

FINANCING AND BUSINESS DEVELOPMENT NEEDS OF PRIVATE HEALTH CARE PROVIDERS IN ZAMBIA

MARKET RESEARCH REPORT



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This publication was produced for review by the United States Agency for International Development (USAID). It was prepared by Kimberley McKeon, and David Musona for the Banking on Health Project.



Market Research Series Report #2

Market Research Series: The Banking on Health project has developed a series of country-specific market research reports on the private health sector. This market research examines private health care providers' financing and business-development needs. It also explores service provision, focusing on reproductive health and family planning services. The market research is developed for a number of audiences. It provides information to financial institutions that are interested in lending to this sector. This information can be used for loan product development and designing marketing strategies. The Banking on Health project uses the market research to design business-development services for the private health sector. The market research also is shared with policy makers who are interested in engaging the private health sector.

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ACRONYMS

ARV	Antiretroviral
GDP	Gross domestic product
IUD	Intrauterine device
MFI	Microfinance institution
NGO	Nongovernmental organization
РМТСТ	Prevention of mother-to-child transmission
PSP-O ne	Private Sector Partnerships-One
SME	Small-and medium-sized enterprises
ТВ	Tuberculosis
USAID	United States Agency for International Development
ZK	Zambian Kwacha

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EXECUTIVE SUMMARY

OBJECTIVE

This report assesses the business-development needs, particularly financial and training, of private health care providers in Zambia. This information will guide the development of a program that was started in 2007 to expand access to financing for the private health sector. Specifically, assessment findings will

- provide market data to assist interested banks and microfinance institutions to develop loan products and marketing strategies for the private health sector
- provide a needs assessment and additional background for a training course developed for private health care providers on financial management
- inform government policies on health promotion with the private health sector

METHODS

This assessment consisted of a quantitative study of a survey of private health care providers in Zambia. A literature review of private providers was performed to gather information about developments that impact the sector, such as government initiatives and policies. Sources for this review included government statistics from articles and papers.

A survey of private health care providers including doctors, clinical officers, midwives, nurses, and other smaller providers groups (such as dentists and physiotherapists) was conducted in five provinces of Zambia: Lusaka, Central, Copperbelt, Southern, and Eastern Provinces. Not all of the survey respondents were medical providers; some of them were business managers hired by non-clinical owners of the private health facility. The provinces were chosen to provide the best opportunity to interview the largest number of private health providers based on the number of them registered with the Medical Council of Zambia. The survey was limited to 432 private medical providers registered with the council as of January 2007; of these providers, the 403 located in Lusaka, Central, Copperbelt, Southern, and Eastern Provinces were eligible for inclusion. A total of 201 providers responded to the survey. A survey with 99 questions was pre-tested at a sub-sample of eight private medical facilities. Then surveyors at the private health care providers' places of business implemented it verbally and individually. Monitoring was conducted on a regular schedule to ensure the data's integrity.

FINDINGS

With only 432 registered private medical providers, not all of which are operational, the formal private health sector in Zambia is small. It consists mainly of doctors, followed by clinical officers and to a much lesser extent midwives, nurses, and other small provider groups (such as dentists and physiotherapists). Despite its small size, recently there has been significant growth in the private sector with approximately 23 percent of private medical providers having started their operations between 2004 and 2006. Additionally, a significant number of providers, almost 31 percent of respondents, are reinvesting more than 3 million Zambian Kwacha (ZK)¹ (\$710 equivalent) per month in their businesses. The research also revealed that the vast majority of private health care providers are in urban areas.

USI\$=4,223.6 ZK as of June 2007 when the survey was conducted. Oanda.com 2009.

These private providers offer a broad range of medical services and make important contributions to priority public health services, including family planning and reproductive health, HIV/AIDS, tuberculosis (TB), malaria, and maternal and child health care. At the time the respondents were interviewed, approximately 73 percent claimed to offer some form of family planning counseling or services as a major aspect of their medical practice, and 99 percent of all providers surveyed said that they provided or prescribed at least one family planning product or service. Overall, 69 percent of the private providers surveyed provided or prescribed contraceptive pills, and 63 percent provided injectable contraceptives or condoms. Private providers also offered long-term methods, including intrauterine device insertion (20%), tubal ligation (13%), and vasectomies (6%).

Despite the predominance of the public sector, the private sector also has an important role in HIV/AIDS service delivery. Almost 60 percent of surveyed providers offered HIV/AIDS testing to their clients. Private providers are a significant source (40%) of prevention of mother-to-child transmission services and 35 percent of them offer anti-retroviral treatment (ARV), despite the availability of free ARVs in the public sector. In addition, 53 percent offered TB-related services and 82 percent treat malaria.

More than 70 percent of the private medical providers surveyed were profitable. Respondents indicated that their greatest constraint to growing their medical businesses is the lack of financing (64%). This sector is under banked with only 10 percent of private providers having applied for financing in the past three years. Despite constraints, a significant percentage of private health providers planned to improve or grow their practices. The most frequently cited ways of doing so are through buying medical equipment (75%), offering new services (73%), physical expansion of the existing health practice (65%), and purchasing drugs (61%).

Forty-six percent of respondents would like financing within the next year to improve their practices. Just fewer than half of respondents (46%) were interested in applying for a business loan in the next year; of those people interested in a loan, approximately 26 percent of them were interested in one ranging from 36 million ZK (\$8,523) to 80 million ZK (\$18,941). There was a wide range of financing needs, however, with 20 percent of respondents interested in loans of fewer than 36 million ZK (\$8,523) and 54 percent interested in loans greater than 80 million ZK (\$18,941). The largest potential loan request was 2.4 billion ZK (\$568,235). Approximately 68 percent of respondents who answered the question regarding possession of collateral (49% of all 201 respondents) had collateral to offer.

Most private providers (92%) were interested in training to improve the management of their medical business. As a group, private providers believed that additional clinical training was the most critical area of training that would help improve their medical practices (50%). The second most desired training was business management, chosen by almost 21 percent of respondents. Third was access to finance (7%).

Of the respondents, 91 percent belonged to a medical association. Only 23 percent of that subset of providers, however, indicated that their medical association provided clinical training and only 6 percent indicated that business training was offered. In contrast, 82 percent of all respondents indicated that medical associations should offer clinical as well as business training.

CONCLUSIONS

Zambia faces a human-resource crisis in the public sector as health workers leave the country, seeking better working conditions, higher wages, and relief from the demands brought on by the HIV/AIDS epidemic. A growing private sector can provide health workers with an alternative to leaving the country and reduce the demand on public-sector facilities.

Private providers have a role to play in contributing to positive public health outcomes, and the government and donors can nurture this function. Private providers in Zambia already offer a number of priority public health services, primarily to medium-income and poor patients, including reproductive health, family

planning, and HIV/AIDS. If the government and donors want to expand access and reduce the burden on public facilities, the private sector can be a platform for achieving these results.

Regulatory changes are needed to significantly grow the sector. The small number of registered private medical providers indicates that in addition to financial constraints there are other restrictions to the development of the sector, including the legal and regulatory environment. While the 1997 Nurses and Midwives Act allows those workers to open their own agencies and nursing homes, no guidelines exist regarding their operation of outpatient clinics or consulting rooms. Furthermore, the Medical Council of Zambia requires that a physician be in attendance the equivalent of one day per week despite their scarcity in Zambia. In addition, no law addresses private practices by clinical officers.

Although most respondents did not indicate that government regulations were a serious constraint, a higher percentage of clinical officers (38%) and 37 percent of providers in the "other" private provider category, which includes smaller private provider groups such as dentists and physiotherapists, think government regulations are an obstacle to managing a medical business. These providers indicated that government regulations are not easy to understand and that requiring a physician to be present one day per week is a problem. Because of the regulatory environment in Zambia, some providers may run their practices in the informal sector without registering with the Medical Council of Zambia. Zambia's estimated 40,000 traditional healers, for example, account for approximately 60 percent of total household health spending and almost 13 percent of total spending on health.² This study did not attempt to interview providers not registered with the Medical Council of Zambia. Clarifying the regulatory environment and enabling nurses, midwives, and clinical officers to own and operate outpatient facilities, along with developing and enforcing quality standards, could impact the growth and size of the private health sector.

Expanding access to finance will help existing private providers to grow and will be important for new entrants if regulatory conditions change. The study revealed that the private health sector is under banked and that there is a demand for financing from private providers to grow and improve their businesses. Given the range of financing needs that were identified, health providers can be segmented by loan size (that is, as potential clients for microfinance institutions or commercial banks). Any program to expand access to financing for private providers should work with both types of financial institutions.

Encourage the development of risk-pooling programs. The survey results indicated that the majority of private providers in Zambia are sole proprietorships. One of the factors that makes it difficult for them to be profitable is that patients often do not pay for services. These providers are likely to depend on out-of-pocket payments that increase the risk of lending to them and make business planning more difficult. Risk-pooling arrangements would provide financial protection for providers and make it more likely that patients could pay.

There may be an opportunity to include the private sector in training and continuing education so it is better able to partner with the public sector and contribute to quality standards. Private providers indicated a great demand for training, with a preference for clinical instruction, to improve their medical practices. But donor and government trainings often do not include the private sector, and when they do, they tend to focus on private providers in urban areas or that are affiliated with large employer-based clinics. The government should work with the private sector to improve the quality of clinical care and establish clinical-care standards.

Medical associations should have an important role in providing clinical and business-management training for private providers. Most private providers belong to a medical association, but most of them also indicated that their medical associations do not provide medical training and supply only a little business training despite the demand.

² Phiri and Tien 2004

I.INTRODUCTION

Private health care providers worldwide cite the inability to access finance as one of their key impediments to business growth and improvement. For these businesses, as with all enterprises, credit is an engine for expansion.

Many health care providers trying to access finance to increase their outreach or improve their services find that banks are not interested in lending to their sector. Financial institutions often view health as a public good, not a business opportunity, and they may not understand the business models in the sector, preferring instead to lend to more familiar businesses, such as those in the trade and manufacturing sectors. Banks that require security may not be interested in the type of collateral that health care providers offer. And the businesses themselves, often run by clinicians with little business management experience, may not produce the type of bankable business plans that are necessary to obtain financing.

The more financial institutions that reach out to the health care market, the more likely it is that doctors, nurses, and other providers of health products and services will be offered favorable terms that meet their financing needs. To assess the health care market's potential and possibly view financing for the sector more favorably, these institutions require market information and, in some cases, training in marketing and lending to the sector.

The United States Agency for International Development (USAID)-funded Banking on Health project expands access to financing for private health providers in developing and transitional economies. Banking on Health works with financial institutions to promote health-sector lending and with private health providers to improve their businesses and ability to access financing. Banking on Health began working in Zambia in October 2006, conducting a preliminary assessment of the financial and private health sectors. This assessment revealed that access to financing was a constraint in Zambia and information about the sector was lacking.

Banking on Health designed this study to further guide the development of a program to expand access to financing for the private health sector. The results of this survey and research are designed to inform financial institutions in Zambia about how to best target the private health sector and provide the products and services these businesses need to expand and improve their practices. The research also was intended to provide Banking on Health with information about private health care providers' business practices for use in developing a business-training curriculum to improve the viability of practices and prepare providers to access financing. The research is intended to provide information to policy makers that are interested in partnering with the private health sector. The main objectives of this research are to

- provide market data to assist interested banks and microfinance institutions (MFIs) to develop loan products and marketing strategies for the sector
- provide a needs assessment and background for a training course developed for private health providers on financial management and access to finance to grow or improve their practices
- inform government policies on health promotion with the private sector.

