

PN-ACR-145

Study Report # 1

**Private Health Expenditure
Review**

May 2001

Prepared by:

Health Care Financing Secretariat
Ministry of Health



Federal Democratic Republic of Ethiopia,
Ministry of Health

In collaboration with:



John Snow, Inc.



Abt Associates Inc.



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Essential Services for Health in Ethiopia

USAID/Ethiopia's primary health sector intervention, Essential Services for Health in Ethiopia-I (ESHE-I) was launched in 1995. It represents a collaborative effort between USAID and the Government of the Federal Democratic Republic of Ethiopia (GFDRE) to: (1) increase the use of integrated primary and preventive health care (PPHC) services in Ethiopia; and (2) contribute to the achievement of national sectoral goals, as articulated in the GFDRE's Health Sector Development Program (HSDP).

Mission

The goal of ESHE-I is to create sustainable improvements in the overall health status of Ethiopians by slowing the rate of population growth and by improving the population's access to, and the quality and utilization of health care services. ESHE-I is comprised of policy, budgetary, and institutional reforms; family planning; STI/HIV/AIDS prevention and mitigation; and PPHC service delivery activities in the Southern Nations, Nationalities and Peoples Regional (SNNPR) State, each with the overall aim of strengthening the health service delivery system and thereby creating a demand in the utilization of PPHC services. ESHE-I is structured into four Intermediate Results (IR) focusing on (1) increasing resources to the sector, (2) improving access and utilization of family planning services, (3) HIV/AIDS prevention and control; and (4) strengthened health systems in the SNNPR.

Intermediate result (IR) 1, "*Increased resources dedicated to the health sector, particularly PPHC*", is a key component that USAID aims to support the implementation of national policies which will increase resources to the sector, the implementation of a Health Care Financing (HCF) Strategy, and promotion of private investment in health care delivery. Also, support for increasing the MOH and RHB capacity for sectoral planning and budget development, relative to the Health Sector Development Program (HSDP). These objectives are meant to be achieved through:

- 1.1 Increased government budgetary allocations to health care, particularly PPHC;
- 1.2 Increased share of public health expenditure covered through cost recovery;
- 1.3 Increased government capacity at central and regional levels for resource; and
- 1.4 Increased private sector investment in health care delivery.

John Snow Inc. (JSI) is the prime contractor for ESHE-I under the USAID/GFDRE bilateral agreement. Abt Associates, Inc., is the subcontractor supporting the "health care finance reform" activities constituted under IR1 of ESHE-I. To inform the reform process, the HCF Secretariat of the Federal Ministry of Health and the Health Finance team have conducted a series of studies, study tours, analysis and interpretation of the information generated on different aspects of health care financing in Ethiopia. This report is part of a series studies and reports, with the aim of contributing data for policy development and implementation of the HCF strategy.

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Acronyms

AAU	Addis Ababa University
CSA	Consumption and Expenditure Survey
EC	Ethiopian Calendar
MOH	Ministry of Health
NHA	National Health Account
PHRD	Policy and Human Resource Development
RHB	Regional Health Bureau

1. Introduction

At present health sector development is among the priority sectors in the governments development's agenda. The government has adopted a new health policy in 1993 and subsequently designed a twenty-year strategy to be implemented through a series four five years rolling health sector development programs. Besides, following the government's emphasis in encouraging the participation of the private sector investment in health, the importance of the private sector has increased in recent years and is expected to grow in the coming years. Looking at the available statistics, according to the PHRD 1995 survey there were only 189 private health facilities in the country. This number has substantially increased in 1999, as can be inferred from the 1991 E.C. Health and Health Related Indicators bulletin, and reached 968 (2 private hospitals, 58 special clinics, and 908 higher, medium and lower clinics).

1.1 Problem Statement

Health information available to date is mainly from two sources:

- a. government health expenditure through the annual recurrent and capital budget, and
- b. household health expenditure estimates from the 1995/96 Household Income, Consumption and Expenditure Survey of CSA, and from the annual Urban and Rural Households Surveys of the Department of Economics of AAU.

The government health expenditure figure is not complete simply because it covers only the public sector, and the household expenditure survey estimates are commonly blamed for overestimating the health expenditure. Private health expenditure is not well surveyed in the country. The first attempt was made in 1995 by PHRD, however, at that time the number of private health facilities were small compared to what we have now. Moreover, there could be significant changes in the cost structure during the last five years.

1.2 Study Purpose

The overall purpose of the study is to complement the government health expenditure account and provide decision-makers with a better picture of the sector. At the same time it substantially enriches the National Health Account (NHA) exercise being undertaken for the first time in the country.

1.3 Study Approach

To produce a comprehensive report of the private health expenditure review the study has used available secondary data and generated primary data through questionnaires from representative samples of private health facilities both at the federal and regional levels.

2. Methodology

2.1 Sampling Approach

The main objective of the study is assessing the expenditures on private health facilities in Ethiopia in view of the need to complement estimates of the government health expenditures. Since studies are already undertaken under the "policy and human resource development project" on the patterns of government financing of health services and households' expenditures on health and medical care, the lack of information on the expenditures of the private health service providers justifies the need for undertaking this study.

Accordingly, the sample frame includes three major private health facilities, namely, hospitals, clinics and pharmacies. Since almost all of the private health service providers are located in the urban centers of Ethiopia, representative samples of private health facilities are selected from urban centers only. And the following five towns are covered by the survey:

- i. Addis Ababa
- ii. Bahir Dar
- iii. Awasa
- iv. Jimma
- v. Mekele

The selection of the sample towns is mad following the survey areas of the Department of Economics of Addis Ababa University. The department has been conducting a series of urban and rural socioeconomic household surveys on seven major towns from which relevant data are also being collected on illness, visits for treatment and expenditures on health care services.

2.2 Sampling Techniques

The study generally employed a probability sampling technique that would enable to make sound statistical inferences about the population based on the sample statistics. As can be seen from Table 1, the private health facilities under investigation are unevenly scattered, both in numbers and level, in the survey areas. As a result, different sample selection methods are employed for Addis Ababa and the other survey areas.

a. Hospitals:

Since there are only 3 private hospitals in the country, all of them are included in the survey.

Table 1: Distribution of Private Health Facilities by Sample Area and Proportion of Samples Selected.

Sample Area	Hospitals			Special Clinics			Clinics			Pharmacies			Total		
	Pop	Sam	% of Pop	Pop	Sam	% of Pop	Pop	Sam	% of Pop	Pop	Sam	% of Pop	Pop	Sam	% of Pop
Addis Ababa ¹	3	3	100	51	10	20	277	39	14	101	16	16	432	68	16
Bahir Dar ²	-	-	-	1	-	-	10	10	100	8	8	100	19	18	95
Awasa ³	-	-	-	-	-	-	14	12	86	8	8	100	22	20	91
Jimma ⁴	-	-	-	-	-	-	12	11	92	6	5	83	18	16	89
Mekele ⁵	-	-	-	3	3	100	11	9	82	5	5	100	19	17	89
Total	3	3	100	55	13	24	324	81	25	128	42	33	510	139	27

NOTE:

1. **Addis Ababa:**
Out of the total 58 higher, 87 medium and 132 lower clinics. 13 (22%), 12 (15%) and 14 (10%) higher, medium and lower clinics, respectively, are randomly selected.
2. **Bahir Dar:**
The owners of 1 special clinic and 1 pharmacy were not available at the time of the survey; and 3 clinics were closed.
3. **Awasa:**
1 clinic was not willing to respond and another 1 clinic is dropped for being unlicensed at the time of the survey.
4. **Jimma:**
1 clinic and 1 pharmacy were not willing to respond.
5. **Mekele:**
2 clinics were not willing to respond.

b. Clinics:

- i. In Addis Ababa, the private clinics are first stratified by levels (i.e., as special, higher, medium and lower clinics) and then representative samples are randomly selected from each stratum. However, in order to account for contingency sampling, the samples selected from each stratum are made to be proportional to the number of clinics in each stratum. Consequently, out of 51 special, 58 higher, 87 medium and 132 lower clinics, 10 (20%), 13 (22%), 12 (15%) and 14 (10%) special, higher, medium and lower clinics, respectively, are randomly selected.
- ii. In contrast, as the total number of private clinics available in the other survey areas is found to be small, attempt was made to include all of them in the survey. Table 1 shows that in most of the survey areas there are no independently operating special clinics.

c. Pharmacies:

- i. Out of the total 101 private pharmacies in Addis Ababa, random samples of 16 (15.8%) pharmacies are selected.
- ii. As shown in the above table, as the total number of private pharmacies does not exceed 8 in the other survey areas, all of them are covered by the survey.

In general, out of a total of 510 private health facilities functioning in the five survey areas, 139 (27%) samples are selected (i.e., 3 hospitals (100%), 13 special clinics (24%), 81 clinics (25%) and 42 pharmacies (33%) are included in the survey). It can also be seen that only 16 percent of the private facilities in Addis Ababa are included in the sample, while the proportion of the samples from the rest of the survey areas range from 89-95 percent.

But comparison of the absolute sizes of the samples selected from each survey area reveals that the majority of the samples are actually taken from Addis Ababa. This is mainly due to the fact that, compared to the 510 private health facilities functioning in the five survey areas, 85 percent (or 432) of them are located in Addis Ababa, which also constitutes 35 percent of the national total (or 1225).

In this connection, Table 2 shows the proportion of samples selected from each type and level of private health facilities and from each survey area. The last column of this table denotes that nearly 50 percent of the samples are taken from Addis Ababa, while 11-14 percent is selected from the remaining four survey areas.

Table 2: Proportion of Samples by Facility Type, Level and Survey Area

Survey Area	Facility Type																			Grand Total		
	Hospital		Special Clinics								Clinics								Pharmacies			
			Dental		Ophthalmic		Gyne		Total		Higher		Medium		Lower		Total					
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%		
Addis Ababa	3	100	5	71.4	3	75	2	100	10	76.9	13	68.4	12	30.8	14	60.9	39	48.1	16	38.1	68	48.9
Bahir Dar													8	20.5	2	8.7	10	12.3	8	19.0	18	12.9
Awasa											4	21.0	5	12.8	3	13.0	12	14.8	8	19.0	20	14.4
Jimma											1	5.3	7	17.9	3	13.0	11	13.6	5	11.9	16	11.5
Mekele			2	28.6	1	25			3	23.1	1	5.3	7	17.9	1	4.3	9	11.1	5	11.9	17	12.2
Total	3	100	7	100	4	100	2	100	13	100	19	100	39	100	23	100	81	100	42	100	139	100

2.3 Data Collection and Analysis

Data collection was carried out using four sets of structured questionnaires for the different types of health facilities identified by the study (i.e., for hospitals, special clinics, clinics and pharmacies)(See Appendix 1). First, preliminary questionnaires were designed and discussed with selected private health facilities in Addis Ababa. Incorporating the comments and suggestions obtained during the pre-test, draft questionnaires were developed and submitted to ESHE IR 1 team, which reviewed them before the final questionnaires were produced.

The questionnaires were structured in seven parts to gather relevant information and data from private health facilities:

- Part I: Background Information
- Part II: Capital Expenditure
- Part III: Recurrent Expenditure
- Part IV: Cost Recovery Condition
- Part V: User Fees
- Part VI: Discount Conditions
- Part VII: Utilization

The survey was conducted from April 12 – 24, 2000 by a team of well experienced enumerators selected in collaboration with the IR 1 team.

The study mainly employed inferential statistical method in order to make estimates of the total expenditure on private health facilities in the country based on the sample information. This can be done using “point estimates” of the population mean, where the sample mean is used to calculate a number that can be used as an estimate of the population mean (McClare, et al., 1994).

Hence, expenditure estimates are made using recurrent expenditures of the sample facilities. That is, by first computing the average recurrent expenditures of the various private health facilities, estimates of the expenditures by each type of private health facilities in the country are made by multiplying the sample mean recurrent expenditures by the total number of facilities in each category. Then, aggregating these expenditure estimates of the different types of private health facilities, the total expenditure made by the private health sector is obtained.

However, it has to be noted that estimating the population means from the sample mean depends on the basic assumption that the sampling distribution be approximately normal. In this regard, the Central Limit Theorem states that “ if the sample size is sufficiently large, the sampling distribution of the sample means is approximately normal” (Monks, et al., 1988).

And as this study incorporates 139 sample private health facilities, which is 11 percent of the total 1225 in the country (Table 3), the sample size used in the study is not only representative of the population but it can also be considered to be sufficiently large so that inferences about population parameters can safely be made based on the sample statistics. Also observe that the proportions of samples taken from each category of the private facilities are significantly large. This further substantiates the above assertion that generalizations can be made about the total

mean expenditures made by all private health facilities in the country based on the data obtained from the samples.

Table 3: Distribution of Privately Owned Health Facilities by Type and Region

Region	Facility Type						Total
	Hospitals	Clinics				Pharmacies	
		Special	Higher	Medium	Lower		
Tigray	-	3	12	9	3	13	40
Afar	-	0	0	0	1	1	2
Amhara	-	4	3	3	104	24	138
Oromia	-	5	6	76	280	57	424
Somali	-	NA	NA	NA	NA	0	0
Benishangul	-	0	0	6	0	0	6
SNNP	-	2	8	30	71	22	133
Gambella	-	0	0	1	6	0	7
Harari	-	0	0	2	12	6	20
Dire Dawa	-	0	2	3	5	13	23
Addis Ababa*	3	51	58	87	132	101	432
National	3	65	89	217	614	237	1225
Samples**	3	13	19	39	23	42	139
	(100)	(20)	(21)	(18)	(4)	(18)	(11)

Source: Health and Health Related Indicators, 1991 E.C. (pp. 15 - 17)

* Some modifications are made on the figures based on recent data obtained from Addis Ababa Health Bureau during the survey.
 ** Figures in parenthesis indicates percentage of sample facilities in each category.

3. Policy Issues¹

Shortage of essential drugs, lack of suitable premises, shortage of professional, low level of investment, small scale of operation, unlicensed operators, and various forms of barrier to entry characterize private health care. These problems have adversely affected the quality of service and raised the cost of private health care. The following recommendations are intended to remove some of the major constraints faced and expand opportunities created by private providers.

Capacity for regulations

The mechanisms of monitoring the standards of private providers are important for the provision of quality health care and have implications for the cost of operating a private enterprise. The regulatory body requires substantial knowledge and manpower. MOH and health bureaus have very limited capacity to design guidelines and policies and to monitor their effectiveness. The weak capacity of the regulatory body is reflected by large number of unlicensed private health care providers. The capacity of MOH and regional bureaus must develop and expand to increase private sector participation. Hence, it is important to:

- Build an independent government authority or create a special department with the only objective of inspecting and supervising both the private and public providers. Establishing such an institution is long-term objective, which needs capacity building.
- In the short-run, the MOH and the regional governments have to build the capacity of the Regional Health Bureaus by increasing the quality and quantity of health professionals and increase the budget so that they could be in a position to effectively monitor the activities of providers and protect interest of customers.
- Although standards should be met in all regions, regional governments should facilitate the activities of private sector providers.
- Both professional and consumers associations should be involved in designing and implementing regulations and standards.
- The private health should become more organized in the form of an association in order to actively participate in the process of designing health policies, regulations and guidelines.

Supervision and reporting systems

Supervision is a useful tool to improve quality and standards and protect society against medical malpractice. Good supervision enhances public confidence in private health care providers and promotes quality service. In this study, it has been reported that, although a majority of the health care providers are satisfied with the standards set by health bureaus, there is some degree of arbitrariness in inspecting and supervising the operations of private providers, dissatisfaction with some of the standards (e.g. too high standards which are inappropriate to local conditions), and limited flows of information between providers and regulating authorities. Therefore, it is important to undertake the following measures:

¹ Taken from BASICS REPORT "Constraints and Opportunities for Private Sector Participation in Health Care in Ethiopia"

- Supervision should focus on evaluating the quality of service provided, not just an inspection of physical facilities;
- Supervision need to be regular and supportive;
- The MOH and Regional Health Bureaus need to mount an effective campaign against unlicensed providers and to create public awareness about the risks of unlicensed provider;
- Reporting to government bodies is necessary to understand disease patterns and identify the outbreak of epidemic. The reporting system should be strengthened to encourage feedback between the private and public sector.

