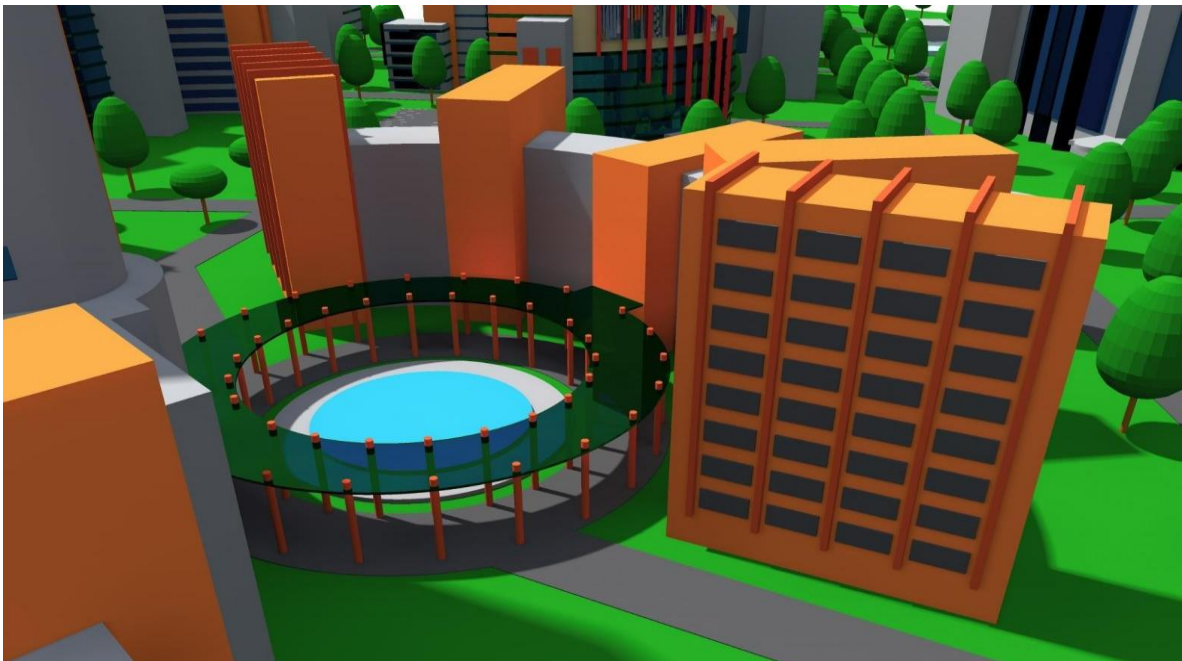


Cancer Ward

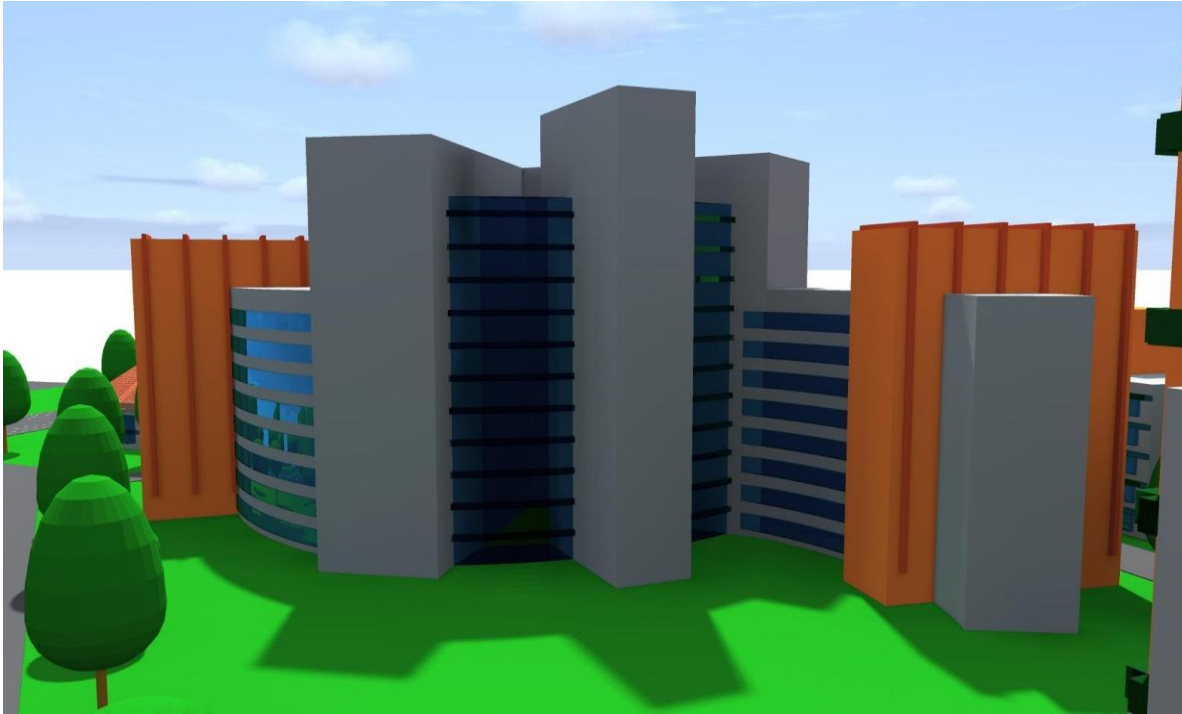
When it comes specifically to technologically-advanced cancer centers, two main factors were considered: the range and quality of cutting-edge treatment options (this includes state-of-the-art facilities, operating rooms, and patient services as well as top-of-the-line diagnostic, imaging, and surgical methods/equipment) and the range and sophistication of innovative research practices. In an effort to preserve the international aspect of advanced cancer treatment, we sought to design a unit that will include equipment with many high-tech features in the cancer ward.



