Applying Managed Care Concepts and Tools to Middle and Lower Income Countries:

The Case of Medical Aid Societies in Zimbabwe

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Abstract

This paper presents information from an investigation of managed care in Zimbabwe by a large medical aid society. The authors contend that it is more important for health managers in middle and lower income countries to become familiar with the many concepts and tools of managed care than the ever-changing organizational forms found in the United States. The question should not be whether HMOs or PPOs as developed in the U.S. are adaptable to other countries, but what specific tools to improve the financing and provision of care are appropriate in other, i.e. non-U.S. health care systems. Focusing on specific managed care mechanisms rather than organizational forms, however, does not eliminate or even necessarily reduce management or policy concerns. Managers, policy-makers and regulators in every environment should be conscious of potentially serious issues relating to quality and access.

The United States Congress rejected government-led health sector reform during the early years (1992-3) of Bill Clinton's presidency. Americans have instead been relying on market mechanisms to constrain health care costs to an increasing degree. Chief among these mechanisms is "managed care," a phenomenon that has been increasingly affecting US health care over the past three decades. As Figure 1 indicates health maintenance organizations (HMOs), the best-known form of managed care organization, have been enjoying steady growth over recent years:

Figure1: HMO Enrollment in the United Statesi

Year	*Million Members*	*Annual Growth Rate (%)*
1990	33.6	3.5
1991	35.1	4.3
1992	37.2	6.1
1993	39.8	6.9
1994	43.4	9.2
1995	48.3	11.2
1996	56.7	17.4

The United States is one of many countries forced to deal with the pressures of rising demand of health care services and increasing costs. Middle and lower income countries are faced with the same problems. Most of these nations also have growing and aging populations, steadily rising rates of costly chronic disease and more expensive medical technology to support. Unlike the U.S. though many have passed legislation enacting a variety of public health reform measures affecting financing and provision systems alike.

Regardless of the success or failure of public policy initiatives health sector managers cannot avoid the challenges of constraining costs and hopefully maintaining if not improving the quality of services. This is certainly true in Zimbabwe (population 11.2 million) where health managers work in a very troubled environment. The country is in very poor condition. Both political and business leaders are struggling to deal with the following factors: a) the effects of extended war in the Democratic Republic of the Congo, b) substantial devaluation of Zimbabwean currency (388% loss from 1994-1999), c) the loss of expected financial support from the International Monetary Fund due to governmental budget failures, d) an increase in inflation from 25% in 1998 to 47% in December, 1999, e) an unemployment rate approaching 50% of the employable population, f) one of the highest HIV/AIDS infection rates in the world (an estimated 15-30% of the adult population), g) intermittent draught seriously damaging farm output, and h) increasing social and political unrest due most recently to erratic attempts (legal and otherwise) at land reform. The Gross Domestic Product (GDP) per capita was estimated in 1996 at $547 in U.S. dollars[ii].

The weakened economic and political foundation combined with the devastation of HIV/AIDS has frustrated efforts to improve health status in Zimbabwe. Life expectancy in the country is less than thirty-nine years. The infant mortality rate is 61 per 1000 live births. Despite a fertility rate of 3.7 the population growth rate is one percent. The ten years following the end of civil war (1981-1991) were filled with promise. Access to primary health care was substantially enhanced for the largely poor rural population. This progress came to a slow halt, however in the 1990's due to the primarily economic factors listed above. From 1990 to 1996 real health expenditures by the public sector declined 27 per cent[iii]. The public health infrastructure, from building maintenance to staffing to supplies has slowly but steadily eroded. While health reform, specifically national health insurance[iv] has been discussed at a high level of government, policy-makers have not decided as yet to make major changes in financing or provision.

Most Zimbabweans depend upon the declining tax-supported public health system of clinics and hospitals for basic health services. Only a small employed and relatively wealthier percentage (8%) of the total population has access to private health insurance. Both public and private employers provide this insurance through participation in *medical aid societies*, non-profit organizations that collect premiums from business and/or government organizations and use that money to pay health care providers for services provided to beneficiaries. There are no proprietary (for-profit) health insurance companies in Zimbabwe.

