

Increasing access
for child and
maternal health
care services:
The Mozambique
experience



World Health
Organization

REGIONAL OFFICE FOR Africa

Increasing access
for child and
maternal health
care services:

The Mozambique
experience



Mozambique

WHO/AFRO Library Cataloguing – in – Publication

Increasing access for child and maternal health care services: the Mozambique experience

1. Maternal Health Services – organization and administration
2. Child Health Services – organization and administration
3. Maternal-Child Health Centers – organization and administration – utilization
4. Health Services Accessibility – utilization
5. Social Determinants of Health
6. Socioeconomic factors
7. Health Resources – supply and distribution – utilization
8. Organizational Case Studies

I. World Health Organization. Regional Office for Africa

ISBN: 978-929023263-6 (NLM Classification: **WA 310**)

© WHO Regional Office for Africa, 2013

Publications of the World Health Organization enjoy copyright protection in accordance with the provisions of Protocol 2 of the Universal Copyright Convention. All rights reserved. Copies of this publication may be obtained from the Library, WHO Regional Office for Africa, P.O. Box 6, Brazzaville, Republic of Congo (Tel: +47 241 39100; Fax: +47 241 39507; E-mail: afrobooks@afro.who.int). Requests for permission to reproduce or translate this publication, whether for sale or for non-commercial distribution, should be sent to the same address.

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by the World Health Organization in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by the World Health Organization to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either express or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall the World Health Organization or its Regional Office for Africa be liable for damages arising from its use.

Disclaimer:

This report contains the collective views of the drafting team and does not necessarily represent the decisions or the stated policy of the World Health Organization.

Contents

Acknowledgments..... iv

Abstract v

Mozambique country profile vi

1. Introduction 1

2. Hypothesis 2

3. Methodology 2

4. Results 3

5. Discussion..... 7

6. References 8

Acknowledgments

This case study was prepared jointly by the Ministry of Health and the Social Determinants of Health Unit, World Health Organization, Regional Office for Africa. Financial support was made available through the *Spanish Core Contribution Grant for Social Determinants of Health (SDH)* received by the Department of Ethics and Social Determinants of Health of the World Health Organization. The overall aim of Spanish Core Contribution Grant for SDH is to strengthen leadership and stewardship role of Ministry of Health to addressing social and economic determinants of health. It supports documentation of country level experiences in using intersectoral actions aimed at addressing the key social determinants of priority public health conditions.

An earlier draft of this case study was included in a special collection of global experiences on intersectoral actions which was widely disseminated during the World Conference on Social Determinants of Health held in Rio de Janeiro, Brazil in 2011. At the country level, the review process leading to the finalization of the case study generated multi-stakeholder policy and strategy discussions on implementing intersectoral actions to address social determinants of health.

The final product is a result of collective efforts of many individuals and organizations. However, the drafting team included Dr. Francisco Mbofana, Scientific Director at National Institute of Health (Mozambique); Dr. Célia Gonçalves, National Director for Planning and Cooperation, Ministry of Health (Mozambique); Dr. Eva Pascoal, (WHO, Mozambique); Dr. Acácio Sabonete, Researcher, National Institute of Health (Mozambique); and Dr William Muhwava, Population Demographer, University of Kwazulu Natal (South Africa).

The overall guidance and technical inputs to the project from WHO Regional Office for Africa are gratefully acknowledged, namely: Dr Tigest Ketsela, Director Health Promotion Cluster; Dr Davison Munodawafa, Programme Area Coordinator, Determinants and Risk Factors; Dr Chandralall Sookram and Mr Peter Phori; and Dr Eugenio Villar, SDH Coordinator in WHO HQ, Geneva. We are indebted to the many people who made valuable inputs throughout the process who cannot be mentioned by name. Last but not least, we express great appreciation for the support received from the Government through the Ministry of Health to conduct this activity.

Abstract

Unequal access to health care is one of the underlying factors contributing to health inequalities. In Mozambique, access to health care is affected by many factors. The country faces a severe shortage of health workers and thus households lack access to this critical resource for health. The aim of this case study was to show that the affordability of health care services in Mozambique can increase patient utilization, the quality of care offered to patients can encourage effective utilization of health care services and therefore availability of drugs and equipment, and a helpful attitude of health workers and prompt treatment can increase the utilization of health care services.

