



PRIVATE SECTOR HEALTH IN INDONESIA: A DESK REVIEW

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Submitted to: Karen Cavanaugh, CTO
Yogesh Rajkotia, co-CTO
Health Systems Division
Office of Health, Infectious Disease and Nutrition
Bureau for Global Health
United States Agency for International Development

And to: Charles Oliver, USAID/Jakarta
Tara O'Day, USAID/Jakarta
Anthony Boni, USAID/W
Ligia Paina, USAID/W

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Abt Associates Inc. | 4550 Montgomery Avenue | Suite 800 North
| Bethesda, Maryland 20814 | P: 301.347.5000 | F: 301.913.9061
| www.healthsystems2020.org | www.abtassociates.com

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PRIVATE SECTOR HEALTH IN INDONESIA: A DESK REVIEW

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ABBREVIATIONS

Askes	Indonesia Health Insurance (<i>Asuransi Kesehatan Indonesia</i>)
Askeskin	Indonesia Health Insurance for the Poor
AusAID	
Badan POM	National Agency for Drug and Food Control
BAPPENAS	National Development Planning Agency (<i>Badan Perencanaan Pembangunan Nasional</i>)
Bidan Pratek Swasta	Private practice midwife
Bidan Delima	Network of private practice midwives
Bidan di Desa	Village midwife
BKKBN	National Family Planning Board
DANIDA	
DAU	General budget (<i>Dana Alokasi Umum</i>)
DHS	Demographic and Health Survey
DFID	Department for International Development (UK)
EDL	Essential drug list
GGHE	General government health expenditure
GTZ	
HMO	Health Maintenance Organization
IBI	Indonesian Midwifery Association
IDI	Indonesian Medical Association
IDHS	Indonesia Demographic Health Survey
Jamsostek	Workforce and Social Insurance (<i>Jaminan Sosial dan Tenaga Kerja</i>)
JKN	National Health Security
JPKM	Community Health Insurance Scheme (<i>Jaminan Pemeliharaan Kesehatan Masyarakat</i>)
KARS	Hospital Accreditation Commission (<i>Komisi Akreditasi Rumah Sakit</i>)
KB Mandiri	Self-reliant family planning
KONAS	National Drug Policy (<i>Kebijakan Obat Nasional</i>)
MCH	Maternal Child Health
MMR	Maternal Mortality Rate
NCDs	Non-communicable diseases

NGO	Non-governmental organization
NHA	National Health Accounts
ODA	Overseas Development Assistance
OGB	Generic drug Program (<i>Obat Generik Berlogo</i>)
OOP	Out-of-pocket payment
PerDaKi	Indonesian Catholic Doctor's Association
PKBI	Indonesian Family Planning Association (<i>Perkumpulan Keluarga Berencana Indonesia</i>)
PPP	Purchasing power parity
Puskesmas	Health Center at Sub-District level (<i>Pusat Kesehatan Masyarakat</i>)
PvtHE	Private health expenditure
SOE	State-owned enterprise
Susenas	National Socio-Economic Survey (<i>Survei Sosial Ekonomi Nasional</i>)
THE	Total health expenditure
USAID	U.S. Agency for International Development
WHO	World Health Organization

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EXECUTIVE SUMMARY

While both supply of and demand for the private health sector have grown in Indonesia in recent years, limited information is available regarding the quality and affordability of private sector health services. In addition, little analysis has been conducted to understand how the private sector is contributing to the public health priorities that have been identified by the government and donors.

This USAID-funded desk review summarizes literature currently available that describes the private health sector in Indonesia and is intended to identify gaps in what is known about the private health sector in anticipation of an in-country assessment. The desk review primarily draws on published and grey literature, and was further informed by information received from in-country sources and via key informant interviews. Research was conducted on the internet, identifying publications, journal articles, and project reports from Indonesian institutions as well as multiple donors and researchers working in the health sector in Indonesia. The desk review provides a summary of the overall policy environment regarding the private health sector in Indonesia, and then summarizes the available literature on private health sector provision in four additional sections focusing on demand for private sector services and products, private sector supply of health services, private sector supply of pharmaceuticals and health products, and private sector financing. Regulation affecting private sector supply is integrated into the two sections on supply.

The review will be validated through an in-country assessment that will include a series of interviews, discussions, and consultation meetings with in-country counterparts, key stakeholders, and donors. The interviews and meetings will help to provide a richer understanding of the private health sector in Indonesia and fill in gaps in the desk review. The in-country assessment also will help to facilitate the identification of key issues and concerns stakeholders may have about private sector health and begin to explore options for encouraging and managing private sector participation in the delivery of health care services and products. It is hoped that these discussions may be useful to BAPPENAS (the National Development Planning Agency) as it develops the next National Mid-Term National Development Plan for Indonesia.

BACKGROUND AND POLICY ENVIRONMENT FOR PRIVATE SECTOR HEALTH

Indonesia's private health sector is large, diverse, and growing. Unlike many countries around the world, Indonesia has long supported the development of the private health sector, beginning with encouraging private sector participation in the delivery of family planning services. However, the distinction between public and private provision of health care services and products in Indonesia is not clear. The vast majority of publicly employed health personnel have second jobs in their own private practices or other private facilities. Some public facilities deliver private services and some state-owned enterprises are incorporated as private firms even though the sole or majority shareholder is the government. This lack of clarity may make defining the scope of the private sector more difficult, but it also points to a policy environment that acknowledges the private sector's contribution to health in Indonesia and is conducive to private sector participation in health care delivery.

