Case Study of

ANINWAH Medical Center

A Private Health Center near Kumasi, Ghana

A Summary

Private Initiatives for Primary Healthcare Project
JSI Research & Training Institute
1616 N Fort Myer Drive • 11th Floor
Arlington VA 22209
# Table of Contents

Forward. .............................................. 4

Introduction. ....................................... 6

Country Context ..................................... 7

Founder .............................................. 8

Developing the Enterprise Concept .............. 9
  Financing .......................................... 9
  Forging Partnerships and Collaborative Relations 10

Organization and Management .................. 12
  Services .......................................... 12
  Decision Making .................................. 13
  Staff ............................................. 14
  Financial Management ............................ 16
  Procurement and Inventory ...................... 17
  Management Information Systems ............... 18
  Strategic Planning ............................... 18

Performance ......................................... 19
  Service Delivery and Utilization .............. 19
  Marketing ........................................ 21
  Community Relations ............................. 21
  Financial Performance .......................... 23

Conclusion .......................................... 29
  Effectiveness ................................... 30
  Sustainability ................................... 31
  Replicability .................................... 32
As populations increase and competition for shrinking public resources becomes more fierce, governments around the world are urgently seeking ways to maximize quality health care delivery while reducing costs. Ministries of Health in many developing countries are exploring how the private sector can meet health needs of their growing populations. Though the private health sector operates in most developing countries, little is known about who it serves, its efficiency and effectiveness in service delivery, and the quality of the services it provides. The Private Initiatives for Primary Health Care project (Initiatives) was designed to examine how private providers can deliver quality basic health services to low-income urban residents and remain financially viable.

Initiatives prepared case studies of five organizations in Africa and Latin America to better understand the factors influencing their success. Case studies are an appropriate approach to documenting and disseminating the organizational and development process. By recording an organization's genesis and development, case studies allow insights into how and why the private provision of basic health services is a viable approach for reaching low-income urban populations.

The subject of each case study is a social enterprise or a private organization that is dedicated to providing social services to largely disadvantaged populations that are not adequately served by public agencies or private markets. Social enterprises maintain or improve social conditions in a way that goes beyond the financial benefits created for the organizations' funders, managers, or employees. Concurrently, such enterprises must find effective ways to address financial pressures, including decreasing dependence on donors, as they develop ways to continue meeting their social objectives.

These case studies focus on the effectiveness, sustainability, and replicability of each enterprise. In looking at effectiveness, the studies place emphasis on service delivery specifically on the enterprises' ability to remain...
focused on the target population blend health needs with client demands and merge technical quality with superior service. In examining sustainability or the capacity of the enterprise to continue to provide services, the studies explore factors including efficient enterprise management and operation financial viability adaptability and, community support Replicability determining whether or not the initiative group models can be transplanted is both a function of effectiveness and sustainability as well as external factors that include markets the policy environment in which the groups operate external assistance in terms of technical and financial aid and the presence or degree of the government support or opposition.

The case studies integrated both quantitative and qualitative data analysis and utilized multiple data collection methods such as facility studies focus groups medical records participatory research observation interviews market surveys and project documents.

Initiatives is making the series of five case study summaries available. This case study of Aninwah Medical Center (AMC) Ghana was prepared by Joseph Akuamoah-Boateng A synopsis of the study was prepared by Lisa R Van Wagner The summary contained in this booklet was based on the report synopsis and edited by Raisa Scriabine
Aninwah Medical Center (AMC), a private medical center on the outskirts of the rural community of Emena, Ghana, was established in April 1991 by a U.S.-trained Ghanaian physician to provide affordable quality healthcare. AMC provides both profitable and subsidized services. The money made by serving wealthy clients enables AMC to subsidize quality care for the poor.

AMC was conceived as a general hospital offering services in areas such as general medicine, surgery, obstetrics and gynecology, pediatrics, family planning, and primary healthcare. The concept included training village health workers to provide basic care for the surrounding community. It was founded as a social enterprise to provide affordable healthcare for all Ghanaians, particularly the rural and peri-urban poor, and not as a means to generate a personal profit for the founder.
The health profile of Ghana is characterized by a preponderance of communicable diseases, malnutrition, poor reproductive health and emerging non-communicable diseases such as neoplasms, diabetes, and cardiovascular problems. Malaria is the single most prevalent health problem in Ghana.

Ghana's economy is plagued by low disposable personal income, unemployment, high cost of living and inflation which affect the average Ghanaian's ability to meet basic needs. Many Ghanians consider health care a luxury and resort to traditional medicine or deny themselves medical attention until it is almost too late.

While Ghana's government, a constitutional democracy since January 1993, encourages the development of a private sector health delivery system, it has also promoted some restrictive practices. It has, for example, banned the use of private health facilities by the government and quasi-government organizations.