2.BACKGROUND

2.1 THE ZAMBIAN HEALTH CARE SYSTEM

Zambia's population was estimated at 12.2 million people in 2007. With approximately 39 percent of the population living in urban areas, mainly Lusaka and the Copperbelt provinces, Zambia is also one of the most urbanized countries in Sub-Saharan Africa. Zambia covers 752,612 square kilometers, divided into nine provinces and 72 districts.³ Zambia is one of the poorest countries in Africa and the world, ranking 166 out of 177 in the Human Development Index according to the 2005 Human Development Report. Sixty-four percent of the population lives in absolute poverty (less than \$1 per day) with 73 percent living under the national poverty line.⁴

Zambia also faces a great disease burden. Malaria is the leading cause of morbidity and is responsible for 44 percent of all public-sector outpatient cases among children less than 5 years old.⁵ There are more than 54,000 cases of tuberculosis (TB) per year.⁶ There is high antenatal attendance, estimated at 94 percent, and the maternal mortality rate decreased from 729 per 100,000 live births in 2002 to 591 in 2007. Many of these deaths are attributable to postpartum hemorrhage, sepsis, obstructed labor, post-abortion complications, and eclampsia. In addition, only 48 percent of women deliver in health facilities.⁷ Other contributing factors to maternal mortality include delays in accessing health care at community and health-center levels.

Zambia's estimated HIV/AIDS prevalence of approximately 16 percent among the 15-to-49-year-old age group makes it one of the countries in Sub-Saharan Africa most affected by the pandemic. Approximately I million Zambians are HIV positive, of which more than 295,240 need antiretroviral therapy. People 15 to 24 years old account for almost 8 percent of the HIV-positive population. The prevalence is significantly greater among women compared to men, especially for those people less than 35 years old. Overall, women (with prevalence rates of almost 18 percent) are 1.4 times more likely to be HIV positive than men (with prevalence rates of 12.6 percent). In addition, there has been a steady increase in the pregnant women testing positive for HIV, from 17 percent in 2005 to 21 percent in 2007.8

In regard to family planning, Zambia's total fertility rate (the average number of children born to a woman) increased from 5.9 as of 2002 to 6.2 as of 2007. The use of modern contraceptives, however, has increased with 30 percent of married women using any modern method of family planning in 2007 compared to 25 percent in 2002. But the unmet need of married women for family planning remains great at 27 percent.⁹

Exacerbating Zambia's disease burden is the fact that the country faces a critical shortage of health personnel, particularly doctors.¹⁰ Poor working conditions and low wages in many public health facilities, coupled with increasing staff demands due to the HIV/AIDS epidemic, have contributed to an exodus of

³ United Nations Joint Programme on HIV/AIDS 2008

⁴ United Nations Development Programme 2005

⁵ Cheelo and Odegaard 2005

⁶ World Health Organization 2006

⁷ Zambia Ministry of Health 2007

⁸ United Nations Joint Programme on HIV/AIDS 2008

⁹ Zambia Ministry of Health 2007

¹⁰ Zambia has 0.12 physicians and 1.56 nurses per 1,000 people. In the United States there are 2.56 physicians and 9.37 nurses per 1,000 people. By contrast, South Africa has 0.77 physicians and 4.08 nurses per 1,000 people. World Health Organization 2009

health workers out of the country. For nurses and clinical officers, death—usually the result of AIDS causes more attrition than emigration. For three public-sector health institutions, annual death rates were 3.5 percent for nurses and almost 3 percent for clinical officers.¹¹

Overall health-sector performance has improved in the last five years.¹² The challenges of a high disease burden and a human-resource crisis, however, has slowed progress towards the Millennium Development Goals. As part of its strategy to make greater advancements towards these and other national health priorities, the Ministry of Health aims to strengthen partnerships with the private health sector. According to the National Health Strategic Plan 2006–2011, the Ministry of Health intends to "harness the public/private partnerships in the delivery of public health services through increased dialogue, development and enforcement of appropriate regulatory framework, improved coordination, monitoring and evaluation."¹³

The Zambian health care system provided universal medical care for all residents from 1964 to 1992. As the economy began deteriorating in the 1970s, however, the quality and provision of health care delivery also suffered. In 1992, a new national health policy was enacted in Zambia to address these issues, emphasizing decentralization and preventive medicine. This innovation culminated in the introduction of an Essential (basic) Health Care Package, which defined the key interventions that the public health system should provide for the community. Health care management was decentralized to the district level with the formation of autonomous District Health Teams and the introduction of cost sharing among other measures.

The District Health Teams are responsible for direct provision or commissioning of health services to the first referral level (district hospitals) for the population within their districts. These health services are provided through health centers and hospitals (public, private, or church missions). At the second and third referral levels are Hospital Management Teams (general, provincial, or central hospitals).

2.2 PRIVATE HEALTH SECTOR

Although the private-sector provision of health care always has been legal, it is only since the deregulation of health care in 1992 that the increasing demand for health services and improved economic conditions have prompted some private providers to consider expanding their operations and some retired public-sector health workers to consider opening a private practice. The private health sector started growing in the early 1990's mainly as a consequence of inadequacies in the public health care sector. It is composed of a number of actors involved in service provision and product and equipment supply. Although the formal economy remains small in Zambia, 11 percent of employers do participate in the health care system, which is the largest in Sub-Saharan Africa.¹⁴

Private service providers include doctors, nurses, clinical officers, dentists, and other small specialized provider groups. Private facilities include hospitals as well as general and specialized medical clinics. In addition to service providers, other segments of the private health sector include pharmacies, pharmaceutical distributors, medical equipment suppliers, insurance companies, and private medical and nursing schools. In Zambia, the church mission sector is second only to the government in the provision of health services in rural areas. The for-profit private medical sector is small with only 432 private provider health providers registered with the Medical Council of Zambia as of January 2007.¹⁵ As will be discussed, the market research survey provides the breakdown of the private health sector by business registration with most private providers registered as sole proprietorships. There are a few larger successful for-profit, private providers that offer high-quality services. These providers are located

¹¹ Feeley et al. 2004

¹² Zambia Ministry of Health 2005

¹³ Zambia Ministry of Health 2005

¹⁴ International Finance Corporation. "The Business of Health in Africa." Washington, DC: IFC, 2008.

¹⁵ Medical Council of Zambia registered providers. Note that this list contains providers who are no longer in practice.

primarily in Lusaka and the Copperbelt. Below this level there are many small-scale providers that run small facilities. This report only focuses on for-profit private providers registered with the Medical Counsel of Zambia and does not examine pharmacies and other private-sector entities not registered with the council.

Data from the 2004 Living Conditions Monitoring Survey showed that among individuals who were sick or injured within two weeks of the survey's date, the public sector was the dominant source of health care. Fully 82 percent of respondents seeking consultations for their illness or injury obtained medical advice from a public-sector institution. By contrast, only 4 percent sought consultations from privatesector ones. These figures, however, mask substantial variations in private-sector visits by location and socioeconomic stratum. Private-sector use is greater in urban areas (9%), for example, than in rural areas (2%), and it increases within urban areas as one moves from low-cost urban areas (7%) to highcost ones (13%). Private-sector use is highest among large-scale private farmers.¹⁶

In addition, there do not appear to be any external quality-assurance mechanisms for the private sector beyond licensing. An accreditation program that began in 1997 apparently was discontinued in 2000 due to lack of funding.

An important consideration regarding the growth of the private health sector is the legal and regulatory environment. While the 1997 Nurses and Midwives Act, signed in 2004, allows nurses and midwives to open their own agencies and nursing homes, no guidelines exist regarding their operation of outpatient clinics. Another area of confusion is that the Medical Council of Zambia requires a physician be in charge of any licensed "medical facility," despite physicians being in short supply in Zambia.¹⁷ All of these considerations create uncertainty among nurses and midwives about whether they can or cannot open private outpatient clinics without a supervising physician.

While there is some ambiguity in the laws with respect to independent practices by nurses and midwives, there is no law that addresses private practices by clinical officers, which again constrains private health sector expansion.¹⁸

2.3 FINANCING OPTIONS FOR THE PRIVATE HEALTH SECTOR

After years of socialism, Zambia underwent market reforms and liberalization in the 1990s. Recently Zambia has experienced high growth rates (such as a 6 percent increase in gross domestic product (GDP) in 2006), boosted by increased investments in its copper mines. Inflation fell from 24 percent in 2002 to 6.4 percent in 2007,¹⁹ although interest rates remain high as Figure 1 shows. In addition, until recently the government's heavy borrowing from commercial banks crowded out lending to private-sector businesses as commercial banks were investing in government treasury bills rather than lending to the private sector.

¹⁶ Central Statistical Office. 2005. "Living Conditions Monitoring Report: 2004." Lusaka, Zambia.

¹⁷ Feeley et al. 2006

¹⁸ Feeley et al. 2006

¹⁹ Bank of Zambia 2009

FIGURE I: WEIGHTED LENDING RATE BASE RATE



Source: Bank of Zambia, Fortnight Economic Statistics 2004, 2005, 2006, and 2007

Currently 14 commercial banks operate in Zambia holding 90 percent of Zambian financial assets. As of the end of 2005, credit to the private sector by banks represented only 8 percent of GDP. Furthermore, only 5,000 people held 90 percent of the loans, and just 8 percent of Zambia's adult population had a bank account.²⁰ Barriers to credit for the health sector in Zambia and throughout Sub-Saharan Africa include prohibitive interest rates, loan minimums or maximums that are not suitable to the needs of health clinics, and excessive or unrealistic collateral requirements.²¹ In addition, the Bank of Zambia reports that "the poor credit culture is attributed to the lack of precision in identifying deserving borrowers."²²

The closure of nine banks in 1995 led to a loss of confidence in the system resulting in the shift of deposits from locally owned banks to larger international institutions. Commercial banks increasingly are becoming receptive to lending to small and medium-sized enterprises (SME) and the low-income market as returns on government investments decline with falling interest rates. But these banks misunderstand the risks, overestimate the costs, and underestimate the potential returns of lending to sectors, such as private health, where the business characteristics are unknown. Like most developing countries, micro, small, and medium enterprises dominate Zambia's private health care sector. According to the 2005 World Bank's World Development Report, small firms in Africa obtain 5 percent of their financing through banks, while large firms rely on banks for 22 percent of their financing needs.²³

Aside from the commercial banks, the Bank of Zambia supervises 12 MFIs.²⁴ Although many MFIs have collateral requirements, most are open to cash-flow based lending for short-term loans. MFIs offer a growing finance opportunity for private health providers, but the microfinance sector in Zambia is fewer than 15 years old and initially the sector grew rapidly without consideration for best practices in lending. As a result, it experienced a partial collapse in 2003 and 2004 and the MFIs have been rebuilding their loan portfolios slowly. In addition, their loan underwriting capacity is weaker than that of the commercial banks, which is reflected in the higher arrears of MFIs. Similar to commercial banks, MFIs tend to be better represented in urban and peri-urban areas where a substantial number of their clientele are located.

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²⁰ DoingBusiness.org 2009

²¹ International Finance Corporation 2008

²² DoingBusiness.org 2009

²³International Finance Corporation 2008

²⁴ Bank of Zambia 2009

In addition to these structural barriers in the financial sector that limit access to finance, many private health care providers have limited financial and business-management skills and often struggle to prepare a bankable loan application.