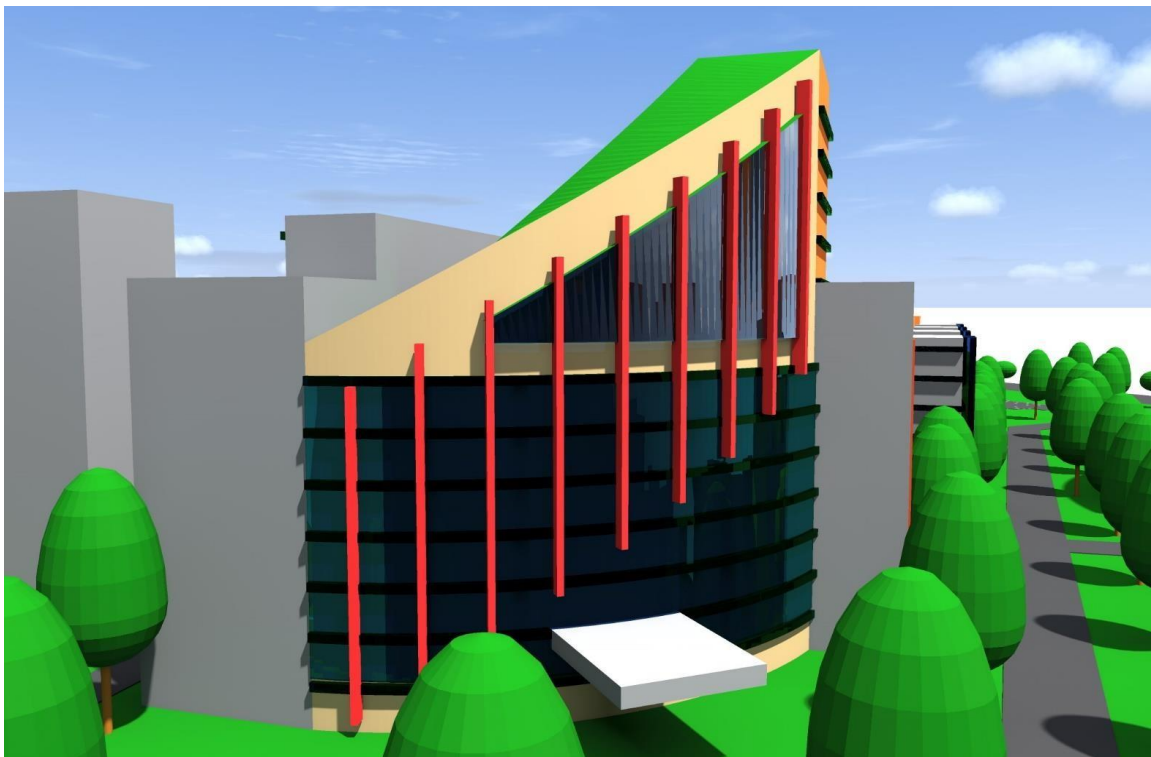
Specialty Wards



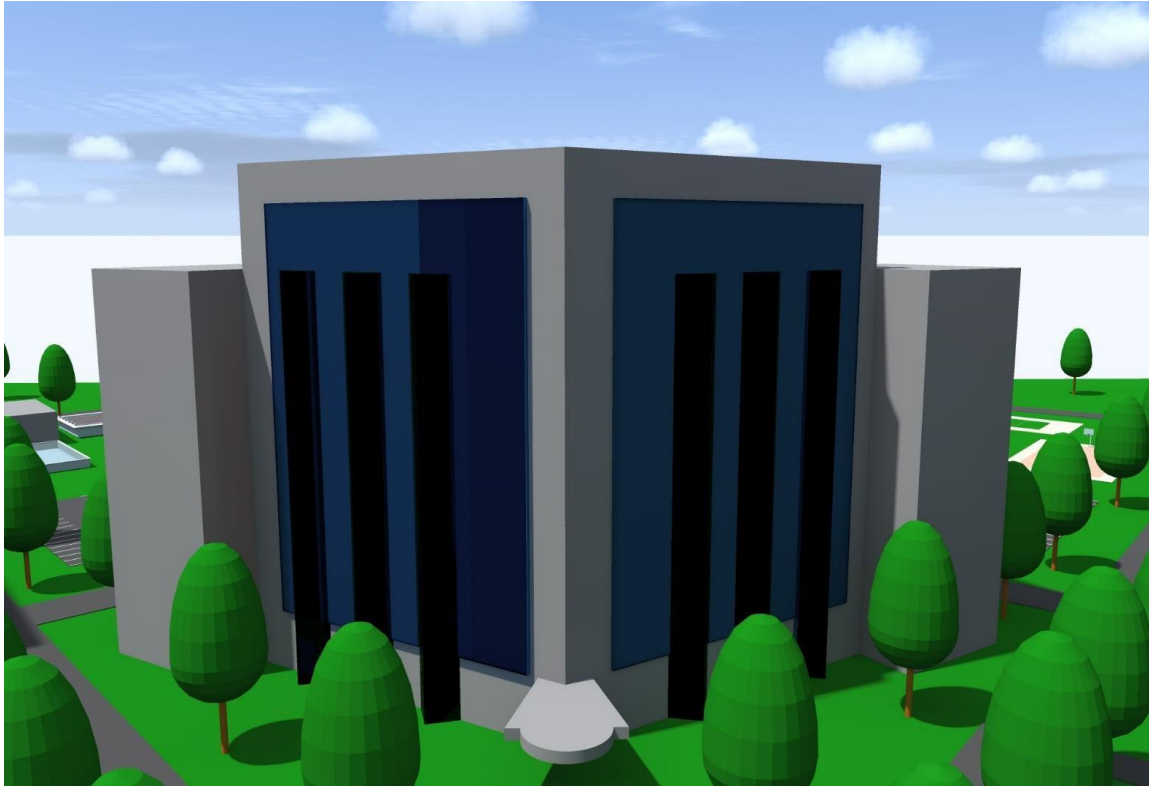
Heart Institute



Leisure Block



The University Block



Staff Estates



Students Hostels



The individual components of the master plan explain the building adjustment by taking traditional background, climate, and actual local needs into consideration. The implementation schedule is based on accurate planning estimates obtained from previous project experiences in Europe by partners from Poland who will take lead in construction and equipping the hospital.

Investment Costs

#	BLOCK	FUNCTIONALITY	LEVELS	Number of Blocks		SQM	Cost per SQM (USD)	Amount
1	A	General Hospital + parking	6	4	930	16600	400	6,640,000.00
2	B	Children's Hospital (shall be far from General Hospital)	5	2	800	5500	500	2,750,000.00
3	C	Cancer Ward	5	2	600	6000	500	3,000,000.00
4	D	Tuberculosis care Center (shall be far from other institution)	5	2	400	12500	400	5,000,000.00
5	E	Specialty Wards i.e. Dental, ENT, medical, surgical that includes orthopedic, neurology, GIT, ophthalmology, urology e.tc.	5	10	300	11500	400	4,600,000.00
6	F	Heart Institute	5	2	700	6500	400	2,600,000.00