Limited financial resources, rapid population growth, and high and rising costs of medical care have contributed to the Ghanaian government's introduction of fee payment in all public health facilities. Patients pay full fees for all services except consultations which are currently free. The government introduced a cash-and-carry system for drug supplies in public health facilities which requires patients to pay for the full cost of their drug/medicine requirements.

Government plans to introduce a social health insurance scheme aimed at universal coverage have not yet been actualized. In the interim, the Government seeks to promote private health service delivery by fostering linkages between the public and private sectors, contracting out services that can be more efficiently managed in the private sector, and increasing direct support to the private sectors in the form of training equipment and grants for infrastructure.
AMC was founded in 1991 by Dr. Emmanuel Tutuor, a US-trained Ghanian medical doctor who serves as AMC's Chairman of the Board from his office in the United States where he is in private practice. Dr. Tutuor completed his medical training at Case Western Reserve University and set up a medical practice in Cleveland, Ohio.

Dr. Tutuor earned scholarships and obtained loans to complete his medical education. As he struggled through medical school, he remembered the medical needs of Ghanians. His goal was to do something about the needless suffering and the unnecessary and untimely deaths of many Ghanians, especially mothers and children. He believed that founding a medical center would be the best way to pay back his country and the world for the sacrifices made on his behalf, particularly by his late grandmother, who provided for his education and encouraged him to study medicine so that he could help others.
DEVELOPING THE ENTERPRISE CONCEPT

Dr Tuffuor put his plans into action almost as soon as he started his medical practice by setting aside money and searching for a suitable site for the center. He succeeded in acquiring land at Emena in 1984 on a 99-year lease. Construction began the same year and was completed in 1990. AMC opened for business in April 1991.

AMC expected to draw most of its low-income clients and some of its employees from its immediate community—the fifteen rural villages surrounding the clinic. Employees would also be drawn from major employers in the nearby city of Kumasi. If successful, all of Ghana and even neighboring countries could eventually become AMC's potential market area.

A number of factors are considered basic to AMC's viability: good management, quality service, founder's personal commitment, and willingness to take calculated risks, strong financial base, easy access to the clinic by patients, and AMC's success in attracting wealthier patients.

AMC had to be affordable for low-income clients. Its charges were, therefore, lower than those of most private practitioners. The clinic was initially expected to survive on external assistance and support. Since such support cannot last forever, the clinic would need to become sustainable.

FINANCING

Construction at AMC was financed by Dr Tuffuor's personal savings from his medical practice. He spent roughly US $800,000 on the project. He did not consider loans viable because fixed interest payments and loan repayment schedules could impact adversely on AMC should expected revenues fail to materialize. AMC received about US $300,000 in cash and in-kind contributions such as
equipment, supplies, and furniture from various governmental and non-governmental organizations.

**FORGING PARTNERSHIPS AND COLLABORATIVE RELATIONS**

A number of organizations have been instrumental in providing support to AMC.

*Rotary Foundation*

The Rotary Foundation has been involved in all stages of AMC's development from construction to staffing and operations. In 1990, the Rotary Foundation provided a matching grant for equipment totaling US$44,450, thereby enabling AMC to obtain two diesel generating sets for standby power, an X-ray machine, and other auxiliary equipment. The Accra West Rotary Club in Ghana helped facilitate entry of the equipment into the country and transported it to Emena. A volunteer from Canada's South Ottawa Rotary Club helped with supervision of the construction work. In collaboration with the Canadian International Development Agency (CIDA), the South Ottawa Club funded the purchase of an anaesthetic machine for AMC's surgical department. The Rotary Club of Gorkchem-Merwede (the Netherlands) also provided funding support.

*Other Organizations*

Donations in kind and cash were received from businesses and hospitals in various countries including the Netherlands, the U.S., and Canada. For example, the Mena Foundation established specifically to assist AMC by Dutch flight attendant Jeanette Eggengor has made many contributions to the Center. It has, for example, facilitated the donation of a standby generator and funds to provide a well for clean water.
Complete Basic Health 2000 Inc, an NGO co-founded by Dr. Tuffuor in the U.S. to help AMC expand its donor network, established connections with two U.S. medical institutions: Thomas Jefferson University promised to provide technical support for the training of ultrasound technicians in Ghana. Case Western Reserve University School of Medicine is expected to send medical students to AMC on rotation. These collaborative efforts are yet to be implemented.
ORGANIZATION AND MANAGEMENT

SERVICES

AMC is equipped with a laboratory to carry out routine as well as some special medical investigations including HIV/AIDS tests, X-ray, computer-operated ultrasound scan, and ECG. There are also two well-equipped surgical/operating theaters, an eye clinic, a pharmacy, a mortuary (with 24-hour storage facilities), and an autopsy/forensics laboratory. AMC services also include spirometry (to check lung diseases), physiotherapy, and stroke rehabilitation. Family planning and child welfare services are available. A dialysis machine to be funded by the UK government is expected in 1997. Other facilities include a 20-room hotel to serve patients, relations, and visitors (not yet operational because water and electricity are not connected) and a cafeteria.