2.4 BANKING ON HEALTH ZAMBIA

In Zambia, Banking on Health designed a program to address these constraints and improve access to financing to support the sustainable delivery of reproductive health and family planning services in the private sector. This USAID-funded global project seeks to expand access to financing for private health providers by working to

- increase the credit-readiness of private-sector providers, especially family planning and reproductive health providers
- increase the capacity of banks, leasing companies, and MFIs to provide financing to these providers and distributors

In late 2006 Banking on Health collaborated with the Private Sector Partnerships (PSP)-One project to conduct a preliminary assessment of the private health sector in Zambia. The team found that private sector is small and faces a number of constraints, including a restrictive regulatory environment, lack of access to finance, and limited business-management skills. The team's recommendations to address the constraints in the private sector included

- rationalize the legal and regulatory environment
- improve public-private linkages
- strengthen private-sector quality-assurance mechanisms
- support access to financing and business-development services²⁵

Ultimately the PSP-One and Banking on Health assessment found that the time is right in Zambia to lay the foundations for a strong private sector capable of contributing to the National Health Strategy. Based on this assessment, Banking on Health designed a program to expand access to financing for Zambia's private health sector. This program includes three main components:

- conduct market research on the private health sector for use in training financial institutions and private providers and informing policy makers
- develop and roll out a business training program for private health providers
- train financial institutions in lending to the private health sector

In April 2007 Banking on Health initiated the market research survey of private health care providers. In October 2007 Banking on Health launched a training program for private health providers in business and financial management, which is ongoing at the time of this report. Workshops were held in November 2007 for commercial banks and MFIs on marketing and product development for the small-scale health care sector, incorporating the research findings in this report. In addition, a trade fair in March 2008 linked medical suppliers and financial institutions to private providers.

²⁵ Banking on Health and PSP-One trip report, March 2006

3. RESEARCH METHODS

3.1 OVERVIEW

Banking on Health commissioned M & N Associates, a Zambian consulting firm that specializes in the small-business sector, to conduct the market research survey. The study consisted of a survey of 403 of the 432 private health care providers registered with the Medical Council of Zambia. A literature review gathered information about developments that impact the sector, such as government initiatives and policies. Sources for this review included government statistics from articles and papers.

The quantitative component of the research consisted of a survey of private health care providers in five Zambian provinces (Lusaka, Central, Copperbelt, Southern, and Eastern Provinces). In all, 201 surveys were collected, representing approximately 47 percent of the private health care providers registered with the Medical Council of Zambia.

The target sample group was all of the private medical providers (including doctors, nurses, clinical officers, midwives, and smaller specialized provider groups, such as dentists and physiotherapists) registered with the Medical Council of Zambia regardless of their business registration (including individual practices, partnerships, group practices, or limited liability companies). The only criterion was that the business be registered with the Medical Council of Zambia. In regard to some survey questions where the response rate was low, such as loan characteristics, the results should not be interpreted as representative of all private health providers in Zambia. The survey did not represent informal private health care providers (unregistered) in Zambia.

3.2 SAMPLING FRAME

As of January 2007, 432 private medical providers were registered nationwide with the Medical Council of Zambia. Figure 2 indicates the distribution of all registered private medical provider by province. One striking feature of the private health care sector in Zambia is the uneven distribution of private providers. As of January 2007, most of the private providers (80%) were in the Lusaka and Copperbelt provinces.



FIGURE 2: REGIONAL DISTRIBUTION OF PRIVATE MEDICAL PROVIDERS

The sampling frame for this survey included just the 403 private medical providers in the Lusaka, Copperbelt, Central, Eastern, and Southern Provinces. Twenty-nine private providers from the Luapula, Northern, Western, and North-Western Provinces were not included due to their remote locations and the costs of surveying them. Consequently, the sample frame represented 93 percent of all 432 private medical providers registered with the Medical Council of Zambia as of January 2007. Efforts were made to survey all 403 providers in the sampling frame.

3.3 SURVEY METHODOLOGY

Banking on Health, with input from M & N Associates, developed the questionnaire. It consisted of 99 primarily multiple-choice questions. Topics included demographic, business, and financial information, as well as opinions about obstacles, opportunities, and future plans. A pilot survey of eight randomly selected private providers was conducted in Lusaka to test and refine the questionnaire; the results are included in the survey findings.

All 403 private medical providers were sent letters to ensure proper introduction of the survey objectives. Providers then were called to arrange appointments with the interviewers. The objectives of the survey were mentioned when making appointments to interview the owner (or one of the owners) of the practice. Six survey operators (four interviewers and two supervisors) were trained to administer the questionnaire to respondents verbally and in-person at their workplaces, although three interviews were conducted by telephone because of the provider's remote location. When it was not possible to interview the owner of the medical practice, the survey was administered instead to the medical or business manager the owner employed. Thirty-seven percent of the survey respondents were medical or business managers rather than owners. Supervisors conducted regular monitoring to ensure the data's integrity.

Table I shows the distribution of outcomes for the 403 medical providers in the sample. The survey team reached 201 respondents, approximately a 50 percent response rate. Of these responses, 190 completed the survey in full and 11 had partially complete surveys, meaning that a respondent agreed to be interviewed but declined to answer one or more sections of the questionnaire. The most notable section that respondents declined to answer was Section 2 that included questions related to personal finance. The 11 partially completed surveys are included in the survey results.

	Lusaka	Central	Copperbelt	Eastern	Southern	Total
Fully completed	102	13	51	7	17	190
Partially completed	5	2	4	0	0	11
Absent	3	I	6	I	0	
Refused	39	0	11	l	2	53
Closed	15	2	17	0	0	34
Same entity	12	0	51	0	8	71
Government of Zambia provider	0	0	5	0	0	5
Language barrier	0	0	2	0	0	2
Not operational	I	0	0	0	0	I
Not located	7	0	5	3	0	15
Duplicate provider	7	0	3	0	0	10
Total	191	18	155	12	27	403

TABLE I: SUMMARY OF SURVEY RESPONDENTS

The 201 respondents represent 47% of the total population of registered private health care facilities in Zambia. The refusal or non-response rate (53 private medical providers out of a total of 403 possible respondents) was highest in Lusaka (10%) and the Copperbelt (3%). In addition, 34 (8%) of the medical practitioners registered had closed their facilities and 15 private facilities could not be located. There were language barriers with two of the providers. An additional 71 (18%) private providers were not standalone legal entities but service-delivery points of a larger entity, such as the Copperbelt mines. (The Medical Council of Zambia registers each clinic as a separate medical provider even though the clinics may be part of a corporate entity.)

3.4 DATA ANALYSIS

Data entry was performed in dBase IV; the captured data then was exported to Statistical Package for the Social Sciences 12.0 for Windows for data cleaning and analysis. Frequency distributions were determined for all variables, and selected variables were analyzed by type of medical provider, province, and number of beds in the medical practice. As few respondents were in rural areas (seven), it was not possible to examine differences in the opinions of providers in urban versus rural locations.

4. GENERAL RESULTS OF THE SURVEY OF PRIVATE MEDICAL PROVIDERS

4.1 GENDER

More than 68 percent of private providers interviewed were male, while approximately 32 percent of respondents were female.

FIGURE 3: GENDER OF PRIVATE PROVIDERS



4.2 URBAN AND RURAL LOCATION

Of the respondents, 97 percent were urban residents, and only 7 providers (3%) were rural residents. Six of the rural providers were located in the Central Province in the townships of Chisamba and Mkushi with one in the Eastern Province in the township of Petauke.

4.3 CHARACTERISTICS OF PRIVATE MEDICAL PROVIDERS

4.3.1 TYPE OF PRIVATE MEDICAL PROVIDER

Doctors represented most of the private health care providers surveyed, accounting for 45 percent of the respondents. Only approximately 21 percent of registered private providers surveyed were nurses or midwives; this figure may reflect the fact that a physician must have management control of a private health practice, and survey teams were instructed to interview either owners or business and medical managers.



FIGURE 4: TYPE OF PRIVATE MEDICAL RESPONDENTS SURVEYED

* Includes ten dentists, six physiotherapists, three opticians, two optometrists, two biomedical workers, two non-medical facility owners, one medical assistant, and one public-health specialist

4.3.2 MEDICAL EXPERIENCE OF PRIVATE PROVIDERS

The private medical providers surveyed were experienced in their fields, as more than 85 percent of them had more than ten years of experience.



FIGURE 5: YEARS OF EXPERIENCE AS A MEDICAL PROVIDER

4.3.3 EXPERIENCE AS PRIVATE PROVIDERS

The majority (57%) of the medical providers had between one and ten years of experience in private practice. Only slightly more than 11 percent had greater than 20 years of private-practice experience. This finding reflects the fact that although private health care existed before the 1990s, it was only in the later part of that decade that the sector surged in growth. In addition, many providers enter private practice after years of working in the public sector.



4.3.4 YEARS OF OPERATION OF MEDICAL FACILITIES

Figure 6 confirms this leap in the growth of private health facilities. Approximately 23 percent of the private medical facilities surveyed began their operations between 2003 and 2006, and almost 57 percent of medical facilities opened between 1992 and 2002. This growth is partly the result of market liberalization that was implemented in the 1990s and the deterioration of public health facilities as operating conditions for public-sector workers worsened.



FIGURE 6: YEAR PRIVATE MEDICAL PRACTICE BEGAN OPERATIONS

4.3.5 TYPE OF MEDICAL PRACTICE

Forty-six percent of the private providers surveyed worked in an individual private practice. Commercial company registration was the second most common type of private practice, accounting for 20 percent of the respondents. And partnerships followed closely with just more than 19 percent. Religious missions and nongovernmental organizations (NGOs) also are important health care providers with 9 percent of respondents indicating them as their type of private practice.



FIGURE 7: PRACTICE TYPES

4.3.6 NUMBER OF PARTNERS IN MEDICAL PRACTICE

Among private medical providers that had partners, most (58%) reported having between one and four of them. Five percent of providers reported having nine or more partners. Doctors (78%) were more likely than clinical officers (62%), nurses (41%), or midwives (39%) to have partners.

FIGURE 8: NUMBER OF PARTNERS IN MEDICAL PRACTICE



4.3.7 EMPLOYEES OF MEDICAL PRACTICES

Private health care providers generate employment in Zambia. For example, 97 percent of respondents indicated that they had employees. Full and part-time employment is offered with practices engaging between one and 233 full-time employees. Most medical providers (61%), however, employ between one and five full-time employees with 23 percent of providers employing as many as two people. As Figure 9 shows, 20 percent of the respondents reported employing between six and ten full-time employees. Only 19 percent of the respondents retained more than ten full-time employees. As would be expected, corporate private health care providers, such as the mines, employ larger numbers of full-time employees.



FIGURE 9: FULL TIME EMPLOYEES WORKING IN PRIVATE PRACTICE

Most medical providers (71%) employed between one and five professional health workers. Among all providers surveyed, the total number of professional health workers employed ranged from one to 197 (Figure 10).





Three-fourths of the medical providers (76%) engaged part-time professional health workers. Reliance on part-time help may reflect the existence of moonlighting among professional health workers in the public sector. Moonlighting has been encouraged among public professional health workers because of low salaries and because it facilitates the public sector retaining them.

4.3.8 WORK OUTSIDE OF PRACTICE

Significantly, almost 21 percent of the respondents had other paid medical work outside of their medical practice. Clinical officers were the most likely (29%) to have other paid medical work followed by doctors (22%). Nurses (17%) and midwives (11%) were less likely to work outside of their practices.