DEMAND FOR PRIVATE SECTOR HEALTH CARE SERVICES AND PRODUCTS

There is an overall wide acceptance among Indonesian consumers to use private sector providers for a range of health services and products – even among the poorest socio-economic groups. Out-of-pocket spending accounts for more than a third of all health spending. Demand appears to be increasing for private sector services and products. However, utilization of private sector out-patient services has decreased since 2004, while utilization of public providers has increased by 50% over the same period, and there is a trend away from seeking care in out-patient facilities toward self-medication and using private drug sellers as the first source of care in an illness episode. Women are increasingly giving birth in a facility – and more than two-thirds of institutional deliveries take place in private facilities across income groups. More than 40% of all women, and 60% of women in urban areas, rely on private sector providers for family planning services. Current demand for pharmaceuticals is estimated at around US\$ 12 per capita with around 10% by value provided by the public sector. Additional information and analysis are needed to fully understand care-seeking behavior in Indonesia, as consumers often lack information about quality and price.

PRIVATE SECTOR SUPPLY OF HEALTH CARE SERVICES

There is no reliable data on the number of health service providers working in a private capacity in Indonesia. Decentralization, the government-sanctioned practice of dual employment, and incomplete registers among the professional associations are some of the main reasons it is difficult to tease out this figure. Experts estimate that at least 60-70% of the health sector workforce holds jobs in both the public and private sectors. Distribution of health service providers, including private sector providers, is inequitable and favors urban areas. This unequal distribution occurs across all types of providers. The number of private sector hospitals and hospital beds is continuing to increase – the Ministry of Health reports that there were a total of 626 private hospitals in 2006 with about 52,300 beds. Even so, the total number of hospital beds in Indonesia per 10,000 population remains low compared to its neighbors in the region. While private hospitals tend to focus on providing narrow specialty services and maternity care, taken together private health facilities and private service providers offer a wide range of preventative and curative services. A few small networks of private and NGO sector service providers exist in Indonesia but have not been taken to scale. Supply of private sector medical and nursing education has exploded in recent years with little regulation, raising concerns about the quality of pre-service education. Overall, quality of care remains an issue throughout the Indonesian health care system, in both public and private sectors. While small-scale efforts exist, there is no institutional and systematic commitment to quality assurance and monitoring, and little enforcement if institutions or practitioners are found to be providing sub-standard quality of care.

For the most part, the legislative and regulatory environment does not hinder the development of the private sector. Current regulations allow physicians and midwives to establish private practices, but not nurses. While there are no regulatory barriers to establishing a private practice for these types of providers, there may be financial barriers with access to credit for health providers limited. The government does have a system of registration and licensing of health care providers, however providers must only fulfill a series of administrative criteria rather than demonstrating the minimum competence required to perform professional work. As of 2007, physicians are required to take a mandatory competency test in order to get their license. There is an accreditation commission for public and private hospitals, but the commission does not regulate the many solo private practices run by physicians and midwives. There are many professional organizational bodies in Indonesia but their functioning at present is limited. They provide legislative input and lobby the Ministry of Health for

changes in the health laws, but do not for the most part certify standards, monitor quality, or enforce compliance to minimum standards.

PRIVATE SECTOR SUPPLY OF PHARMACEUTICALS AND HEALTH PRODUCTS

Supply of medicines to the private sector is considered to be straight-forward following a simple pyramid structure from manufacturer to wholesale distributor to dispensing unit, but with many players at each level. Privately purchased medicines supplied through private pharmacies and drug sellers dominate the supply of medicines in Indonesia. When sick, around half of the population relies on self-treatment, most commonly from a private seller of pharmaceuticals. Medicine prices in Indonesia are generally considered to be high – with innovator brand names around 20 times the international indicator price and generic medicines costing nearly 75% higher than the international price indicator guide. All medicines in the private sector are subject to a variety of taxes ranging from import duties on raw materials through to VAT. It has been estimated that the tax burden adds around 22% to the retail cost of drugs.

There is a National Drug Policy, a number of essential drug lists, a series of regulatory controls and statutory functions of various agencies, and a large number of Ministerial decrees that govern both public and private pharmaceutical sectors. Overall, Indonesia has reasonable and improving regulatory controls – through the national agency for drug and food control (Badan POM) – for product quality with a relatively moderate rate of counterfeit and fake medicines at around 25% by value of the market (approximately 5% by volume). However, there may be cause for concern as more recent reports suggest that this could now be as high as 40% by value (approximately 8% by volume). This situation warrants further investigation and possible effective action to strengthen regulatory functions if confidence in the quality of all medicines in the country is to be maintained. Licensing and monitoring of retail pharmacy outlets and drugstores, and for enforcing regulations governing proscribing and dispensing, was decentralized in 2001, resulting in a somewhat variable and confused enforcement environment.