AMC houses 75 inpatient beds and is organized into one general male ward, one general female ward, three female side wards, and one ward each for maternity, labor, detained patients, nursery, and children. There are also nine private wards and two isolation/infectious disease wards. The number of beds in the wards ranges from one to six each.

AMC introduced eight outreach programs since 1994. However, they are not carried out on a regular basis due to a lack of funding. Outreach programs include discussion of preventive health care during weekly church services and a village health workers training program. An outreach nurse stationed at Kumasi once a month offers health advice, takes blood pressure, and weighs patients. A nurse at AMC provides similar services. AMC also planned a mobile clinic program involving a doctor and nurse team moving from village to village to offer free medical treatment, but it was not carried out due to lack of both funds and a vehicle.

AMC also has developed a medical insurance program that enables Ghanaians residing abroad to take out policies on behalf of relatives in Ghana. The scheme offers three types of plans: Silver, Gold, and VIP. Currently, 37 Ghanian
residents in the U.S. and Canada have taken medical insurance policies for their relatives, involving a total of 72 beneficiaries.

A fee-for-service supplement to the program enables non-resident Ghanians to deposit funds with AMC to defray relatives' medical expenses. When the initial amounts are exhausted, sponsoring relatives replenish them. The fee-for-service supplement was introduced to attract those who may not find the medical insurance option attractive because premiums paid are not refundable if beneficiaries do not avail themselves of the center's services during the period covered by the premiums. This supplementary scheme, introduced in 1996, has not been vigorously promoted in order not to weaken the market potential of the insurance program which has been found to be financially rewarding (premiums paid exceed medical expenses on beneficiaries).

**DECISION MAKING**

The Board of Directors is supposed to be responsible for major policy and strategy decisions. The AMC Board, however, hardly meets. Instead, Dr. Tuffuor, who is based in Cleveland, makes all major strategic and policy decisions on the phone with his sister, Afranie Appiahgye, who is the CEO of AMC. Dr. Tuffuor also visits the clinic once a year to assess performance.

A number of steps need to be taken to optimize the effectiveness of the decision-making process. A functional Board needs to be put into place and become active in strategic management. A competent and successful local entrepreneur/manager should be made Chairman.

Top management also needs to be strengthened. The present CEO's management style tends to be extremely hands-on. She is involved in minor operating decisions that would, under normal circumstances, be the responsibility of lower-level personnel. Department heads have little or no
decision-making authority, due to inadequate delegation on the CEO's part. This centralization may be justified now because of AMC's current shaky financial situation but once the enterprise is well staffed and organized, it should no longer be necessary.

The current CEO could be made Executive Director and a member of the Board in charge of relations with donors and other external connections/collaborations. This would make it possible for her to continue to oversee and protect the interest of her brother, the founder. An Administrator could then concentrate on developing a good working relationship with the physicians.

STAFF

AMC's structure consists of a Board of Directors, Chief Executive Officer with an office assistant, and key line (operating) and staff (supporting) department heads. As of March 17, 1997, AMC had a total staff strength of 59 including two medical officers and 21 nurses. Staff has been downsized from 75 since November 1996.

A new Senior Medical Officer/Medical Director and a General Manager (Maintenance) assumed duties in December 1996. AMC still lacks an experienced Administrator and Financial Director.

The high turnover among all categories of staff is attributed to low remuneration, low morale and poor interpersonal relations. The fact that the clinic has been unable to keep doctors on staff has impacted unfavorably on patients’ attendance and service utilization. Since high turnover due to low pay threatened the viability of the clinic, AMC raised pay substantially, and now the current gross monthly salaries of AMC doctors are far higher than their counterparts in government service.
Other factors contributing to the high turnover of doctors include lack of security of tenure and the fact that the doctors do not have a stake in AMC's success. Private practitioners in Ghana normally own their own facilities, and hired doctors for such clinics are not common, except on a part-time basis. AMC doctors may not clearly understand AMC's not-for-profit concept, and envision a situation where the revenue they help generate should be theirs instead of going to an absentee medical doctor colleague.

Additional experienced and competent medical doctors need to be employed to ensure service consistency. Two options to address the high turnover dilemma, which should be further explored are 1) doctors be made shareholders; 2) AMC be leased to a group of doctors to run who in turn would pay an agreed monthly compensation to Dr. Tuffuor.

Clinic staff are recruited on the basis of unsolicited applications or personal calls at the clinic. Interviews are conducted before employment after formal applications have been received. Staff training is predominantly on the job. There are no formal training programs in place due to lack of funds.

A formalized staff performance appraisal system is in place. An annual appraisal report is prepared. Salary increment and promotion decisions are based on the report.