On personal, staffing and training

Shortage of health professionals has increased the cost and reduced the quality of private health care. The shortage of professionals also is a major barrier to greater participation of the private sector in health care. In-service training is necessary to improve capacity and to cope with new developments in health care in this regard:

- The MOH and Regional Health Bureau should allow professionals in public institutions to work in private clinics during their spare time;
- The MOH guidelines should relax standards of staffing requirements in higher level clinics;
- MOH and Regional Health Bureaus should upgrade existing skills through regular short-term training, workshops, seminars, etc;
- MOH and Regional Health Bureaus have to improve access to IEC materials;
- Enhance training capacity of the country to produce more health professionals;
- Encourage private sector participation in training health professionals

Taxes

High tax rates have increased the cost of private health care. The problem is aggravated by a lack of transparent tax assessment system and delays in getting official estimate of taxes. Thus, it is possible that taxes have discouraged the expansion of the private sector. Moreover, untimely assessment and declaration of taxes created a state of uncertainty among private providers of health care. Hence, tax authorities and MOH should consider the following measures:

- Review the tax structure and the tax assessment procedures so that providers get the incentive to expand their business;
- Introduce a transparent taxing system;
- MOH and Inland Revenue Authority should jointly provide training to private operators on how to keep records.

Market Opportunity

The importance of the market in improving efficiency of health services was stressed earlier. However, the degree of imperfection in the health sector in Ethiopia is very high. This is clearly illustrated by the unavailability of drugs, drug quota systems, illegal traders (i.e. contraband dealers), shortage of capital, problem of obtaining land and premises at required standards in the right location. Thus, the MOH and the Ministry of Trade and Industry should

improve the competitiveness of the drug market by relaxing institutional constraints imposed in the market.

- Increase the supply of drugs through increased domestic supplies and increased allocation of foreign exchange for the importation of essential drugs;
- There is also a need to relax bureaucratic red tape imposed on importers of drug;
- Review the impact of the drug quota system and compulsory purchases of unwanted drugs on the cost of drugs and inefficiency of the system;
- Increasing domestic supply and imports, intensifying control of contraband, and creating the awareness of the society through mass media, training, workshops, etc should reduce illegal trade of drugs;
- Although the essential drug list in Ethiopia has helped to control extravagant prescription practices and restricted expensive and unnecessary drugs, it must be revised by MOH regularly;
- There is a need to provide the private sector with an effective market information system. The information on private sector should be integrated into the regular health system.
- Taking measures to provide information on opportunities and prospects of private investment in health. For instance workshops and seminars for investors can be organized by the MOH or Regional Health Bureaus.
- The finance institutions should improve access to credit to private providers. For instance, financial polity changes are required to address the problems related with collateral requirement of bank.

Drugs and Equipment

The quality of service, hence the capacity of the private clinics, to attract patients is adversely affected by shortage of drugs. Lack of emergency drugs, in particular is a major constraint to the operation of private clinics. The standards on medical equipment must be met to ensure safety and adequate service. Hence, it is imperative to:

- Expand the existing drug list in the guidelines;
- Increase the drug supply through private and public producers and importers;
- The Ethiopian Investment Authority should extend duty concessions to all clinics, not just hospitals, for basic medical equipment. Franco- Valluta import may also help to solve the problem.

Premise and in-patient beds

Shortage of suitable buildings and facilities has negatively affected the operation of existing clinics and hindered potential investors in health care. The shortage has often resulted in high cost of rent, especially for newly established providers. On the other hand, some medium and higher clinics have the necessary facilities and capacity to provide in-patient treatment. This should be viewed as positive development in view of the critical shortage of hospital beds (aggravated in recent years due to HIV/AIDS) in country. Hence, it is important to:

- Take measures to reduce the cost of building and facilities (e.g. improve access to land) to all types of clinics, not just higher ones like clinics.
- Relax the restriction on in-patient beds in the guidelines.

Financing health care

Effective demand for health care is due to limited social financing system and insurance coverage. Self-financing or out-of pocket payment makes private health care unaffordable, especially to low-income groups. There is a need for:

- The MOH and Regional Health Bureaus should encourage community participation (e.g. 'Iddir') to participate in financing health care.
- Promoting health insurance schemes for employees in the formal sector with a view to introducing compulsory insurance schemes in the long run.

Partnership between public and private health care providers

The development of the private sector can alleviate the pressure upon the government budget to provide health care for the entire population. The private sector can play an innovative and flexible role in areas where the government has not yet developed capacity. Moreover, existing attitudes of public employees towards private providers are not always positive. Private providers are not considered as partners in public health activities. Various medical practices (e.g. medical certificate) are reserved for public providers. The private sector is not involved in the national planning system and policy formulation. Exchange of information between public and private providers and between regions and the MOH is not well developed. Referral from private to public hospitals is a serious problem. This has resulted in the perception that private providers are not part of the national health care system. The following may help to foster partnership and promote better understanding.

- Involve the private sector in the national planning system and policy formulation by first organizing it in a form of an association.
- Complementary and effective health service can be provided if government hospitals accept referrals from private clinics and the latter share responsibilities in public health activities, issuing medical certificates or evidence and treating insurance patients.
- Involve professional associations and consumer groups in setting formulating policies and monitoring outcomes.

Increasing the standard of public providers

One of the major reasons for the expansion of the private health care sector in Ethiopia is the deterioration of standards within the public sector. Thus, introducing market and competition elements in the public sector will improve the efficiency of the health care system. Competition should be promoted between public and between the private and public providers.

Monitoring the reform process in the health sector

After the market liberalization, the growth of the private providers in the health sector has been relatively better than other sectors such as education. However, there is hardly any data to inform the community and policy makers about the operation of the private health care providers. The impact of the reform process is not monitored and evaluated. Unless there are empirical research on how they operate, whom they serve and how much money they make, etc., it will be very difficult for the government to introduce meaningful interventions.

Additional studies which need to be undertaken

The findings and conclusions of this study are restricted by terms-of-reference provided to the consulting firm. However, there are yet unanswered questions about the role and constraints of private health care providers in Ethiopia. Thus, more in-depth studies are proposed to address the major problems encountered by the private providers. These include:

1) Quality of services provided by private providers; 2) The efficiency of drug marketing; 3) Demand for private health care; 4) Public/private mix for health; 5) Health insurance and community based social financing; 6) Illegal drug trade and illegal health service provision: magnitude and means of reducing it; 7) Reforming the reform in the health sector: Is there a need for further policy change; 8) The role of private for non-profit providers; 9) The role of traditional health care; and 10) How should the private providers reach the rural poor.

4. Main Findings of the Study

4.1 Background Information on Private Health Facilities

Hospitals

All the three private hospitals in the country were established after the 1993 health policy reform and are located in Addis Ababa. And all are found to work throughout the week and around the clock. The capacities of these private hospitals are not only low (for they have on average 63 admission beds and employ 65 health professionals and 71 administrative personnel) but also show big differences among themselves. (Table 4) Because the numbers of admission beds, health professionals and administrative personnel range between 30 and 120, 34 and 96, and 37 and 111, respectively. (Appendix 2)

Special Clinics

The survey identified three major types of private special clinics, namely, Dental, Ophthalmic and OB Gynecology clinics. But in most of the survey areas there are no independently operating special clinics, instead a number of higher clinics are observed in which a group of Dental, Ophthalmic and Gynecology specialists work together in the same premises. Hence, as these clinics are licensed as higher clinics and are functioning not as independent special clinics, they are categorized by the survey as higher clinics.

Both in Addis Ababa and Mekele all the special clinics are found to work on average for about 6 days in a week. But while those in Addis Ababa are open for more than 10 hours in a day, those in Mekele work for less than 3 hours per day. A significant difference is also observed in the number of professional and administrative workers employed in the two sample areas. In Addis Ababa 2 – 4 health professionals and 2 – 6 administrative workers are hired, while the number of professional and support staff does not exceed 2, respectively, in Mekele. (Appendix 3)

As prescribed in MOH's 1987 E.C. guideline, dental, ophthalmic and gynecology clinics are required to hire at least 2, 2 and 5 health professionals, respectively. In this regard, the gynecology clinics in Addis Ababa and dental clinics in Mekele are observed to operate with less professionals compared to the minimum set, shading some doubt to the quality of services these facilities are providing.

Finally, Table 4 also shows that the majority of the special clinics in Addis Ababa and all in Mekele were opened after the 1994 health policy reform.

Clinics

Based on the Revised Guideline for Licensing Private Clinics issued by MOH in 1987 E.C., the survey categorized private clinics into three levels: Higher, Medium and Lower clinics. Except in Mekele where all the sample clinics work on average for 6 days in a week and less than 4 hours in a day, in the rest of the survey areas the sample clinics, irrespective of their levels, are open almost all the week round and for an average of 13 hours per day (Table 4).

Though all the clinics in four of the survey areas seem to employ on average 5 to 6 health professionals and administrative workers, respectively, variations are observed in the number of professional and support staff between the different facility levels. Again the case in Mekele is an exception because the number of health professionals and administrative workers does not exceed 2, respectively, for all levels of clinics. But in the other sample areas 8 – 25, 3 – 6 and 2 – 5 health professionals and 10 – 15, 3 – 5 and 2 – 3 administrative workers are employed in higher, medium and lower clinics, respectively (Appendix 4).

However, MOH's 1987 E.C. guideline requires higher, medium and lower clinics to employ a minimum of 6, 3 and 2 health professionals, respectively. Compared to these requirements, all the sample clinics, except those in Mekele, have professional manpower well above the minimum requirements, which imply that these private clinics are relatively large. But those in Mekele are underemployed so that they might not be providing the required services.

Table 4 Background Information on Private Health Facilities.

Sampled Facilities	Survey Area	Working Days Per week	Working Hours per day	Emergency Beds	Admission Beds	Employees		Opened	
						Health Professionals	Administrative Personnel	Before 1994	After 1994
Hospitals (N=3)	Addis Ababa (N=3)	7	24	2	63	65	7	-	3
	Bahir Dar (N=0)	-	-	-	-	-	-	-	-
	Awasa (N=0)	-	-	-	-	-	-	-	-
	Jimma (N=0)	-	-	-	-	-	-	-	-
	Mekele (N=0)	-	-	-	-	-	-	-	-
Special Clinics (N=13)	Addis Ababa (N=10)	5.6	11.6	5	-	3	-	4	6
	Bahir Dar (N=0)	-	-	-	-	-	-	-	-
	Awasa (N=0)	-	-	-	-	-	-	-	-
	Jimma (N=0)	-	-	-	-	-	-	-	-
	Mekele (N=3)	5.7	2.5	-	-	1	-	-	3
Clinics (N=82)	Addis Ababa (N=39)	6.4	15.0	3	-	5	-	11	26
	Bahir Dar (N=10)	7.0	13.4	3	-	5	-	-	10
	Awasa (N=13)	6.6	15.8	3	-	5	-	3	10
	Jimma (N=11)	6.6	14.2	2	-	6	-	4	7
	Mekele (N=9)	6.1	3.6	-	-	2	-	2	6
Pharmacies (N=42)	Addis Ababa (N=16)	6.6	12.8	-	-	2	-	5	10
	Bahir Dar (N=8)	6.6	12.3	-	-	2	-	2	6
	Awasa (N=8)	6.3	11.7	-	-	2	-	-	8
	Jimma (N=5)	6.4	12.8	-	-	2	-	1	4
	Mekele (N=5)	7.0	11.8	-	-	2	-	1	4

Note: All the figures are mean values.

Table 4 also shows that the majority of the clinics (i.e., about 72% of the 81 sample clinics) have been established in the last five years (1995 – 99).

Pharmacies

In all the survey areas, the sample pharmacies are open on average for more than 6 days in a week and 12 hours in a day. They also employ almost the same number of professional and administrative workers, 2 and 2 – 4, respectively. (Table 4; Appendix 5)

The survey also found that 32 out of the 42 surveyed pharmacies (76%) are newly established ones (1996-99).

In summary, it can be said that working for not less than 11 hours in almost every day of the week, the private health facilities are more accessible to those who need their services compared to public health facilities that, in most cases, provide their services only in public working days and hours (i.e., 8 hours in 5 days of the week).

4.2 Capital and Recurrent Expenditures of Private Health Facilities

Hospitals

The three private hospitals invested a total of Birr 79.5 million (or an average of Birr 26.5 million each) on their respective facilities (Table 5). Two of these facilities expended on average Birr 13.9, 11.7 and 1.5 million, respectively, on building construction, purchase of medical equipment and on ward facilities and others (which include the purchase of such items as beds, blankets, sheets, office furniture and equipment, vehicle, etc.). It is observed that expenditures on building construction and purchase of medical equipment are the two major cost components of the total initial investment, accounting for more than 95 percent of the total outlay.

Table 5: Mean Capital Expenditures of Private Health Facilities (in '000 Birr)

Sampled Facilities	Survey Area	Total Initial Investment	Building Constructio	Building Renovation	Medical Equipment	Medical Transportation	Stocks of Consumable Items*	Ward Facilities & others
Hospitals (N=3)	Addis Ababa (N=3)	26,491.7	13,859.5	-	11,744.0	506.5	331.0	1,501.5
Special Clinics (N=13)	Addis Ababa (N=10)	144.6	-	19.9	99.5	-	10.8	37.5
	Mekele (N=3)	44.2	-	6.3	3.5	-	1.7	-
Clinics (N=82)	Addis Ababa (N=39)	278.5	515.6	22.2	145.0	115.0	12.4	30.9
	Bahir Dar (N=10)	53.9	85.0	2.8	30.3	-	4.0	5.3
	Awasa (N=13)	290.4	147.7	10.4	114.8	67.5	22.5	34.3
	Jimma (N=11)	307.5	517.2	6.9	131.6	20.0	11.9	13.9
	Mekele (N=9)	42.3	-	1.1	31.6	-	1.3	4.2
Pharmacies (N=42)	Addis Ababa (N=16)	100.0	110.0	30.0	-	-	65.0	-
	Bahir Dar (N=8)	43.8	85.0	3.1	-	-	20.0	-
	Awasa (N=8)	152.5	180.0	6.5	-	-	41.9	-
	Jimma (N=5)	26.3	-	9.9	-	-	16.4	-
	Mekele (N=5)	87.4	-	32.6	-	-	96.3	-

For private hospitals, salaries and allowances, drugs and supplies, stationery and utilities and maintenance are found to be the major recurrent cost items, in order of their magnitudes. For instance, their monthly average expenditure on salaries and allowances is Birr 171,900 (out of which that paid for health professionals takes the largest proportion of Birr 132,400 or 77%) and that on acquisition of drugs and supplies is Birr 108,333 (or Birr 325,000 per quarter if a year). While the sample hospitals' monthly expenditures on stationery and utilities (such as on water, telephone and electricity) average Birr 32,500, they expend on average Birr 75,000 per annum (or 6,250 per mongh) for maintaining their facilities. (Table 6)

The large variations observed both in the capital and recurrent expenditures of the hospitals under consideration reflect the big differences in the capacities of the hospitals (Appendices 6 and 7). This can also be confirmed by the wide variations observed in the number of admission beds and size of employees, which range between 30 and 120 and 34 and 111, respectively. (Appendix 2)

* For Pharmacies the column represents stocks of drugs and medicines

Special Clinics

Table 5 presents the capital investments required to establish special clinics in Addis Ababa and Mekele, the only two survey area where special clinics are found. Close examination of this table and Appendix 8 reveals that wide variations are observed not only in the total initial investments made in the two survey areas, but also in the amounts expended in each type of the sample clinics.

Hence, with the exception of Gynecology clinics, the major investment items of Dental and Ophthalmic clinics in Addis Ababa are expenditures on medical equipment, building renovation, ward facilities and stocks of consumable items (such as x-ray consumables, syringes, gloves, laboratory chemicals, etc.), in order of their magnitudes. But in Mekele, expenditures on medical equipment, building renovation and stocks of consumable items take the largest proportions of the total initial investment.

Table 6: Mean Recurrent Expenditures of Private Health Facilities (in '000 Birr)

Sampled Facilities	Sample Area	House Rent (per month)	Salaries & Allowances		Supplies (per quarter year)	Maintenance (per year)	Stationery & Utilities (per month)
			Health Professionals/ per month	Administrative Personnel per month			
Hospitals (N=3)	Addis Ababa (N=3)	-	132.4	39.5	325.0	75.0	32.5
Special Clinics (N=13)	Addis Ababa (N=10)	2.3	2.7	1.5	0.	1.7	0.6
	Mekele (n=3)	0.8	0.5	0.34	0.	0.3	0.24
Clinics (N=82)	Addis Ababa (N=39)	4.4	5.4	2.6	11.	4.9	0.84
	Bahir Dar (N=10)	1.6	5.7	1.1	6.	1.2	1.64
	Awasa (N=13)	1.9	7.7	1.4	10.	2.9	1.32
	Jimma (N=11)	0.9	7.1	1.2	6.	2.8	0.74
	Mekele (N=9)	0.9	0.9	0.3	2.	1.1	0.37
Pharmacies (N=42)	Addis Ababa (N=16)	2.8	2.9	1.4	24.	2.2	0.5
	Bahir Dar (N=8)	0.8	2.7	0.3	32.	0.6	0.5
	Awasa (N=8)	0.8	3.4	0.5	20.	1.6	0.3
	Jimma (N=5)	0.8	3.3	0.9	18.	2.3	0.33
	Mekele (N=5)	1.1	2.1	0.4	18.	-	0.2

* This figure represents the mean expenditure of private hospitals on drugs and supplies per quarter of a year

In the case of OB Gynecology clinics in Addis Ababa, expenditures on ward facilities and procurement of stocks of consumable items take the largest proportions of the total initial outlay, next to the expenditure on medical equipment.