7	G	Leisure Room Block i.e. Banking areas, cafeteria, restaurants, lounges, recreation areas	2	1	1100	8500	500	4,250,000.00
8	H	Admin Block i.e. , Laboratories, block for hospital and University separate	6	4	1280	19500	340	6,630,000.00
9	I	Staff Estates near campus & Guest residences at city, e.g. for Visiting professors, volunteers)	5	12	300	14400	400	5,760,000.00
10	J	Students Dormitories (prohibited for rooms sharing, shall have a single room, single apartment and single rooms in a shared flat)	5	5	600	15000	440	6,600,000.00
11	K	Lecture rooms	5	5	500	11000	500	5,500,000.00
13	L	Infrastructure (roads, water, drainage, Gas, electricity, ICT, Emergency landing ground shall be near first class clinical Center)	1	4	1	42000	300	12,600,000.00
14	M	Emergency Power Supply-2MW	1	1	2	950	1400	1,330,000.00
15	N	First aid center (at city center)	2	2	1	2100	400	840,000.00
16	O	Nursing and Medical Assistance Centre	2	2	1	5000	200	1,000,000.00
17	P	First class clinical center	2	2	800	2100	200	420,000.00
		Sub-total						69,520,000.00
18	Q	Other services	1					872,028.00
19	R	Administrative works	2					1,744,056.00
20	S	Consultancy Team and design fees	1					872,028.00
21	T	Furnishing and Machinery	4					3,488,112.00