Staff discipline has been a major management concern. As a result, disciplinary procedures and policies have been laid out and communicated to all staff. A 126-page manual outlines the procedures.

Original plans called for foreign volunteers to make up a large part of the AMC staff. Some 10-15 foreign volunteers — both medical and non-medical — offered AMC their services every year. In the beginning, volunteers performed various services: staff training, patient-care setting up records management systems, installing equipment, and supervising construction workers. But tensions and
disagreements built up between staff and volunteers. Some staff felt that volunteers are not adequately sensitive to local values and conditions lack respect for local staff, and have assumed roles beyond those they were given.

This difficulty with the volunteers led to the suspension of the program. AMC subsequently decided to employ experienced Ghanaians rather than solicit foreign volunteers despite the fact that volunteers would be paid for by agencies outside Ghana. The volunteer program could be reconsidered when more experienced medical and management teams are in place.

**FINANCIAL MANAGEMENT**

AMC's accounting system features a main cash book (for revenues and expenditures), purchases day book and (creditors/debtors) ledgers. The various departments/operating centers also keep notebooks for recording costs, revenues and usage of materials/supplies in their respective responsibility centers.

Revenue and expenditure data are compiled and submitted weekly and monthly by the Internal Auditor to the CEO. The CEO uses the reported information to take necessary corrective actions in poorly performing functional areas. The information also serves as input for preparing a monthly budget/financial plan.

Since January 1996, AMC has set up a cost center accounting system in which costs and/or revenues are attributed to various cost centers such as mortuary pharmacy or laboratory. The system requires improvement to make it more useful as a planning tool. For example, whereas revenues are collected by cost centers, not all expenditures are so assigned except in the case of the pharmacy, laboratory and surgeries against which expenditure figures are directly recorded. All other
expenditures are recorded by natural expense accounts e.g. vehicle maintenance, fuel, wages, and salaries. Sanitation supplies, medical supplies, plumbing, and electrical.

Monthly budgeting for revenue and expenditure department by department is an integral part of AMC's financial management system. It involves allocating the previous month's revenue to departments as budgeted expenditure for the current month without any revenue projection for the current month. This system was adopted in response to unpredictable revenue expectations following continual decline in clinic attendance.

A professionally qualified accountant is needed to take charge of the finance and accounting function. This is necessary to design and implement more comprehensive financial accounting, budgeting, internal control, and auditing systems.

**PROCUREMENT AND INVENTORY**

All equipment is procured by either Dr. Tutuor or a donor agency and shipped directly to AMC. For instance, Rotary Clubs outside Ghana who fund equipment also assume responsibility for seeking best buys, free transportation, and arranging and coordinating packing and shipping documentation. Some drugs and hospital and medical supplies are similarly procured, although other drugs are purchased locally from pharmacies and drug distributors.

To help meet drug needs, the SOS system was established. Under this system, the clinic receives drug supplies on credit from 17 selected pharmacies/drug distributors in Kumasi. It puts a mark-up on the cost, sells to patients, and pays monthly to the suppliers portions of supplies sold. This system has enabled the clinic to ensure regular availability of drugs and been a major source of income.
MANAGEMENT INFORMATION SYSTEMS

A manual information management system for collecting, processing, storing, and disseminating data/information has been adopted but remains too tedious and cumbersome to operate. There are too many centers for data collection and processing which renders the system susceptible to duplication and errors. No formal mechanisms exist to ensure quality control in data collection, processing, and reporting.

AMC should consider seeking the necessary financial and material assistance (e.g., computing equipment) from its donors to enable it to plan and implement a custom-designed version of the Hospital Admissions and Billing System (HABS) designed by Deloitte and Touche Ghana for Ashanti Goldfields Company Hospital.

STRATEGIC PLANNING

AMC's survival is threatened by inadequate revenue generation, declining clinic attendance, weak central management, high labor turnover among doctors and staff, and, to some extent, poor community relations. A well thought-out written strategic plan is necessary to give long-term guidance and direction for achieving effectiveness and sustainability. The plan needs to incorporate a clear definition and statement of AMC’s mission and objectives as well as strategies for achieving them. The plan should address organizational structure, staffing, compensation, and motivation of staff, and measures for monitoring and evaluating the plan's implementation. AMC's financial structure (including decisions on its ownership) should also be included. There are also no strategies in place for pricing and promotion of AMC services.
SERVICE DELIVERY AND UTILIZATION

AMC is promoted as a hospital for geriatrics, stroke prevention and rehabilitation, hypertension control, pain management, heart and lung disorders, and general health maintenance for children, men, and women.

About 70 percent of AMC's patients are low-income people. There are more female (55.9 percent) than male (44.1 percent) patients. Most patients are aged between 15 and 44 years (51.7 percent).