The special clinics in Addis Ababa also expend much higher on each of the recurrent cost items as compared to those in Mekele. But the relative sizes of these cost items seem to be similar. For instance, for the Dental clinics in Addis Ababa and Mekele, salaries and allowances, house rent, supplies, and stationery and utilities are the items that take the largest share of the total recurrent expenditure, in the order they appear. (Table 6)

Ophthalmic clinics in Addis Ababa spend monthly on average Birr 4,300 on salaries and allowances (of which Birr 2,700 or 63% is for health professionals) and Birr 3,200 on house rent. They also expend Birr 2,800 per year to maintain their facilities and Birr 800 per quarter of a year to purchase supplies. It can also be observed that their expenditures on stationery and utilities are significantly high, amounting to an average of Birr 630 per month. (Appendix 9)

On the other hand, the single Ophthalmic clinic in Mekele expends monthly on average Birr 1,100 on salaries and allowances (in which case the support staff takes the largest share of Birr 600) and Birr 700 on house rent. But the expenditures on stationery and utilities and supplies account for the smallest proportions of the total recurrent expenditures.

Clinics

The mean total initial investments on the sample private clinics are found to be relatively larger than the other private facilities excluding hospitals. Thus, except in Bahir Dar and Mekele, in the rest of the survey areas more than a quarter of a million Birr was required to establish private clinics, where expenditures on building construction, purchase of medical equipment and transportation, ward facilities and stocks of consumable items take the highest share of the total initial investments. (Table 5)

For most of the survey areas, the amounts invested seem to increase with the levels of clinics. For instance, Birr 753,300, 69,600 and 17,200 were invested to establish higher, medium and lower clinics, respectively, in Addis Ababa; while the corresponding figure for the clinics in Awassa was 599,900, 192,000 and 41,800, respectively. (Appendix 10)

It can be observed from Table 6 that the mean recurrent expenditures of private clinics are also relatively higher when compared to special clinics and pharmacies. For the clinics in Addis Ababa and Mekele salaries and allowances, house rent, supplies, and stationery and utilities are found to be the major four cost components, in this order, on which they expend on average more than Birr 16,000 and 3,000 per month, respectively.

Whereas, in the rest of the survey areas, the monthly expenditures on these four cost items ranges on average between Birr 12,000 and 16,000, where expenditure on supplies takes the second place and that on house rent the third. Furthermore, it has to be noted that in most of the survey areas monthly expenditures on salaries and allowances of health professionals accounts for the largest proportion of the total recurrent expenditure.

However, wide variations are observed in the amounts expended on each of the recurrent cost items between the various survey areas and levels of clinics. In this connection, the total recurrent expenditures are highest in Addis Ababa and Awasa, with monthly average expenditures exceeding Birr 16,000, followed by Jimma and Bahir Dar, which on average expend monthly around Birr 12,000. But expending monthly on average nearly Birr 3,300, the total recurrent expenditure on private clinics is the lowest in Mekele. On the other hand, as was the case for the capital expenditures, the total recurrent expenditures are observed to increase as we move from lower to medium and to higher clinics. (Appendix 11)

Pharmacies

Of the total initial investments required to establish private pharmacies, capital expenditures on building construction and on stocks of drugs and medicines took the highest share in all the survey areas (Table 5). In addition, significant amounts were also required for renovating the premises. However, the amounts invested differ from one survey area to the other and also from one pharmacy to another. This can be seen from the large standard deviations in all the capital cost components. (Appendix 12)

Unlike the cases in the other health facilities, all sample private pharmacies in all the survey areas are found to expend the largest proportions of their total recurrent expenditures on the procurement of supplies (Table 6). Hence, supplies, salaries and allowances, house rent, and stationery and utilities are observed to be the major four recurrent cost components, in the order they appear, in all the survey areas. And out of the total average monthly expenditures on salaries and allowances that paid for health professionals are proportionately larger.

Again in contrast to the other private health facilities, the variations in the recurrent expenditures of the pharmacies in the various survey areas are not significantly large (Appendix 13). Nevertheless, the amounts expended on supplies by individual pharmacies in all the sample areas are observed to show relatively wider variations.

In summary, it can be concluded that relatively large amounts of initial investments are required to establish private health facilities, where outlays on building construction and the purchase of medical equipment, stocks of consumable items, and ward facilities and office furniture take the largest share of these investments. Furthermore, the operating costs of these facilities are not small either. As shown above, the highest proportion of the recurrent expenditures go to salaries and allowances, supplies, house rent, and stationery and utilities.

4.3 Cost Recovery Conditions of Private Health Facilities

All the surveyed private health facilities were asked whether they are breaking-even, (i.e., getting zero profits) or losing money or making profits; and the length of time after which they expect to get profits if they are not doing so currently. Accordingly, the responses of the sample facilities are summarized in Table 7.

Out of the total 139 surveyed facilities 25 (18%) of them responded that they are losing money, while 32 (23%) and 82 (59%) of them replied that they are breaking-even and making profits.

respectively. In general, those that are breaking-even and making profits account for 82 percent of the total, implying that the sector is profitable.

Table 7: Cost Recovery Conditions of Private Health Facilities

Sampled Facilities	Breaking-even	Losing Money	Making Profit	Breaking-even & Making Profit
Hospitals (N=3)	1	2	-	1
Special Clinics (N=13)	-	2	11	11
Higher Clinics (N=19)	12	2	5	17
Medium Clinics (N=39)	7	7	25	32
Lower Clinics (N=23)	4	7	12	16
Pharmacies (N=42)	8	5	29	37
Total (N=139)	32 (23%)	25 (18%)	82 (59%)	114 (82%)

Individual examination of the different facilities reveals that 2 of the 3 hospitals are losing money, while the majority of higher clinics are breaking-even. This may mainly be due to the fact that the majority of these facilities are newly established ones. For instance, all of the hospitals and nearly 79 percent of the surveyed higher clinics were opened during the last 5 years (Appendix 4) so that they may need some time before they are able to fully cover all their costs by their revenues and then start making profits.

Those health facilities that are currently either losing money or breaking-even have also indicated their expectations regarding the length of time before they start making profits. Thus, all the three private hospitals reported that they would expect to make profits on average after 6 years. The special clinics and pharmacies in all the survey areas would require less than 2 years before they start making profits. Similarly, the mean length of years reported by the different levels of private clinics are found not to exceed 3 years in most of the survey areas. (Appendices 14 –17)

However, it may be necessary to note that the responses of the private facilities regarding their cost recovery conditions and the expected length of years they require to start making profits may largely depend on the accounting systems of the facilities. As it is the practice of most of the private businesses in the country, the private health facilities are also presumed not to employ conventional and systematized accounting procedures that would enable them to arrive at accurate cost and revenue figures.

4.4 Discount Conditions of Private Health Facilities

It is known that most of the public health institutions in the country provide discounts and free treatments to those poor people who can produce a letter from their Kebeles or Peasant Associations certifying their inability to pay for the services they would be receiving. But this may not be the case in private health facilities whose main objectives are making profits. However, though they do not have any waiver policy at all, private providers claim that they also at times relieve some of their patients of some part of their charges. This may be particularly due to the nature of the services they are providing.

To ascertain this claim the study made inquiries on respondents as to whether they reduce fees for the poor or not, and if they do approximately what percentage of their patients get discounts. Nevertheless, in some instances the results obtained may not seem to be realistic. Because the percentage of discount recipients reported by some facilities is so high that it is not by any standard common to private-for-profit businesses. However, with the view of giving some highlights as to the discount conditions of private health facilities, the responses of the different facilities are summarized below.

Out of the total 139 private facilities surveyed, about 83 percent of them reported that they reduce fees for the poor (Appendices 18 – 21). But the percentages of discounts given by the various facilities are not the same. For instance, two of the private hospitals reported that they on average discount fees for 20 percent of their patients. In 9 of the 13 special clinics, the mean proportion of patients receiving discounts is nearly 14 percent. In addition, while about 11 percent of the patients visiting 74 of the 81 private clinics benefit from fee reductions, 31 of the 42 surveyed pharmacies also reported that they reduce charges for about 8 percent of their customers.

Therefore, it can be concluded from the above observations that though they are profit seeking businesses, the majority of the private providers do actually give fee reductions for those whom they believe can not afford to pay the full charges for the services provided. However, the proportions of customers reported to have received fee reductions seem to be very much exaggerated.

4.5 Rate of Utilization of Private Health Facilities

With the aim of getting some relevant information on the rate of utilization of private health facilities, a couple of questions were included in the questionnaires. The first question inquires about the average number of visits per day, while the second deals with the proportions of fee paying and credit patients/customers.

In this regard, Table 8 shows the average number of patients that visit the private health facilities under investigation in any one day. Comparing the facilities that provide medical treatments only, it can be observed that higher clinics have the second highest number of visits per day next to hospitals, followed by special, medium and lower clinics.

However, wide variations are observed in the average number of visitors among the facilities operating in the same survey area and between the facilities in different survey areas. The number of patients visiting private hospitals, for instance, ranges 10 to 24 and 20 to 80 per day for inpatients and outpatients respectively. Where the variation nearly equals the mean number of visits (Appendix 22). Large differences are also observed in the number of customers received in a day by private pharmacies both in each survey area and between the different survey areas (Appendix 23). Similar variations are also observed in special clinics and in all the three levels of clinics (Appendices 24 – 25).

In general, these average numbers of visits can be considered to be significantly large for the majority of the facilities reported that they are not making any losses. That is, as discussed

earlier, about 82 percent of the private facilities are breaking-even and making profits. This then implies that the fees collected from the users are large enough to either fully cover their costs or to enable them make profits.

Furthermore, the rate of utilization of private facilities can also be viewed in terms of the proportions of fee paying and credit patients they are serving. While fee paying users are those who pay cash instantly for the services they received, the bills of credit clients are covered by either insurance companies or their employer organizations with whom prior arrangements are made or contracts are signed.

Table 8: Rate of Utilization of Private Health Facilities

Sample Facilities	Average Number of Patients (per day)	Fee Paying Patients (%)	Credit Clients (%)
Hospitals (N=3)		81.7	18.3 (3)
Inpatients	16		
Outpatients	43		
Special Clinics (N=13)	11	95.4	13.8 (4)
Higher Clinics (N=19)	22	84.3	15.8 (16)
Medium Clinics (N=39)	10	94.9	13.6 (15)
Lower Clinics (N=23)	6	91.8	11.8 (6)
Pharmacies (N=42)	52	98.5	6.7 (9)

Note:

- All the figures are mean values.
- The numbers in parentheses denote the total number of facilities
- having credit arrangements with their clients.

As can be seen from Table 8, the majority of users served by private health facilities are cash paying patients. But relatively speaking, private hospitals and higher clinics are found to have the largest proportions of credit clients out of the total number of patients they are serving. Hence, all the three private hospitals reported that an average of 18 percent of their patients are credit clients, while 16 of the 19 surveyed higher clinics reported to have credit arrangements on average with 16 percent of their patients. Observe also that only few of the private pharmacies investigated have credit contracts with relatively low percentage of their customers.

4.6 User Fees of Private Health Facilities

Attempt was made to assess the amounts private health providers are charging users for some commonly provided services. Based on the information obtained from private health facilities comparisons are made with what public health facilities are charging for these same services. Actually, these comparisons of user fees are made with the a priory expectation that private-for-profit health facilities would charge much higher than public health institutions. The data for the public facilities are obtained from the studies conducted by Health Care Financing Secretariat.

Table 9 summarizes the comparisons made between the user fees of government and private health facilities. Item by item comparison reveals that for all the listed services the fees of

private facilities are higher than those of public health institutions. For instance, while the government-owned health institutions charge Birr 0.50 to 2.00 for card/consultation, the amount charged by the private facilities ranges from Birr 5 to 25, where in the latter repeat patients are required to pay for card/consultation if they visit the facility again after a week.

For some specialized services, the privately owned facilities charge much higher than the public institutions. One good example may be the charges for delivery services, where the maximum fee is Birr 60 in the latter while it extends to Birr 1400 in the former. However, it has to be noted that there are great variations in the amounts charged within facilities in the same survey area and between facilities in different survey areas. (See Appendices 26 - 27)

Table 9: Comparisons of User Fees of Public and Private Health Facilities

Types of Services	Government Facilities			Private Facilities			
	1	2	3	4	5	6	7
Card/Consultation Fees							
General Practitioner	1.5	1	0.50	25*	10-15	8-14	5-15
Specialist	-	-	-	36.7*	15-21	11-30	5-15
Laboratory Analysis							
Blood (white cell count + differential)	2	1.5	0.50	17	6-14	4-10	3-20
Stool (Oval/parasite)	1	1	0.50	9.7	3-5	3-6	3-5
Urine (urinalysis + microscopy)	1.75	1.80	1.5	13.3	6-13	4-9	3-10
Pregnancy test	10	10	10	18	8-15	11-27	3-15
Chest X-ray	10	12	-	41.7	35-37	35-37	-
Abdominal Ultra-sound	20	-	-	66.7	30-63	50-64	-
In-patient Treatment							
Daily bed rate:							
1 st class		5	-	233.3	30-74	40-60	-
2 nd class	3.75**	7	-	187.5	23-60	40-43	-
3 rd class		2	-	150	20-50	43	-
Medication (e.g., IV fluid)	-	-	-	24	18-31	21-26	20-30
Surgical Interventions							
Minor Surgery:							
Circumcision	15	25	8	120	25-82	30-100	20-31
Abscess draining	20	12.5	7.5	108.3	15-28	20-33	7-12
Incision & excision under L.A.	22.5	10	-	90	-	-	-
Suture (one stitch)	17.5	16	10	-	2-20	10-18	7-12
Major Surgery:							
Laparotomy	-	-	-	1233.3	-	-	-
Delivery Services							
Normal delivery	20	18.5	10	541.7	160-290	20-200	25-45
Instrumental delivery	25	28.5	17.5	690	182-750	-	-
Caesarean section	58.6	60	-	1400	150***	-	-
General Services							
Cleaning and dressing	3	4	5	45	5-6	5-6	3-5
Injection (e.g., Procaine Penicillin 4 MIU)	4	-	-	3.3	1-2	1-2	1-4
Others (e.g., ear irrigation, etc)	3	5	7	30.7	10-12	4-13	3-9

Codes: 1= Zonal Hospitals 4= Hospitals 7= Lower Clinics
 2= Public Hospitals 5= Higher Clinics
 3= Health Centers 6= Medium Clinics

Notes: All figures are mean values in Birr.

* Birr per week

** Bed and meals (1st, 2nd and 3rd classes)

*** Lower clinics are not allowed to undertake C/S, but lower clinics in Awasa are carrying out C/S.

The same comparisons are also made between the fee structures of privately owned special clinics and government-run health institutions. But as predicted before, for all services identified by the survey the private facilities are found to charge much higher than the public facilities. (See Appendix 28)

In the case of user fees of private pharmacies, the study used a list of 10 indicator drugs selected from 32 essential drugs approved by MOH and used as a basis for data collection in the “**Assessment of Revolving Drug Funds in Ethiopia**”, a survey conducted in 1998. This survey attempted to assess the charges of Liyu and Kenema pharmacies for 32 indicator drugs that are used in the treatment of most commonly prevailing illnesses in Ethiopia. However, in the current study attempt was made to assess the charges of private pharmacies for only 10 of these drugs.

Comparison of the results obtained in these studies reveals that though private pharmacies charge higher than the government owned pharmacies, the variations are not that big. Considering the long queues one is likely to face in Liyu and Kenema pharmacies, the price differences between government owned and private pharmacies become really insignificant. Moreover, large variations are not also observed in the amounts private pharmacies are charging within the same survey area and between different survey areas. (See Appendix 29)

4.7 Estimation

In this section attempt is made to estimate first the total recurrent expenditure of all the private health facilities in Ethiopia and then the amount these facilities are expending per patient. For the purpose of expenditure estimation, the recurrent expenditures of private health facilities are preferred to their capital expenditures for the latter merely represent sums of money invested by the various facilities at different times.

First, using Table 6, the mean recurrent expenditures of the sample private health facilities are computed (Table 10). Hence, the three private hospitals operating in the country expend on average Birr 308,091 per month. While the average monthly expenditures of higher, medium, lower and special clinics are Birr 33,011, 9,269, 6,180 and 2,695, respectively, that of private pharmacies is Birr 12,939 per month.