PRIVATE HEALTH CARE FINANCING AND EXPENDITURES

Total health expenditure in 2006 was 2.2% of GDP, with general government expenditure comprising 50.4% of the total and private spending comprising 49.6% (WHO, 2008). There has been a dramatic increase in government investment in health since 2000, from Rp 8.4 trillion to Rp 35.6 trillion in 2006, a more-than fourfold increase during this six-year period. Even with increased public spending on health, the private health sector plays an important role in supplying health services to all populations in Indonesia, including the poor. Currently, half of total health expenditure in Indonesia comes from private sources, primarily out-of-pocket payments including user fees (66.3%), with a small proportion from private prepaid health care plans (9.7%), and the rest spent by NGOs and private firms (WHO, 2008). Many people prefer to use private health services, even over highly subsidized public services. In 2001, more than two-thirds of total household health expenditures were on services provided by private facilities. Out-of-pocket expenditure is the main access method for pharmaceuticals on either volume or value estimates. Approximately 50% of medical insurance costs are from pharmaceuticals.

Lack of overall investment in health and limited insurance coverage affects the overall demand for health services, which will ultimately limit the funding sources for the development of health care provision, including the development of the private sector. Even without government subsidy on investment and

operation, as well as the contracts from health insurance schemes, the private sector is more attractive to many patients compared with public health providers, which imply there are differences in perceived quality, cost, and availability between public and private providers. More research is needed to understand consumer care-seeking behavior.

There is little information on the amount of funding that the private sector obtained from either the national level or facility level. A comprehensive analysis of health care financing should include the flow of funds from financing sources to financing agents (managers or programmers of health funds), to health care facilities, and to the beneficiaries. In particular, little information is available to estimate the flow from institutional payers to health care facilities. More comprehensive resource tracking and data analysis efforts are needed to understand the development and functioning of the private sector in the overall Indonesian health care system.

CONCLUSIONS

In many ways, Indonesia is an ideal environment for further engaging participation of the private sector in delivering priority health services. The private sector is vibrant and active, Indonesians rely on private sector providers for a large proportion of their health services and products, and both the Indonesian government and donors are receptive to identifying new ways to collaborate with the private sector in achieving common health sector goals and priorities.

The desk review summarized what is currently known about private sector health in Indonesia. It also revealed a number of areas where additional information about the private sector would be useful in contemplating how best to harness private sector resources to improve health outcomes, such as:

- More comprehensive data on the number and location of health workers engaging in private sector health through dual practice or exclusively in the private sector in order to more accurately assess geographic access and inequities;
- Market share and income generated by private providers to assess the potential for forming networks and introducing performance-based financing mechanisms;
- Fee levels and pricing of services in both public and private sectors to better understand financial incentives facing providers and financial barriers that may be affecting households;
- Consumer health seeking behavior in selecting public or private health care providers based on quality, price, and availability;
- Quality of pharmaceuticals on the market, including the availability of fake and counterfeit medicines, given the high levels of self-treatment; and
- Resource tracking and data analysis of private health care financing, including the flow of funds from financing sources to financing agents, to health care facilities, and to beneficiaries.

The desk review is intended to serve as a useful foundation to help Indonesian counterparts identify key issues, challenges, and opportunities in working with the private health sector. It is hoped that the review document also will aid stakeholders in exploring a number of options to address the key issues that have been identified, in order to further encourage and manage private sector participation in the delivery of health care services and products for improved health outcomes in Indonesia.

I. INTRODUCTION

The Indonesian government, led by BAPPENAS (the National Development Planning Agency), is currently undertaking a participatory process to develop its next Mid-Term National Development Plan (2009-14). A number of studies have been commissioned by the government and donors to feed into consultative meetings and discussions to help develop the Plan. Together the studies, which focus on topics such as health financing, health workforce, pharmaceuticals, physical infrastructure, and service delivery, provide a comprehensive review of health system performance. The cross-cutting themes of decentralization and the private health sector run through each of these topics.

The purpose of this USAID-funded desk review and planned in-country assessment is to provide input to the Mid-Term National Development Plan and National Health Strategy related to improving private sector provision of health services and products, and the private sector's contribution to improved health outcomes. While both supply of and demand for the private health sector have grown in Indonesia in recent years, limited information is available regarding the quality and affordability of private sector health services. In addition, little analysis has been conducted to understand how the private sector is contributing to the public health priorities that have been identified by the government and donors.

The desk review is a first step in summarizing what is currently known about the private health sector in Indonesia and identifying gaps in knowledge that may require further investigation. The review will be validated through an in-country assessment that will include a series of interviews, discussions, and consultation meetings with in-country counterparts, key stakeholders, and donors. The interviews and meetings will help to provide a richer understanding of the private health sector in Indonesia and fill in gaps in the desk review. The in-country assessment also will help to facilitate the identification of key issues and concerns stakeholders may have about private sector health and begin to explore options for encouraging and managing private sector participation in the delivery of health care services and products.

The desk review provides a summary of the overall policy environment regarding the private health sector in Indonesia, and then summarizes the available literature on private health sector provision in four additional sections focusing on demand for private sector services and products, private sector supply of health services, private sector supply of pharmaceuticals and health products, and private sector financing. Regulation affecting private sector supply is integrated into the two sections on supply.