Exit interviews show that patients come from 45 different places in Ghana, traveling distances ranging from less than 1 km (Emena) to 260 km. Nine of the 200 exit-interview respondents were from Emena itself and 22 from the villages that make up AMC's immediate community. This confirms the founder's claim that the whole of Ghana constitutes AMC's target-market but also indicates that it is not drawing large numbers of patients from the local community.

Of 200 exit interview participants, 94.5 percent came for out-patient medical services, 15 percent for out-patient surgical, and 0.5 percent for out-patient emergency medical visits. In-patients accounted for 3.5 percent of interviewees. Two respondents mentioned that they came for X-ray services. However, AMC's X-ray machine has been out of order for more than a year. Consequently, the patients' expectations were not met.

Patients are generally very satisfied with the care they receive at AMC, particularly the quality of its physicians, friendly staff, availability of drugs, quick services, and the quality of its facilities and equipment. AMC is also much acclaimed by patients for its clean and hygienic premises which are better than many other hospitals in the country. AMC management ensures the technical quality of service...
through employment of competent doctors and nurses and interpersonal skills training and education.

Patient attendance at the clinic was estimated at 73 patients per day in 1995 and 55 per day in 1996 compared with an estimate of 60 to 100 per day six months after the clinic opened in 1991. Although it is too early to make any definite conclusions, there appears to be some increase in daily attendance since the two new permanent full-time doctors assumed duty in December 1996 and February 1997. As more permanent doctors are employed and patients become aware of the changed staffing situation, attendance is expected to pick up.

Although some patients complain that AMC is expensive, its consultation fees are not particularly high when compared with fees recommended by the Society of General Medical and Dental Practitioners (SGMDP) for its members.

AMC should consider adopting some form of means testing in its pricing policy, particularly in the area of consultation fees. Medical doctors should be permitted to use their discretion in charging fees, which would make it possible for the poor and possibly citizens from Emena to receive services at lower fees. This would reduce the perception of some patients that AMC is expensive.

Government health facilities do not officially charge consultation fees, but the quality of service is considered very poor compared with AMC's. In terms of laboratory service costs, AMC's charges are comparable to those of other private hospitals, clinics, and laboratories and only slightly higher than those of government facilities. Although the high cost of drugs is a general not AMC phenomenon and exists throughout the country, at all health institutions, AMC should consider scaling down its mark-up on the cost of drugs, currently ranging between 30 and 50 percent, which is quite high.
MARKETING

Currently AMC and its services are promoted primarily through personal communication by patients, AMC staff and others. For instance, 80 percent of respondents in the exit interview study mentioned family members/friends as a source from which they first heard about AMC. Other sources are the media (15 percent), fellow traders (1 percent), general public (1 percent), pastor (1 percent) and public outreach (1 percent).

Following the appointment of two permanent medical officers, AMC has intensified its promotional activities to attract more patients directly or through physician/provider referrals. The CEO’s office assistant, for instance, has been touring its target-market areas to promote AMC services and activities. Doctors and staff of nearby clinics and health centers are briefed using a brochure on AMC. Referral cards are left at these centers. A special financial arrangement is worked out between AMC and the referring providers.

As part of its outreach program, AMC has arranged for the local FM Radio station in Kumasi to broadcast promotional announcements. A particular health problem is selected each month. Radio announcements invite people to come to AMC for treatment. The first of a selected number of people — for example 50 — to come would receive free treatment. This is the only AMC outreach program that is aimed specifically to generate revenue.

COMMUNITY RELATIONS

There is a frosty relationship between AMC and the leaders/elders of Emena. Villagers expected that AMC would provide free or low-cost medical services. The fact that these expectations have not been met led to community dissatisfaction. Community members also complain about being denied access to electric power from AMC’s stand-by
generating plant and water from its well. They believe AMC's presence has not benefited them.

AMC has no relationship with the community beyond the provision of free medical services for the queen mother of Emena. No AMC Board members come from the immediate community. The community perceives AMC as a rich hospital financed by foreign donors which should offer free or reduced cost services. This view was somewhat reinforced by the fact that AMC offered low initial consultation fees which were subsequently raised. Once fees were raised, the community became dissatisfied, believing that AMC was trying to make money at its expense.

Conversely, Dr. Tuffuor chose Emena because he expected the community to provide land for free or at reduced cost but this did not occur.

It is not clear to what extent the tenuous clinic-community relations have affected patronage of AMC by Emena patients. In the absence of data on clinic attendance prior to 1996, it would be difficult to determine whether any decline could be attributed to disaffection. Interviews with the queen mother and her elders show that the likelihood of “bad-mouthing” AMC cannot be ruled out.