Table 10: Mean Recurrent Expenditure of Sample Private Facilities (Birr/month)

Facilities	Valid N	Minimum	Maximum	Mean	Std. dev
Hospitals		172822.00	497283.3	308,090.67	168818.36
Special Clinics	1	1400.00	12607.6	6,179.53	4182.64
Higher Clinics	1	2238.33	132500.0	33,010.66	31210.58
Medium Clinics	3	966.67	41166.6	9,268.53	8729.26
Lower Clinics	2	70.00	10166.6	2,694.89	2339.18
Pharmacies	4	2833.33	28870.0	12,939.24	6690.98

The total recurrent expenditure of all the private health facilities in the country can then be estimated by multiplying the mean expenditures of each category of health facilities by the number of facilities. As shown in Tables 3 and 11, there are 1,225 private health facilities operating in the country, nearly 50 percent of which are lower clinics. Aggregating the total estimated recurrent expenditures of each category of facilities, the total expenditure of all private health facilities operating in the country is estimated to be Birr 10,996,424 per month or 131,957,083 per annum.

Table 11: Total Estimated Recurrent Expenditure of Private Health Facilities in Ethiopia (Birr/month)

Facilities	Total Number of Facilities	Mean Recurrent Expenditure	Total Estimated Recurrent Expenditure
Hospitals	3	308090.67	924,272.01
Special Clinics	65	6179.53	401,669.45
Higher Clinics	89	33010.66	2,937,948.74
Medium Clinics	217	9268.53	2,011,271.01
Lower Clinics	614	2694.89	1,654,662.46
Pharmacies	237	12939.24	3,066,599.88
Total Estimated Private Expenditure (per month)			10,996,432.55
Total Estimated Private Expenditure (per year)			131,957,082.60

However, the recurrent expenditures of private hospitals can be viewed in terms of the proportions devoted to inpatient and outpatient services. But due to the crude nature of the survey, there is no reliable way of separating costs of inpatients from costs of outpatients.

However, attempt is made to estimate the portion of the total recurrent expenditure attributed to inpatient and outpatient services. This is truly an educated guess that could be inferred from a supposed relationship between occupancy rate (which indicates the intensity with which variable costs are devoted to inpatients) and the proportion of total costs (fixed plus variable) devoted to inpatients.

Based on what is practically observed, experts in the area posit this relationship as follows (which obviously is a rough guess):

Occupancy Rate	Portion of total cost to inpatients
100 %	85 %
92	83
84	81
76	79
68	77
60	75
52	73
44	71
36	69
28	67
20	65

Average occupancy rate is computed by dividing the total number of inpatients (admissions) per day to the total number of admission beds. Hence, on the average, only 30 % of the hospitals' beds are found to be occupied in any one day (Table 12). Then, after apportioning the total recurrent costs, according to the above schedule, and dividing through by the corresponding utilization figure for each hospital, the per patient expenditures are obtained. Accordingly, private hospitals spend on average Birr 416 per day (admission) for inpatients and Birr 86 per visit for outpatients (Table 13).

Finally, an estimate of the mean per patient expenditure of the other private health facilities can be made by making use of the information given in Table 8 (i.e., the average number of visits per day) and Table 4 (i.e., the number of working days per week). The mean recurrent expenditure per patient is calculated by taking the ratio of the mean recurrent expenditure (Table 10) to the total number of patients seen per month, obtained by multiplying the per day visits by the number of working days in a month.

Table 12: Occupancy Rate of Private Hospitals

Hospital by Code	1 No. of Admissions beds	2 No. of Inpatients per day	3 No. of Outpatients per day	4 Average length of Stay (days)	5 No. of Working days/month	6 No. of times 1 bed is Occupied per month (if fully occupied) (5 ÷ 4)	7 Total No. of Inpatient-days per month (2 x 5) or (2x4x6)	8 Total No. of Outpatients per month (3 x 5)	9 Average Occupancy Rate (2 ÷ 1)
H1	120	24	80	5	30	6	720	2400	20 %
H2	39	14	30	5	30	6	420	900	36 %
H3	30	10	20	5	30	6	300	600	33 %

Table 13: Proportion of Total Recurrent Expenditure Devoted to Inpatients and outpatients, and Expenditure per patient

Hospital by Code	10 Total Recurrent Expenditure (ETB/month)	11 Average Occupancy Rate	12 Proportion of Recurrent Expenditure Devoted to		13 Recurrent Expenditure (ETB/month) Devoted to		14 Expenditure per Patient (13a ÷ 7) and (13b ÷ 8)		15 Mean Expenditure/ Patient (14 ÷ No. of Hospital)	
			Inpatients (Estimate)	Outpatients (Estimate)	Inpatients (10x12a)	Outpatients (10x12b)	Inpatients (ETB/day)	Outpatient (ETB/visit)	Inpatient (ETB/day)	Outpatient (ETB/visit)
H1	497,283.33	20 %	65%	35%	323,234.16	174,049.17	448.94	72.52	415.57	86.00
H2	254,166.66	36 %	69%	31%	175,375.00	78,791.66	417.56	87.55		
H3	172,822.00	33 %	66%	34%	114,062.52	58,759.48	380.21	97.93		

As reported in Table 14, private special clinics spend on average Birr 35 per patient per visit. The corresponding figures for Higher, Medium, and Lower Clinics are Birr 59, 40, and 17 per patient. At an average of Birr 11, per patient expenditures of private pharmacies are found to be the least of all the private health facilities.

Table 14: Mean Estimated Expenditure per Patient of private clinics & pharmacies (Birr/month)

Facilities	Mean Recurrent Expenditure/Patient
Special Clinics	34.61
Higher Clinics	58.81
Medium Clinics	39.63
Lower Clinics	16.91
Pharmacies	11.49

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Annexes

Questionnaire For The Private Health Expenditure Survey In Ethiopia

To Be Conducted Under 'Eshe' Project

The project *Essential Services for Health in Ethiopia (ESHE)* is a joint undertaking between the Government of Ethiopia and the USAID. A major objective of the project is to increase resources for the health sector in Ethiopia.

We are currently reviewing the conditions for the private providers and facilities functioning in the health sector. We plan to work out proposals to encourage the private sector and to provide opportunities for public-private cooperation in the provision of health services.

As part of this support we are currently carrying out a study to estimate the private health expenditures in the country by taking samples from among private hospitals, clinics and pharmacies. Therefore, we would appreciate very much your kind cooperation in the survey of private health facilities. We confirm that all data will be treated confidentially so that no individual facility may be identified. And in the presentation of the final estimates only aggregate data will be reported. Furthermore, all the respondents to the survey will receive a copy of the final report on private health expenditures in Ethiopia.

**QUESTIONNAIRE FOR THE PRIVATE HEALTH EXPENDITURE
SURVEY
(CLINICS)**

Objective of the study: To assess the costs of and expenditures on private health facilities in view of the need to complement estimates of the government health expenditures and to provide decision-makers with a better picture of the sector.

I. Background Information:

1. Facility Code: _____
2. Facility level: 1. Higher Clinic 2. Medium Clinic 3. Lower Clinic
3. Date of opening: _____
4. Number of days you are open per week _____
Number of hours you are open per day _____
5. Total number of beds for emergency _____
6. Total number of employees: a. Health professionals _____
b. Administrative personnel _____
7. Title/position of respondent: _____

II. Capital Expenditure:

8. Total initial investment: _____
 - a. Building (if not rented) _____
 - b. Building renovation (if rented) _____
 - c. Medical equipment: _____
 - d. Emergency medical transportation (Ambulance, etc.): _____
 - e. Stocks of consumable items (x-ray consumables, syringes, gloves, laboratory chemicals, etc.) _____
 - f. Ward facilities and others (beds, blankets, sheets, office furniture, office equipment, vehicle, etc.) _____

III. Recurrent Expenditure:

9. House rent (per month): _____
10. Personal services (salaries and allowances):
 - a. Health professionals (per month) _____
 - b. Administrative personnel (per month) _____
11. Supplies: _____ (per quarter of a year)
12. Maintenance: _____ (per year)
13. Others (stationery and utilities – water, telephone, electricity): _____
(per month)

IV. Cost Recovery:

14. Are you breaking-even (i.e., getting zero profit) or losing money or making profits?
 1. Breaking-even 2. Losing money 3. Making profits

15. If your response is 1 or 2: a) after how long do you think it will be before you start making profits? _____ b) What are the reasons?

V. **User Fees:**

How much do you generally charge for:

16. Registration/consultation (per ___ days) if the patient is seen by
a. general practitioner _____
b. specialist _____

17. Diagnostic procedures:

Laboratory analysis: Blood (white cell count and differential) _____

Stool (ova/parasite) _____

Urine (urinalysis + microscopy) _____

Pregnancy test _____

Chest X-ray _____

Abdominal Ultra -sound _____

18. Treatment:

In-patient: Daily bed rate: 1st class _____

2nd class _____

3rd class _____

Medication (e.g. IV fluid) _____

19. Surgical interventions:

Minor surgery

Circumcision _____

Abscess incision _____

Suture (one stitch) _____

20. Delivery services:

a. Normal delivery _____

b. Instrumental delivery _____

c. Caesarian section _____

21. General services;

a. Cleaning and dressing _____

b. Injection (e.g. Procaine penicillin 4 MIU) _____

c. Others (ear irrigation, catheterization, etc.) _____

(Specify what other)

22. Do you reduce fees for the poor?

1. Yes

2. No

23. If yes, what percentage of your patients receives discounts?
_____ %

VI. **Utilization:**

24. What is the average number of patients seen per day?

25. What percentages of your patients are

a. fee paying _____

b. credit _____

**QUESTIONNAIRE FOR THE PRIVATE HEALTH EXPENDITURE
SURVEY
HOSPITALS**

Objective of the study: To assess the cost of and expenditures on private health facilities in view of the need to complement estimates of the government health expenditures and to provide decision-makers with a better picture of the sector.

VII. Background Information:

2. Facility Code: _____
3. Date of opening: _____
6. Number of days you are open per week _____
Number of hours you are open per day _____
7. Total number of beds for a. emergency _____
b. admission _____
8. Total number of employees: a. Health professionals _____
b. Administrative personnel _____
9. Title/position of respondent: _____

VIII. Capital Expenditure:

10. Total initial investment: _____
 - g. Building (if not rented) _____
 - h. Building renovation (if rented) _____
 - i. Medical equipment: _____
 - j. Emergency medical transportation (Ambulance, etc.): _____
 - k. Stocks of consumable items (drugs, x-ray consumables, syringes, gloves, laboratory chemicals, etc.) _____
 - l. Ward facilities and others (beds, blankets, sheets, office furniture, office equipment, vehicle, etc.) _____

IX. Recurrent Expenditure:

11. House rent (per month): _____
12. Personal services (salaries and allowances):
 - a. Health professionals (per month) _____
 - b. Administrative personnel (per month) _____
13. Drugs and supplies: _____ (per quarter of a year)
14. Maintenance: _____ (per year)
15. Others (stationery and utilities - water, telephone, electricity):
_____ per month)

X. Cost Recovery:

16. Are you breaking-even (i.e., getting zero profit) or losing money or making profits?
 1. Breaking-even
 2. Losing money
 3. Making profits

17. If your response is 1 or 2: a) after how long do you think it will be before you start making profits? _____ b) What are the reasons?

XI. User Fees:

How much do you generally charge for:

18. Registration/consultation (per ___ days) if the patient is seen by

(a) general practitioner _____

(b) specialist _____

19. Diagnostic procedures:

Laboratory analysis: Blood (white cell count and differential) _____

Stool (ova/parasite) _____

Urine (urinalysis + microscopy) _____

Pregnancy test _____

Chest X-ray _____

Abdominal Ultra -sound _____

20. Treatment:

In-patient: Daily bed rate: 1st class _____

2nd class _____

3rd class _____

Medication (e.g. IV fluid) _____

21. Surgical interventions:

a. Minor surgery

• Circumcision _____

• Abscess draining _____

• Incision & Excision under Local Anesthesia

b. Major surgery

Laparotomy _____

22. Delivery services:

a. Normal delivery _____

b. Instrumental delivery _____

c. Caesarian section _____

23. General services;

a. Cleaning and dressing _____

b. Injection (e.g. Procaine penicillin 4 MIU) _____

c. Others (ear irrigation, catheterization, etc.) _____

(Specify what other)

24. Do you reduce fees for the poor?

1. Yes

2. No

25. If yes, what percentage of your patients receives discounts?

_____%

XII. Utilization:

26. What is the average number of patients seen per day?

27. What percentages of your patients are

a. fee paying _____

b. credit _____

XVII. User Fees:

15. How much do you generally charge for the following indicator drugs?

Indicator Drug/Strength/Dose Form	Retail Unit Price (Birr)
1. Aluminum Hydrate and Magnesium Trisilicate tablets	
2. Oral Rehydration Salts	
3. Theophedrine tablets	
4. Paracetamol 500 mg tablets	
5. Ampicillin 500 mg capsules	
6. Chloramphenicol 250 mg capsules	
7. Tetracycline 250 mg capsules	
8. Procaine Penicillin 4 MIU injection	
9. Chloroquine 250 mg tablets	
10. Metronidazole 250 mg capsule	

16. Do you reduce fees for the poor?

1. Yes

2. No

17. If yes, what percentage of your customers receives discounts?
_____ %

XVIII. Utilization:

18. What is the average number of customers per day?

19. What percentages of your customers are

(a) fee paying _____

(b) credit _____

APPENDICES

Appendix 1: Questionnaire

Code: PHERS 002

QUESTIONNAIRE FOR THE PRIVATE HEALTH EXPENDITURE SURVEY
(SPECIAL CLINICS)

Objective of the study: To assess the costs of and expenditures on private health facilities in view of the need to complement estimates of the government health expenditures and to provide decision-makers with a better picture of the sector.

XIX. Background Information:

5. Facility Code: _____
2. Type of Clinic: 1. Dental 2. Ophthalmic 3. O.B. Gynecology
3. Date of opening: _____
4. Number of days you are open per week _____
Number of hours you are open per day _____
5. Total number of beds for emergency _____

6. Total number of employees: a. Health professionals _____
b. Administrative personnel _____
22. Title/position of respondent: _____

XX. Capital Expenditure:

23. Total initial investment: _____
 - p. Building (if not rented) _____
 - q. Building renovation (if rented) _____
 - r. Medical equipment: _____
 - s. Emergency medical transportation (Ambulance, etc.): _____
 - t. Stocks of consumable items (x-ray consumables, syringes, gloves, laboratory chemicals, etc.) _____
 - u. Ward facilities and others (beds, blankets, sheets, office furniture, office equipment, vehicle, etc.) _____

XXI. Recurrent Expenditure:

24. House rent (per month): _____
25. Personal services (salaries and allowances):
 - a. Health professionals (per month) _____
 - b. Administrative personnel (per month) _____
26. Supplies: _____ (per quarter of a year)
27. Maintenance: _____ (per year)
28. Others (stationery and utilities – water, telephone, electricity): _____ (per month)

XXII. Cost Recovery:

29. Are you breaking-even (i.e., getting zero profit) or losing money or making profits?
 1. Breaking-even 2. Losing money 3. Making profits

30. If your response is 1 or 2: a) after how long do you think it will be before you start making profits? _____ b) What are the reasons?