The data used in this study were taken mainly from secondary sources. A desk review of reports was undertaken to make an analysis of health interventions implemented from 1997 to 2011 in the area of access to health care and coverage in order to understand how this influenced different indicators and inequities in health.

Mozambique has made important strides in increasing the proportion of the gross domestic product (GDP) allocated to health and in raising government spending to meet the Abuja commitment. The child mortality rate (CMR) and the under-5 mortality rate (U5MR) have been disproportionately high in rural areas, and lack of access to good quality health services has been the major contributing factor for this difference. A huge programme (infrastructure, human resources, immunizations, etc.), including integrated management of childhood illness, has been put in place to reduce this gap. Consequently, the reduction in mortality has been more pronounced in rural areas. A similar trend was observed with respect to the infant mortality rate (IMR) and the maternal mortality rate (MMR). This is attributed to the national plan and strategy for the reduction of maternal and newborn mortality from the year 2000, with better diagnosis and treatment of obstetric complications and greater access to quality health services, including antenatal consultations and family planning.

Mozambique country profile

Mozambique has a population of 22.4 million, of which about 70% live in rural areas. The illiteracy rate is 60% (male: 39.4%; female: 71.3%). The population density, as well as the main indicators of the health status of the population, present a great variation between the 11 provinces that comprise the country.

Despite economic growth at an annual rate of 8%, Mozambique is still one of the poorest countries in the world, with a per capita GDP of US\$ 422.8, and ranking at 184 out of 187 countries. Between 1997 and 2003, the economic growth averaged about 9%, well above the African continent's average, and it continues to grow. About 54% of the population lives below the national poverty line. Maputo city, the capital, has poverty index of 36.2% while Zambezia province has the highest of 70.5%.

The epidemiological profile of Mozambique is typical of developing countries. The common causes of death and illness are malaria (29%) and HIV/AIDS (27%). The main epidemic-prone disease is cholera. The leading risk factors are high levels of poverty and malnutrition and inadequate access to clean water and sanitation. Children under five years of age and pregnant women are the most vulnerable groups. The average life expectancy is only 48 years and the under-five mortality rate is 97 per 1000 newborns.

The National Health Service is financed by the public and external funds. A substantial proportion of the investment and recurrent expenditure is financed by external funds. The cooperation of the Ministry of Health (MoH) and its development partners is based on a well-structured Sector-Wide Approach programme (SWAp), which has been in place since 2000. The SWAp is organized around a set of common principles, objectives and working arrangements. This is an enabling environment to tackle issues like late disbursements, unpredictability of funding and lack of sustained long-term financing agreements and alignment to country mechanisms.

1. Introduction

Unequal access to health care is one of the underlying factors contributing to health inequalities. Lack of access to health services is one of the important social determinants that contribute to an increased risk of poor health outcomes. According to Penchansky and Thomas (1984), access to health care is a general concept that summarizes a set of more specific dimensions describing the fit between the patient and the health care system. The specific dimensions are availability, accessibility, accommodation, affordability and acceptability. It is within this context that access to health care in Mozambique will be examined. In the social determinants framework proposed by Dahlgren and Whitehead (1991), health care access falls within the third layer, living and working conditions.

In Mozambique, access to health care is affected by many factors. Non-availability of trained and qualified human resources is an important issue. The country faces severe shortages of health workers and thus households lack access to this critical resource for health. The shortage of health care workers has been acknowledged as one of the biggest obstacles to achieving the Millennium Development Goals (MDGs) in Mozambique. The impact of the human resources development strategy and plan is beginning to show, with numbers and densities of health workers improving. However, the allocation and deployment of health workers varies by province so the differential coverage needs to be further investigated and addressed. Resources are unequally distributed (budget, infrastructures and human resources) and it is suggested that measures be implemented to redress these imbalances, such as through the resource allocation formula.

Availability of medicines has also been an important issue. While, historically, shortfalls in access to medicines have been severe, evidence in 2005 suggested that the access had improved significantly in the provinces. A vital and essential medicines availability survey that disaggregates access by level of the health system is needed. This would better track whether the significant deficits at primary care level found in 2002 have been addressed through the improved overall drug availability in the provinces.