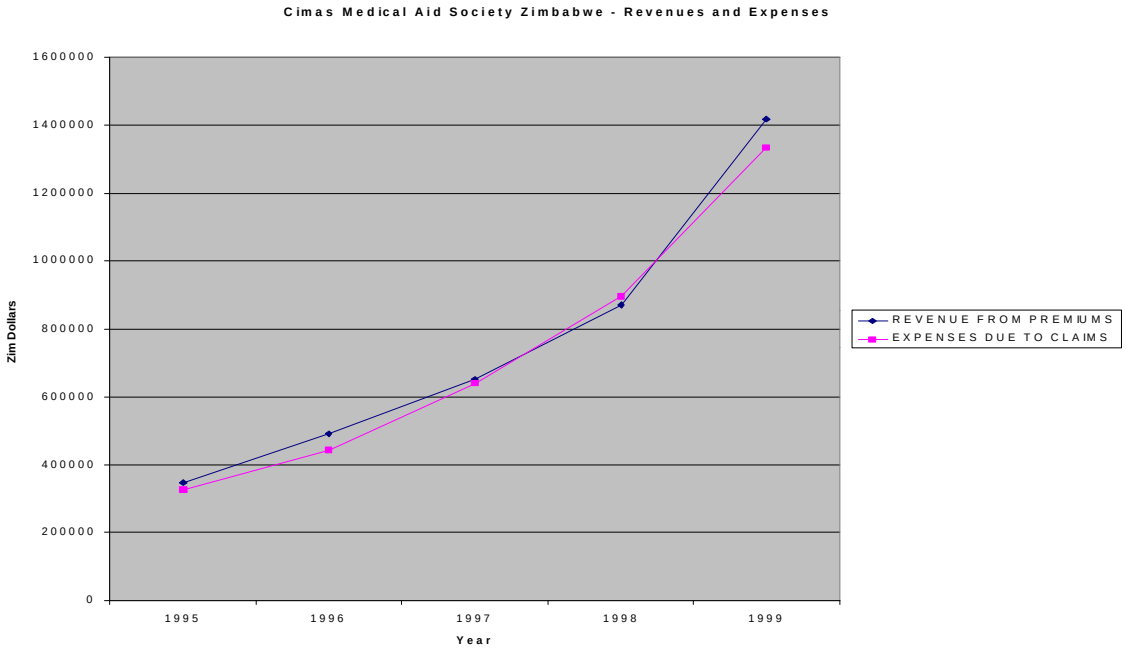
Medical aid society managers, like their ministry of health counterparts, face multiple pressures. Business leaders are not doing well either domestically or in international markets and are therefore resistant to premium increases beyond inflation.

A large medical aid society in Zimbabwe, Cimas (formally known as the Commercial/Industrial Medical Aid Society), looked to managed care for help. Company leaders attended conferences and courses in the United States and sought to learn from the experience of counterparts in both the United States (as well as in South Africa where there is a longer experience with managed care). They obtained financial assistance from the U.S. Agency for International Development that enabled them to consult experts from the Harvard School of Public Health. This paper presents information on the elements of managed care that Cimas managers evaluated, and reports which elements they decided to implement. Insufficient time has passed since those decisions, made over the past year (1999-2000) to present any data relative to results.

The Cimas medical aid society serves approximately 400,000 individuals in Zimbabwe, primarily in the larger cities. It is one of the two largest medical aid societies in the country. Cimas enrollees are nearly all from the private sector while the other sizable society, the Public Service Medical Aid Society (as its name indicates) has a largely public sector enrollment. Together they account for about 90 percent of the national medical aid society population. The two organizations have experienced increasing competition between each other and from approximately ten other much smaller medical aid societies for members, especially over recent years as the total pool of potential members has stagnated. The National Association of Medical Aid Societies (NAMAS) has given both large and small aid societies a forum for collaboration, however, and for many years operated as an industry-wide vehicle for rate setting with providers.

Data revealing the specific problem facing Cimas is displayed in Figure 2.

Figure 2: Cimas Premium Revenue and Claims Costs



In the above graph you first notice the rapid increase (exceeding general inflation) of both revenues and expenses reflecting the issues listed above. Second, you may note that in 1998 expenses exceeded revenues. This is not a sustainable trend for the company. Leaders achieved a small surplus in the following year (1999) by increasing premiums still further. They knew though that eventually their strategies would have to include effective cost containment.

In addition to the general cost pressures listed above Cimas and other medical aid societies face additional concerns. Providers, especially physicians, have been demanding higher rates of payment, fueled by decreases in their own purchasing power. And their dissatisfaction has contributed to yet another serious problem, fraud and abuse. This issue includes a range of behaviors exhibited by both providers and beneficiaries. The beneficiaries have commonly shared their insurance cards with non-members, leading to inappropriate billings. Providers have also submitted bills for extremely high volumes of visits per day (e.g. 120), leading causing medical aid society managers to suspect either or both fraud and/or poor quality of service. While it is difficult to quantify the extent of fraud and abuse a general consensus is that it may be as much as 20-30% of primary care costs or 6 percent of total costs.