XXIII. User Fees:

31. How much do you generally charge for the following services?

Types of Services	Charges (Birr)
A. Dental Clinic	
1. Registration/Consultation (per _____ days)	
2. Intraoral X-ray per film	
3. Panorama X-ray	
4. Prophylaxis dentistry (children < 14 years)	
5. Topical application of fluoride	
6. Extraction (simple, surgical)	
7. Each additional extraction in the same quadrant	
8. Treatment of post extraction hemorrhage (revisit)	
9. Chaining of teeth	
10. Treatment of septic socket	
11. Filling one surface amalgam	
12. Filling two surface amalgam	
13. Composite restorations:	
One surface	
Two surfaces	
B. Ophthalmic Clinic	
1. Registration/Consultation (per _____ days)	
2. Eye exam	
3. Cataract Operation	
4. Aspiration of Lens (L.A)	
5. Aspiration of Lens (G.A)	
6. Trabeculectomy	
7. Cyclodiathermy	
8. Cyclodialysis	
9. Tonometry (G.A) – E.U.A.	
10. Cornectomy (G.A)	
11. DCR Entropion/Trichiasis correction	
12. Strabismus (one muscle)	
13. Penetrating Keratoplasty	
14. EVISERATION/ENUCLATION	
15. Rential Detachment - Cinclage	
16. Perforation Injuries (Scelera/cornea)	
17. GLAUCOMA SURGERY	
18. Foreign body – Cornea or G.A.	
19. Lids - Plastic	
20. Chalazion	
21. Ectopion	
22. Ptosis (sling)	

C. OB. Gynecology	
1.Registration/Consultation (per _____ days)	
2.Normal Delivery	
3.Delivery with induction	
4.Instrumental delivery	
5.C/S (Caesarean section)	
6.E & C (Evacuation & Curettage)	
7.D & C (Dilation & Curettage)	
8.Loop Insertion	
9.Manual removal of retained placenta	
10.Delivery with Episotomy	
11.Repair of tears	
12.Oophorectomy	
13.Hysterectomy	
14.Repair of ruptured uterus	
15.Myomectomy	
16.Bed/day	

17. Do you reduce fees for the poor?

1. Yes

2. No

18. If yes, what percentage of your patients receives discounts? _____ %

XXIV. Utilization:

19. What is the average number of patients seen per day?

20. What percentages of your patients are

(b) fee paying _____

(b) credit _____

Appendix 2: Background Information on Private Hospitals

Survey Area	Values	Working Days per week	Working Hours per day	Emergency Beds	Admission Beds	Employees		Dates of Establishment
						Health Professionals	Administrative Personnel	
Addis Ababa (N=3)	Min	7	24	1	30	34	37	1995-99=3
	Max	7	24	4	120	96	111	
	Mean	7	24	2.3	63	65.3	71.3	
	Std.dev	0.0	0.	1.5	49.6	31.0	37.3	
	Valid N	3			3	3	3	

Appendix 3: Background Information on Special Clinics

Facility type: Dental Clinic

Survey Area	Values	Working Days per week	Working Hours per day	Emergency Beds	Employees		Dates of Establishment
					Health Professionals	Administrative Personnel	
Addis Ababa (N= 5)	Min		9		2	2	1973=1 1988=2 1997-98=2
	Max	5.	13.5		4	6	
	Mean	5.	11	--	2.4	4.2	
	Std.dev	0.	2.3		0.9	2.1	
	Valid N		5		5	5	
Bahir Dar (N=0)	--	--	--	--	--	--	--
Awasa (N=0)	--	--	--	--	--	--	--
Jimma (N=0)	--	--	--	--	--	--	--
Mekele (N=2)	Min		2		1	1	1999=2
	Max		3		1	2	
	Mean	5.	2.5	--	1	1.5	
	Std.dev	0.	0.7		0.0	0.7	
	Valid N		2		2	2	

Facility type: Ophthalmic Clinic

Survey Area	Values	Working Days per week	Working Hours per day	Emergency Beds	Employees		Dates of Establishment
					Health Professionals	Administrative Personnel	
Addis Ababa (N= 3)	Min	50	7	5	3	3	1965=1 1996-99=2
	Max		14	5	4	6	
	Mean	5.	9.7	5	3.3	4.3	
	Std.dev	0.	3.8	0.0	0.6	1.5	
	Valid N		3	1	3	3	
Bahir Dar (N=0)	--	--	--	--	--	--	--
Awasa (N=0)	--	--	--	--	--	--	--
Jimma (N=0)	--	--	--	--	--	--	--
Mekele (N=1)	Min		2.5		2	2	1995=1
	Max		2.5		2	2	
	Mean		2.5	--	2	2	
	Std.dev	0.	0.0		0.0	0.0	
	Valid N		1		1	1	

Facility type: OB Gynecology Clinic

Survey Area	Values	Working Days per week	Working Hours per day	Emergency Beds	Employees		Dates of Establishment
					Health Professionals	Administrative Personnel	
Addis Ababa (N=2)	Min		8	4	2	2	1995-96=2
	Max		24	5	4	3	
	Mean		16	4.5	3	2.5	
	Std.dev	1.	11.3	0.7	1.4	0.7	
	Valid N		2	2	2	2	
Bahir Dar (N=0)	--	--	--	--	--	--	--
Awasa (N=0)	--	--	--	--	--	--	--
Jimma (N=0)	--	--	--	--	--	--	--
Mekele (N=0)	--	--	--	--	--	--	--

Appendix 4: Background Information on Private Clinics
Facility level: Higher Clinic

Survey Area	Values	Working Days per week	Working Hours per day	Emergency Beds	Employees		Dates of Establishment
					Health Professionals	Administrative Personnel	
Addis Ababa (N=13)	Min	5.	9	1	3	4	1968-83=2 1994-95=3 1996-2000=7
	Max		24	6	20	25	
	Mean	6.	20.8	4.4	8.3	10.4	
	Std.dev	0.	6.2	1.5	4.7	6.1	
	Valid N	13	13	11	13	13	
Bahir Dar (N=0)	-						-
Awasa (N=4)	Min		24	5	6	7	1994 =1 1996-97=3
	Max		24	8	13	16	
	Mean		24	6.3	9	11	
	Std.dev	0.	0.0	1.5	4	4	
	Valid N		4	4	4	4	
Jimma (N=1)	Min		24	5	25	15	1999 = 1
	Max		24	5	25	15	
	Mean		24	5	25	15	
	Std.dev	0.	0.0	0.0	0.0	0.0	
	Valid N		1	1	1	1	
Mekele (N=1)	Min		2.5		2	2	1997 = 1
	Max		2.5		2	2	
	Mean		2.5		2	2	
	Std.dev	0.	0.0		0.0	0.0	
	Valid N		1		1	1	

(Appendix 4, cont'd)
Facility level: Medium Clinic

Survey Area	Values	Working Days per week	Working Hours per day	Emergency Beds	Employees		Dates of Establishment
					Health Professionals	Administrative Personnel	
Addis Ababa (N=12)	Min		8	1	2	1	1989-94=5
	Max		24	5	12	20	
	Mean	6.	13.5	2.7	4.4	4.6	1996-2000=7
	Std.dev	0.	5.3	2.0	2.7	5.3	
	Valid N	12	12	3	12	11	
Bahir Dar (N=8)	Min		8	1	3	3	
	Max		24	5	9	13	
	Mean		14	3.4	4.9	5.3	1996-2000=8
	Std.dev	0.	6.3	1.8	2.5	3.2	
	Valid N		8	5	8	8	
Awasa (N=5)	Min		8	1	3	2	1988-91=2
	Max		11	2	5	7	
	Mean	6.	9.8	1.3	3.4	4.2	1998-99=3
	Std.dev	0.	1.3	0.5	0.9	1.9	
	Valid N		5	4	5	5	
Jimma (N=7)	Min		8	1	2	1	
	Max		24	4	12	8	
	Mean	6.	12.9	1.9	5.6	3.7	1980 = 1
	Std.dev	0.	5.3	1.1	3.6	2.3	1992-94=3
	Valid N		7	7	7	7	1996-99=3
Mekele (N=7)	Min		2		1	1	
	Max		10		4	3	
	Mean	6.	3.8	--	2.3	1.6	1993-94=2
	Std.dev	0.	2.8		1.1	0.8	1996-99=4
	Valid N		7		7	7	

(Appendix 4, cont'd)
Facility level: Lower Clinic

Survey Area	Values	Working Days per week	Working Hours per day	Emergency Beds	Employees		Dates of Establishment
					Health Professionals	Administrative Personnel	
Addis Ababa (N=14)	Min		8	1	1	1	1986-87=2 1992-95=3 1996-99=8
	Max		12	1	4	2	
	Mean		10.9	1	2.1	1.8	
	Std.dev	1.	1.6	0.0	0.8	0.5	
	Valid N	14	14	3	14	8	
Bahir Dar (N=2)	Min		10	1	4	2	1995 = 2
	Max		12	1	5	3	
	Mean		11	1	4.5	2.5	
	Std.dev	0.	1.4	0.0	0.7	0.7	
	Valid N		2	3	2	2	
Awasa (N=3)	Min		8	1	2	1	1996 = 3
	Max		24	1	3	3	
	Mean	6.	15	1	2.7	1.7	
	Std.dev	0.	8.2	0.0	0.6	1.2	
	Valid N		3	1	3	3	
Jimma (N=3)	Min		8	1	2	2	1998-99=3
	Max		24	2	2	3	
	Mean	6.	14	1.3	2	2.5	
	Std.dev	0.	8.7	0.6	0.0	0.7	
	Valid N		3	3	3	2	
Mekele (N=1)	Min		3	--	2	2	1999 = 1
	Max		3	--	2	2	
	Mean		3	--	2	2	
	Std.dev	0.	0.0	--	0.0	0.0	
	Valid N		1	--	1	1	

Appendix 5: Background Information on Private Pharmacies

Survey Area	Values	Working Days per week	Working Hours per day	Employees		Dates of Establishment
				Health Professionals	Administrative Personnel	
Addis Ababa (N=16)	Min		9	1	1	1969-76=2 1993-95=5 1996-99=8
	Max		15	5	8	
	Mean	6.	12.8	2.1	4.1	
	Std.dev	0.	1.5	1.0	2.0	
	Valid N	1	16	16	16	
Bahir Dar (N=8)	Min		10	1	1	1993-94=2 1997-99=6
	Max		15	3	3	
	Mean	6.	12.3	2.1	2.3	
	Std.dev	0.	1.7	0.8	1.0	
	Valid N		8	8	7	
Awasa (N=8)	Min		10	1	1	1996-99=8
	Max		13	3	3	
	Mean	6.	11.7	1.9	2	
	Std.dev	0.	1.3	0.6	0.8	
	Valid N		8	8	7	
Jimma (N=5)	Min		8	1	1	1983=1 1998-99=4
	Max		24	2	4	
	Mean	6.	12.8	1.6	3	
	Std.dev	0.	6.6	0.6	1.4	
	Valid N		5	5	4	
Mekele (N=5)	Min		10	1	1	1992=1 1996-97=4
	Max		15	2	2	
	Mean		11.8	1.8	1.5	
	Std.dev	0.	2.0	0.5	0.6	
	Valid N		5	4	4	

Appendix 6: Capital Expenditures of Private Hospitals (in million Birr)

Survey Area	Values	Total Initial Investment	Building Construction	Building Renovation	Medical Equipment	Medical Transportation	Stocks of Consumable Items	Ward Facilities & Others
Addis Ababa (N= 3)	Min	16.48	8.00		7.50	0.18	0.20	0.60
	Max	40.00	19.72		15.99	0.84	0.46	2.40
	Mean	26.49	13.86		11.74	0.51	0.33	1.50
	Std.dev	12.14	8.29		6.00	0.47	0.19	1.27
	Valid N	3	2		2	2	2	2

Appendix 7: Recurrent Expenditures of Private Hospitals (in `000 Birr)

Survey Area	Values	House Rent (per month)	Salaries & Allowances		Drugs and Supplies (per quarter year)	Maintenance (per year)	Stationery & Utilities (per month)
			Health Professionals (per month)	Administrative Personnel (per month)			
Addis Ababa (N=3)	Min	.	78.1	13.8	200	12	25
	Max	.	219.0	54.7	535	150	40
	Mean	.	132.4	39.5	325	75	32.5
	Std.dev	.	75.8	22.4	183.0	69.8	10.6
	Valid N	.	3	3	3	3	2

Appendix 8: Capital Expenditure of Special Clinics (in '000 Birr)

Facility type: Dental Clinic

Survey Area	Values	Total Initial Investment	Building Construction	Building Renovation	Medical Equipment	Medical Transportation	Stocks of Consumable Items	Ward Facilities & Others
Addis Ababa (N=5)	Min	11.3		1	10		0.2	
	Max	565		50	500		60	
	Mean	167.8	--	14.4	142	--	14.3	--
	Std.dev	230.1		23.8	203.3		25.9	
	Valid N	5		4	5		5	
Bahir Dar (N=0)	--	--	--	--	--	--	--	--
Awasa (N=0)	--	--	--	--	--	--	--	--
Jimma (N=0)	--	--	--	--	--	--	--	--
Mekele (N=2)	Min	25.5		1.5	15		0.5	
	Max	37		1.5	35		2	
	Mean	31.3	--	1.5	25	--	1.3	--
	Std.dev	8.1		0.0	14.1		1.1	
	Valid N	2		1	2		2	

Facility type: Ophthalmic Clinic

Survey Area	Values	Total Initial Investment	Building Construction	Building Renovation	Medical Equipment	Medical Transportation	Stocks of Consumable Items	Ward Facilities & Others
Addis Ababa (N=3)	Min	8		2	4		1.1	13.9
	Max	102		77	100		1.1	13.9
	Mean	68.9	--	27.3	36.6	--	1.1	13.9
	Std.dev	52.8		43.0	54.9		0.0	0.0
	Valid N	3		3			1	1
Bahir Dar (N=0)	--	--	--	--	--	--	--	--
Awasa (N=0)	--	--	--	--	--	--	--	--
Jimma (N=0)	--	--	--	--	--	--	--	--
Mekele (N=1)	Min	70		11	55		2.7	
	Max	70		11	55		2.7	
	Mean	70	--	11	55	--	2.7	--
	Std.dev	0.0		0.0	0		0.0	
	Valid N	1		1			1	

Facility type: OB Gynecology Clinic

Survey Area	Values	Total Initial Investment	Building Construction	Building Renovation	Medical Equipment	Medical Transportation	Stocks of Consumable Items	Ward Facilities & Others
Addis Ababa (N=2)	Min	100			20		3.3	5
	Max	300			155.2		3.3	93.7
	Mean	200	--	--	87.6	--	3.3	49.3
	Std.dev	141.4			95.6		0.0	62.7
	Valid N	2			2		1	2
Bahir Dar (N=0)	--	--	--	--	--	--	--	--
Awasa (N=0)	--	--	--	--	--	--	--	--
Jimma (N=0)	--	--	--	--	--	--	--	--
Mekele (N=0)	--	--	--	--	--	--	--	--

**Appendix 9: Recurrent Expenditures of Special Clinics
(in `000 Birr)**

Facility type: Dental Clinic

Survey Area	Values	House Rent (per month)	Salaries & Allowances		Supplies (per quarter year)	Maintenance (per year)	Stationery & Utilities (per month)
			Health Professionals (per month)	Administrative Personnel (per month)			
Addis Ababa (N=5)	Min	0.1	1.3	0.2	0.3	0.5	0.2
	Max	5	4.5	1.7	1.5	3	0.5
	Mean	1.5	2.1	1.1	0.9	1.4	0.3
	Std.dev	2.1	1.4	0.7	0.5	1.1	0.1
	Valid N	5	5	5	5	5	5
Bahir Dar (N=0)	--	--	--	--	--	--	--
Awasa (N=0)	--	--	--	--	--	--	--
Jimma (N=0)	--	--	--	--	--	--	--
Mekele (N=2)	Min	0.4	0.6	0.1	0.6	0.3	0.1
	Max	1.2	0.6	0.3	1.5	0.3	0.5
	Mean	0.8	0.6	0.2	1.1	0.3	0.3
	Std.dev	0.6	0.0	0.1	0.6	0.0	0.28
	Valid N	2	2	2	2	1	2

Facility type: Ophthalmic Clinic

Survey Area	Values	House Rent (per month)	Salaries & Allowances		Supplies (per quarter year)	Maintenance (per year)	Stationery & Utilities (per month)
			Health Professionals (per month)	Administrative Personnel (per month)			
Addis Ababa (N=3)	Min	0.3	2	1.4	0.1	1	0.2
	Max	6	3.6	1.8	2	4.8	1.4
	Mean	3.2	2.7	1.6	0.8	2.8	0.63
	Std.dev	2.9	0.8	0.2	1.1	1.9	0.65
	Valid N	3	3	3	3	3	3
Bahir Dar (N=0)	--	--	--	--	--	--	--
Awasa (N=0)	--	--	--	--	--	--	--
Jimma (N=0)	--	--	--	--	--	--	--
Mekele (N=1)	Min	0.7	0.5	0.6	0.2	--	0.1
	Max	0.7	0.5	0.6	0.2	--	0.1
	Mean	0.7	0.5	0.6	0.2	--	0.1
	Std.dev	0.0	0.0	0.0	0.0	--	0.0
	Valid N	1	1	1	1	1	1

Facility type: OB Gynecology Clinic

Survey Area	Values	House Rent (per month)	Salaries & Allowances		Supplies (per quarter year)	Maintenance (per year)	Stationery & Utilities (per month)
			Health Professionals (per month)	Administrative Personnel (per month)			
Addis Ababa (N=2)	Min	2	3.3	2	0.8	0.3	1.1
	Max	4	5	3	0.8	0.3	1.2
	Mean	3	4.2	2.5	0.8	0.3	1.15
	Std.dev	1.4	1.2	0.7	0.0	0.0	0.07
	Valid N	2	2	2	1	1	2
Bahir Dar (N=0)	--	--	--	--	--	--	--
Awasa (N=0)	--	--	--	--	--	--	--
Jimma (N=0)	--	--	--	--	--	--	--
Mekele (N=0)	--	--	--	--	--	--	--

Appendix 10: Capital Expenditures of Private Clinics (in `000 Birr)
Facility level: Higher Clinic