2. METHODOLOGY FOR THE DESK REVIEW

The desk review primarily draws on published and grey literature, and was further informed by information received from in-country sources and via key informant interviews. Research was conducted on the internet, identifying publications, journal articles, and project reports from Indonesian institutions as well as multiple donors and researchers working in the health sector in Indonesia. This included reports from World Bank, USAID, WHO, AusAID, and DANIDA. Additional documents were collected and analyzed from a variety of in-country sources, including the World Bank Jakarta office, the Indonesia Business Coalition on AIDS, and the Indonesian Medical Council. The key informants that were interviewed to obtain an overview of the regulatory environment and key policy issues included a former Minister of Health and current faculty at the University of Indonesia (Annex 1).

3. BACKGROUND

3.1 GENERAL BACKGROUND

Indonesia is a populous and diverse country. Indonesia is an archipelago in Southeastern Asia between the Indian Ocean and the Pacific Ocean. In addition to the capital city of Jakarta, Indonesia has 30 provinces and two special regions (Aceh and Jogjakarta). The Indonesian government is a highly decentralized, democratic Republic. The country is the fourth most populous country in the world with approximately 237 million people consisting of nearly 300 native ethnicities and 742 different languages and dialects. The largest segment of the population is the Javanese, making up 42% of the population, followed by the Sundanese, ethnic Malays, and Madurese groups.

Prior to the recent global financial downturn, Indonesia's economy had largely recovered from the Asian financial crisis of the late 1990s. Indonesia is a lower-middle income country with a nominal gross national income per capita of US\$ 1,650 (US\$ 3,580 PPP) in 2007. Indonesia has undergone significant economic reforms under President Susilo Bambang Yudhoyono. The economy has grown approximately 6% per year since 2005. The country has extensive natural resources, including crude oil, natural gas, tin, copper, and gold. Prudent macroeconomic policies have contributed to a decline in Indonesia's debt-to-GDP ratio and an increasing availability of government revenue. A new investment law was passed in March 2007 to begin to address concerns of foreign and domestic investors in the Indonesian market economy, and may result in increased private investment (Reksodiputro, 2007). However, the recent global financial turmoil has led to sharp declines in demand and prices for key exports such as crude palm oil and coffee. The government is taking steps to try to mitigate the effects of the economic crisis. Experts predict that the growth of Indonesia's economy is expected to slow, but continue to estimate that it will grow by 4-6% in 2009.

Despite progress in stabilizing the economy, Indonesia continues to struggle with a number of complex issues. Nearly 18% of the population continues to live below the poverty line, while 49% of the population lives on less than US\$ 2 per day (World Bank, 2006(b)). The unemployment rate has held steady at approximately 10% over the past several years, but may increase as the decline in demand for exports negatively impacts manufacturing and production. Distribution of resources across provinces remains highly unequal with provinces in the East of the country receiving substantially less than those in the West. Rapid decentralization, a key part of democratization efforts which began in 1999, has further complicated an already complex regulatory environment. Both a lack of accountability and corruption remain key concerns at all levels of government and continue to deter both foreign and domestic investment. The current administration has had to deal with a string of natural disasters including the devastating December 2004 tsunami and a number of terrorist attacks that also have affected domestic and international tourism and investment.

3.2 HEALTH SITUATION IN INDONESIA

A relatively small list of health conditions make up the majority of the burden of disease, particularly among the poor, and contribute to high levels of avoidable death. Data from the Ministry of Health's Basic Health Research collected in 2007-08 indicate that the main causes of child deaths are diarrheal disease (25.2%) and pneumonia (15.5%). Dengue hemorrhagic fever is the main

cause of death among children between the ages of five and 15 in urban areas, responsible for 30.4% of deaths in this age group, while diarrhea at 11.3% is the main cause of death among the same age group in rural areas. The main causes of death across all ages of the population over five years old are stroke (15.4%), tuberculosis (7.5%), and injuries (6.5%).¹ According to WHO, ischaemic heart disease, lower respiratory infections, malaria, HIV/AIDS, and nutritional deficiencies also contribute to mortality rates (WHO, 2007).

Many of Indonesia's health indicators are improving; however other indicators remain a concern. Key health indicators, such as infant and child mortality, have improved steadily over the past several decades. Despite these general trends, improvements in some indicators seem to have slowed in recent years. The infant mortality rate decreased from 36 deaths per 1,000 live births in 2002-03 to 34 in 2007, while the under-five mortality rate decreased from 46 deaths per 1,000 live births to 44 (IDHS, 2008). Life expectancy at birth is 66 for men and 70 for women (World Bank, 2009(c)). Between 2002-03 and 2007, the fertility rate remained at 2.6 births per woman. Contraceptive use among currently married women is high and has held steady at 61% (IDHS, 2008). Three indicators remain a cause for concern: i) high child mortality; ii) high maternal mortality rates (MMR); and, iii) child malnutrition rates, which remain high at 25% for children under five and have largely stagnated since 2000 (World Bank, 2008). Despite increases in the number of deliveries attended by a health professional (from 66% in 2002-03 to 73% in 2007) and the number of deliveries taking place in a health facility (40% to 46%) (IDHS, 2008), the MMR remains high. One study estimates MMR at 420 deaths per 100,000 live births (Hill et al, 2007), while the IDHS estimates MMR at 228 deaths (IDHS, 2008.) Irrespective of the wide discrepancy in these two estimates, Indonesia's MMR is relatively high compared to similar countries in the region.