It is critical for AMC to improve community relations. AMC management should initiate moves to shore up its strained relations with opinion leaders/elders in the community. AMC management should not miss any opportunity to demonstrate its commitment to making the community benefit in various ways from the center’s existence. For instance, on-going construction work on the access road to Emena is a source of great happiness for the community. The community, however, is not aware of the efforts Dr. Tuffuor made towards getting the government to undertake this development project. Management should also consider using one of the clinic’s mini-buses to carry patients (for a fee) the 3 kilometer distance from AMC to the main Accra-Kumasi road to ease patients transportation problems.
FINANCIAL PERFORMANCE

After AMC began operating, it became clear that external funding support and assistance would be needed to ensure sustainability and growth. Dr. Tuffuor constantly solicits support in cash and kind for AMC from a variety of organizations and foundations.

<table>
<thead>
<tr>
<th>USES</th>
<th>FOUNDER</th>
<th>DONORS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>AMOUNT (US$)</td>
<td>%</td>
</tr>
<tr>
<td>Real Estate Development</td>
<td>560,000</td>
<td>70.0</td>
</tr>
<tr>
<td>Medical Supplies/Equipment/Furniture and Fixtures</td>
<td>184,000</td>
<td>23.0</td>
</tr>
<tr>
<td>Operating Expense</td>
<td>56,000</td>
<td>7.0</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>800,000</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*Provided by the Mena Foundation in February 1996 as salary support.

Revenue Sources

AMC's major revenue source is fees paid by clients for services rendered. The major revenue centers are pharmacy, laboratory, theater (surgery), ECG, physiotherapy, ultrasound, eye clinic, out-patient department (OPD), mortuary wards, and the cafeteria (which is treated as a separate profit center). The pharmacy generates more than 40 percent of AMC's revenues. The out-patient laboratory and surgery departments together account for 32 percent of total revenues.
Table 2  Sources Of Revenue January - December 1996

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount (000)*</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmacy</td>
<td>102,027</td>
<td>42.2</td>
</tr>
<tr>
<td>Laboratory</td>
<td>24,113</td>
<td>10.0</td>
</tr>
<tr>
<td>Surgery</td>
<td>24,864</td>
<td>10.3</td>
</tr>
<tr>
<td>Physiotherapy</td>
<td>3,041</td>
<td>1.3</td>
</tr>
<tr>
<td>Ultrasound</td>
<td>8,433</td>
<td>3.5</td>
</tr>
<tr>
<td>Eye Clinic</td>
<td>2,517</td>
<td>1.0</td>
</tr>
<tr>
<td>OPD</td>
<td>30,402</td>
<td>12.6</td>
</tr>
<tr>
<td>Mortuary</td>
<td>15,832</td>
<td>6.6</td>
</tr>
<tr>
<td>ECG</td>
<td>610</td>
<td>0.3</td>
</tr>
<tr>
<td>Wards</td>
<td>23,842</td>
<td>9.9</td>
</tr>
<tr>
<td>Cafeteria</td>
<td>5,990**</td>
<td>2.5</td>
</tr>
<tr>
<td>TOTAL</td>
<td>241,671</td>
<td>100.0</td>
</tr>
</tbody>
</table>

*All figures rounded to nearest thousand cedis
**October - December 1996

Other sources/planned sources of revenue are insurance premiums, 'fee-for-service programs (pre-paid plan) and outreach programs. So far, 37 medical insurance policies have been purchased since the program's inception in 1994. Accrued premium incomes amount to US$7,275. Part of the premium income is used to purchase supplies and equipment.

The medical insurance program has been found to be extremely viable and could be an important source of revenue if the patronage rate could be increased. Analysis of benefits and premiums paid from a random sample of six
policies shows that roughly 17 percent of premiums are utilized as benefits for beneficiaries.

Fee-for-service (pre-paid plan), retainer and outreach programs may be regarded as expected sources of revenue for AMC because their potentials are yet to be realized. For example, the pre-paid plan has not been patronized by any client since its introduction in 1996. It is difficult to estimate what revenues may have been accrued from the FM Radio program as there is no mechanism for determining what patients visit the center in response to the FM Radio promotions.

Retainer contracts with companies or organizations do not yet exist and are therefore not a revenue source. In the absence of permanent full-time and regular part-time doctors, the center did not vigorously promote the clinic among institutional clients. Such efforts will be intensified once permanent doctors have been recruited.

**Operating/Profit Performance**

AMC has not been financially viable as indicated by revenues and operating costs between July 1991 and December 1996 (See Table 3). Operating costs increased at a faster rate per annum (102.6 percent) than revenue (90.9 percent) with an average return on sales (revenue) of 5.1 percent per annum.

AMC experienced absolute operating losses in 1994 and 1995 as the result of heavy expenditures on extensive renovation and reconditioning work. Losses on operations were said to have been meet with donor funds, additional capital contributions from the founder and personal loans from the CEO’s personal savings.