Survey Area	Values	Total Initial Investment	Building Construction	Building Renovation	Medical Equipment	Medical Transportation	Stocks of Consumable Items	Ward Facilities & Others
Addis Ababa (N=13)	Min	30	500	5	20	115	2.5	2
	Max	3000	2000	250	1500	115	250	250
	Mean	753.3	1250	73	404.1	115	33.7	56.1
	Std.dev	919.2	1061.7	103.4	455.9	0.0	76.6	81.0
	Valid N	13	2	5	12	2	10	11
Bahir Dar (N=0)	--	--	--	--	--	--	--	--
Awasa (N=4)	Min	200	165	3	110.4	75	5	10.7
	Max	1700	165	28.7	755	75	150	235
	Mean	599.9	165	15.6	287.3	75	60.7	84.5
	Std.dev	733.8	0.0	12.8	312.1	0.0	63.3	101.8
	Valid N	4	1	3	4	1	4	4
Jimma (N=1)	Min	2590	1500		900		87	103
	Max	2590	1500		900		87	103
	Mean	2590	1500	--	900	--	87	103
	Std.dev	0.0	0.0		0.0		0.0	0.0
	Valid N	1	1		1		1	1
Mekele (N=1)	Min	5		0.6	1.7			
	Max	5		0.6	1.7			
	Mean	5	--	0.6	1.7	--	--	--
	Std.dev	0.0		0.0	0.0			
	Valid N	1		1	1			

(Appendix 10, cont'd)
Facility level: Medium Clinic

Survey Area	Values	Total Initial Investment	Building Construction	Building Renovation	Medical Equipment	Medical Transportation	Stocks of Consumable Items	Ward Facilities & Others
Addis Ababa (N=12)	Min	14.2		0.4	7		0.1	2
	Max	500		82.5	350		50	106
	Mean	69.1	--	14.8	44.3	--	6.7	14.8
	Std.dev	136.7		24.8	97.0		13.9	32.1
	Valid N	12		10	12		12	10
Bahir Dar (N=8)	Min	20		1.5	12		1	3
	Max	72		4	55		7	10
	Mean	47.8	--	3.1	31.3	--	3.7	6
	Std.dev	19.1		1.1	13.6		2.3	2.9
	Valid N	8		6	8		8	8
Awasa (N=5)	Min	25	60		15	60	0.8	2.5
	Max	300	250		100	60	10	15
	Mean	192	158.8	--	410.2	60	5.0	6.3
	Std.dev	128.5	78.3		34.7	0.0	4.7	5.0
	Valid N	5	4		5	1	5	5
Jimma (N=7)	Min	18		2	10	20	1	0.5
	Max	250		10	200	20	12	20
	Mean	98.7	--	4.9	76.9	20	5.3	6.5
	Std.dev	86.2		3.1	74.5	0.0	4.7	7.2
	Valid N	7		5	7	1	7	7
Mekele (N=7)	Min	5		0.6	2		0.2	2
	Max	200		2	140		3.6	10
	Mean	52.6	--	1.2	40.1	--	1.1	4.5
	Std.dev	77.1		0.7	58.8		1.2	3.7
	Valid N	7		3	7		7	4

(Appendix 10, cont'd)
Facility level: Lower Clinic

Survey Area	Values	Total Initial Investment	Building Construction	Building Renovation	Medical Equipment	Medical Transportation	Stocks of Consumable Items	Ward Facilities & Others
Addis Ababa (N=14)	Min	2	10	0.2	1		0.1	0.2
	Max	65.1	48	6	20		2	5
	Mean	17.2	26	2.3	9.3	--	0.5	1.7
	Std.dev	16.0	19.7	1.9	6.8		0.6	2.2
	Valid N	14	3	9	14		12	4
Bahir Dar (N=2)	Min	7	85	1.3	3		0.7	0.2
	Max	150	85	1.3	50		10	5
	Mean	78.5	85	1.3	26.5	--	5.4	2.6
	Std.dev	101.1	0.0	0.0	33.2		6.6	3.4
	Valid N	2	1	1	2		2	2
Awasa (N=3)	Min	10	86	1.5	5		0.4	3
	Max	91.5	86	4	12		2	4.5
	Mean	41.8	86	2.8	7.3	--	1.0	3.8
	Std.dev	43.5	0.0	1.8	4.0		0.9	1.1
	Valid N	3	1	2	3		3	2
Jimma (N=3)	Min	19.6	1.5	17	1.5		0.6	0.4
	Max	56.9	50	17	5		4	2.7
	Mean	33.9	25.8	17	3.2	--	2.0	1.4
	Std.dev	20.1	34.3	0.0	1.8		1.8	1.2
	Valid N	3	2	1	3		3	2
Mekele (N=1)	Min	8			2		3	3
	Max	8			2		3	3
	Mean	8	--	--	2	--	3	3
	Std.dev	0.0			0.0		0.0	0.0
	Valid N	1			1		1	1

**Appendix 11: Recurrent Expenditures of Private Clinics
(in `000 Birr)**

Facility level: Higher Clinic

Survey Area	Values	House Rent (per month)	Salaries & Allowances		Supplies (per quarter year)	Maintenance (per year)	Stationery & Utilities (per month)
			Health Professionals (per month)	Administrative Personnel (per month)			
Addis Ababa (N=13)	Min	0.	1.4	0.6	1.5	1	0.3
	Max	5	30	25	150	30	10
	Mean	11.	10.5	5.3	28.1	10.4	2
	Std.dev	15.	9.1	7.1	43.8	11.3	2.7
	Valid N	1	13	13	11	9	12
Bahir Dar (N=0)	--	--	--	--	--	--	--
Awasa (N=4)	Min	0.	9.1	1.3	4	2	0.4
	Max		25	5.5	75	10	7
	Mean		15.5	3.2	24.6	4.5	2.7
	Std.dev	1.	6.9	1.9	34.0	3.7	3.0
	Valid N		4	4	4	4	4
Jimma (N=1)	Min		28.9	3.2	12	6	4.3
	Max		28.9	3.2	12	6	4.3
	Mean	--	28.9	3.2	12	6	4.3
	Std.dev		0.0	0.0	0.0	0.0	0.0
	Valid N		1	1	1	1	1
Mekele (N=1)	Min	0.	1.2	0.2	0.2	0.5	0.2
	Max	0.	1.2	0.2	0.2	0.5	0.2
	Mean	0.	1.2	0.2	0.2	0.5	0.2
	Std.dev	0.	0.0	0.0	0.0	0.0	0.0
	Valid N		1	1	1	1	1

(Appendix 11, cont'd)
Facility level: Medium Clinic

Survey Area	Values	House Rent (per month)	Salaries & Allowances		Supplies (per quarter year)	Maintenance (per year)	Stationery & Utilities (per month)
			Health Professionals (per month)	Administrative Personnel (per month)			
Addis Ababa (N=12)	Min	0.	1.5	0.07	0.2	0.4	0.06
	Max		22	7.5	15.5	10	4
	Mean	2.	4.7	1.1	2.7	2.5	0.6
	Std.dev	1.	5.6	2.1	4.4	3.2	1.1
	Valid N	1	12	11	12	9	12
Bahir Dar (N=8)	Min		3	0.6	1.5	0.5	0.3
	Max	2.	15	5	18	1.5	7
	Mean	1.	6.5	1.3	6.2	1.1	1.6
	Std.dev	0.	4.2	1.5	5.4	0.4	2.4
	Valid N		8	8	8	4	7
Awasa (N=5)	Min	0.	3.8	0.2	1.8	1.5	0.3
	Max	0.	7.6	0.7	4	3	1
	Mean	0.	4.8	0.5	2.8	2.2	0.6
	Std.dev	0.	1.6	0.2	0.9	0.8	0.3
	Valid N		5	5	5	3	5
Jimma (N=7)	Min	0.0	1.6	0.06	0.5	1.8	0.2
	Max		15	4	50	8.4	1
	Mean		6.4	1.1	8.7	4	0.4
	Std.dev	0.	5.7	1.4	18.2	2.3	0.3
	Valid N		7	7	7	4	7
Mekele (N=7)	Min	0.	0.1	0.08	0.2	1	0.05
	Max	1.	1.8	0.6	15	2	2
	Mean		0.9	0.3	3.1	1.3	0.4
	Std.dev	0.	0.6	0.2	5.9	0.6	0.7
	Valid N		7	7	6	3	7

(Appendix 11, cont'd)
Facility level: Lower Clinic

Survey Area	Values	House Rent (per month)	Salaries & Allowances		Supplies (per quarter year)	Maintenance (per year)	Stationery & Utilities (per month)
			Health Professionals (per month)	Administrative Personnel (per month)			
Addis Ababa (N=14)	Min	0.2	0.2	0.06	0.04		0.02
	Max	2.1	2.1	1	2.1		0.3
	Mean	0.8	0.9	0.3	0.4		0.1
	Std.dev	0.6	0.6	0.3	0.7		0.1
	Valid N	11	13	8	8		14
Bahir Dar (N=2)	Min	0.5	1.5	0.3	0.4	0.6	0.3
	Max	0.5	3.6	0.5	15	2	3
	Mean	0.5	2.6	0.4	7.7	1.3	1.7
	Std.dev	0.0	1.5	0.1	10.3	1.0	1.9
	Valid N	1	2	2	2	2	2
Awasa (N=3)	Min	0.4	1.5	0.2	2.5	0.5	0.2
	Max	0.5	2.5	0.3	5	2	1.1
	Mean	0.45	1.9	0.3	3.8	1.3	0.8
	Std.dev	0.07	1.5	0.09	1.8	0.8	0.5
	Valid N	2	3	3	2	3	3
Jimma (N=3)	Min	0.2	0.8	0.5	0.2	0.1	0.1
	Max	0.2	1.6	0.6	1.3	0.4	0.4
	Mean	0.2	1.3	0.5	0.6	0.2	0.3
	Std.dev	0.0	0.4	0.09	0.6	0.1	0.1
	Valid N	1	3	2	3	3	3
Mekele (N=1)	Min	0.8	0.8	0.3	0.25		0.2
	Max	0.8	0.8	0.3	0.25		0.2
	Mean	0.8	0.8	0.3	0.25		0.2
	Std.dev	0.0	0.0	0.0	0.0		0.0
	Valid N	1	1	1	1		1

Appendix 12: Capital Expenditures of Private Pharmacies (in `000 Birr)

Survey Area	Values	Total Initial Investment	Building Construction	Building Renovation	Stocks of Drugs and Medicines
Addis Ababa (N=16)	Min	3	20	1	2
	Max	350	200	150	240
	Mean	100	110	30	65
	Std.dev	102.2	127.3	42.7	73.6
	Valid N	16	16	16	16
Bahir Dar (N=8)	Min	7	85	0.5	3
	Max	135	85	7.8	50
	Mean	43.8	85	3.1	20
	Std.dev	43.6	0.0	4.1	16.3
	Valid N	8	1	3	8
Awasa (N=8)	Min	40	100	4	21
	Max	400	300	10	80
	Mean	152.5	180	6.5	41.9
	Std.dev	140.0	94.2	3.0	22.6
	Valid N	8	4	4	8
Jimma (N=5)	Min	20		2.5	10
	Max	39		20	32
	Mean	26.3	--	9.9	16.4
	Std.dev	8.2		6.4	9.7
	Valid N	5		5	5
Mekele (N=5)	Min	12		10.3	35
	Max	265		55	210
	Mean	87.4	--	32.6	96.3
	Std.dev	102.4		31.6	81.4
	Valid N	5		2	4

Appendix13: Recurrent Expenditures of Private Pharmacies (in `000 Birr)

Survey Area	Values	House Rent (per month)	Salaries & Allowances		Supplies (per quarter year)	Maintenance (per year)	Stationery & Utilities (per month)
			Health Professionals (per month)	Administrative Personnel (per month)			
Addis Ababa (N=16)	Min	0.2	0.4	0.1	1.3	0.1	0.12
	Max		5	5.5	65	10	1
	Mean	2.	2.9	1.4	24.6	2.2	0.5
	Std.dev	1.	1.4	1.3	20.6	3.0	0.3
	Valid N	1	15	16	14	11	15
Bahir Dar (N=8)	Min	0.	2	0.03	5	0.3	0.1
	Max	1.	4	0.8	75	1	1
	Mean	0.	2.7	0.3	32	0.6	0.5
	Std.dev	0.	0.6	0.3	21.4	0.3	0.3
	Valid N		8	7	8	6	8
Awasa (N=8)	Min	0.	1.2	0.1	10	0.2	0.2
	Max		5	0.8	30	3	0.5
	Mean	0.	3.4	0.5	20.8	1.6	0.3
	Std.dev	0.	1.3	0.2	8.6	2.0	0.1
	Valid N		8	7	8	2	8
Jimma (N=5)	Min	0.	1.5	0.2	0.9	1	0.15
	Max	1.	4.3	1.7	45	5	0.5
	Mean	0.	3.3	0.9	18.1	2.3	0.33
	Std.dev	0.	1.1	0.6	17.4	1.9	0.15
	Valid N		5	4	5	4	5
Mekele (N=5)	Min	0.	0.4	0.2	2		0.15
	Max	1.	2.9	0.8	60		0.3
	Mean	1.	2.1	0.4	18.7	--	0.2
	Std.dev	0.	1.1	0.3	24.1		0.06
	Valid N		4	4	5		5

Appendix 14: Cost Recovery Conditions of Private Hospitals

Survey area	Cost Recovery Conditions					Length of Years before making Profit				
	Breaking Even		Losing Money		Making Profit	N	Min	Max	Mean	Std. Dev
	f	%	f	%	f %					
Addis Ababa (N=3)	1	33.3	2	66.7	- -	3	5	7	6	1

Appendix 15: Cost Recovery Conditions of Special Clinics
Facility type: Dental Clinic

Survey area	Cost Recovery Conditions						Length of Years before making Profit				
	Breaking Even		Losing Money		Making Profit		N	Min	Max	Mean	Std. Dev
	f	%	f	%	f	%					
Addis Ababa (N=5)	--	--	1	20	4	80	1	2	2	2	0.0
Bahir Dar (N=0)	--	--	--	--	--	--	--	--	--	--	--
Awasa (N=0)	--	--	--	--	--	--	--	--	--	--	--
Jimma (N=0)	--	--	--	--	--	--	--	--	--	--	--
Mekele (N=2)	--	--	--	--	2	100	--	--	--	--	--

Facility type: Ophthalmic Clinics

Survey area	Cost Recovery Conditions						Length of Years before making Profit				
	Breaking Even		Losing Money		Making Profit		N	Min	Max	Mean	Std. Dev
	f	%	f	%	f	%					
Addis Ababa (N=3)	--	--	1	33.3	2	66.7	1	1	1	1	0.0
Bahir Dar (N=0)	--	--	--	--	--	--	--	--	--	--	--
Awasa (N=0)	--	--	--	--	--	--	--	--	--	--	--
Jimma (N=0)	--	--	--	--	--	--	--	--	--	--	--
Mekele (N=1)	--	--	--	--	1	100	--	--	--	--	--

Facility type: OB Gynecology Clinics

Survey area	Cost Recovery Conditions						Length of Years before making Profit				
	Breaking Even		Losing Money		Making Profit		N	Min	Max	Mean	Std. Dev
	f	%	f	%	f	%					
Addis Ababa (N=2)	--	--	--	--	2	100	--	--	--	--	--
Bahir Dar (N=0)	--	--	--	--	--	--	--	--	--	--	--
Awasa (N=0)	--	--	--	--	--	--	--	--	--	--	--
Jimma (N=0)	--	--	--	--	--	--	--	--	--	--	--
Mekele (N=0)	--	--	--	--	--	--	--	--	--	--	--

Appendix 16: Cost Recovery Conditions of Private Pharmacies

Survey area	Cost Recovery Conditions						Length of Years before making Profit				
	Breaking Even		Losing Money		Making Profit		N	Min	Max	Mean	Std. Dev
	f	%	f	%	f	%					
Addis Ababa (N=16)	3	18.8	1	6.3	12	75	3	1	2	1.7	0.6
Bahir Dar (N=8)	1	12.5	--	--	7	87.5	1	1	1	1	0.0
Awasa (N=8)	3	37.5	4	50	1	12.5	4	1	2	1.5	0.6
Jimma (N=5)	1	20	--	--	4	80	1	1.5	1.5	1.5	0.0
Mekele (N=5)	--	--	--	--	5	100	--	--	--	--	--

Appendix 17: Cost Recovery Conditions of Private Clinics
Facility level: Higher Clinic