Evidence shows that user charges are a barrier to the poorest households accessing health care, particularly considering that exemption and fee policies vary across areas and facilities. Given the growth in urban poverty and the high HIV risk among young people, barriers to services uptake in such groups may exist, even in areas where user charges did not previously cause a barrier. The development of policy and strategy to remove user fees at primary care level is thus timely, with its aim to increase the use of primary health care services, to encourage early use of health facilities and to avoid unnecessary delays in patients consulting health facilities.

Experience in the region suggests that lifting user fees needs to be accompanied by adequate investment in service levels where increased uptake is likely in order to meet demand. Further measures are needed to replace the lost local revenue from fee collection, particularly at primary care level, and to ensure that formal fee charges are not substituted by informal charges. A recent study on user fees abolishment has shown that it can increase the access and primary health services consumption by 30% although it increases the cost by 5%.

Efforts have been made to address, within specific programmes, the financial, social and physical barriers that particular groups face in accessing services. It would be useful to periodically gather and review evidence (nationally and within district planning) on the barriers households face in accessing services. This would be a counterpart of the efforts to expand the availability and allocation of resources for health, ensuring that these resources do reach, and are used by, households, particularly those with greatest health need.

The Constitution of Mozambique protects the right of the people to health and health care, children's rights, gender equality, disabled citizens' rights (Articles 36 and 37) and the right to assistance in the case of disability or old age (Article 95). In Article 89 it provides that: "All citizens shall have the right to medical and health care, within the terms of the law, and shall have the duty to promote and protect public health."

Universal coverage and primary health care are the key elements in the *Health Sector Strategic Plan (2007–2012)* (PESS), which provides for stated cornerstones of 'primary health care, equity and better quality of care' (MoH, 2008). In the new poverty reduction strategy paper, *Plano de Acção para a Redução da Pobreza 2009 +* (PARP), it is stated clearly that the 'Government of Mozambique commits itself to gradually expand health services to the poorest in order to comply with the PARP and the PESS' (GoM, 2011). To achieve this, the health sector strategic plan identifies the following priority areas: development of human resources; development and strengthening of health infrastructures and equipment; and community participation, with emphasis on training elementary polyvalent agents (APEs) (MoH, 2008).

2. Hypothesis

- Presence of health facilities increases the utilization of the health services and therefore reduces infant and childhood mortality.
- Affordability of health care services increases patient utilization.
- Quality of care offered to patients encourages effective utilization of health care services.
- Availability of drugs and equipments, helpful attitude of health workers and prompt treatment increases the utilization of health care services.

3. Methodology

The data used were drawn mainly from secondary sources. First, a desk review of reports was undertaken. An analysis of health interventions implemented from 1997 to 2011 in the area of access to health care and coverage was done to understand how this influenced different indicators and inequities in health.

Key health indicators were identified to understand their behaviour during the period 1997 to 2011 through a review of progress reports from health programmes and national surveys such as DHS (1997, 2003, 2011), MICS (2008), Human Resources Development Plan (2010-2015), household expenditure survey (IOF- 2009), household survey (IAF-

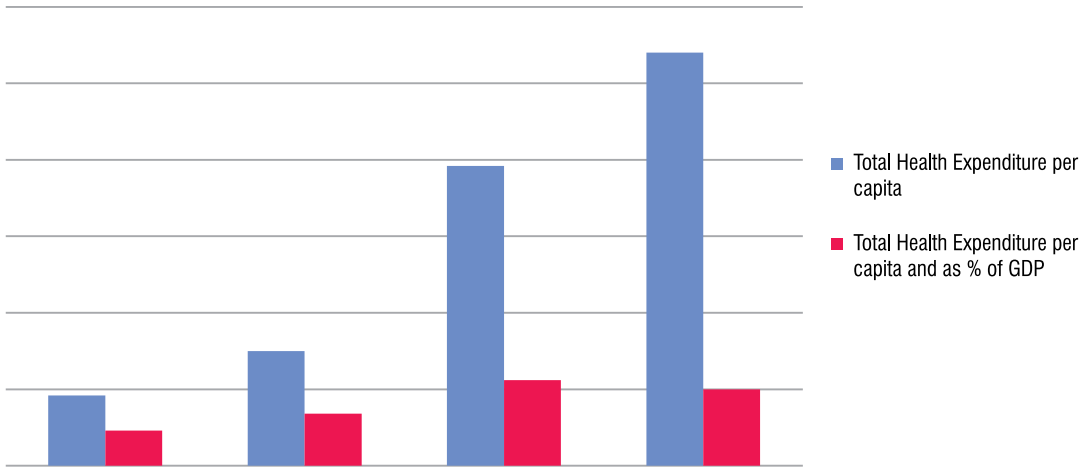
2007/2008) and National Health Accounts (2004/2006). The reports were provided by the heads of health programmes in charge of improvement in interventions as well as expansion of health network and provision of qualified health professionals. Survey data were obtained from the National Statistics Bureau. Data from the national coordination meetings reports from 1997 to 2011 were also used.