		Sub-total						6,976,224.00
22	U	Specialized laboratories i.e. Anatomic pathology, Clinical Microbiology, Clinical Chemistry, Hematology and X- ray department	3	1				1,000,000.00
23	V	Oxygen plant	1	1				850,000.00
24	W	Incinerator	1					1,000,000.00
25	X	Central stores	4	2				900,000.00
26	Y	Production department for IV fluids, distilled sterile water, laboratory reagents	2	2				900,000.00
27	Z	Blood transfusion department and special ambulance for blood collection	2	1				950,000.00
28	AA	Central Pharmacy	2	1				1,000,000.00
29	AB	Workshop for University and Hospital e.g. Motor vehicle	1	1				1,000,000.00
30	AC	Research center for GCITH and Administration Block	6	2				750,000.00
31	AD	Training and Technical support	1	1	120			500,000.00
32	AE	Medicine package	30	1	2			1,100,000.00
33	AF	Marketing & Advertisement	1	1	1	130	2000	260,000.00
34	AG	Min Super market center with storage facilities, Ware house & one Transportation vehicle	1	1	1	9500	400	3,800,000.00
35	AH	Sports Academy Center & sports irrigation (shall be far from other centers)	3	2		11000	250	2,750,000.00
36	AI	Senior care estate	3	2		10000	400	900,000.00
		Sub-total	1					31,612,448.00
37	AJ	Vehicles for Heads of Departments, Heads of Units, Administrative work transportation, medical waste, including special 6 busses for on Campus and off Campus students and Communities.	30	2				1,300,000.00
38	AK	Ambulances with equipment	10	1				1,160,976.00
		Sub-total						2,460,976.00
39		Grand Total						110,569,648.00

Revenue Generation

Students Category	Forecasted Number of Students	Tuition fees per student (USD)	Amount (USD)	Cost per student	Total Cost
Local	6,000	800.00	4,800,000.00	430.00	2,580,000.00
International	4,000	1,230.00	4,920,000.00	570.00	2,280,000.00
Total	10,000		9,720,000.00		4,860,000.00

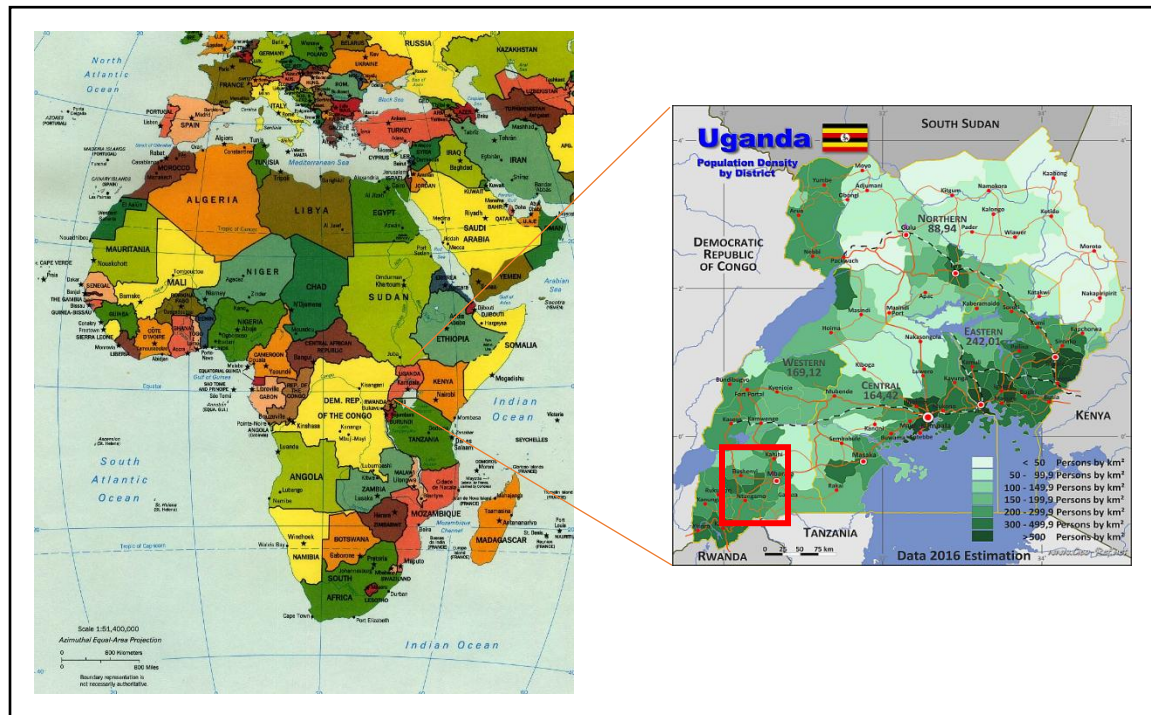
S/No	Revenue Source	Amount (USD)
1	Student (University) Tuitions Fee Generation	3,650,000.00
3	Grants Applications and Operational Research	4,789,000.00
4	Provision of Super Specialized Services and Patient Management	6,590,000.00
5	Targeting Local and International Companies for Medical Care to Employees	4,390,000.00
6	Affiliations with Ten International Universities	2,700,000.00
7	Manage New Innovative Service Lines to Increase Market Share	1,907,000.00
8	Dormitories Fee Fair Rent Generation	1,800,000.00
9	Residential Compound Rent Generation	580,000.00
10	Sports Academy Center Income Generation	440,000.00
11	Min Supermarket Fee Rent Generation	310,000.00
12	Monthly Health Care Income Generation (From Insurance Company)	1,000,000.00
13	Transportation (Daily Buses) Fee Generation	330,000.00
14	Monthly Clinical Care Fee Generation	1,530,000.00
15	Monthly Extra Energy Produced Income Generation	198,000.00
16	Staff Estate Monthly Fee Generation	670,000.00
17	Parking Fee Income Generation	120,000.00
18	Fee for International Patient Income Generation	760,000.00
19	Registration Entrance for General Hospital	110,000.00
20	Senior Care Fee Income Generated (Source GOV)	390,000.00
	Total	32,264,000.00