Considering the huge amounts of money invested in buildings, equipment, machines, furniture and other fixed-cost items -- estimated at US$1.028 million -- AMC would have posted a consistently dismal financial performance if depreciation had been charged to the annual revenues.
### Table 3 Revenue/Expenditure Performance July 1991 - Dec 1996

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue</th>
<th>Operating Cost</th>
<th>Profit Margin</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Amount (c 000)</td>
<td>% Change</td>
<td>Amount (c 000)</td>
</tr>
<tr>
<td>1991**</td>
<td>6633</td>
<td>51/4</td>
<td>5334</td>
</tr>
<tr>
<td>1992</td>
<td>38766</td>
<td>192 2+</td>
<td>34187</td>
</tr>
<tr>
<td>1993</td>
<td>94643</td>
<td>144 1</td>
<td>90775</td>
</tr>
<tr>
<td>1994</td>
<td>146443</td>
<td>54 7</td>
<td>147846</td>
</tr>
<tr>
<td>1995</td>
<td>235754</td>
<td>61 0</td>
<td>247365</td>
</tr>
<tr>
<td>1996</td>
<td>241671</td>
<td>25</td>
<td>239003</td>
</tr>
<tr>
<td>TOTAL</td>
<td>763910</td>
<td>90 0</td>
<td>764510</td>
</tr>
</tbody>
</table>

* Figures cannot be regarded as profit because operating costs represent only out-of-pocket expense and exclude depreciation. It is better called Contributing Margin.

** July - December

* Calculated by doubling the actual 1991 figures (6 months) to translate into estimated 12-months figures for 1991

All amounts have been rounded to the nearest thousand cedis

**SOURCE: AMC Records**

**Cost Recovery**

AMC uses cost recovery mechanisms to remain financially viable. Fees for laboratory, X-ray surgery, ultrasound, and other services include the cost of supplies and some charges for overheads and profit margin. AMC bases its charges (except consultation) on minimum charges in other private clinics. Drugs are charged to patients at full cost plus mark-up of 30-50 percent.

On the average, operating costs are fully covered by revenues. An average of 94.9 percent goes into operating expenses, with an average contribution margin (toward fixed costs) of 5.1 percent.
**Structure of Operating Cost**

Table 4 shows the structure of operating costs between January and December 1996. Wages and salary accounts for 61.4 percent of total operating costs, followed by fuel costs (12.9 percent), medical supplies (7.4 percent), and miscellaneous expenses including telephone, electricity, printing, and stationery. Others are vehicle maintenance, sanitation supplies, plumbing and electrical supplies/repairs, and consumable supplies/stores in the cafeteria.

The very high fuel component is accounted for mostly by the cost of operating AMC's stand-by electricity generator which some days must run continuously when the public electricity supply fails.

*Table 4 Structure of Operation Costs Jan - Dec 1996*

<table>
<thead>
<tr>
<th>Item</th>
<th>Amount</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle Maintenance</td>
<td>11,469</td>
<td>48</td>
</tr>
<tr>
<td>Fuel</td>
<td>30,892</td>
<td>12.9</td>
</tr>
<tr>
<td>Wages and Salary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical (including Nursing Staff)</td>
<td>94,779</td>
<td>39.7</td>
</tr>
<tr>
<td>Admin/Support Staff</td>
<td>51,815</td>
<td>21.7</td>
</tr>
<tr>
<td>Sanitation Supplies</td>
<td>7,490</td>
<td>3.1</td>
</tr>
<tr>
<td>Medical Supplies</td>
<td>17,789</td>
<td>7.4</td>
</tr>
<tr>
<td>Plumbing and Electricals</td>
<td>5,617</td>
<td>2.3</td>
</tr>
<tr>
<td>Consumable Supplies</td>
<td>4,171</td>
<td>1.8</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>14,979</td>
<td>6.3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>239,000</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Service Cost

The cost-data collection/analysis system at AMC makes it extremely difficult to determine the costs involved in providing the various categories of services. Whereas revenue data are accrued by service centers, costs are not similarly assigned to cost centers, but rather according to natural expense accounts as shown in Table 4. Therefore, no meaningful cost-efficiency analysis for monitoring and controlling service/departmental costs can be carried out, even if AMC management were inclined to do so. Cost-feedback control at AMC involves comparing actual expenses with the budgeted natural expense accounts or comparing past and current period figures for purposes of (cost) trend analysis.
AMC's financial performance shows that the clinic has not been profitable but its poor performance is not an immediate indictment since according to the founder his motivation was not profit but the desire to do something to help others. Therefore, if AMC is able to meet its operating expenses and earn some margin, it will have achieved its objective.

AMC's operations have been sustained partly through external assistance and support in cash and kind. This assistance cannot be expected to continue indefinitely nor can the founder be expected to continue pumping funds from his personal savings to sustain AMC. Internally generated funds in the form of incomes from services provided are barely enough to cover operating expenses let alone cover depreciation/equipment replacement costs. Basically, despite the high quality care and facilities that AMC offers, not enough people are using the facility.