For providers who performed work outside of their private practice, the largest percentage worked in government hospitals or clinics (59%) followed by those who worked in other private practices (29%). This finding is an important consideration for financial institutions as supplemental income is an additional source for loan repayment.

FIGURE | |: TYPE OF FACILITY WHERE PROVIDERS WORK OUTSIDE OF THEIR PRIVATE PRACTICE



4.4 CAPACITY OF HEALTH FACILITY

4.4.1 CAPACITY FOR INPATIENT CARE

Most private health care providers in Zambia (71%) have the capacity for outpatient care only. A small percentage of health care providers (29%), offer both outpatient and inpatient services. Forty-two percent of nurses and 41 percent of doctors offer both inpatient and outpatient services, while only 22 percent of midwives and 17 percent of clinical officers do so.





4.4.2 NUMBER OF BEDS

Of providers that offer inpatient care, the number of beds varies from one to 122. Most of the privatesector medical facilities with inpatient capacity have between one and five beds followed by those with between six and ten beds. Approximately 3 percent of private medical facilities have more than 20 beds.





4.4.3 OWNERSHIP OF MEDICAL FACILITY

Approximately half of private-sector medical providers operate from rented buildings with slightly less than half of them operating from their own building. Approximately 78 percent of midwives (14) own their facility, followed by 58 percent of nurses (14), 57 percent of clinical officers (24), and 46 percent of doctors (41). The lower ownership levels of facilities by doctors might be due to their greater equipment needs and operating costs.

4.5 SERVICE PROVISION OF MEDICAL PRACTICES

4.5.1 CLIENT VISITS PER MONTH

A majority of the respondents (57%) reported 300 or fewer client visits the previous month, with 27 percent having received between 100 and 200 client visits. A significant number (19%) had 701 or more visits the previous month. The Copperbelt and Lusaka provinces accounted for 80 percent of the providers that reported more than 701 visits. Among the 36 providers with more than 701 visits in the last month, 44 percent were in the Copperbelt, 36 percent in Lusaka, 8 percent in Eastern Province, and 6 percent each in the Southern and Central Provinces. Most (56%) of these providers were only outpatient facilities.



FIGURE 14: NUMBER OF CLIENT VISITS IN PREVIOUS MONTH
4.5.2 TYPES OF MAJOR MEDICAL SERVICES PRIVATE PROVIDERS OFFERED

Private health care providers in Zambia offer a wide range of critical clinical services (Figure 15). The major medical services indicated by providers in the five provinces surveyed include malaria treatment (82%), drug dispensing (82%), general primary care (79%), and family planning (73%). Fewer private providers offer prenatal and postnatal care (52%) and antiretroviral (ARV) therapy for HIV (35%). Family planning is discussed in greater detail in the following section.



FIGURE 15: MAJOR MEDICAL SERVICES PRIVATE PROVIDERS OFFERED*

 * Question allowed for multiple responses

TABLE 2. PROPORTION OF REGISTERED PRIVATE MEDICAL PROVIDERS OFFERING MAJOR CLINICAL SERVICES, BY PROVINCE*

	Central	Copperbelt	Eastern	Lusaka	Southern	All five
	Province		Province		Province	provinces
Total number of providers	15	55	7	107	17	201
Primary care	87%	80%	71%	79%	76%	79%
Prenatal and postnatal care	69%	47%	57%	53%	53%	52%
HIV/AIDS treatment (ARV)	27%	40%	14%	38%	12%	35%
Malaria treatment	100%	85%	86%	75%	100%	82%
Child health care	80%	76%	86%	68%	94%	74%
TB care	40%	62%	43%	51%	47%	53%

* Question allowed for multiple responses

While all of these clinical services were offered in every province, there were variations in the proportion of providers that provided them. For example, all of the private providers in Central and Southern Provinces offered malaria treatment, compared to three-fourths of the providers in Lusaka. And only a small proportion of private providers in Eastern and Southern Provinces offered HIV/AIDS treatment.

TABLE 3. PROPORTION OF PRIVATE PROVIDERS OFFERING MAJOR CLINICAL SERVICES,
BY TYPE OF PRIVATE PROVIDER*

Services	Doctor	Clinical officer	Nurse	Midwife	Other**
Total number	90	42	24	18	27
Primary care	83%	81%	92%	89%	44%
Prenatal and postnatal care	64%	45%	46%	67%	19%
HIV treatment (ARV)	48%	31%	25%	22%	15%
Malaria treatment	86%	93%	88%	94%	41%
Child health care	91%	71%	75%	50%	37%
TB care	71%	43%	38%	44%	26%

*Question allowed for multiple responses

** Includes ten dentists, six physiotherapists, three opticians, two optometrists, two biomedical workers, two non-medical facility owners, one medical assistant, and one public-health specialist

There are differences in the major clinical services offered depending on the type of private provider (Table 3). A substantial proportion of all types of providers offered some major services, such as primary care and malaria treatment. TB care was provided most commonly by doctors (71%), however, and less so by midwives (44%), clinical officers (43%), and nurses (38%).

4.5.3 FAMILY PLANNING SERVICES

The private health sector in Zambia is active in offering family planning services. Approximately 73 percent of respondents claimed to offer family planning counseling or services as a major component of their medical practices. Family planning services are offered as a general service by 94 percent of midwives, 83 percent of clinical officers, 79 percent of doctors, and 71 percent of nurses. In addition, 22 percent of providers included in the "other" category of providers reported offering family planning services ("other" includes ten dentists, six physiotherapists, three opticians, two optometrists, two biomedical workers, two non-medical facility owners, one medical assistant, and one public-health specialist).

Almost all (99%) of the providers surveyed, however, said they provided or prescribed at least one family planning product or service, even if they did not consider family planning to be one of the major medical services they provided. While 146 providers said that family planning is one of the major general medical services that they provide, Table 4 breaks down the family planning products or services each type offered. Overall, 69 percent of the private providers surveyed provided or prescribed contraceptive pills, and 63 percent provided injectable contraceptives or condoms. Private providers also offered long-term methods, including intrauterine device (IUD) insertion (20%), tubal ligation (13%), and vasectomies (6%).

Type of family planning products offered	Doctors (n=90)	Clinical officers (n=42)	Nurses (n=24)	Midwives (n=18)	Other** (n=27)	Total private providers (n=201)
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
Contraceptive pills	73 (81)	32 (76)	16 (67)	16 (89)	7 (26)	144 (69)
Injectable contraceptives	65 (72)	28 (67)	16 (67)	12 (67)	5 (19)	126 (63)
Condoms	58 (64)	30 (71)	17 (71)	16 (89)	5 (19)	126 (63)
IUD	33 (37)	3 (7)	2 (8)	2 (11)	l (4)	41 (20)
Tubal ligation	21 (23)	2 (5)	2 (8)	2 (11)	0 (0)	27 (13)
Vasectomy	12 (13)	0 (0)	l (4)	0 (0)	0 (0)	13 (6)
Other	5 (6)	0 (0)	2 (8)	l (6)	0 (0)	8 (4)

TABLE 4: TYPES OF FAMILY PLANNING PRODUCTS OFFERED BY PROVIDER TYPE*

* Question allowed for multiple responses

** Includes ten dentists, six physiotherapists, three opticians, two optometrists, two biomedical workers, two non-medical facility owners, one medical assistant, and one public-health specialist

An analysis of family planning services by province indicates that at least one registered private provider in each province surveyed offers contraceptive pills, injectable contraceptives, and condoms (Table 5). None of the seven private providers surveyed in Eastern Province offered IUDs, tubal ligation, or vasectomies.

Type of family planning products offered	Lusaka (n=107)	Copperbelt (n=55)	Central Province (n=15)	Eastern Province (n=7)	Southern Province (n=15)
	n (%)	n (%)	n (%)	n (%)	n (%)
Contraceptive pills	69 (64)	40 (73)	13 (87)	7 (100)	15 (88)
Injectable contraceptives	59 (55)	35 (64)	12 (80)	5 (71)	15 (88)
Condoms	60 (56)	34 (62)	13 (87)	5 (71)	14 (82)
IUD	23 (21)	14 (25)	2 (13)	0 (0)	2 (12)
Tubal ligation	16 (15)	8 (15)	l (7)	0 (0)	2 (12)
Vasectomy	7 (7)	4 (7)	l (7)	0 (0)	I (6)
Other	7 (7)	I (2)	l (7)	0 (0)	0 (0)

TABLE 5. FAMILY PLANNING SERVICES OFFERED BY PROVINCE*

* Question allowed for multiple responses

** Includes ten dentists, six physiotherapists, three opticians, two optometrists, two biomedical workers, two non-medical facility owners, one medical assistant, and one public-health specialist

A total of 160 private providers indicated that they had at least one family planning visit in the preceding month (Figure 16). Most providers (47%) had between one and 20 family planning consultations a month. Among the 19 providers who had more than 80 family planning consultations in the last month, eight were in Lusaka province, five in Copperbelt, three in Southern Province, two in Eastern Province, and one in Central Province.

FIGURE 16: AMONG PRIVATE PROVIDERS OFFERING THESE SERVICES, THE RANGE OF FAMILY PLANNING CONSULTATIONS OFFERED PER MONTH*



* Includes ten dentists, six physiotherapists, three opticians, two optometrists, two biomedical workers, two non-medical facility owners, one medical assistant, and one public-health specialist

4.5.4 HIV/AIDS SERVICES

Despite the predominance of the public sector, the private sector also has an important role in HIV/AIDS service delivery. Almost 60 percent of surveyed providers offered HIV/AIDS testing. Forty percent of private providers were also a significant source of prevention of mother-to-child transmission (PMTCT) and ARV treatment (35%), despite the availability of free ARVs in the public sector. Private-sector HIV/AIDS service delivery was available in all of the five provinces surveyed, although there was only one provider in Eastern Province for each of the three HIV/AIDS-related services.

FIGURE 17: PROPORTION OF PRIVATE PROVIDERS OFFERING SERVICES RELATED TO HIV/AIDS*



* Question allowed for multiple responses and includes ten dentists, six physiotherapists, three opticians, two optometrists, two biomedical workers, two non-medical facility owners, one medical assistant, and one public-health specialist



FIGURE 18: PRIVATE PROVIDERS OFFERING SERVICES RELATED TO HIV/AIDS BY PROVINCE*

* Question allowed for multiple responses and includes ten dentists, six physiotherapists, three opticians, two optometrists, two biomedical workers, two non-medical facility owners, one medical assistant, and one public-health specialist

4.6 MEDICAL BUSINESS INDICATORS

Generally respondents hesitated to divulge information related to their business and household expenses. In particular, some of them viewed questions related to their personal finances as irrelevant. They indicated that the purpose of the survey was their medical practice and, therefore, saw no need to

answer personal questions. Consequently, the number of responses to household and business finance questions is lower compared to other survey questions.

4.6.1 MONTHLY BUSINESS PROFIT

Seventy percent of private-provider businesses were profitable. For nurses and midwives, however, profitability was a problem, as 69 percent of midwives and 39 percent of nurses indicated that they had no average monthly profit from their medical practices. Almost 27 percent of respondents indicated that they made a monthly profit of 1 to 5 million ZK (237 to 1.184) per month followed by 15 percent who indicated that they earn a monthly profit of 5 to 14 million ZK (1.184 to 3.14). Given the amount of providers with low levels of profit, it is not surprising that, as mentioned previously, almost 21 percent of survey respondents indicated engaging in other paid medical work outside of their private practice.