Data from the Ministry of Health, mainly health service statistics, human resources, expenditure data and others, were reviewed and are presented in this report.

4. Results

Mozambique has made important strides in increasing the proportion of GDP allocated to health and in raising government spending to meet the Abuja commitment. However, it needs to protect its domestic contribution which has been falling so that the share, *excluding* external assistance in the state budget, rises to the level of 15% as per the commitment made at Abuja.

Figure1: Total health expenditure per capita and as percentage of GDP, Mozambique



With the last recorded data of 22% of public spending allocated to primary care level in 1999 and 49% to district level in 1997, Mozambique’s performance on allocation to these levels is better than many other countries in the region (ETSDS). However, in the absence of more recent data, it is difficult to assess the trends and ascertain whether improvements in public health financing have translated into improvements in key ‘pro-poor’ areas of delivery in the health system, such as the primary care level. This needs further assessment using comparable methods to those used in 1999.

Mozambique has an overall shortage of key categories of health workers. In 2000, there were 2.5 doctors and 21.25 nurses per 100 000 people, much lower than the African average of 21.7 doctors and 117 nurses per 100 000 people. In 2004, there were only about 700 medical doctors, including expatriates from nongovernmental organizations, with only 0.03 doctors and 0.21 nurses per 1000 people (WHO, 2007). This was well below the number of doctors, nurses and midwives estimated to be fundamental for a health system.

Health workers are viewed in policy as the most valuable resource: to improve health services accessibility, especially for the poorest populations living in rural areas; to consolidate primary health care; to strengthen continuity of care through a well-coordinated referral system; and to improve the operation, quality and performance of the services provided at all levels. The deficits in the numbers of health workers are seen as the main barrier to sustaining and expanding these and other health outcomes in Mozambique (Republic of Mozambique, 2008c).

The government invested in training medical personnel and up to 60 doctors a year were trained at the University Eduardo Mondlane. This was inadequate for a population of 18 million. Greater numbers could not be trained due to resource constraints, and at that time international partners offered little support for basic medical education. By 2007, no international funds for AIDS programmers, for example, went to support the basic education of doctors (de Oñate, 2007). There are now prospects of increasing the training of medical doctor with the opening of four medical schools, of which two are private.

There has been some improvement in the availability of health personnel as shown in Table 2.

Table 2. Evolution of health personnel by levels, 1990-2010

Level	1990		2000		2004		2010	
	no	%	no	%	no	%	no	%
Medical doctors	207	1.3	583	3.7	908	4.6	1.744	5.1
Medium level	865	5.4	2.489	15.6	2907	14.8	6.927	20.1
Basic	5.197	32.2	4.635	29.1	5963	30.3	10.572	30.6
Elementary	1.660	10.3	1.679	10.5	2448	12.5	3.082	8.9
Auxiliary (1)	8.231	50.9	5.03	31.6	6243	31.8	12.171	35.3
Others (2)	0	0.0	1.510	9.5	1188	6.0	-	-
Total	16.160	100	15.926	100	19657	100	34.496	100.0

Source: SIP (PDRH 2004-10) & DHR Report 2010

Even though there is an increase in the ratios of doctors and overall priority health personnel, there is only a limited increase in the number of nursing personnel. However, Mozambique continues to face a critical shortage of health personnel with only 1.26 health workers per 1000 population (GoM, 2008).

In September 2008, a costed human resources development strategy was finalized which President Guebuza referred to in his speech to the 2008 MDG Call to Action meeting in New York. The plan, if fully funded, would increase the number of health workers by 20 000 by 2015, raising the density of health workers from 1.26 to 1.87 per 1000 population. While still below the 2.5/1000 level which WHO considers essential for good coverage, it would lead to a 67% increase in access to skilled attendance at birth, a 50% reduction in MMR and a 15–20% reduction in neonatal mortality.