Annual Operating Expenses

Category	Annual Operating Expenses (USD)	
	Hospital	University
In-patients	589,000.00	-
Out-patients	288,000.00	-
Salaries	980,000.00	650,000.00
Utilities	23,000.00	20,000.00
Equipment	58,000.00	32,000.00
Staff development and training	103,000.00	100,000.00
Sponsorships	376,000.00	440,000.00
Charity Expenses	39,000.00	87,000.00
Insurance	287,000.00	168,000.00
Exchange Programs	211,300.00	430,000.00
Others	870,000.00	667,000.00
Total	3,824,300.00	2,594,000.00

Site Location Recommendation

The Main center for the Hospital will be located in Mbarara District indicated on the Map below.



The European-African state-of-art University Teaching Hospital will facilitate the health demands of the African continent and its center of medical excellence will be located in Uganda and specifically in Mbarara district. The choice for this locale is based on the Geo-political location of Uganda and Mbarara district in particular.

In reference to the geographical positioning of countries in Africa, Uganda lies in the center of the Greatlakes region. This positioning gives an equal opportunity to countries in Africa to access the health facility. For instance, the East African block consisting of Rwanda, Burundi, Kenya, Tanzania and South Sudan are at an equal geographical advantage of accessing health services of international standards from Mbarara.

Given that the hospital will provide emergency patients referred by other health facilities in Africa by use of Air ambulance, the location rides on the already existing advantage of the airport to be constructed in Mbarara as part of the oil and gas developments.

Locally, compared to district development plans in other regions of the country, the project fits within the development planning of Mbarara district where land for commercial agriculture is limited and only high-level investments have been earmarked for the development of the district.

The western region also has a diversity of tourist assets of the country and this gives an edge to the hospital establishment with an anticipation that some of the foreign expatriates who will fly in for medical treatment will spend some time touring the natural resources and biodiversity. This will promote the tourism potential in the region and the country in general on top of the medical expenditures.

The proposed siting location designated as project site option, was one of many site development options that were studied, and represents a plan that best meets the goals of the government and District, and conforms to the goals of Good Care Teaching University Master Plan. The hospital will not only help transform the great lakes region, but also will encourage economic development and create a vibrant, healthy African continent.

Patient and Visitor Accessibility: Patient and neighborhood connectivity was a key criterion that was evaluated during the planning process. Due to the close proximity of the metropolitan area, the site meets the visibility and connectivity goals as well as supporting the Master Plan's goal of connecting the neighboring East African member states with Good Care University Teaching Hospital. As proposed in the Master Plan, a pedestrian and bicycle path will encourage greater access to the hospital and medical buildings which in turn will encourage use of the ground floor retail space that will be incorporated with the medical office buildings. The emphasis on walkability for vehicular and emergency traffic to flow in and out of the site without causing any congestion.

Operational Accessibility: Short and Long-Term: Short and long-term operational accessibility issues such as emergency access, building service, staff shifts, and helicopter access were important considerations during the evaluation of the sites. The proposed location of the hospital, medical office buildings, and education building allows for long- and short-term operational flexibility during the phasing and ultimate build-out of the hospital program. It also allows staff to enter and exit a continuous, efficiently-configured below-grade parking area in multiple locations as well as allowing ambulance traffic to flow easily in and out of the site without disrupting other campus functions or being encumbered by campus traffic. It also provides the additional benefit of improving public connectivity between the metropolitan area and Good Care Hospital.

Operational Efficiency and Flexibility: In addition to operational accessibility, the proposed siting location employs efficient building layouts and configurations for both the hospital and medical programs. Special care was taken to ensure that the configurations proposed were efficient in size while also meeting the urban design principles outlined by the Master Plan. The building locations and sizes allow for flexible patient circulation, physician circulation, large- and small-scale way-finding, efficient stacking of the medical programs, and parking. The building configuration for the ACC, MOB, and Education buildings allow for a flexible plan and core that support either an ACC tenant, MOB tenant, or a mixed-use commercial tenant. These buildings are also positioned in such a way as to allow for future expansion or more direct connections with adjacent buildings.