Survey area	Cost Recovery Conditions						Length of Years before making Profit				
	Breaking Even		Losing Money		Making Profit		N	Min	Max	Mean	Std. Dev
	f	%	f	%	f	%					
Addis Ababa (N=13)	7	53.8	2	15.4	4	30.8	8	0.5	5	2	1.4
Bahir Dar (N=0)	--		--		--		--	--	--	--	--
Awasa (N=4)	3	75.0	--		1	25.0	1	0.5	0.5	0.5	0.0
Jimma (N=1)	1	100	--		--		1	6	6	6	0.0
Mekele (N=1)	1	100	--		--		--	--	--	--	--

Facility level: Medium Clinic

Survey area	Cost Recovery Conditions						Length of Years before making Profit				
	Breaking Even		Losing Money		Making Profit		N	Min	Max	Mean	Std. Dev
	f	%	f	%	f	%					
Addis Ababa (N=12)	2	16.7	1	8.3	9	75.0	2	2	3	2.5	0.7
Bahir Dar (N=8)	1	12.5	4	50.0	3	37.5	5	1	5	3.2	1.8
Awasa (N=5)	2	40.0	-	-	3	60.0	2	1	1.5	1.3	1.4
Jimma (N=7)	2	28.6	1	14.3	4	57.1	1	0.3	0.3	0.3	0.0
Mekele (N=7)	-	-	1	14.3	6	85.7	1	1.5	1.5	1.5	0.0

(Appendix 17, cont'd)
Facility level: Lower Clinic

Survey area	Cost Recovery Conditions						Length of Years before making Profit				
	Breaking Even		Losing Money		Making Profit		N	Min	Max	Mean	Std. Dev
	f	%	f	%	f	%					
Addis Ababa (N=14)	1	7.1	5	35.7	8	57.1	2	1	5	3	2.8
Bahir Dar (N=2)	-	-	-	-	2	100	-	-	-	-	-
Awasa (N=3)	1	33.3	-	-	2	66.7	-	-	-	-	-
Jimma (N=3)	1	33.3	2	66.7	-	-	1	1.5	1.5	1.5	0.0
Mekele (N=1)	1	100	-	-	-	-	1	0.7	0.7	0.7	0.0

Appendix 18: Discount Conditions of Private Hospitals

Survey area	Do you reduce fees for the poor?				Percentage of patients receiving discounts				
	Yes		No		N	Min	Max	Mean	Std. Dev
	f	%	f	%					
Addis Ababa (N= 3)	2	66.7	1	33.3	2	17	22.5	19.8	3.9

Appendix 19: Discount Conditions of Special Clinics

Facility type: Dental Clinic

Survey area	Do you reduce fees for the poor?				Percentage of patients receiving discounts				
	Yes		No		N	Min	Max	Mean	Std. Dev
	f	%	f	%					
Addis Ababa (N=5)	5	100	--	--	5	10	50	20	17.3
Bahir Dar (N=0)	--	--	--	--	--	--	--	--	--
Awasa (N=0)	--	--	--	--	--	--	--	--	--
Jimma (N=0)	--	--	--	--	--	--	--	--	--
Mekele (N=2)	1	100	--	--	1	3	3	3	0.0

Facility type: Ophthalmic Clinic

Survey area	Do you reduce fees for the poor?				Percentage of patients receiving discounts				
	Yes		No		N	Min	Max	Mean	Std. Dev
	f	%	f	%					
Addis Ababa (N=3)	3	100	--	--	3	3	10	7.5	2.5
Bahir Dar (N=0)	--	--	--	--	--	--	--	--	--
Awasa (N=0)	--	--	--	--	--	--	--	--	--
Jimma (N=0)	--	--	--	--	--	--	--	--	--
Mekele (N=1)	--	--	1	100	--	--	--	--	--

Facility type: OB Gynecology Clinic

Survey area	Do you reduce fees for the poor?				Percentage of patients receiving discounts				
	Yes		No		N	Min	Max	Mean	Std. Dev
	f	%	f	%					
Addis Ababa (N=2)	--	--	2	100	--	--	--	--	--
Bahir Dar (N=0)	--	--	--	--	--	--	--	--	--
Awasa (N=0)	--	--	--	--	--	--	--	--	--
Jimma (N=0)	--	--	--	--	--	--	--	--	--
Mekele (N=0)	--	--	--	--	--	--	--	--	--

Appendix 20: Discount Conditions of Private Clinics
Facility level: Higher Clinic

Survey area	Do you reduce fees for the poor?				Percentage of patients receiving discounts				
	Yes		No						
	f	%	f	%	N	Min	Max	Mean	Std. Dev
Addis Ababa (N=13)	12	92.3	1	7.3	12	0.2	10	6.3	3.9
Bahir Dar (N=0)	--		--		--	--	--	--	--
Awasa (N=4)	4	100	--		4	1	15	7	6.7
Jimma (N=1)	1	100	--		1	25	25	25	0.0
Mekele (N=1)	1	100	--		1	15	15	15	0.0

Facility level: Medium Clinic

Survey area	Do you reduce fees for the poor?				Percentage of patients receiving discounts				
	Yes		No						
	f	%	f	%	N	Min	Max	Mean	Std. Dev
Addis Ababa (N=12)	8	66.7	4	33.3	8	1.0	30.0	11.4	8.5
Bahir Dar (N=8)	8	100	-	-	8	0.5	30	7.6	9.5
Awasa (N=5)	5	100	-	-	4	1.5	5.0	2.9	1.5
Jimma (N=7)	7	100	-	-	7	2	30	9.4	9.7
Mekele (N=7)	6	85.7	1	14.3	5	2	15	7.4	5.1

Facility level: Lower Clinic

Survey area	Do you reduce fees for the poor?				Percentage of patients receiving discounts				
	Yes		No						
	f	%	f	%	N	Min	Max	Mean	Std. Dev
Addis Ababa (N=14)	13	92.9	1	7.1	12	5	20	15.0	4.9
Bahir Dar (N=2)	2	100	--	--	2	3	15	9	8.5
Awasa (N=3)	3	100	--	--	3	17.5	35	24.2	9.5
Jimma (N=3)	3	100	--	--	3	10	25	18.3	7.6
Mekele (N=1)	1	100	--	--	1	4	4	4	0.0

Appendix 21: Discount Conditions of Private Pharmacies

Survey area	Do you reduce fees for the poor?				Percentage of customers receiving discounts				
	Yes		No		N	Min	Max	Mean	Std. Dev
	f	%	f	%					
Addis Ababa (N=16)	9	56.3	6	37.5	9	1	20	7.9	5.9
Bahir Dar (N=8)	8	100	--	--	8	0.3	10	3.7	4.0
Awasa (N=8)	8	100	--	--	8	1	10	5.4	3.2
Jimma (N=5)	5	100	--	--	5	1	40	15.6	16.7
Mekele (N=5)	1	20	4	80	1	25	25	25	0.0

Appendix 22: Rate of Utilization of Private Hospitals

Survey Area	Values	Average Number of Patients (per day)	Fee Paying Patients (%)	Credit Patients (%)
Addis Ababa (N= 3)	Min	15	65	5
	Max	125	95	35
	Mean	53.3	81.7	18.3
	Std.dev	62.1	15.3	15.3
	Valid N		3	3

Appendix 23: Rate of Utilization of Private Pharmacies

Survey Area	Values	Average Number of Customers (per day)	Fee Paying Customers (%)	Credit Customers (%)
Addis Ababa (N=16)	Min	20	10	1
	Max	150	100	30
	Mean	66	97.8	11
	Std.dev	35.8	7.7	16.5
	Valid N	14	15	3
Bahir Dar (N=8)	Min	20	85	15
	Max	100	100	15
	Mean	53.1	98.1	15
	Std.dev	28.4	5.3	0.0
	Valid N	8	8	1
Awasa (N=8)	Min	30	95	2
	Max	50	100	5
	Mean	37.5	99.1	3.5
	Std.dev	7.6	1.8	2.1
	Valid N	8	8	2
Jimma (N=5)	Min	15	98	1
	Max	100	100	2
	Mean	64	99.4	1.5
	Std.dev	34.5	0.9	0.7
	Valid N	5	5	2
Mekele (N=5)	Min	15	98	2
	Max	70	100	2
	Mean	40	99.6	2
	Std.dev	23.2	0.9	0.0
	Valid N	5	5	1

Appendix 24: Rate of Utilization of Special Clinics
Facility type: Dental Clinic

Survey Area	Values	Average Number of Patients (per day)	Fee Paying Patients (%)	Credit Customers (%)
Addis Ababa (N=5)	Min	4	90	10
	Max	12	100	10
	Mean	8.6	98	10
	Std.dev	3.1	4.5	0.0
	Valid N	5	5	1
Bahir Dar (N=0)	--	--	--	--
Awasa (N=0)	--	--	--	--
Jimma (N=0)	--	--	--	--
Mekele (N=2)	Min	7	100	--
	Max	7	100	--
	Mean	7	100	--
	Std.dev	0.0	0.0	--
	Valid N	1	1	--

Facility type: Ophthalmic Clinic

Survey Area	Values	Average Number of Patients (per day)	Fee Paying Patients (%)	Credit Customers (%)
Addis Ababa (N=3)	Min	7	75	10
	Max	25	100	25
	Mean	15.8	88.3	17.5
	Std.dev	9.0	12.6	10.6
	Valid N	3	3	2
Bahir Dar (N=0)	--	--	--	--
Awasa (N=0)	--	--	--	--
Jimma (N=0)	--	--	--	--
Mekele (N=1)	Min	20	90	10
	Max	20	90	10
	Mean	20	90	10
	Std.dev	0.0	0.0	0.0
	Valid N	1	1	1

(Appendix 24, cont'd)
Facility type: OB Gynecology Clinic

Survey Area	Values	Average Number of Patients (per day)	Fee Paying Patients (%)	Credit Customers (%)
Addis Ababa (N=3)	Min	5	100	
	Max	15	100	
	Mean	10	100	
	Std.dev	7.1	0.0	
	Valid N	2	2	
Bahir Dar (N=0)	--	--	--	--
Awasa (N=0)	--	--	--	--
Jimma (N=0)	--	--	--	--
Mekele (N=0)	--	--	--	--

Appendix 25: Rate of Utilization of Private Clinics
Facility level: Higher Clinic

Survey Area	Values	Average Number of Patients (per day)	Fee Paying Patients (%)	Credit Patients (%)
Addis Ababa (N=13)	Min	4	15	2
	Max	80	100	55
	Mean	20	81.4	17.6
	Std.dev	19	25.3	18.8
	Valid N	13	12	11
Bahir Dar (N=0)	Min			
	Max			
	Mean	--	--	--
	Std.dev			
	Valid N			
Awasa (N=4)	Min	20	80	5
	Max	45	100	20
	Mean	27	90	13.3
	Std.dev	12	9.1	7.6
	Valid N	4	4	3
Jimma (N=1)	Min	45	90	10
	Max	45	90	10
	Mean	45	90	10
	Std.dev	0.0	0.0	0.0
	Valid N	1	1	1
Mekele (N=1)	Min	5	90	10
	Max	5	90	10
	Mean	5	90	10
	Std.dev	0.0	0.0	0.0
	Valid N	1	1	1

(Appendix 25, cont'd)
Facility level: Medium Clinic

Survey Area	Values	Average Number of Patients (per day)	Fee Paying Patients (%)	Credit Patients (%)
Addis Ababa (N=12)	Min	2	85	15
	Max	28	100	15
	Mean	9.4	98.8	15
	Std.dev	8.1	4.3	0.0
	Valid N	12	12	1
Bahir Dar (N=8)	Min	5	80	3
	Max	20	100	20
	Mean	12.8	93	9.3
	Std.dev	5.8	6.6	5.9
	Valid N	8	8	6
Awasa (N=5)	Min	8	100	
	Max	25	100	
	Mean	13.2	100	--
	Std.dev	7.2	0.0	
	Valid N	5	5	
Jimma (N=7)	Min	4	70	3
	Max	18	100	30
	Mean	10.4	88.1	16.6
	Std.dev	4.7	13.1	12.6
	Valid N	7	7	5
Mekele (N=7)	Min	3	70	10
	Max	12	100	30
	Mean	6.1	91.7	16.7
	Std.dev	3.3	11.7	11.5
	Valid N	7	6	3

(Appendix 25, cont'd)
Facility level: Lower Clinics

Survey Area	Values	Average Number of Patients (per day)	Fee Paying Patients (%)	Credit Patients (%)
Addis Ababa (N=14)	Min	3	7	10
	Max	10	100	20
	Mean	5.2	90.5	15
	Std.dev	2.6	25.8	7.1
	Valid N	14	13	2
Bahir Dar (N=2)	Min	8	90	10
	Max	12	100	10
	Mean	10	95	10
	Std.dev	2.8	7.1	0.0
	Valid N	2	2	1
Awasa (N=3)	Min	7	80	10
	Max	10	100	20
	Mean	9	90	15
	Std.dev	1.7	10	7.1
	Valid N	3	3	2
Jimma (N=3)	Min	5	100	
	Max	7	100	
	Mean	5.7	100	--
	Std.dev	1.2	0.0	
	Valid N	3	1	
Mekele (N=1)	Min	3	99	1.0
	Max	3	99	1.0
	Mean	3	99	1.0
	Std.dev	0.0	0.0	0.0
	Valid N	1	1	1

Appendix 26: User Fees of Private Hospitals (in Birr)

Types of Services	Valid N	Min	Max	Mean	Std. dev
Card/Consultation					
General Practitioner	1	25	25	25	0.0
per ___ days	1	7	7	7	0.0
Specialist	3	30	40	36.7	5.7
per ___ days	3	7	10	8	1.7
Laboratory Analysis					
Blood (white cell count + differential)	3	15	20	17	2.6
Stool (Oval/parasite)	3	6	15	9.7	4.7
Urine (urinalysis + microscopy)	3	10	20	13.3	5.8
Pregnancy test	3	13	26	18	7.0
Chest X-ray	3	35	43	41.7	5.8
Abdominal Ultra-sound	3	50	80	66.7	15.3
In-patient Treatment					
Daily bed rate:					
1 st class	3	200	300	233.3	57.7
2 nd class	2	125	250	187.5	88.4
3 rd class	1	150	150	150	0.0
Medication (e.g., IV fluid)	2	18	30	24	8.5
Surgical Interventions					
Minor Surgery:					
Circumcision	3	100	150	120	26.5
Abscess draining	3	50	150	108.3	52.0
Incision & excision under local anesthesia	3	70	100	90	17.3
Major Surgery:					
Laparotomy	3	1000	1500	1233.3	251.7
Delivery Services					
Normal delivery	3	500	625	541.7	72.2
Instrumental delivery	3	600	750	690	79.4
Caesarian section	3	1000	1800	1400	400
General Services					
Cleaning and dressing	3	10	100	45	48.2
Injection (e.g., Procaine Penicillin 4 MIU)	3	2	5	3.3	1.5
Others (e.g., ear irrigation, catheterization, etc)	3	20	42	30.7	11.0

Appendix 27: User Fees of Private Clinics (in Birr)
Facility level: Higher Clinic

Survey Area	Values	Card/consultation fees		Laboratory Analysis						In-patient Treatment				Minor Surgery			Delivery Services			General Services		
		General Practitioner	Specialist	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Addis Ababa (N=13)	Min	10	10	4	3	3	10	35	50	30	40	30	15	30	8	5	120	750	--	3	1	4
	Max	25	30	15	6	10	16	40	80	125	100	70	50	200	65	25	500	750	--	10	5	32
	Mean	15.60	21.30	8.3	5	6	13.5	35.7	63.5	74.4	60	50	31.8	82.3	28.2	10.7	290	750	--	6.3	1.9	5
	Std.dev	5.60	6.80	4	0.9	1.9	2.5	1.9	9.4	32.2	22.4	28.3	13.6	48.9	17.3	6.0	193.1	0.0	--	2.2	1.0	7.9
	Valid N	13	13	13	13	13	13	7	10	8	7	2	7	11	11	11	3	1	--	13	13	13
Bahir Dar (N=0)	Min																					
	Max																					
	Mean	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Std.dev																					
	Valid N																					
Awasa (N=4)	Min	10	10	5	3	5	10	35	40	20	20	20	27	40	10	5	100	130	150	3	1	5
	Max	10	15	10	4	9	15	40	60	50	30	20	35	100	20	30	200	250	150	7	2	15
	Mean	10	12.5	6.3	3.3	6	13.8	37.5	50	30	23.3	20	30.8	72.5	15.7	20	162.5	182.5	150	5.1	1.5	10
	Std.dev	0.0	2.9	2.5	0.5	2	2.5	3.5	8.2	14.1	5.8	0.0	3.8	32.0	4.2	12.2	47.9	53.8	0.0	1.8	0.5	4.0
	Valid N	4	4	4	4	4	4	2	4	4	3	2	3	4	4	4	4	4	1	4	3	4
Jimma (N=1)	Min	10	15	10	4	6	8	35	30	50	--	--	18	25	15	2	--	--	--	5	1	12
	Max	10	15	10	4	6	8	35	30	50	--	--	18	25	15	2	--	--	--	5	1	12
	Mean	10	15	10	4	6	8	35	30	50	--	--	18	25	15	2	--	--	--	5	1	12
	Std.dev	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	0.0	0.0	--	--	--	0.0	0.0	0.0
	Valid N	1	1	1	1	1	1	1	1	1	--	--	1	1	1	1	--	--	--	1	1	1
Mekele (N=1)	Min	--	15	14	5	7	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Max	--	15	14	5	7	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Mean	--	15	14	5	7	15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Std.dev	--	0.0	0.0	0.0	0.0	0.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	Valid N	--	1	1	1	1	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Note: 1= Blood (white cell count and differential) 6= Abdominal Ultra-sound 11= Circumcision 16= Caesarian section
2= Stool (oval/parasite) 7= Daily bed rate, 1st class 12= Abscess incision 17= Cleaning & dressing
3= Urine (urinalysis + microscopy) 8= Daily bed rate, 2nd class 13= Suture (one stitch) 18= Injection (e.g., Procaine Penicillin 4 MIU)
4= Pregnancy test 9= Daily bed rate, 3rd class 14= Normal delivery 19= Others (ear irrigation catheterization, etc)
5= Chest X-ray 10= Medication (e.g., IV fluid) 15= Instrumental delivery