National health indicators mask significant disparities by region and socio-economic status. Significant geographic disparities exist in health indicators such as life expectancy, infant and child mortality rates, and under-five malnutrition rates. For example, life expectancy in West Nusa Tenggara is 59 years compared with 72 years in Jogjakarta (World Bank, 2008). Infant mortality rates in West Sulawesi and West Nusa Tenggara are nearly three times greater than those in Jakarta and Central Java (IDHS, 2008). Significant variance in health indicators exists across socio-economic quintiles. Despite improving overall trends in delivery care, most poor pregnant women deliver at home and 40% continue to deliver without the benefit of a skilled birth attendant (IDHS, 2002-03). Infant and child mortality rates are more than four times higher among the poorest quintile (World Bank, 2006(b)).

Due to longer life expectancy and fewer childhood deaths from communicable diseases, the demographic and epidemiological profile of Indonesia is transitioning. In the decades to come, Indonesia will face a "double burden of disease" from both communicable and non-communicable diseases. Already, the number of people with diabetes, heart disease, and cancer is increasing as the population ages, diets change, and lifestyles become more sedentary (World Bank, 2008). These changes have the potential to greatly increase both demand for and the cost of health care.

3.3 HEALTH SECTOR PRIORITIES AND HEALTH SPENDING

The Government's Annual Plan for 2007 describes the health sector's key policy directions and priority diseases. The main policy directions stated in the Plan include increasing access to and

¹ Results of the Basic Health Research were synthesized online in the article "Indonesia: Stroke and TB are Lead Killers," published December 9, 2008, IRIN humanitarian news and analysis, UN Office for the Coordination of Humanitarian Affairs, available online at www.irinnews.org/Report.aspx?ReportId=81883.

quality of basic services for the poor, increasing the quantity and quality of health personnel, focusing on preventing and eradicating infectious and transmittable diseases (including diarrhea), improving nutritional status for mothers and children, increasing use of essential generic drugs, and revitalizing the family planning program. Priority diseases mentioned in the Plan include tuberculosis, dengue fever, malaria, and HIV/AIDS. The Plan also outlines objectives for the health sector to increase immunization coverage and rates and to improve nutritional status through iron supplementation in pregnant women, exclusive breastfeeding in infants, and Vitamin A supplementation in children. There is no explicit statement regarding engaging the private sector in the Annual Plan.

Indonesia spends a relatively low percentage of GDP on health. The World Bank estimates that Indonesia spends less than 3% of GDP on health (of which less than 1% is public spending). This is less than the average for countries in the East Asia and Pacific region (6.1%) and the lower middle income group of countries (5.9%) (Table 1). Despite the government's recent increases in health spending, public health expenditure remains quite low. As a result, Indonesia has relatively few hospital beds per 10,000 population compared to its neighbors in the region. Many public health facilities reportedly suffer from weak infrastructure and a lack of equipment. The country as a whole suffers from a lack of doctors, nurses, and to some extent midwives, particularly in rural and remote areas. Neighboring countries such as Vietnam, the Philippines, and Malaysia spend more and subsequently have better health outcomes, including child and maternal mortality rates (World Bank, 2008). Private expenditure as a percentage of total health spending is 50% in Indonesia, a smaller percentage than is spent in most neighboring countries.

TABLE 1: REGIONAL COMPARISON OF HEALTH PERFORMANCE INDICATORS, 2006 (UNLESS NOTED)

Indicator	Indonesia	Philippines	Thailand	Malaysia	China	Cambodia	Viet Nam
Health Financing							
Total health expenditure (THE) as % of GDP	2.2	3.3	3.5	4.3	4.5	6	6.6
General government expenditure on health as % of THE	50	40	64	45	42	26	32
Private expenditure on health as % of THE	50	60	36	55	58	74	68
Out-of-pocket expenditure as % of private expenditure on health	66	80	77	73	93	84	90
Health Status							
Life expectancy at birth (years)	68	68	72	72	73	62	72
Infant mortality rate (per 1,000 live births)	26	24	7	10	20	65	15
Under-5 mortality rate (per 1,000 live births)	34	32	8	12	24	82	17
Maternal mortality ratio (per 100,000 live births)	420 ^f	230 ^f	110 ^f	62 ^f	45 ^f	540 ^f	150 ^f
Births attended by skilled personnel (%)	66 ^d	60 ^d	97	100 ^f	98	44 ^f	88
Contraceptive prevalence (%)	61	49 ^d	72	--	90 ^e	40 ^f	79 ^c
Health Systems							
Hospital beds (per 10,000 population)	2.5 ^f	13	22 ^a	19	22	6 ^b	26 ^f
Physician density (per 100,000 population)	13 ^d	58 ^a	37 ^a	70 ^a	106 ^b	16 ^a	53 ^b
Nursing density (per 100,000)	62 ^d	169 ^a	28 ^a	135 ^a	105 ^b	61 ^a	56 ^b