Excessive billings, due to fraud or otherwise, are exacerbated by the traditional fee-for-service format of medical aid societies. Members have been given full freedom of choice of providers and have been able to self-refer for services at any time to virtually any provider (with one exception being the common practice for specialists to require a referral from a general practitioner). There have been no incentives to coordinate care, share results of testing or to look for cost-effective alternative treatments. There have also been no incentives to emphasize health promotion or prevention or to involve patients and their families in the care process. In addition there is almost no way for consumers to evaluate the quality of the care received and yet the only real mechanism for quality control (other than through a weak state licensure process) is patient choice of provider.

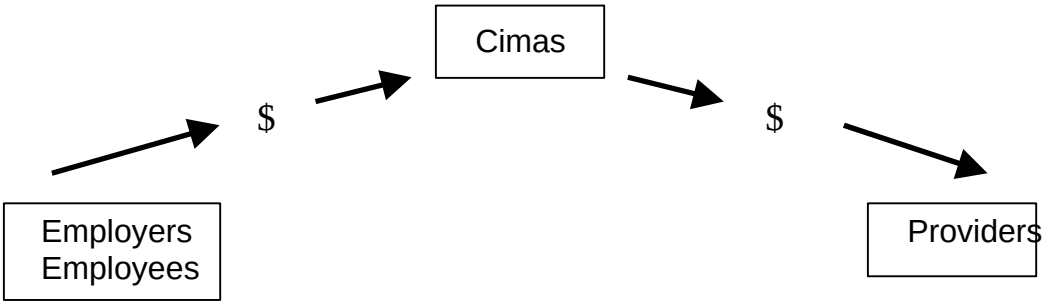
Cimas managers realized early on that they did not want necessarily to create a managed care organization reflective of those found in the United States. They were though interested in the relevant concepts and skills.

Peter Kongstvedt (1997) defined managed health care as a "system of health care deliver that tries to manage the cost of health, the quality of health care and access to care.[v]" Edward Hughes at the Kellogg Graduate School of Business calls it "the application of standard business practices to the delivery of health care in the best traditions of the U.S. fee-enterprise system[vi]." Managed health care has also been termed a "management process which involves contractual arrangements between health financers and providers which use incentives, education, regulation and review of providers' practice to improve cost effectiveness of care.[vii]" These writers conclude correctly that managed care is an approach to organizing the financing and provision of care, a set of concepts and tools, and should not be inappropriately reduced to merely one or several types of organization. The latter and extremely narrow definition can take planners and policy makers in the wrong direction, leading to inappropriate replications of a uniquely American phenomenon.[viii]

The important concepts and tools of managed care, as reviewed for appropriateness by Cimas leadership, include:

1. Primary Care Provider
2. Incentives for Providers and Patients
3. Enrolled Population
4. Broad Coverage
5. Selected Network of Providers
6. Budget for the Cost of Care
7. Active Care Management
8. Communication and Education
9. Continuous Measurement and Improvement

Cimas managers decided that while they might be interested in the entire list of managed care concepts and tools over time, they needed to begin by focusing upon the relationship between patients and primary care physicians. They knew that they were starting from a very early point in care management and did not want to jeopardize their critical relationships with providers, beneficiaries and employers by attempting too radical a change early on. Their current function may be diagrammed as follows:



As alluded to earlier medical aid societies including Cimas have been functioning as little more than a "pass-through" organizations, collecting premiums from employers and employers on a monthly basis and paying out benefits through fee-for-service reimbursements to health care providers including doctors and hospitals. The difficult management decisions had always surrounded annual projections of health care costs, an actuarial dilemma based upon epidemiological and economic assumptions, (one that promises to remain difficult even with managed care). But beyond those decisions and the challenge of getting their participating

employers to meet projected revenue requirements, they did very little to "manage" the care process. Intervention had been limited to identifying "problem" (i.e. abusing) physicians and assigning them to "cash basis." Cash basis means that the doctor must collect the charge from the patient and then the patient is required to submit a claim to Cimas for payment. Since patients have the option of visiting other physicians without facing out-of-pocket expenses this has been perceived as a marketing barrier but not sufficiently serious to the problem with the most serious abusers. In addition this approach did little to affect the vast majority of doctors who carefully avoided "outlier status" while inflating visit volumes to a more modest degree in order to meet revenue goals.

Cimas senior managers began their managed care effort with a communications campaign. They knew that, given the overwhelming negative media treatment of the subject in the American press, that they would need to convince their important audiences that the steps they intended to take were necessary and prudent. They began by educating themselves on the topic; the second-in-command even attended a three-month course on managed care in the United States to be prepared for his critical role in the planning and implementation processes. They then worked through their Board of Directors to educate employers on the seriousness of their economic challenges and the need for fundamental change in their business methods. They secured technical assistance through a USAID- funded project entitled "Data for Decision-Making," based at Harvard University. They used the consultants to educate additional staff, to introduce managed care to physicians across Zimbabwe through numerous meetings and workshops, and to help them design a pilot project labeled *HealthGuard*. Their intention has been to use the experience of this project as a springboard to company-wide application in the near future. They do not under-appreciate the importance of this step as a key potential trust-building measure. The risks are also apparent.