Access to medicines has increased from 10% of the population in 1975 to 80% in 2007 (WHO, 2009e): 'In 2005, a joint mid-term evaluation of the *Plano Estratégico do Sector de Saúde* (PESS) 2001-2005-2010 confirms that the availability of high-quality medicines in all provinces is one of the main achievements and the most important progress made in the pharmaceutical sector' (WHO, 2009a).

Mozambique has a national list of 430 essential medicines (WHO, 2009a). However, constraints in the procurement and distribution of medicines have restricted their availability at the primary care and district levels of the health system. During the six months preceding the nationwide 2002 expenditure tracking and service delivery survey (ETSDS), over 50% of the facilities had been out of stock of one or more essential medicines, with an average stock-out time of six weeks. Facilities in rural areas and health posts were more likely to be out of stock. Primary facilities do not hold their own procurement budget. Survey interviews suggested that the criteria for allocating and distributing drugs and vaccines were not properly understood or implemented (Lindelöw et al., 2004).

Legislation is in place that seeks to harmonize user fee-charging practices across public health facilities. It ensures that implementing user fees guarantees the government's constitutional obligations to provide universal access to health. The law states that emergency treatment cannot be withheld on the grounds of failure to pay. It provides that fees are subject to regular review and that revenue is to be used to support operational costs at facility level. Exemptions are provided for in cases of care associated with childbirth and treatment of minors, the disabled, retirees, pensioners and the unemployed. Exemption is also provided for specific diseases, such as malaria, tuberculosis and other chronic diseases. Nevertheless, government reports suggest there were still potential barriers to exemptions from fee charges for poor households: '*User fees were charged in 2008 for most health services, and while exemption mechanisms exist (for some vulnerable groups and for specific illnesses) "they are not well understood by the majority of health sector clients"*' (MISAU, 2008a).

A 2008 study implemented to evaluate the impact of abolishing user fees for primary health care noted that out-of-pocket payments amounted to more than 70% of household health spending. The study proposed a policy to alleviate this burden for poor households (MISAU, 2008a). The policy and strategy aimed to remove user fees at primary care level, promoting use of primary health care services and encouraging early use of health facilities, thus avoiding unnecessary delays in patients consulting health facilities.

There is limited further evidence on the barriers different communities face in accessing health services. In the meantime, various supply-side barriers have been targeted for action. Efforts to remove fee barriers are discussed above, given that exemption mechanisms are not well understood by most health sector clients (Rep Mozambique, 2008b). The community health programme, implemented through community health councils, has focused on reducing family- or community-level barriers and social mobilization. A further programme concentrated on overcoming barriers to reproductive health, for example, by constructing waiting mother shelters near facilities, revising abortion laws, involving men in programmes, using information outreach to both partners and increasing reproductive health services coverage with men's involvement (RNDH, 2005; HDNR).

The child mortality rate (CMR) and under-5 mortality rate (U5MR) have been disproportionately high in rural areas and lack of access to good-quality health services has been the major contributing factor for this difference. A huge programme (infrastructures, human resources, immunization, etc.) has been put in place that includes integrated management of childhood illness to reduce this difference. Consequently, the reduction in mortality has been more pronounced in rural areas, with the rural U5MR down by 32 per cent from an average in 1987–1997 of 237/1000 to 162/1000 in 1998–2008, while the urban U5MR was down by 10 per cent from 150/1000 to 135/1000 in the same period. A similar trend was observed with respect to the infant mortality rate (IMR).

The MMR decreased from 692 in 1997 to 340 in 2008 (MISAU, 2008b). This is attributed to the national plan and strategy for the reduction of maternal and newborn mortality from the year 2000, with better diagnosis and treatment of obstetric complications and greater access to quality health services, including antenatal consultations and family planning (MISAU, 2008b). The health sector has launched a national logbook and expanded the integrated care strategy for child diseases (AIDI) for the newborn within the first week of life. A presidential initiative to support infant, newborn and maternal health was launched and a strategic plan on infant and newborn health has been developed (PESNI, 2008–2012). Health staff in general, and mother-and-child health nurses, medical and surgical technical staff and doctors in particular, have had updated training in assisting in childbirth and emergency obstetric care. As a result, the proportion of births taking place in health units with qualified staff rose from 44 per cent in 1997 to 48 per cent in 2003 and 55 per cent by 2009 (INE, 1997, 2003, 2009).