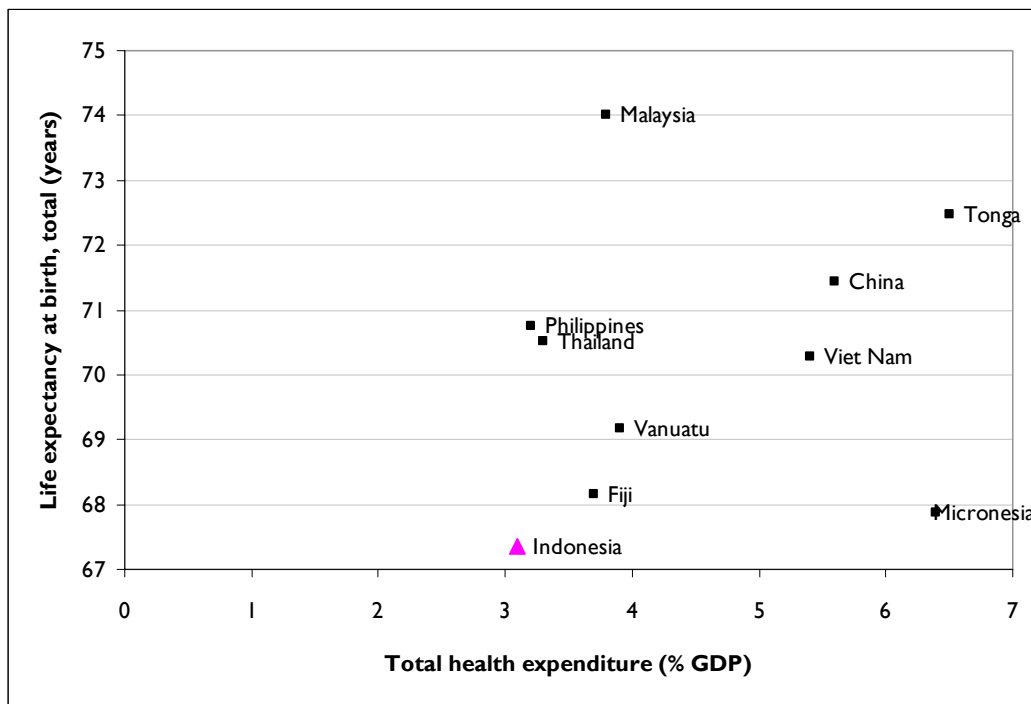
Indicator	Indonesia	Philippines	Thailand	Malaysia	China	Cambodia	Viet Nam
population)							
Midwife density (per 100,000)	20 ^d	45 ^a	1 ^a	34 ^a	3 ^b	23 ^a	19 ^b

Key: a) 2000; b) 2001; c) 2002; d) 2003; e) 2004; f) 2005.

Source: WHO, World Health Report, 2006 and WHOSIS accessed via the web at <http://www.who.int/whosis/en/index.html>.

Figure I shows that Indonesia spends less on health than its neighbors and has a lower life expectancy at birth. Philippines and Thailand spend only slightly more on health as a percentage of GDP than Indonesia but perform better on this outcome measure.

FIGURE I: TOTAL EXPENDITURES ON HEALTH AS % OF GDP AND LIFE EXPECTANCY AT BIRTH (IN YEARS), 2006



Source: Based on data from WHO (2006) and World Bank (2006b).

4. POLICY ENVIRONMENT FOR PRIVATE SECTOR HEALTH

Unlike many countries around the world, Indonesia has long supported the development of the private health sector. In the 1980s, Indonesia privatized state enterprises and the financial sector, created economic policies supportive of expanding private sector cooperation, and offered tax breaks and financial incentives to encourage private enterprise (Hull, 1997). The health sector developed its own policies at the time to reform the health financing system and to expand the role of private health providers. The pharmaceutical sector and the hospital sector were deregulated and the Ministry of Health began targeting public resources to support priority preventive health services for vulnerable populations, leaving the private sector to focus on curative care (Chandani et al, 2006). The Ministry also began to create a regulatory climate more conducive to private sector participation when it became clear that the public system could not continue to keep pace with population growth and health care demand (Marzolf, 2002).

The initiatives and programs of the Indonesian National Family Planning Board (BKKBN) are viewed globally as a model of how to encourage private sector participation in the delivery of family planning/reproductive health services. BKKBN was successful in achieving a rapid decline in total fertility and a rapid increase in use of contraceptives, in large part due to the launch of the *KB Mandiri* program in 1987. *KB Mandiri* sought to replace government subsidies by increasing the share of revenue generated for family planning services and to encourage those willing and able to pay for family planning to rely on private sector channels. Over time, *KB Mandiri*, and its Blue and Gold Circle Service Provider Initiatives – that trained private sector doctors and midwives, introduced moderately priced contraceptives, and invested in wide-scale social marketing of family planning products – resulted in consumers developing the habit of paying for family planning services and products and utilizing private health sector providers to address family planning needs.² During the Asian financial crisis, the private sector further stepped in to fill gaps created by the weakened public sector, and overall contraceptive prevalence remained stable even after the crisis had ended. (Chandani et al, 2006). Successes in encouraging private sector delivery of high quality family planning services and products have led to government and donor investments to support delivery of other priority services by private sector midwives, including antenatal care, delivery, and other reproductive health services.