To allow greater ease of patient and physician circulation, a series of sky bridges is recommended to connect the hospital to the medical office buildings. The medical office and innovation programs have been located within the Phase 1 Real Estate Master Development Plan, which will encourage this

program to be phased and constructed by private development entities. When in the future new modalities and acuities require new equipment or space, the proposed hospital plan has flexibility to grow across the currently proposed emergency drop off location.

Next Steps

Development Timeline

To develop a conceptual design for the hospital, the parties suggest that the District plan for at least 2 months of design and detailed planning effort. To obtain a Certificate of Need (CON) for a hospital at the new site, the District should anticipate that it will take approximately 6-10 months. Site development and Hospital construction would be anticipated to require 30 to 36 months to complete after building permits.

[illegible]

Project Partners and Implementation Schedule



This is an engineering and construction company from Poland founded by MAREK STEFAŃSKI and the majority shareholder (96.7% of shares of the company), founder of the known and valued capital group P.R.I. Pol-Aqua S.A. The managerial and engineering staff of IDS-BUD S.A. constitutes of a large group of well-educated specialists who along with Marek Stefański contributed to the success of the P.R.I. Pol-Aqua group and who at present are employees of IDS-BUD S.A.

Among other similar projects, IDS-BUD S.A has constructed Platinum Hospital Warszawa At Ul. Goszczyńskiego 1 (Former Sisters of Saint Elizabeth Hospital), Hospital of The Military Institute of Medicine, Szaserów Street, The Cezamat Central Laboratory and The Silesian Centre For Heart Diseases in Zabrze

The following are Samples of some of the work done by IDS-BUD



ALVO medical is a medical equipment manufacture and supply company based in Poland which supplies medical equipment in specialized hospitals around the world. Over 25 years in production and supply of medical equipment especially theater complexes. The company has supplied to many African companies including some in Uganda and is ready to cooperate towards supplying world class equipment to the proposed International

Below are samples of the work done by ALVO among others



MULTIMED This is a company specializing in the design and comprehensive supply of medical equipment for hospitals. The company has managed and supervised over 100 large projects. Currently, the company is carrying out the project of the National Diagnostic Center in Maldives. The company also has a subsidiary called HYPNOS –dealing with hospital management. Currently, the company manages three hospitals in Poland.

Work Samples by Multimed below.



Project Management

As Good Care international teaching hospital moves forward, the project concept and mission statement will be tested, improved, and refined through the prefeasibility and feasibility studies. The hospital will be planned, designed, and constructed by IDS BUD S.A. The company has a long-term vast experience in large scale projects inside and outside Poland including several modern Hospitals under PPP models of operation. IDS BUD S.A, already signed a letter of Intent on undertaking the construction of the proposed Teaching Hospital under the suggested model (BOT) in partnership with Good Care Uganda Foundation and Ministry of Health.

Strategically, as a lead implementor, IDS BUD S.A will undertake feasibility studies to actualize the proposed hospital designs. These will include; works to be developed within the project detailing how each component will be delivered, specific requirements to be observed by the designer, available land surveys and design stages. Further to the design feasibility studies, a geotechnical survey will be carried out by IDS BUD S.A with careful analysis of the structural parameters of the terrain, as selection of a favorable site depends upon a particular structural element possessed by the rock. Land survey, Hydro - geological studies and a thorough environmental and social impact assessment will be part of the studies undertaken by the construction company. Other activities require for IDS BUD S.A are;

Architectural Plans, Civil and Structural designs, Electrical and Plumbing designs and Landscape designs

Medical equipment will be bought, and the hospital staffed. This will be supplied by ALVO company which has over 25 years in production and supply of medical equipment especially theater complexes. The company has supplied to many African companies including some in Uganda and is ready to cooperate towards supplying world class equipment to the proposed Teaching Hospital.

The hospital will utilize the production and medicine research laboratories at all levels deemed fit for the corporation. Pharmaceutical Research Institute's scope of business includes implementation research in the field of pharmaceutical studies and API production in the scale ranging from several dozen grams to several hundred kilograms. The institute has already indicated its cooperation by signing a Letter of Intent with Good Care Uganda Foundation which will pave way for Uganda Government policy to be supported by the institute. This process of implementation is illustrated in figure 2.