Although volunteers and equipment donations have been welcomed in the past, problems have developed. AMC is frustrated by the difficulty of working with some volunteers and the costs involved in maintaining old or flawed donated equipment. The center fears that complaints could dampen donors' enthusiasm and commitment to AMC. Similarly, donors are frustrated by AMC's persistently poor performance in spite of all the assistance it has received. The seriousness of AMC's past financial performance will become apparent when donor support tapers off or dries out completely and AMC has to sustain itself with internally generated funds.

In terms of its responsiveness to market needs and changing operational circumstances, AMC has taken a number of actions. It has introduced new services in response to client needs, introduced the SOS drug purchasing system to ensure regular drug availability, and suspended the outreach programs in response to the clinic's poor financial position.
The CEO believes AMC will be profitable within two years of employing at least three permanent full-time doctors (gynecologist, surgeon and physician) Appointment of permanent doctors is expected to increase overall patient traffic and facility utilization. Availability of surgeons may attract more wealthy people to avail themselves of AMC's well-equipped facilities increase admissions and ward utilization thereby enhancing AMC's revenue-generating capacity. However, no written business/financial plan has been prepared as a basis for monitoring the profit expectations of AMC's management.

The leadership may be commended for its perceptiveness in making appropriate responses to evolving changes, but the real impact of the changes on AMC's performance is mixed or premature to assess.

EFFECTIVENESS

AMC has been somewhat effective in the achievement of its mission and objectives. It has provided quality services and adapted to changing client needs. There is a large market potential for AMC's services, especially for those services not available in other public or private clinics. Among these are forensic laboratory/mortuary (AMC is the only private medical facility that has one), ultrasound physiotherapy, X-ray machine, and two well-equipped operating theaters.

However, AMC's facilities are grossly underutilized, and the Center has done poorly financially. This has been traced to a number of different causes including high turnover of doctors, poor community relations, and ineffective publicity. Poor utilization of the Center and its subsequent inability to generate revenue has in turn made it difficult for AMC to pay decent salaries to attract and retain competent personnel, creating a vicious cycle.
Currently staff morale is very low and some staff who resign in frustration or are dismissed are alleged to bad-mouth the Clinic even to the extent of discrediting the quality of its services. Mending community relations reducing staff turnover and publicizing the positive aspects of the Center to attract patients (as well as generate repeat business) is critical to its future effectiveness.

SUSTAINABILITY

AMC’s performance shows that it faces a sustainability challenge. The external environment has been generally supportive featuring a liberalized economic, political and regulatory environment, government recognition of the crucial role of the private sector in Ghana’s health delivery system and the large potential market in the clinic’s immediate community and beyond. However, AMC has survived to date only due to heavy infusion of funds by the founder, significant assistance and support in cash and kind by external connections and collaborators in addition to the revenue for the services provided.

Sustainability will remain questionable unless key problems are addressed in the areas of financial viability, management succession and the ability to continue meeting the needs of low-income clients at affordable cost. AMC also needs to address its ability to repair or maintain old and obsolete machines, equipment, and vehicles and to replace them when high operating costs would no longer justify their continued use.

AMC’s sustainability will be fully tested if and when external support is no longer forthcoming.
REPLICABILITY

While the AMC concept is not an entirely new one in Ghana or elsewhere, AMC has certain high-quality facilities that are not available in most private hospitals or clinics in Ghana.

AMC's success to date has been made possible through heavy infusion of ownership capital and external donor assistance and support. The fact that a generally supportive political and regulatory environment exists also contributes to its viability. Under such favorable conditions, the concept should be replicable in Ghana or elsewhere provided a more effective ownership-management arrangement is instituted. AMC's ownership/management concept has not worked in its favor. The clinic is owned wholly by a medical doctor based in the United States and managed and operated by hired managers and medical doctors since its inception. There has been a general perception that hired managers in the absence of an interested party at the clinic have not performed well. Future efforts should also ensure that stakeholders (especially medical doctors) are committed to the mission, vision, and objectives of the founder.
Private Initiatives for Primary Healthcare (*Initiatives*) is a project funded by the U.S. Agency for International Development (USAID) and managed through a cooperative agreement with JSI Research & Training Institute. The project promotes access to quality basic health services in developing countries by strengthening local private groups' abilities to provide basic health services. The project specifically targets low-income residents of urban and peri-urban areas.

Working in Ecuador, Guatemala, Nigeria and Ghana, *Initiatives* strengthens the financial and institutional capabilities of local provider groups. In these countries, the local groups encompass a range of service models, including independent physicians and nurses, networks of providers, and traditional and non-traditional insurance schemes. *Initiatives* provides technical assistance through business development workshops and individual consulting in the areas of strategic, business and financial planning, marketing assistance and capital acquisition.