The Ministry of Health’s “zero growth” policy for public health care further encouraged expansion of the private sector in the 1990s. Designed to contain costs and better target limited government resources, the zero growth policy resulted in few public sector jobs being available in the 1990s, driving an increasing number of doctors to seek employment in the private sector. The Ministry promoted an expansion of the private sector to “encourage self-selection out of public facilities among those who were able to pay – and thus more efficiently target limited resources” (Barber et al, 2007). Marzolf reports that public sector health care did not grow appreciably in the 1990s while the private health sector expanded significantly. Expansion of private ambulatory facilities alone was three times that of public health centers (Marzolf, 2002). Several public statements by the Ministry of Health in 2000

² USAID provided significant technical assistance to BKKBN through a series of family planning and social marketing projects.

reinforced the need for private sector engagement, including the following: “Government funds will be severely restricted through this recovery period... Thus, the government must turn to the private sector and community groups to assist us in recovery in the health sector... With less total public funds, health services for the non-poor must be more self-supporting.”³

The distinction between public and private provision of health care services and products in Indonesia is not clear. The vast majority of publicly employed health personnel have second jobs in their own private practices or other private facilities. Those with second jobs earn nearly 50% of their income from private sources (Widyanti and Suyahadi, 2008). Some public facilities charge fees and deliver private services and some state-owned enterprises are incorporated as private firms even though the sole or majority shareholder is the government. This lack of clarity may make defining the scope of the private sector more difficult, but it also points to a policy environment that acknowledges the private sector’s contribution to health in Indonesia and is conducive to private sector participation in the delivery of health care services and products.

Indonesia’s decentralization policies adopted in 2001 significantly changed the flow of funding for health, but it is unclear whether that has had a direct impact on the supply or demand of private providers. New policies and initiatives currently being designed and implemented – including reimbursement procedures and the benefits package under Jamkesmas, implementation of social health insurance, or procedures for health provider accreditation – may have a significant impact. One result of decentralization that the division of roles and responsibilities between national and sub-national levels is not completely clear (World Bank, 2008.)

³ Opening remarks of the Minister of Health at the Partners for Health Meeting, January 25, 2000 quoted in Marzolf, 2002.

5. DONOR SUPPORT IN PRIVATE SECTOR HEALTH

A number of donors are investing significant resources in the health sector, including USAID, the World Bank, AusAID, and GTZ. In 2002, the total amount of external funding to the health sector amounted to US\$ 188.2 million (Michaud, 2003). However, according to WHO, in 2006 external resources for health only accounted for 2.3% of total expenditure on health.

Several donors have provided technical assistance to the private health sector. USAID has played a leadership role in providing substantial and long-standing support to develop and encourage use of the private sector family planning market and also has supported the development and expansion of the Bidan Delima network of private sector midwives through a series of global and bilateral projects. USAID's Proposed Health and Infectious Diseases Strategy for Indonesia (2009-14) includes continued support to improving delivery of MCH services in both public and private sectors. The World Bank has conducted reviews of private sector expenditure and utilization patterns in 2002 and 2008, and is collaborating with the Government of Indonesia to conduct a review of the health system, with private sector health as a theme cutting across a number of commissioned studies, including a health financing study and a health sector workforce assessment that will help to inform understanding of the nature of dual practice. AusAID is supporting implementation of National Health Accounts (NHA) and district health accounts which will include a private sector survey, as well as compiling a list of NGOs working in the health sector. AusAID and GTZ are collaborating to conduct a health facility costing analysis in Indonesia which will include a number of private hospitals. Although still in the early planning stages, the University of Melbourne, as an activity of the AusAID-funded Health Policy and Finance Knowledge Hub, is planning to undertake an in-depth analysis of the role of the private sector / non-state providers in a sample of countries in the East Asia and Pacific region, including Indonesia.

In addition to the large bilateral and multilateral programs, there are other smaller initiatives that touch on private sector health issues. These include but are not limited to:

- A Japanese ODA loan for \$165,000 to improve the University of Indonesia Medical School as a quality measure (which will improve the quality of graduating doctors whether they ultimately work in either the public or private sector);
- Singapore Temasek Foundation grant for \$865,000 to train staff at seven nursing schools and hospitals;
- Canadian Nurses Association Project: District Jurisdiction Partnership Development Project toward Healthy Indonesia 2010. This project is a partnership with the Indonesian Nursing Council to develop regulatory mechanisms. It is funded by the Canadian International Development Agency (CIDA); and
- Dreyfus Health Foundation, Problem Solving for Better Health Projects to improve quality of care in the hospital sector, including private hospitals.