Monthly profit levels by type of provider indicated that physician practices are more profitable compared to other private-provider groups, as 47 percent of them earned a profit of 1 to 14 million ZK per month (\$237 to \$3,314). Nurses, midwives, and clinical officers have the additional expense of hiring a physician the equivalent of one day a week to provide supervision of their clinics, giving them an additional expense.

Monthly profit levels	Midwife	Doctor	Clinical officer	Nurse	Other*	Total
No profit	69%	19%	32%	40%	29%	56
Less than I million ZK (0-\$236)	19%	9%	15%	4%	7%	19
l to 5 million ZK (\$237–\$1,184)	0	21%	46%	40%	21%	52
5 to 14 million ZK (\$1,185–\$3,314)	0	26%	5%	0	25%	29
14 to 24 million ZK (\$3,315–\$5,682)	6%	5%	0	4%	7%	8
24 to 34 million ZK (\$5,683–\$8,049)	6%	4%	0	0	0	4
34 to 44 million ZK (\$8,050–\$10,417)	0	0	0	4%	0	Ι
44 million ZK and greater (\$10,418 and greater)	0	6%	2%	4%	4%	8
Not sure	0	10%	0	4%	7%	
Total number	16	81	41	23	27	188

TABLE 6: MONTHLY PROFITABILITY OF PRIVATE PROVIDERS*

* Includes ten dentists, six physiotherapists, three opticians, two optometrists, two biomedical workers, two non-medical facility owners, one medical assistant, and one public health specialist

4.6.2 BUSINESS EXPENSES

Just greater than 31 percent of the respondents that reported medical-practice expenses indicated that their practices spent between 1 to 4 million ZK (\$237 to \$947) monthly while another 27 percent reported a range of 4 to 14 million ZK (\$947 to \$3,314). For analyzing the total monthly costs of private practices, expenses were defined as monthly reoccurring payments for items such as rent, salaries, and medical supplies.



FIGURE 19: MONTHLY BUSINESS EXPENSES

Given the lack of profitability of some private health providers' medical practices, it is not surprising that 32 percent of them have problems paying their expenses every month.

Of the 65 providers who had problems paying medical expenses related to their practices, the major problems (Figure 20) were patients paying too little for services (27%) or not paying at all (17%).

FIGURE 20: WHY PRIVATE PROVIDERS HAVE DIFFICULTY PAYING BUSINESS EXPENSES EVERY MONTH*



* Question allowed for multiple responses

4.6.3 PRIVATE PROVIDER CHARACTERIZATION OF PATIENT SOCIOECONOMIC STATUS

Almost 30 percent of private providers characterized their patients as poor. This status obviously has ramifications regarding their practices' profitability. For instance, some health care providers reported that they are forced to eliminate charges such as the consultation fee to give their clients access to medical care.

TABLE 7: CHARACTERIZATION OF PATIENT SOCIOECONOMIC STATUS BY PRIVATE-PROVIDER GROUPS AND PROVINCE

Socioeco nomic status	All private providers	Doctors	Clinical officers	Nurses	Midwives	Other*	Central Province	C opperb elt	Eastern Province	Lusaka	Southern Province
Poor	30%	27%	43%	29%	39%	15%	40%	26%	43%	30%	29%
Medium	61%	62%	55%	58%	61%	74%	53%	61%	57%	62%	71%
Upper	9%	11%	2%	13%	0	11%	7%	13%	0	8%	0
Total	201	90	42	24	18	27	15	55	7	107	17

*Includes ten dentists, six physiotherapists, three opticians, two optometrists, two biomedical workers, two non-medical facility owners, one medical assistant, and one public-health specialist

The classification of patient socioeconomic group by provider type indicates that private providers largely serve medium and poor populations, not just upper-class patients. The socioeconomic groups served also correlates with profitability as indicated by provider groups. For instance, clinical officers said that 43 percent of their patients were poor and 32 percent report no profitability. Of the midwives and nurses who indicated no profitability for their medical practices (69 and 39 percent respectively), 39 percent of the midwives and 29 percent of nurses reported that their patients were poor.

Despite serving mostly poor and medium-income groups, almost 62 percent of respondents reported monthly household incomes of 3 million ZK (\$710) and greater. According to the Central Statistical Office of Zambia, average monthly income for people with a university education in Zambia in 2004 is 1,374,260 ZK (\$325) with the average monthly household income for all households estimated to be 502,030 ZK (\$119). ²⁶

²⁶ Central Statistical Office of Zambia 2005

4.6.4 INVESTMENT IN BUSINESS

The majority of private providers in Zambia invested in their businesses from 2003 through 2006. Of the private medical providers who responded to this question, that is those who reinvested profits in their medical businesses in 2006, 30 percent invested greater than 3 million ZK (\$711) as shown in Figure 21. Another 22 percent, however, indicated low levels of annual investment—from 0 to 250,000 ZK (\$0 to \$59).



FIGURE 21: PRIVATE PROVIDER INVESTMENT IN HEALTH PRACTICE

4.7 CONSTRAINTS TO GROWTH AND EXPANSION PLANS

The survey asked private health providers what they thought were the constraints to the growth of their medical practices.

Almost two-thirds of respondents (68%) indicated that a major restriction to their profitability was the lack of financing; clinical officers in particular mentioned it as a major constraint (74%). Another significant constraint, indicated by 54 percent of respondents is patients' inability to pay. Sixty-seven percent of doctors indicated this factor as a constraint as well as 28 percent of midwives and 29 percent of nurses. Competition from the private sector (40%) is considered a greater constraint than competition from the public sector (17%).



FIGURE 22: CONSTRAINTS TO GROWTH OF PRIVATE PRACTICE*

*Questions allowed for multiple responses

4.7.1 GOVERNMENT CONSTRAINTS TO GROWTH

More than 76 percent of respondents thought that government regulations were not an obstacle to managing a medical business. As Table 8 shows, however, a greater percentage of clinical officers (38%) and providers in the "other" category (37%) consider them an obstacle to managing a medical business.

For private providers who thought government regulations were an obstacle (24%), Table 9 describes their rationale. Pharmacy regulations that prevent the dispensing of drugs by non-doctor provider groups were considered the most significant obstacle by 50 percent of those providers who believed that government regulations were an obstacle. The second most commonly cited impediment was the requirement that a physician be present the equivalent of one day per week in a private medical facility (48%). As mentioned previously, while the 1997 Nurses and Midwives Act allows them to open their own agencies and nursing homes, there are no guidelines regarding their operation of outpatient clinics or consulting rooms. Additionally, the Medical Council of Zambia requires a physician be in charge of any licensed medical facility, despite the fact that they are in short supply in Zambia.

Futhermore, no law addresses private practices by clinical officers, which may explain why 69 percent (11 of 16) of the clinical officers who felt government regulations were an obstacle said that these regulations were not easy to understand and that physician-attendence requirement was onerous. In

addition, in a question that asked whether it was difficult to obtain a license for their medical practice, 21 percent of the clinical officers answered affirmatively compared to a much lower percentage for other provider groups.

TABLE 8: PERCENT OF PROVIDERS WHO SEE GOVERNMENT REGULATIONS AS AN OBSTACLE

	Midwives	Doctors	Clinical officers	Nurses	Other providers*	Total
Total number of providers	18	90	42	24	27	201
	n (%)	n (%)	n (%)	n (%)	n (%)	n (%)
Think government regulations are an obstacle	6 (33)	15 (17)	16 (38)	I (4)	10 (37)	48 (24)

* Includes ten dentists, six physiotherapists, three opticians, two optometrists, two biomedical workers, two non-medical facility owners, one medical assistant, and one public-health specialist

TABLE 9: GOVERNMENT REGULATIONS IDENTIFIED AS OBSTACLES BY THOSE PROVIDERS WHO SEE GOVERNMENT REGULATIONS AS A PROBLEM*

	Midwife	Doctor	Clinical officers	Nurses	Other**	Total providers
Total number of providers	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
Pharmacy regulations preventing dispensing drugs	4 (66)	5 (33)	9 (56)	0 (0)	6 (60)	24 (50)
Requirement that a physician be present the equivalent of one day per week	4 (66)	I (7)	11 (69)	0 (0)	7 (70)	23 (48)
Government regulations are not easy to understand	3 (50)	3 (20)	(69)	0 (0)	4 (40)	21 (44)
Physical facility and staffing requirements are excessive	3 (50)	7 (47)	6 (38)	0 (0)	4 (40)	20 (42)
Requirement that a physician be listed on a medical facilty's license	3 (50)	I (7)	9 (56)	0 (0)	3 (30)	16 (33)

* Question allowed for multiple responses

** Includes ten dentists, six physiotherapists, three opticians, two optometrists, two biomedical workers, two non-medical facility owners, one medical assistant, and one public-health specialist

4.8 PLANS TO EXPAND AND GROW THEIR BUSINESSES

Despite the aforementioned constraints to growing their medical businesses, a majority of private provider respondents indicated that they had plans to grow their venture by investing in it. The majority of respondents indicated that they intended to purchase medical equipment (74%), offer new services (73%), expand their clinic (65%), purchase drugs (61%), and hire staff (58%). Forty-one percent of private providers plan to expand their business by purchasing contraceptive products followed by 36 percent who plan to purchase ARVs. Plans to invest in medical practices do not vary significantly by provider group, although the number of doctors and clinical officers who plan to invest in their medical practices is higher compared to midwives and nurses.

4.9 FINANCE NEEDS ASSESSMENT

4.9.1 CREDIT EXPERIENCE

Private medical providers do not have extensive credit experience with financial institutions, as almost 90 percent of respondents had not applied for a business loan in the last three years. Out of the 21 providers that applied for financing, 14 of them were doctors. Overdraft facilities commonly were used to access short-term credit in Zambia, but only 11 percent of respondents applied for one in the last three years. The private health sector in Zambia appears to be under banked.

Twenty-five percent of respondents, however, took a personal loan in the past three years and 20 percent of those who did so actually used it for their medical business. Few clinical officers, midwives, or nurses applied for or received a business loan but it is interesting to note that 35 percent of midwives, 32 percent of clinical officers, and 35 percent of nurses received personal loans in the past three years.

Respondents' reasons for their reluctance to apply for a business loan were high interest rates (56%), not needing one (43%), and possible problems repaying it (20%).



FIGURE 23: REASONS FOR NOT APPLYING FOR A LOAN*

* Question allowed for multiple responses.

4.9.2 PRIVATE PROVIDERS WHO APPLIED FOR AND RECEIVED A LOAN

Although most private health care providers did not currently have a loan, 52 percent of those who had applied for a business loan were successful in obtaining one.

4.9.3 WHY PRIVATE PROVIDERS DID NOT RECEIVE A LOAN

It is significant that 48 percent of the respondents who applied for a business loan were unsuccessful in obtaining one. Five out of 10 who applied but did not receive a loan said that one of the reasons given was their lack of collateral. The following figure indicates the reasons why private providers did not receive loans.



FIGURE 24: WHY PRIVATE PROVIDERS DID NOT RECEIVE A BUSINESS LOAN*

4.9.4 BORROWING FREQUENCY OF PRIVATE PROVIDERS IN THE PAST THREE YEARS

Of the 11 private providers that obtained a loan during the last three years, most took just one or two of them. Only two providers obtained business loans three or more times during that period.

FIGURE 25: BORROWING FREQUENCY OF PRIVATE PROVIDERS IN THE PAST THREE



^{*} Question allowed for multiple responses.

4.9.5 VALUE AND TERMS OF RECENT LOANS

Of the 11 private health care providers who received a loan in the last three years, five of them were doctors with a clinical officer, physiotherapist, nurse, midwife, optician, and a non-clinical medical provider comprising the rest.