Immunization coverage in Mozambique has increased since 1997. It increased from 58 per cent in 1997 to 67 per cent in 2003 and 70 per cent in 2008 (IDS 1997-2003, MICS 2008). New vaccines – hepatitis B and haemophilus influenza – were introduced and there are plans to introduce rotavirus and pneumococcus vaccines. ANC and skilled assistance at delivery, while better, is still below the target. Urban-to-rural area differentials have reduced in relation to ANC but not in relation to immunization or skilled deliveries (IDS 1997-2003, MICS 2008). Vaccination coverage remains higher in urban areas and varies by level of wealth, indicating that further effort and investment is needed to close such gaps. The fact that income differentials are now wider than urban–rural differentials suggests that while supply-side factors (availability) need to be addressed, addressing the demand-side barriers is more important to reach MDG targets and overcome differentials. This shifts focus to maternal and child health programmes reaching those who are least served, through measures promoting universal coverage, complemented by programmes to ensure uptake in families with lower incomes and education and other disadvantages.

5. Discussion

The strategy under way on integrating equity into the allocation of increasing recurrent resources will strengthen the work on addressing the availability gaps and could improve needs-based allocation. It calls for collecting the relevant parameters at the district level that are also important in assessing equity in the health system.

The government plans to build more health centres in areas that are currently least served to reduce geographical inequity in public health care provision (MISAU/ DNS, 2005a, 2004b). The presidential initiative aims to support infant, newborn and maternal health with a strategic plan for infant and newborn health (PESNI, 2008–2012). The health sector has expanded the integrated management of childhood illness strategy for newborns within the first week of life to raise coverage in all districts through the Achieve All Districts (RED) strategy. This includes re-adopting mobile team services, supervision, liaison with the community, monitoring and record-keeping and resource planning and management. This approach focuses on building the capacity of districts, health workers and communities to address major obstacles to improving immunization and other maternal and child survival services.

6. References

1. Arrazola de Oñate, Wouter (2007) "Medicines without Doctors: In Mozambique, Salaries Are Not the Biggest Problem" in PLoS Medicine July 2007 Vol 4 Issue 7 at: www.plosmedicine.org
2. Dahlgren G, Whitehead M. Policies and Strategies to Promote Social Equity in Health. Stockholm: Institute for Future Studies; 1991.
3. Govt of Mozambique. 2008 National Health Human Resource Development Plan (2008-2015), Maputo.
4. Instituto Nacional de Estatística (INE), ORC Macro (1997). Inquérito Demográfico e de Saúde. Maputo:INE, Maputo www.ine.gov.mz
5. Instituto Nacional de Estatística, ORC Macro (2003) Inquérito Demográfico e de Saúde.
6. Instituto Nacional de Estatística (2003) Inquérito Demográfico e de Saúde. Maputo, Moçambique, 2009.
7. Maputo:INE, Maputo Moçambique accessed 5 Sep 2009 at: <http://www.measuredhs.com/>
8. Instituto Nacional de Estatística (2009) Inquérito indicadores Múltiplos 2008. Sumário', Maputo, Mozambique, 2009.
9. J, Mackenbach, L.J. Gunning-Schepers How should interventions to reduce inequalities in health be evaluated?
10. Lindelöw, Magnus, Patrick Ward and Nathalie Zorzi (2004) Primary Health Care in Mozambique: Service Delivery in a Complex Hierarchy" The World Bank accessed 10 October 2009 at: <http://siteresources.worldbank.org/AFRICAEXT/Resources/ww11888final201.pdf.pdf>
11. Ministry of Health (2008a) "International Health Partnership: Taking Stock Report Mozambique" accessed 10 October 2009 at: http://www.internationalhealthpartnership.net/pdf/07_MOZAMBIQUE_TSR_EN_FINAL.pdf
12. Penchansky R, Thomas JW (1984) The concept of access: definition and relationship to consumer satisfaction. Medical Care. 1981 Feb;19(2):127-40.
13. World Health Organization (2009) 'Essential Medicines List' accessed 10 October 2009 at: <http://www.who.int/mediacentre/factsheets/fs325/en/index.html>



**World Health
Organization**

REGIONAL OFFICE FOR **Africa**

ISBN 978-929023263-6