(Appendix 27, cont'd) Facility level: Medium Clinic

Survey Area	Values	Card/consultation fees		Laboratory Analysis						Treatment				Minor Surgery			Delivery Services			General Services		
		General Practitioner	Specialist	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Addis Ababa (N=12)	Min	5	5	4	3	4	8	35	60	60	40		10	50	10	4	200			3	1	5
	Max	15	25	15	5	58	15	35	60	60	40		50	115	115	30	200			10	10	30
	Mean	10.40	15.63	8.63	4.25	9.75	15.54	35	60	60	40	--	26.79	69.29	33.13	12.90	200	--	--	5.25	2.79	13.43
	Std.dev	2.57	9.70	3.40	0.87	15.23	2.44	0.0	0.0	0.0	0.0		15.19	26.21	34.22	8.67	0.0			2.10	2.63	9.15
	Valid N	12	4	12	12	12	12	1	1	1	1		7	7	8	10	1			12	12	8
Bahir Dar (N=8)	Min	10	30	3	3	5	10		50	10	10	10	5	20	5	5	20			3	0.50	2
	Max	15	30	7.50	7.50	7	15		50	100	100	100	30	50	65	15	20			10	7	10
	Mean	14.38	30	4.79	4.36	5.83	13.86	--	50	48.33	43.75	43.75	21.17	41.25	23	10	20	--	--	6.71	1.79	6
	Std.dev	1.77	0.0	1.63	1.65	0.75	2.04		0.0	46.46	39.02	39.02	10.85	14.36	24.90	5.0	0.0			3.55	2.31	3.81
	Valid N	8	1	7	7	6	7		2	3	4	4	6	4	5	5	1			7	7	5
Awasa (N=6)	Min	5		4	3	4	10						5	20	10	5	15			3	0.50	3
	Max	10		8	5	6	15						45	40	30	20	150			12	1.00	5.70
	Mean	8.40	--	5.40	4	4.80	11.80	--	--	--	--	--	23.75	30	20	10	65	--	--	5.25	0.90	4.18
	Std.dev	2.30		1.52	0.71	0.82	2.05						16.52	10	14.14	8.66	73.99			4.50	0.22	1.39
	Valid N	5		5	5	5	5						4	3	2	3	3			4	5	4
Jimma (N=7)	Min	5	5	4	3	4	15	35	40	40			16	50	3	5	150			3	0.50	3
	Max	15	15	10	4	9	20	40	120	40			18	50	30	30	150			7.50	5	10
	Mean	10.29	11.71	5.57	3.86	5.5	18.33	37.50	64	40	--	--	21.80	50	20.75	18.33	150			5.10	1.58	5.40
	Std.dev	2.98	3.73	2.70	0.38	2.35	2.58	3.54	35.78	0.0			4.71	0.0	12.07	12.58	0.0			1.60	1.69	2.70
	Valid N	7	7	7	7	6	6	2	5	1			5	1	4	3	1			5	6	5
Mekele (N=7)	Min		15	7	5	5	13.50						100	30							1.00	7.50
	Max		15	14	10	10	80						100	30							1.00	7.50
	Mean	--	15	10.71	6	7.14	27.70	--	--	--	--	--	100	30	--	--	--	--	--	--	1.00	7.50
	Std.dev		0.0	2.56	1.83	1.57	29.24						0.0	0.0							0.0	0.0
	Valid N		7	7	7	7	5						1	1							1	1

Note 1= Blood (white cell count and differential)

2= Stool (oval/parasite)

3= Urine (urinalysis + microscopy)

4= Pregnancy test

5= Chest X-ray

6= Abdominal Ultra-sound

7= Daily bed rate, 1st class

8= Daily bed rate, 2nd class

9= Daily bed rate, 3rd class

10= Medication (e.g., IV fluid)

11= Circumcision

12= Abscess incision

13= Suture (one stitch)

14= Normal delivery

15= Instrumental delivery

16= Caesarian section

17= Cleaning & dressing

18= Injection (e.g., Procaine Penicillin 4 MU)

19= Others (ear irrigation, catheterization, etc)

(Appendix 27, cont'd)
Facility level: Lower Clinic

Survey Area	Values	Card/consultation fees		Laboratory Analysis						Treatment				Minor Surgery			Delivery Services			General Services			
		General Practitioner	Specialist	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
Addis Ababa (N=14)	Min	4	5										30	30	7	5				1	1	5	
	Max	10	5										30	30	10	18.5				10	10	12.50	
	Mean	6	5	--	--	--	--	--	--	--	--	--	30	30	8.50	11.70	--	--	--	4.80	2.50	8.10	
	Std.dev	1.90	0.0										0.0	0.0	2.10	5.20				3.00	2.30	2.80	
	Valid N	8	3										1	1	2	5				12	13	7	
Bahir Dar (N=2)	Min	15		5	5	5	12								7	7	25				4	0.50	1
	Max	15		5	5	5	12								7	7	25				5	8	6
	Mean	15	--	5	5	5	12	--	--	--	--	--	--	--	7	7	25	--	--	--	4.50	4.30	3.50
	Std.dev	0.0		0.0	0.0	0.0	0.0								0.0	0.0	0.0				0.71	5.30	3.50
	Valid N	1		1	1	1	1								1	1	1				2	2	2
Awasa (N=3)	Min	5		4	3	3	15						25	25	7	7	25				3	1	5
	Max	5		4	4	4	15						30	35	20	20	60				7.50	2	15
	Mean	5	--	4	3.50	3.50	15	--	--	--	--	--	27.50	31.70	12.30	12.30	45	--	--	--	5.20	1.30	9.20
	Std.dev	0.0		0.0	0.70	0.70	0.0						3.50	5.80	6.80	6.80	18.0				2.30	0.60	5.20
	Valid N	3		1	2	2	1						2	3	3	3	3				3	3	3
Jimma (N=3)	Min	3	5	3	3		3						20	20	7	5				3	0.50	2	
	Max	7	5	3	3		3						20	20	10	10				5	1.00	5	
	Mean	5	5	3	3	--	3	--	--	--	--	--	20	20	8.50	8.30	--	--	--	4	0.80	3.30	
	Std.dev	2.8	0.0	0.0	0.0		0.0						0.0	0.0	2.10	2.90				1.0	0.30	1.50	
	Valid N	2	1	1	1		1						2	1	2	3				3	3	3	
Mekele (N=1)	Min	15	15	20	5	10	15														3	2	
	Max	15	15	20	5	10	15														3	2	
	Mean	15	15	20	5	10	15	--	--	--	--	--	--	--	--	--	--	--	--	--	3	2	--
	Std.dev	0.0	0.0	0.0	0.0	0.0	0.0														0.0	0.0	
	Valid N	1	1	1	1	1	1														1	1	

Note: 1= Blood (white cell count and differential)
 2= Stool (oval/parasite)
 3= Urine (urinalysis + microscopy)
 4= Pregnancy test
 5= Chest X-ray
 6= Abdominal Ultra-sound

7= Daily bed rate, 1st class
 8= Daily bed rate, 2nd class
 9= Daily bed rate, 3rd class
 10= Medication (e.g., IV fluid)
 11= Circumcision
 12= Abscess incision
 13= Suture (one stitch)

14= Normal delivery
 15= Instrumental delivery
 16= Caesarian section
 17= Cleaning & dressing
 18= Injection (e.g., Procaine Penicillin 4 MIU)
 19= Others (ear irrigation, catheterization, etc)

Appendix 28: User Fees of Special Clinics (in Birr)
Facility type: Dental Clinic

Survey Area	Values	Card or Consultation Fees	per days	Charges for different services (in Birr)												
				1	2	3	4	5	6	7	8	9	10	11	12	13
Addis Ababa (N=5)	Min	5		20		5	10	10	30	20	500	10	20	20	20	20
	Max	20		30		10	10	45	30	20	500	30	60	60	75	80
	Mean	10	--	26.70	--	7.50	10	31.5	30	20	500	20	44	44	42.50	53.60
	Std.dev	8.66		5.80		3.50	0.0	13.40	0.0	0.0	0.0	10.0	15.20	15.20	25.30	28.70
	Valid N	3		3		2	1	5	2	1	1	5	5	5	4	4
Bahir Dar (N=0)	Min	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Awasa (N=0)	Max	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Jimma (N=0)	Mean	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mekele (N=2)	Min	10	7			10		15	20				60	150	100	150
	Max	10	10			10		20	30				100	150	100	150
	Mean	10	8.50	--	--	10	--	17.50	25	--	--	--	80	150	100	150
	Std.dev	0.0	2.10			0.0		3.50	7.10				28.30	0.0	0.0	0.0
	Valid N	2	2			1		2	2				2	1	1	1

Note: 1= Intraoral X-ray per film

2= Panorama X-ray

3= Prophylaxis dentistry (children <14 years)

4= Topical application of fluoride

5= Extraction (simple, surgical)

6= Each additional extraction in the same quadrat

7= Treatment of post extraction hemorrhage (revisit)

8= Chaining of teeth

9= Treatment of septic socket

10= Filling one surface amalgam

11= Filling two surface amalgam

12= Composite restoration: One surface

13= Composite restoration: Two surface

(Appendix 28, cont'd)
Facility type: Ophthalmic Clinic

Survey Area	Values	Card or Consultation Fees	per _day s	Charges for different services (in Birr)																			
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Addis Ababa (N=3)	Min	20		500			600					75	600	1500	300	600	300		20	1000	60	75	300
	Max	30		500			600					283.3	600	1500	300	600	300		30	1000	15	100	300
	Mean	26.70	--	500	--	--	600	--	--	--	--	186.1	600	1500	300	600	300	--	25	1000	103.3	87.5	300
	Std.dev	5.80		0.0			0.0					104.9	0.0	0.0	0.0	0.0	0.0		7.1	0.0	45.1	17.7	0.0
	Valid N	3		1			1					3	1	1	1	1	1		2	1	3	2	1
Bahir Dar (N=0)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Awasa (N=0)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Jimma (N=0)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mekele (N=1)	Min	15													70				25	70	70	70	
	Max	15													70				25	70	70	70	
	Mean	15	--	--	--	--	--	--	--	--	--	--	--	--	70	--	--	--	25	70	70	70	--
	Std.dev	0.0													0.0				0.0	0.0	0.0	0.0	
	Valid N	1													1				1	1	1	1	

Note: 1= Cataract operation
2= Aspiration of lens (L.A.)
3= Aspiration of lens(G.A.)
4= Trabeculectomy
5=Cyclodiathermy
6= Cyclodialysi
7= Tonometry (G.A.) – E.U.A

8= Cornectomy (G.A)
9= DCR Entropion
10= Strabismus (one muscle
11= Penetrating Keratoplasty
12= Eviseration/Enucleation
13= Rental detachment – Cinclage
14= Perforation injuries (Scelera/cornea)

15= Glaucoma surgery
16= Foreign body – Cornea or G.A
17= Lids - plastic
18= Chalazion
19= Ectopion
20= Ptosis (sling)

Facility type: OB Gynaecology Clinic

Survey Area	Values	Card or Consultation Fees	per days	Charges for different services (in Birr)														
				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Addis Ababa (N=2)	Min	15	10	300	500			300	300	50	50	50	50					50
	Max	25	10	420	500			300	300	50	250	450	120					50
	Mean	20	10	360	500	--	--	300	300	50	150	250	85	--	--	--	--	50
	Std.dev	7.1	0.0	84.60	0.0			0.0	0.0	0.0	141.4	282.8	49.50					0.0
	Valid N	2	2	2	2			1	1	1	2	2	2					1
Bahir Dar (N=0)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Awasa (N=0)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Jimma (N=0)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Mekele (N=0)	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Note: 1= Normal delivery
 2 = Delivery with induction
 3 = Instrumental delivery
 4= C/S (Caesarean Section)
 5= E & C (Evacuation & Curettage)

6= D & C (Dilation & Curettage)
 7= Loop insertion
 8= Manual removal of retained placenta
 8= Delivery with episotomy
 10= Repair of tears

11= Oophorectomy
 12= Hysterectomy
 13= Repair of ruptured uterus
 14= Myomectomy
 15= Bed rate per day

Appendix 29: User Fees of Private Pharmacies

Survey Area	Values	Prices of Indicator Drugs (in Birr)									
		1	2	3	4	5	6	7	8	9	10
Addis Ababa (N=16)	Min	0.50	1.00	0.50	0.70	0.50	0.20	0.10	3.40	0.90	0.10
	Max	1.25	1.50	1.00	1.25	0.60	0.30	0.18	4.25	1.60	0.20
	Mean	0.86	1.21	0.66	0.96	0.54	0.24	0.14	3.88	1.21	0.13
	Std.dev	0.21	0.13	0.17	0.16	0.03	0.03	0.02	0.21	0.25	0.03
	Valid N	16	16	16	16	16	16	16	16	16	16
Bahir Dar (N=8)	Min	0.75	1.30	0.50	0.80	0.50	0.21	0.10	3.50	1.00	0.10
	Max	1.50	1.50	1.00	1.20	0.65	0.30	0.20	4.00	1.50	0.20
	Mean	1.03	1.43	0.65	1.00	0.58	0.26	0.15	3.88	1.34	0.14
	Std.dev	0.31	0.10	0.18	0.11	0.04	0.03	0.04	0.23	0.23	0.03
	Valid N	8	8	8	8	8	8	8	8	8	8
Awasa (N=8)	Min	1.00	1.10	1.50	1.00	0.40	0.20	0.10	3.50	0.90	0.10
	Max	1.50	1.50	1.00	1.50	0.60	0.25	0.20	4.00	2.00	0.25
	Mean	1.15	1.36	0.64	1.20	0.53	0.24	0.15	3.64	1.30	0.14
	Std.dev	0.23	0.16	0.19	0.25	0.06	0.02	0.04	0.18	0.39	0.05
	Valid N	8	8	8	8	8	8	8	8	8	8
Jimma (N=5)	Min	0.66	0.98	0.33	1.00	0.50	0.18	0.09	3.85	1.00	0.07
	Max	1.00	1.50	0.75	1.25	0.60	0.30	0.18	4.50	1.50	0.15
	Mean	0.90	1.20	0.54	1.06	0.56	0.25	0.12	4.17	1.10	0.12
	Std.dev	0.15	0.21	0.16	0.13	0.04	0.04	0.03	0.31	1.22	0.03
	Valid N	5	5	5	4	5	5	5	5	5	5
Mekele (N=5)	Min	1.00	1.00	1.00	0.80	0.34	0.19	0.12	3.00	0.80	0.11
	Max	1.00	1.50	1.00	1.50	0.80	0.50	0.25	4.50	2.00	0.25
	Mean	1.00	1.40	1.00	1.16	0.67	0.32	0.19	3.74	1.46	0.20
	Std.dev	0.0	0.22	0.0	0.32	0.19	0.12	0.05	0.62	1.56	0.06
	Valid N	5	5	5	5	5	5	5	5	5	5

Note: 1= Aluminium hydrate and magnesium trisilicate tablets (per 10 tablets)

2= Oral rehydraton salt (per sachet)

3= Theophedrine tablets (per 10 tablets)

4= Paracetamol 500 mg tablets (per 10 tablets)

5= Ampicillin 500 mg capsule (per capsule)

6= Chloramphenicol 250 mg capsule (per capsule)

7= Tetracycline 250 mg capsule (per capsule)

8= Procaine penicillin 4 MIU injection with water (per vial)

9= Chloroquine 250 mg tablets (per 10 tablets)

10= Metronidazole 250 mg capsule (per capsule)