As seen in Table 10, the loan sizes varied significantly, ranging from 3 million ZK (\$710) for a clinical officer to 280 million ZK (\$66,288) for an optician. The monthly loan repayment amounts also differed substantially, ranged from 600,000 ZK (\$142) to 12.5 million ZK (\$2,962). Repayment periods ranged from 3 to 60 months. Five of the loans were term financing, that is, longer than one year.

Loan amount (ZK 000)	Doctor	Clinical officer	Nurse	Physio- therapist	Optician	Total loans
3,000 (\$710)						l
15,000 (\$3,551)	I					
40,000 (\$9,469)				l I		l
60,000 (\$14,204)	I					
80,000 (\$18,939)	I					l
150,000 (\$35,511)						l
160,000 (\$37,878)	2					2
200,000 (\$47,348)	I					
280,000 (\$66,287)					I	I
Total	6	1			I	10

TABLE 10: PRIVATE PROVIDER LOAN AMOUNTS*

*Nonclinical provider did not respond

4.9.6 USE OF MOST RECENT LOANS

FIGURE 26: PROVIDER USE OF MOST RECENT LOAN*



 * Question allowed for multiple responses

Among the providers that took a loan, the most frequent reason for doing so was to expand a clinic (seven providers), followed by buying equipment (six providers).

4.9.7 SOURCE OF PREVIOUS LOANS

As Figure 27 shows, financial institutions (six loans) and family and friends (three loans) were the most common lenders for businesses' most recent loans.





4.9.8 SOURCES OF CREDIT OTHER THAN LOANS

A far greater number of private providers access drug-supply credit compared to bank credit: 46 percent of the 201 respondents indicated they had purchased drug supplies on credit. Suppliers extend credit for drug supplies usually for 30 days. Twenty percent of the 93 respondents that had received drug-supply credit, however, indicated that their suppliers had given them a repayment period of 31 to 60 days.

	Drug-supplier credit	Medical-supply credit	Medical-equipment credit
Number of respondents	93	55	26
30 days	75%	75%	44%
31–60 days	20%	22%	32%
61–90 days	۱%	2%	12%
More than 90 days	۱%	1%	12%
Varies depending on supplier	3%		

TABLE 11: REPAYMENT PERIOD FOR DRUG, MEDICAL-SUPPLY, AND EQUIPMENT CREDIT

Far fewer respondents (28%) purchase medical supplies on credit compared to drug supplies. As with suppliers of drugs, most medical suppliers extend credit for only 30 days. Twenty-five percent of private providers receiving medical supplier credit, however, indicated that their suppliers had given them a repayment period of 31 to more than 90 days. Given that the purchase of most medical equipment is costly and requires long-term financing, it is not surprising that only 16 percent of respondents were able to purchase it on credit. Repayment periods for providers who were able to do so were longer compared to the credit drug and medical-supply companies offered. Terms, however, were still short with only 12 percent of respondents indicating that they received credit of more than 90 days.

4.9.9 INTEREST IN A FUTURE LOAN

Just fewer than half of respondents were interested in applying for a business loan in the next year. Another 46 percent were not interested, and 7 percent were not sure. Provider group interest in future loans indicated that 52 percent of clinical officers, 50 percent of doctors, 42 percent of nurses, and 33 percent of midwives were interested in a loan in the next year. This finding represents an opportunity for financial institutions as doctors (14) represent the majority of those who applied for business loans in the past three years with few clinical officers (2), midwives (1), or nurses (1) having done so.

Of those private providers who indicated interest in applying for a business loan, 34 percent would use the loan to buy equipment followed by offering new services (23%) and expanding a health facility (22%).

4.9.10 FUTURE LOAN AMOUNTS DESIRED

There are potential clients for MFIs or commercial banks. And any program that seeks to expand access to financing for private providers should work with both types of financial institutions. Whether a private provider works with a commercial bank or an MFI will depend on the size of the business and the loan needed.

The highest percentage (25%) of respondents who would like to borrow in the next year were interested in Ioan amounts of 36 to 80 million ZK (\$8,523 to \$18,939). These sums are greater than what most MFIs would consider but are within the SME range for commercial banks. Most MFIs do not have an individual business Ioan product for clients much less first-time borrowers. Some MFIs, however, including the Foundation for International Community Assistance (FINCA) and the Christian Enterprise Trust of Zambia, have such a Ioan product for clients that have demonstrated that they are creditworthy. These Ioan amounts are significantly less than an SME Ioan from a commercial bank though.

As seen in Table 12, doctors desired larger business loan amounts compared to other private health providers. This finding is not surprising because doctors own the majority of medical facilities, which require larger investments in buildings and equipment. Commercial banks and specialized lenders, such as leasing companies, would provide the financing for these loans.

Loan amount (000 ZK)	Doctor	Clinical officer	Nurse	Dentist	Midwife	Other	Total Ioans	Percent
400–5,000	3	-	I	-	I	-	5	5
(\$95–\$1,180)								
5,001-36,000	2	6	3	-	2	-	13	15
(\$1,181-\$8,523)								
36,001-80,000	9	8	I	3	0	4	25	25
(\$8,524-\$18,939)								
80,001-132,000	6	4	-	-	2	2	14	15
(\$18,940-\$31,250)								
32,00 -250,000	8	2	I	2	-	I	14	15
(\$31,251-\$59,186)								
250,001-600,000	10	I	-	l.	I	-	13	14
(\$59,187-\$142,045)								
600,001-2,400,000	6	-	I	I	-	2	10	
(\$142,046-\$568,182)								
Total loans	44	21	7	7	6	9	94	100

TABLE 12: DISTRIBUTION OF DESIRED LOAN AMOUNT BY CATEGORY OF PRIVATE PROVIDER

4.9.11 DESIRED MONTHLY PAYMENTS

As Table 13 shows, the desired monthly loan repayment varied significantly: respondents who would like to borrow expected to make monthly payments between 250,000 ZK (\$59)—or less—and 10 million ZK (\$2,370). About 39 percent of respondents, however, were willing to make monthly repayments of between 3 million ZK (\$711) and 10 million ZK (\$2,370); 63 percent of those respondents were doctors. About 20 percent of respondents were willing to repay between 251,000 ZK and 500,000 ZK (\$60 to \$118) on a monthly basis. These respondents are likely to be smaller facilities, such as sole providers or small group practices, and MFIs could finance them.

TABLE 13: DISTRIBUTION OF DESIRED MONTHLY LOAN REPAYMENTS

Monthly loan repayment (000 ZK)	Doctors	Clinical officers	Midwives	Nurses	Other
Number of providers	46	22	6	10	10
Less than 250 (\$59)	I	3	2	I	0
251-500 (\$60-\$118)	2	5	2	2	2
501–750 (\$119–\$178)	2	2	I	0	0
751–1,000 (\$179–\$237)	0	0	0	0	I
1,001–1,250 (\$238–\$296)	6	2	0	0	0
1,251-2,000 (\$297-\$474)	4	2	0	I	I
2,001-3,000 (\$475-\$711)	9	3	0	3	2
3,001-10,000 (\$712-\$2,370)	22	5	I	3	4

4.9.12 REASONS FOR NO INTEREST IN BORROWING IN THE FUTURE

For respondents with no desire to borrow in the next year (46%), the primary reason they were not interested was that they did not need a loan (50%). High interest rates (19%) and dependence on sponsors (11%) also were reasons frequently cited.

FIGURE 28: REASONS FOR NO INTEREST IN BORROWING IN THE FUTURE*



* Question allowed for multiple responses

4.9.13 COLLATERAL

Only 98 out of 201 respondents (49%) in the survey answered questions about collateral. Of the providers who answered, about 68 percent had some form of collateral or a guarantee that they would offer for a loan. About 32 percent had no collateral.

FIGURE 29: PRIVATE PROVIDERS WHO HAVE COLLATERAL OR A GUARANTEE FOR A LOAN



Among respondents with collateral (68%), 81 percent could offer buildings as collateral, 52 percent could offer land, 31 percent could offer equipment, and 8 percent could offer a co-signor or personal guarantee. As mentioned, the collateral requirements for a loan are great, frequently cited at 100 percent of the loan amount. But the collateral that private providers have to offer could be used to secure loans.



FIGURE 30: TYPE OF COLLATERAL PRIVATE PROVIDERS' POSSESS*

*Question allowed for multiple responses

4.9.14 LEVEL OF FINANCIAL MANAGEMENT EXPERTISE

The largest numbers of private providers indicated that they possess only a medium understanding of financial management, accounting for 39 percent of the responses.



FIGURE 31: PRIVATE PROVIDERS' KNOWLEDGE OF FINANCIAL MANAGEMENT

Only 25 percent of respondents received training in accounting and financial records in the past five years; 75 percent did not. This finding reinforces the desirability of financial-management training given that 58 percent of respondents indicated that their medical association should offer it. Improved business management, expansion of private providers' medical practices, and increased access to finance from banks are other reasons for financial-management training.

4.9.15 WHO PREPARES FINANCIAL STATEMENTS

A majority of private health providers had an employee who prepared their financial records. Many providers, however, cannot afford to employ professional financial managers, and often they kept only the most basic of records. Twenty-eight percent of the respondents prepared their own financial records.

FIGURE 32: WHO PREPARES FINANCIAL STATEMENTS FOR PRIVATE PROVIDERS' BUSINESSES



4.9.16 TYPE OF FINANCIAL STATEMENTS PREPARED AND USE OF STATEMENTS

Sixty-seven percent of respondents had prepared a balance sheet, 68 percent an income statement, and 70 percent a cash-flow statement. Of the respondents that had prepared these statements, 90 percent used the financial records for management decisions, 47 percent for analyzing cash payments or revenue, and 58 percent for submission to the government or tax authorities.

Financial statements	Number of responses	*Percentage (of 201)
Balance sheet		
Yes	135	67
No	66	33
Total	201	100
Income statement		
Yes	137	68
No	64	32
Total	201	100
Cash flow		
Yes	4	70
No	60	30
Total	201	100

TABLE 14: FINANCIAL RECORDS PREPARED BY PRIVATE MEDICAL PROVIDERS

* Question allowed for multiple responses

FIGURE 33: PRIVATE MEDICAL PROVIDER USE OF FINANCIAL STATEMENTS*



* Question allowed for multiple responses

4.10 TRAINING NEEDS ASSESSMENT

4.10.1 INTEREST IN TRAINING

Of the 199 respondents who answered the question, a high percentage (92%) were interested in receiving training to improve the management of their medical business. Eighty-eight percent of doctors indicated interest in this training to 92 percent of nurses and 100 percent of clinical officers and midwives.



FIGURE 34: FUTURE TRAINING DESIRED BY PRIVATE PROVIDERS*

* Question allowed for multiple responses.

As a group, private providers believed that additional clinical training was the most critical area of education (46%) for improving their medical practices. This belief appears to be due in part to the fact that government and donor trainings often do not include the private sector. And, when they do, they tend to focus on private providers in urban areas or affiliated with large employer-based clinics. The second most critical desired training was business management, chosen by 21 percent of respondents. Access to finance followed (7%). There were no important differences by type of provider group regarding what training was most critical.

4.10.2 MEMBERSHIP IN MEDICAL ASSOCIATIONS

Most private providers belong to a medical association, with 91 percent of respondents indicating membership in one. But only 23 percent of these providers indicated that their association provides medical training, and just 6 percent said that business training was offered. In contrast, 82 percent of all respondents indicated that associations should offer medical training as well as business training.