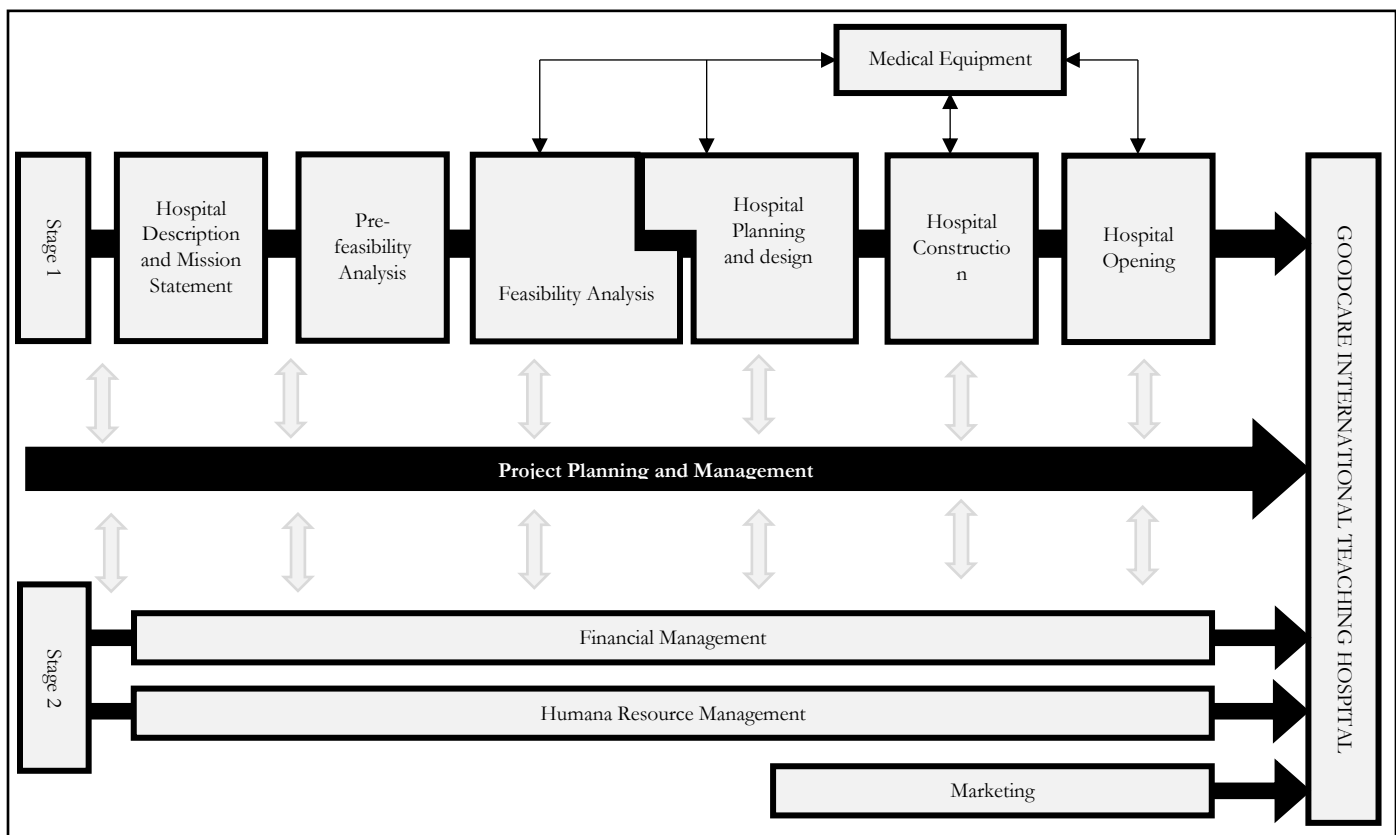


Figure 2: Project Management: Establishing Good Care International Teaching Hospital

The top tier of the figure lays out the stages that will take place: project concept and mission statement, prefeasibility analysis, feasibility analysis, hospital planning and design, hospital construction, and hospital opening. The arrow behind the stages indicates that they will occur largely in sequence, although with different levels of iteration and considerable overlap. Medical equipment is placed parallel to the sequence because activities related to medical equipment are less sequential and will take place during four of the stages: the feasibility analysis, the hospital planning and design, hospital

construction, and hospital opening. The greatest attention to medical equipment will come during the hospital planning/design and construction phases.

Shown at the bottom of figure 2 are the major supporting functions: financial management, human resources management, and marketing. These supporting functions are essential to successful completion of the stages shown in the top part of the figure, though their complexity and intensity will vary depending on each stage of the process. The supporting functions will continue to be critically important to the hospital's operation after its opening.

In the middle of the figure, a large arrow illustrates the planning and management functions that continue throughout the implementation of the project and are critical to its success. The central person who will perform this role is the project director, who will provide leadership, guidance, and oversight to everyone involved in the project. The project director with complete understanding of the vision and mission of the hospital will set the priorities, standards, and key policies for the project. He will represent the project and the project team in dealings with government agencies, architects, banks, and contractors and will take the lead role in conducting negotiations.

Good Care and the partners from Poland who have conceived the idea of developing Goodcare international teaching hospital will agree on who will manage different components of the project successfully. BGK and KUKE will provide the initial equity financing requested by the government of Uganda using export credit facility under OECD regulations.

Funding

The project will be funded by BGK Bank of Poland in cooperation with KUKE Insurance that will open a Credit line for Uganda Government starting with Good Care International Teaching University Hospital in Uganda. BGK bank as the only state development bank in Poland has a long history of financing projects both on PPP and BOT.