Another important step in this process has been the hiring of a medical director. There were no physicians among the senior Cimas managers and they knew they could not make progress in care management without the knowledge and credibility of a skilled doctor-manager. An exhaustive nationwide search identified an interested physician in private practice who, while not familiar with managed care, was already enrolled in a graduate business administration program in Harare. This individual, in addition to medical and developing management skills, provided evidence of the human communications abilities that would be seriously needed for this venture to succeed. Immediately upon joining Cimas the new Medical Director began learning, through written materials, briefings with the other senior staff and finally through a workshop and exposure in the United States, about managed care concepts, tools and experience.

HealthGuard has been designed around the concept of a *primary care provider* (PCP). The PCP, usually a physician in the U.S., is customarily responsible for coordinating medical (including inpatient and specialty) care for all the Cimas members on his/her panel. Very few Zimbabweans had experience with this concept. In general as mentioned earlier consumers have been accustomed to fairly extensive shopping for medical opinions from a variety of both general and specialist physicians. HealthGuard requires that all care paid for by Cimas is managed (by referral) by the PCP. The patients are receiving increased drug benefits as an enhancement, and the physicians are receiving a small fee to compensate them for their PCP responsibilities.

HealthGuard contains a number of other managed care features beyond the PCP and expanded coverage (for pharmaceuticals). First, there are no limits on visits with the PCP him or herself; primary care utilization is encouraged with this consumer incentive and the Cimas managers hope that it will ultimately lead as it has in the U.S. to reduced expenditures on specialists and hospitals. Second the PCP's in HealthGuard are part of a selective network. The Zimbabwean Medical Society has always lobbied against exclusion among licensed physicians, and has been generally successful. HealthGuard represents a departure from this tradition; only physicians with HealthGuard contracts are eligible to develop a patient panel and to receive the Cimas fee for PCP responsibilities. Cimas have therefore been able to select physicians who were

interested in this new approach to care, willing to participate in a dynamic experiment, and who had a positive history with the company in terms of both efficient and quality care. They could in other words "load the deck" for success.

As stated above Cimas managers did not elect to proceed from the outset with a number of other managed care concepts. For example, they rejected a proposal to begin the experiment by compensating HealthGuard PCPs through capitation payments. Many American advocates perceive capitation (literally payment per head) as the "guts" of managed care. Capitation, with payments to providers on a regular (usually monthly) basis regardless of the amount of care provided, eliminates the incentive for over-utilization that fee-for-service compensation provides. Cimas managers decided to introduce the concept of PCP without that incentive, with the intention of monitoring the care provided (through retrospective utilization review procedures). The results of utilization review will determine the next steps to take with potential incentives. They have not ruled out capitation ultimately, or other associated payment methods such as expanded fund holding as attempted in the United Kingdom or "fee-for-service withholds," both of which also offer curbs to utilization. They are instead taking a careful stepwise approach to change. They are aware of a number of U.S. managed care companies that have retreated from pure capitation compensation for their PCPs. These companies are instead paying their PCPs a set of fees that encourage preventive services (e.g. mammograms, blood pressure screenings).

Cimas is also embarking on communications strategies with both providers and beneficiaries that will be low-key by American standards but which are unprecedented within the company and relatively unknown in Zimbabwean. The senior managers are convinced that whatever their tactics, they need to be in closer touch with the physicians who are making the daily resource allocation decisions affecting their patients, and the Cimas members themselves, whose health care depends upon the company's ability to first sustain itself in Zimbabwe's troubled economy, and second implement measures to improve the quality and appropriateness of care.

It is too soon to measure the effectiveness in the Cimas managed care pilot project. Many actors are on the scene are watching with heightened interest. Physicians, including the leadership of the Zimbabwean Medical Society are well aware of their American colleagues' opinions regarding managed care. They are anxious about potential losses in autonomy regarding medical decision-making as well as potential declines in income. Other medical aid society managers and Zimbabwean business leaders will be monitoring the relative ability of Cimas to remain solvent, as well as its market share. Patients, at least those who learn about these developments, will be concerned about the financial incentives (e.g. co-payments) they may ultimately face and about the quality of care they will receive. Finally, Zimbabwean government officials in the Ministry of Health will be watching closely to see if their intervention is necessary for quality, access or cost reasons, or if they can adopt managed care measures to reduce the downward slide of the government's own much more extensive health care system. The first ever Zimbabwean Medical Aid Society Registration Act was enacted into law in 1999, a historic development in a country that has avoided nearly all forms of health care regulation to date. It provides a foundation for regulation in the future should policy-makers decide that it is warranted.

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