5. CONCLUSIONS

Zambia faces a human-resource crisis in the public sector as health workers leave the country, seeking better working conditions, higher wages, and relief from the demands brought on by the HIV/AIDS epidemic. As the government and donors look to respond to this crisis and address the disease burden facing the country, partnering with and promoting the development of the private sector is an important strategy that should be considered. A growing private health sector—indicated by the approximately 23 percent of private medical providers surveyed that began operations in the last three years—can provide health workers with an alternative to leaving Zambia and help reduce the demand on public-sector facilities. The findings in this research suggest that there is potential to partner with the private sector and provide strategies for doing so.

Regulatory changes are needed to significantly grow the sector. Almost two-thirds of respondents indicated that access to financing was their major constraint to profitability. Fewer than a quarter (24%) of them cited government regulation as an obstacle to private practice, although the percentage was greater among clinical officers (38%) and smaller provider groups. In most countries where access to finance is the major constraint, the private sector is characterized by small clinics and consulting rooms that never are able to access funds to grow and achieve scale. While these small clinics exist in Zambia and access to financing is a constraint, the small number of registered private medical facilities indicates that, in addition to financial constraints, there are other restraints to the development of the sector.

One explanation is that the ambiguous legal and regulatory environment hampers the private health sector. A World Bank study found that a difficult regulatory system can distort a firm's investment decisions or even prevent investment entirely. ²⁷ While the 1997 Nurses and Midwives Act allows those providers to open their own agencies and nursing homes, no guidelines exist regarding their operation of outpatient clinics or consulting rooms. Furthermore the Medical Council of Zambia requires that a physician be in charge of any licensed medical facility, despite their being in short supply in Zambia. How can the difficult regulatory environment be reconciled with the research findings?

While more than 75 percent of respondents did not cite government regulation as an obstacle, doctors were the largest number of respondents and they are not impacted negatively by—and even may benefit from—the regulatory environment. It gives them less competition and an opportunity to generate additional income by playing a supervising role for providers who want to own a private practice. Furthermore, of those clinical officers who believe government regulations are an obstacle, 69% think that government regulations are not easy to understand. In addition, in a separate question that asked whether it was difficult to obtain a license for their medical practice, 21 percent of the clinical officers answered affirmatively compared to a lower percentage for other provider groups.

Because of the regulatory environment in Zambia, some providers may run their practices in the informal sector without registering with the Medical Council. Zambia's informal sector is large with an estimated 40,000 traditional healers, for example, accounting for approximately 60 percent of total household health spending and almost 13 percent of total spending on health. This study did not attempt to interview providers not registered with the Medical Council of Zambia. Clarifying the regulatory environment and enabling nurses, midwives, and officers to own and operate outpatient facilities, could impact the size of the private health sector.

²⁷ Batra 2003

Private providers have a role in contributing to positive public health outcomes, and the government and donors can nurture that function. Private providers in Zambia supply a number of priority public health services as 82 percent of respondents offered malaria medical care and dispensed drugs, 79 percent offered general primary care, 74 percent offered pediatric care, 73 percent offered family planning, 72 percent offered medical care for other infectious diseases, and 53 percent offered TB medical care. In addition, despite the predominance of the public sector, the private sector also has an important role in HIV/AIDS service delivery. Almost 60 percent of surveyed providers offered HIV/AIDS testing to their clients. Private providers are also a significant source of PMTCT (40%) and ARV treatment (35%), despite the availability of free ARVs in the public sector. Analysis of critical clinical services by province indicates that these services are offered in all the provinces surveyed but reflect the fact that there are few private providers registered in the Eastern and Southern Provinces, limiting private medical treatment of HIV/AIDS and the offering of long-term family planning methods.

The classification of patient socioeconomic group by provider types indicates that the majority of patients private providers serve are from middle-income and poor populations, not just higher income patients. Survey results indicate that if the government and donors are looking to expand access and reduce the burden on public facilities, the private sector can be a platform for achieving those results.

Expanding access to finance will help existing private providers to grow and will be important for new entrants if regulatory conditions change. The study revealed that the private health sector is underbanked with only 10 percent of private providers having applied for financing in the past three years. In addition, there is demand for financing by private providers to grow and improve their businesses with almost half of respondents interested in applying for a business loan in the next year. While not all providers will be appropriate loan candidates, many of them had the profitability to repay loans and a majority also had collateral. Furthermore, while the sector is small, it is growing and should represent a market opportunity for financial institutions. The survey identified a range of financing needs and segmented health providers by loan size, indicating that doctors desired larger loans than clinical officers, nurses, or midwives. Consequently, there are potential clients for MFIs or commercial banks, and any program that seeks to expand access to financing for private providers should work with both types of financial institutions. Whether a private provider works with a commercial bank or an MFI will depend on the size of the business and the loan needed.

Encourage the development of risk-pooling programs. The majority of private providers in Zambia are sole proprietorships and one of the factors that makes it difficult for them to maintain profitability is that patients often do not pay for services. These providers likely depend on out-of-pocket payments, which increase the risk of lending to them and makes business planning more difficult. Risk-pooling arrangements would provide more financial protection for providers and make it more likely that patients could pay.

There may be an opportunity to include the private sector in training and continuing education so that it is better able to partner with the public sector and contribute to the national health strategy. Private providers indicated a great demand for training and said clinical training was their most critical need. This belief appears to be due, in part, to the fact that government and donor trainings often do not include the private sector. And when they do, they tend to focus on private providers in urban areas or affiliated with large employer-based clinics. In addition, a high percentage (92%) of private providers indicated an interest in training to improve the management of their medical business.

Medical associations can have an important role in providing clinical and business-management training for private providers. Most private providers belong to a medical association with 91 percent of respondents indicating membership in one. Only 23 percent of providers belonging to a medical association, however, said that their medical association provided medical training. And just 6 percent indicated that business training was offered. In contrast, 82 percent of all respondents indicated that the medical associations should offer medical training as well as business training.

By addressing these issues, donors, the government of Zambia and other stakeholders can build a stronger private as well as public health sector in Zambia by providing health workers an alternative to leaving the country and reducing the demand on public-sector facilities.

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ANNEX A. QUESTIONNAIRE

Banking on health final questionnaire

Research on the Business Management Practices and Training Needs of Private Health Care Providers in Zambia

Baseline Survey Questionnaire

April 2007

Survey of Private Medical Providers in Zambia

INTRODUCTION AND CONSENT

•	Interviewer: Present	yourself by	reading	from t	the informed	consent form.
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- If the medical practitioner agrees to participate, record information on gender, and type of private medical provider below and then continue with the interview.
- If the medical practitioner does NOT agree, thank him/her and go on to the next medical practitioner on the list.

Identification Number

Identification Form						
I. Line number from	consent pag	ge				
2. Province						
3. Town						
		Inte	rviewer Visit			
4. Name of interview	ver					
E Decule*						
5. Result*						
(Please use result code						
presented below)						
*Result Codes:						
I. – Completed			4. –Refused			
2. – Absent			5. – Other	(specify)		
3. – Partial interview of	conducted					
	Spot	Fie	eld Edited By	Office Edited	Keyed	
	Checked			Ву	Ву	
	Ву					
Name						
Date						

No.	Questions	Codes
Ι.	Record the start time of the interview	
		∶ Hour Minutes

Section 1: Business Information Regarding Medical Practice

No. **Questions and filters** Skip Codes to 2. Gender Male.....I Female......2 3. How is this medical practice/clinic/hospital registered? Individual private practice....... **→ 5** Partnership private practice......2 A group of individual private practices......3 Commercial company (LLC, corporation etc)4 Other (specify)......96 4. What is the number of partners or owners in total? Partners _____ 5 Are you one of the owners or partners? YesI No0 6. Do you have employees in the medical practice/clinic/hospital? Yes $\rightarrow 10$ No0 7. How many employees work full-time in the medical practice/clinic/hospital, excluding Employees yourself or any other partners? 8. How many of the employees are Employees professional health workers? 9. How many professional health workers are part-time employees? Employees Does your medical practice/clinic/hospital 10. have outpatient only or inpatient and Outpatient only.....I $\rightarrow 12$ outpatient capacity? Inpatient and outpatient......2 How many beds do you have? 11. Beds

Now I'd like to ask you some general questions related to your medical practice.

No	Questions and filters	Codes	Skip to
12.	Do you own or rent your facility?	Own I Rent2	
13.	What type of private medical provider are you? If not a medical provider, request for a competent medical provider to answer the rest of the questions in this section and excuse current respondent.	MidwifeIDoctor2Clinical Officer3Nurse4Dentist5Not a clinical provider6Other96	$ \begin{array}{c} \rightarrow 15 \\ \rightarrow 15 \end{array} $
14.	What type of private medical provider are you? Resume the interview with the new respondent	MidwifeI Doctor2 Clinical officer3 Nurse4 Dentist4 Other96	
15.	How many years have you been a (doctor, nurse, midwife,)?	Years	
16.	How long have been in private practice?	Years	
17.	When did you begin operating your medical facility/business?	Year	
18.	Which of the following family planning products or services do you provide or prescribe? Circle all that apply by reading the list to the provider.	Contraceptive pillsIIUD2Injectable contraceptives3Condoms4Tubal ligation5Vasectomy6I do not provide such6products/services7Others (describe)96	

No.	Questions and filters	Codes	Skip to
19.	Please describe the major general services		•
	that your medical facility provides.	-Inpatient care I	
		-Surgical theater2	
	Circle all that apply by reading the list	-General primary care	
	to the provider.	-Family planning4	
		-Pediatric care5	
		-Drug dispensary6	
		-Dental services7	
		-Home based nursing care8	
		-Malaria medical care9	
		-TB medical care10	
		-Medical care for other infectious	
		diseasesII	
		-Medical care for upper respiratory	
		infections12	
		-Medical care for chronic diseases	
		(hypertension, diabetes, asthma,	
		cardiovascular)	
		-HIV/AIDS (anti-retrovirals)14 -Prevention of Mother to Child -	
		Transmission (PMTCT)	
		-Sexually transmitted diseases other than HIV/AIDS16	
		-Laboratory services	
		-X-Ray	
		-Ultrasound	
		-HIV/AIDS testing	
		-Other diagnostic services	
		-Pre and post natal care	
		-Deliveries23	
		-Post abortion care24	
		-Other (specify)96	
20.	Other than this medical practice, do you		
	currently do any other medical work for	YesI	
	рау?	No0	→ 22
21.	What other type of medical facility?		
		Another private	
		practice/clinic/hospital	
		Another private business2	
		Government run hospital or clinic.3	
		Other (specify)96	

No.	Questions and filters	Codes	Skip to
22.	Would you say the majority of your patients are: Read list to provider with only one answer.	Poor I Medium class	
23.	How many total client visits did you have during the previous month (March or April)?	Client visits Not sure98	
24	How many total client visits related to family planning did you have during the previous month (March or April)?	Client visits Not sure98	
25	How many total client visits related to HIV/AIDS did you have during the previous month (March or April)?	Client visits Not sure98	
26	In the next year do you plan to: Circle all that apply by reading the list to the provider.	Expand clinicIRenovate clinic2Buy a medical clinic3Construct a medical clinic4Purchase land5Buy equipment6Hire staff7Offer new services8Purchase drugs9Purchase contraceptiveProducts10Purchase ARVs11Other (specify)96	
No.	Questions and filters	Codes	Skip to
-----	--	--	-------------
27	Please indicate if the following items make it difficult for you to operate a profitable medical business. Circle all that apply by reading the list to the provider.	Lack of accounting skills	
28	Do you think that government regulations are an obstacle to managing a medical business?	Yes	→ 30
29	Please indicate if the following reasons are why government regulations are an obstacle to managing a medical business. Circle all that apply by reading the list to the provider.	-Government regulations are not easy to understand regarding the operation of nurse, midwife and clinical officer owned outpatient clinics	
30	Was it difficult to obtain a license for this private medical practice/clinic/hospital?	Yes I No0	→ 32

No.	Questions and filters	Codes	Skip to
31	Please identify difficulties in registering this medical practice/clinic/hospital. Circle all that apply by reading the list to the provider.	-Difficulty in meeting physical facility requirements	
32	Do you belong to a medical professional association?	YesI No0	→ 34
33	Do the professional medical association(s) you belong to provide these services? Circle all that apply by reading the list to the provider.	Is a national advocate on issues that affect health professionals I Provides information relevant to medical practice	
34	What services should professional medical associations offer to members? Circle all that apply by reading the list to the provider.	Be a national advocate on issues that affect health professionals I Provide information relevant to medical practice	

Section 2: Sourcing of funds

Now I'd like to ask some questions related to your sourcing of funds for your medical business or for personal reasons and whether you would hypothetically be interested in applying for a loan.