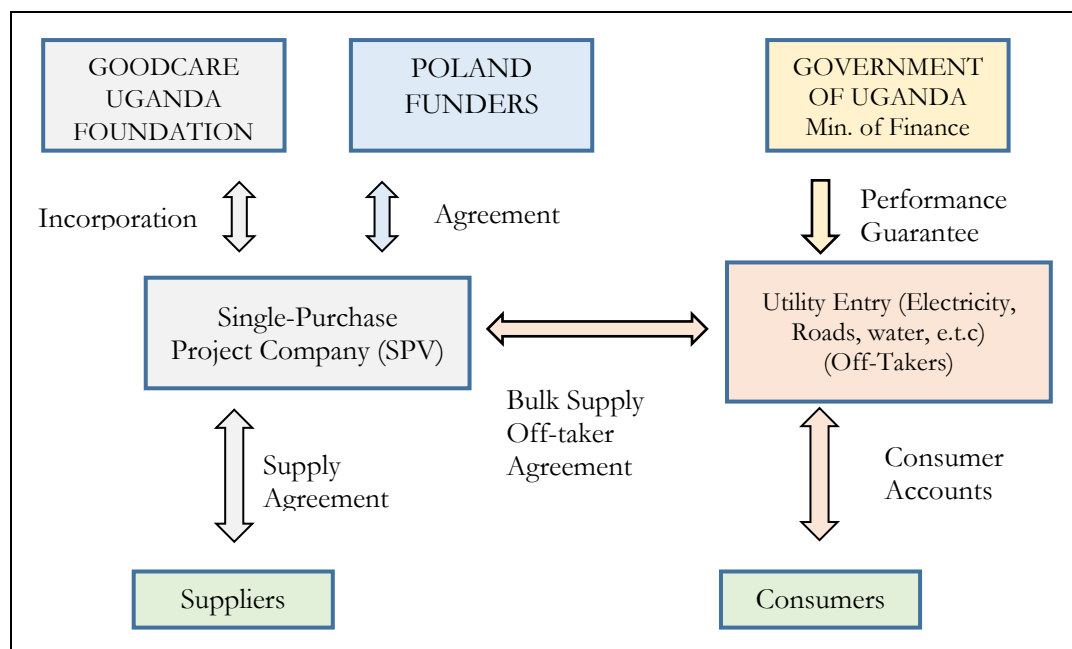
The implementation of the funding process entails the initialization of a bi-lateral relationship between the Government of Uganda and the Government of Poland. The benefactor Ministry of Health of Uganda shall formally request the Ministry of Finance of Uganda to cogitate issuing an official letter to BGK Bank and KUKE confirming the interest in a bi-lateral financial cooperation supported by the Ministry Trade of Poland (where Polish companies (IDS-BUD, ALVARO and the Pharmaceutical Research Institute are involved). This will be followed by the internal analysis process carried on by BGK and KUKE concerning the limit for financing/insuring for Uganda State Treasury.

At an advanced level, the two parties shall be involved in the Signing of a Memorandum of Understanding ("the MoU") establishing basic terms and conditions which shall be implemented in each future facility agreement. Good care Uganda Foundation and the lead partner on the project (IDS BUDS S.A) will join to establish a special purpose vehicle (SPV) company to work on the design, construction, operations and maintenance of Good care international teaching hospital for a specified government-granted concession for a period of around 35 years (3 years' construction plus 32 years' operation), after which the facility would be handed back to government of Uganda under the custodianship of Good care Uganda Foundation.

The Government to Government credit financing model will be adopted where the liability to repay the investment lies on Good Care Uganda Foundation in consideration of the Build Operate and Transfer approach. The Ministry of Finance accepted to write the letter of application for the G2G financing on after engaging the Ministry of Education and Ministry of Health on the mode of participation in the implementation of the project. It should be noted that because of the 0.02% interest rate on the 35-year credit facility the project therefore belongs to the people of Uganda and in the benefit of all Ugandans since Good Care Uganda Foundation is proposing a private Non-for-profit partnership with the government of Uganda.

The Ministry of Finance, upon the meeting with the several sectors involved in the project, a cabinet Memorandum shall be prepared after the application for funds and included in the 2018/2019 budget so as to start the project in July 2019. Therefore, there is need for the multi sectors engagements given the high value associated with the project to the people of Uganda. The initial investment is intended to be recovered through revenues from the services provided during the concession period, which will be determined to sufficiently pay off the debt incurred and earn an acceptable profit from the hospital cash flows.

Build-Operate-Transfer (BOT)



The estimated total capital cost (including equipment) is US\$110 million. The financing plan of Good Care international teaching hospital will take three to five years to firmly establish its reputation and start generating positive cash flow. For this reason, the total cost of establishing the hospital will be financed with long-term funds from the Polish funders and will not place large payback burdens on the hospital soon after its opening. The financing plan consists of long-term equity. The financing plan, will largely be discussed with various potential financial partners, the availability of financing and its conditions so as to gain a reasonable sense of whether Good Care will be able to obtain the financing necessary for the hospital.

The Feasibility Study was conducted by Good Care Uganda Foundation in Corporation with the Government of Poland and the Government of Uganda