I will also ask you some specific questions related to the amount of income and expenses related to your household and medical business. This information will only be used in describing the average financial position of private medical providers to financial institutions who might be interested in lending to you. Your name will not be given to any financial institution or government agency for any reason. Are you capable of answering these questions or someone else can answer them?

No.	Questions and filters	Codes	Skip to
35	Circle the appropriate code for identifying the respondent of this section.	Same respondent as for section 1 1 Different person 2 Non clinical provider who answered Q2 to Q13 in section 1	→ 37
36	CHECK Q5 IN SECTION I TO DETERMINE WHETHER RESPONDENT IS A PARTNER IN THE MEDICAL PRACTICE	YES, SOLE PARTNER OR ONE OF THE PARTNERS	→ 38
37	Are you the owner, one of the owners or partners?	YesI No0	
38	Did you apply for an overdraft for your medical business in the past three years?	Yes I No0	→ 47
39	When you applied for an overdraft for your medical business in the past three years, did you receive one?	YesI No0	→47
40	How often did you get overdrafts within the last three years?	Never I Once or twice	

No.	Questions and filters	Codes	Skip to
41	Do you currently have any overdraft(s) you are making payments on for your medical business?	Yes I No0	→ 43
42	When did you pay off your last overdraft(s) for your medical business? (year and month)	Year Month	
43	What did you use the overdraft(s) for in regard to your medical business? Circle all that apply by reading the list to the provider.	Expanding clinicIRenovating clinic2Buying a medical clinic3Constructing a medical clinic4Purchasing land5Buying equipment6Hiring staff7Offering new services8Purchasing drugs9Purchasing contraceptive9Purchasing ARVs11Personal reasons12Other (specify)96	
44	From which bank did you obtain your most recent overdraft?	Bank	
45	What was the amount of your most recent overdraft?	ZK Other currency	
46	What was the repayment time of your most recent overdraft (months or years)?	Months Years	
47	Did you apply for a loan for your medical business in the past three years?	YesI No0	→ 49

No.	Questions and filters	Codes	Skip to
48	What are the reasons why you did not apply for a loan for your medical business? Circle all that apply by reading the list to the provider.	I do not need a loanI I do not like to borrow money2 Don't have collateral3 Concerned about difficulty in repaying a loan4 Don't want to offer collateral5 High interest rates6 Bad experience with borrowing in the past	All response s go to 61
49	When you applied for a loan for your medical business in the past three years, did you receive one?	Yes I No0	→5 I
50	Do you know why you were denied a loan in the past three years? Read list to provider with only one answer.	Lack of credit history I Lack of collateral	All response s go to 6 I
51	How often did you get loans within the last three years (including current loans and leases)	Never I Once or twice	
52	Do you currently have any loan(s) you are making payments on for your medical business?	YesI No0	→ 54
53	When did you pay off your last loan(s) for your medical business? (year and month)	Year Month	

No.	Questions and filters	Codes	Skip to
54	How much money do you still owe on your loan(s) for your medical business? Consider all outstanding loans. (In case the respondent has more than one loan to pay, ask him/her to specify all the sums. In case of different currencies, write down separately the total for each currency).	Loan I Loan 2 Loan 3 ZK Other currency	
	Multiple answer		
55	What did you use the loan(s) for in regard to your medical business? Circle all that apply by reading the list to the provider.	Expanding clinic1Renovating clinic2Buying a medical clinic3Constructing a medical clinic4Purchasing land5Buying equipment6Hiring staff7Offering new services8Purchasing drugs9Purchasing contraceptive9Purchasing ARVs11Personal reasons12Other (specify)96	
56	From whom or what type of institution did you obtain your most recent loan within the past three years, whether a medical business or personal loan?	BankI Microfinance Institution2 Family/friend3 Traditional money lender4 Other (specify)96	
57	Please specify the institution.	Institution	
58	What was the amount of your most recent loan?	ZK Other currency	
59	What was the amount of your monthly payment on your most recent loan?	ZK Other currency	
60	What was the repayment time of your most recent loan (months or years)?	Months Years	

No.	Questions and filters	Codes	Skip to
61	In general, do you purchase drug supplies on credit?	YesI No0	→ 64
62	When you receive drugs on credit, how long do suppliers give you to repay?	30 days 1 30-60 days 2 61-90 days 3 90 days 4 Varies depending on supplier 5 Other (specify) 96	
63	How much do you still have left to pay on drug credit?	ZK Other currency Nothing	
64	In general, do you purchase medical supplies on credit?	YesI No0	→ 67
65	When you receive medical supplies on credit, how long do suppliers give you until you must repay?	30 days 1 30-60 days 2 61-90 days 3 90 days 4 Other (specify) 96	
66	How much do you still have left to pay on medical supplies?	ZK Other currency Nothing	
67	Do you purchase medical equipment on credit?	YesI No0	→ 70
68	How long do medical equipment suppliers give you until you must repay?	30 days 1 30-60 days 2 61-90 days 3 6 months 4 1 year 5 Depends on the cost of the equipment 6 Other (specify) 96	
69	How much do you still have left to pay on medical equipment?	ZK Other currency Nothing	

No.	Questions and filters	Codes	Skip to
70	Do you plan to apply for a medical business loan within the next year?	Yes I No0 Not sure98	→ 73
71	What are the main reasons why you are not interested in borrowing? Circle all that apply by reading the list to the provider.	I do not need a loan	
72	Is there a primary reason why you are not interested in borrowing? Read list to provider with only one answer.	I do not need a loanI I do not like to borrow money2 Don't have collateral3 I am concerned that I may have difficulty repaying a loan4 Don't want to offer collateral5 High interest rates6 Bad experience with borrowing in the past7 Some one I know had problems after taking a loan	All responses go to 76
73	How much would you like to borrow for your medical business?	ZK Other currency	

No.	Questions and filters	Codes	Skip to
74	For what purpose would you use the medical business loan? Circle all that apply by reading the list to the provider.	Expanding clinic1Renovating clinic2Buying a medical clinic3Constructing a medical clinic4Purchasing land5Buying equipment6Hiring staff7Offering new services8Purchasing drugs9Purchasing contraceptive9Purchasing ARVs11Personal reasons12Other (specify)96	
75	If you were able to get a loan for any of the purposes you mentioned earlier, given your current business/practice income and expenses, in your opinion, what is the most you think you could repay per month? Read list to provider with only one answer.	-Less than 250,000 ZK I -250,000 to 500,000 ZK	
76	Have you ever received a personal loan within the past three years?	YesI No0	→ 78
77	What did you use the personal loan for? Circle all that apply by reading the list to the provider.	Rent a building I Buy land	
78	CHECK Q5 SECTION I AND Q37 IN SECTION 2 TO DETERMINE WHETHER RESPONDENT IS A PARTNER IN THE MEDICAL PRACTICE	YES, SOLE PARTNER OR ONE OF THE PARTNERS 1 NOT AMONG THE PARTNERS	→ 8 1

No.	Questions and filters	Codes	Skip to
79	How much on average does your household earn per month, including your profit from your medical business? Read list to provider with only one answer.	-Less than 250,000 ZK I -250,000 to 500,000 ZK	
80	What are your average monthly expenses for your household? Expenses are defined as monthly reoccurring payments for things such as rent or mortgage payments, food, utilities, loan payments, education costs, and gasoline. Read list to provider with only one answer.	-Less than 250,000 ZK 1 -250,000 to 500,000 ZK	
81	What are your average monthly expenses for your medical practice/clinic/hospital? Expenses are defined as monthly reoccurring payments for things such as rent, salaries and medical supplies. Read list to provider with only one answer.	-Less than I million ZK I -1 to 4 million ZK 2 -5 to 14 million ZK	
82	Approximately what is the average monthly profit; the amount of money available after all medical practice expenses have been paid of your medical practice/clinic/hospital? Read list to provider with only one answer.	-Less than I million ZK I - I-4 million ZK	→84

No.	Questions and filters	Codes	Skip to
83	Approximately how much from this profit did you reinvest in your business in 2006? Read list to provider with only one answer.	-0 to 250,000 ZK	
84	Do you encounter problems in paying the expenses every month for your medical business?	YesI No0	→ 86
85	Please describe the specifics of the problem in paying medical business expenses every month.		

Section 3: Training Needs

Now I'd like to ask some questions related to training and your interest in training. Are you capable of answering the questions or someone else can answer them?

No.	Questions and filters	Codes	Skip
			to
86	Circle the appropriate code for identifying the respondent of this section.	Same respondent as for section I and section 2 I Same respondent as for section 2	
87	Are you interested in training to help improve the management of your medical business?	Yes I No0 Not sure98	→ 90
88	What are the specific areas you think you need additional training or information to better manage your medical business? Circle all that apply by reading the list to the provider	Stock Control	

No.	Questions and filters	Codes	Skip to
89	So which is the most critical area of training which would help you improve your business operations? Read list to provider with only one answer.	Stock Control	
90	In the past five years, have you received training in accounting and financial records?	YesI No0	
91	In your opinion, at what level is your understanding of accounting and financial records. Read list to provider with only one answer.	Very low I Low	
92	Would you be willing to pay for training in accounting and financial records?	YesI No0 Depends on the cost2	→ 94
93	How much would you be willing to pay for a two-day course in training that gives you the skills you are most interested in?	-Less than 250,000 ZK I -250,000 to 500,000 ZK	
94	Are you willing to travel outside of your hometown for a course in training?	Yes I No0 Depends on the cost2 Depends on the location3	

No.	Questions and filters	Codes	Skip to
95	Who maintains the financial records of your medical practice/clinic/hospital?	Me I Independent Accountant/accounting company2 Friend or relative	→ 100
96	If your medical business has prepared financial records, what are they? Circle all that apply by reading the list to the provider	Balance sheet	
97	How are these financial records used? Circle all that apply by reading the list to the provider	Management decisions I Analyze cash payments/revenue2 Submit to the government/ tax authority	
98	Do you have collateral or a guarantee that you could use to help obtain a loan?	YesI No0	→ 100
99	If yes, what type of collateral do you have? Circle all that apply by reading the list to the provider	LandI Building(s)2 Equipment3 Co-signer/personal guarantee4 Other (specify)96	

Thank you very much for your time.

END INTERVIEW

100	Record the end time of the interview		
		: Hour Minutes	