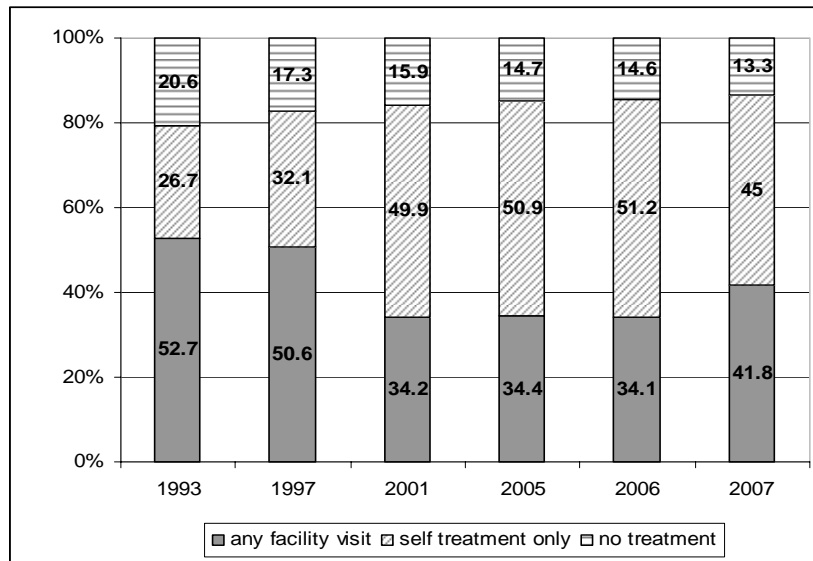
6. DEMAND FOR PRIVATE SECTOR HEALTH CARE SERVICES AND PRODUCTS

6.1 EXISTING DEMAND FOR PRIVATE SECTOR PROVISION OF SERVICES

Overall, there is wide acceptance among Indonesian consumers to use private sector providers for a range of health services and products – even among the poorest socio-economic groups. The Indonesian private health market is large and diverse – both for services as well as products. Out-of-pocket spending accounts for more than a third of all health spending. The number of private health providers has grown dramatically in Indonesia since the legalization of dual practice, liberalization of hospital ownership, the introduction of zero-growth policy on civil servants recruitment and the passing of decentralization legislation in 1999 (World Bank, 2009(b)). While it is difficult to estimate the potential demand for private sector provision of primary care services, the private sector is clearly a major player in the overall Indonesian health care market. The findings from the desk review suggest that consumer behaviors related to health care are changing in a number of ways. For example:

Self-medication, and using private drug sellers is the first source of care in an illness episode. The long term trend shows Indonesians have increasingly changed their treatment-seeking behavior away from out-patient facility-based services toward self-medication (Figure 2). This trend is consistent with reported widespread growth in the private pharmaceutical/drug market in Indonesia. In 2007, 45% of people reported that they relied on self-treatment during their last illness, obtaining medication at pharmacies or drug-stores, a decrease from 2006 data showing 51% of people reporting self-treatment during their last illness. Since 2005/2006, with the introduction of Askeskin/Jamkesmas insurance for the poor, it appears that self-treatment may be declining as these insurance schemes reimburse costs of care at public health facilities.

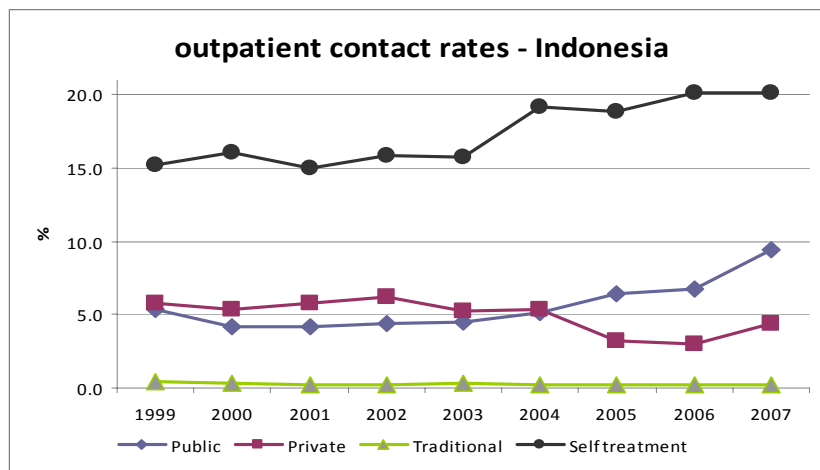
FIGURE 2: CARE-SEEKING BEHAVIOR AMONG THOSE REPORTING ILLNESSES, 1993-2007



Source: World Bank staff calculations based on various years of Susenas (World Bank, 2008)

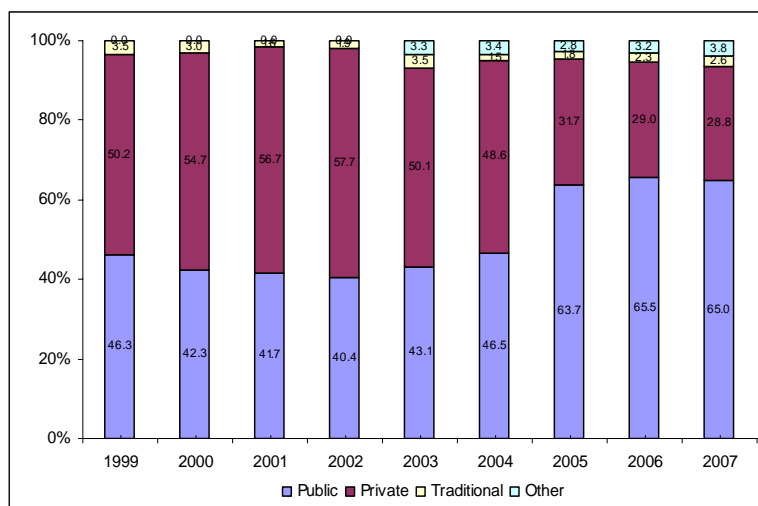
For those Indonesians visiting a health care facility, use of public sector facilities appears to have increased since 2004, while private provider utilization has decreased. Public health service utilization rates have increased by almost 50% since 2004, while private service utilization rates have decreased (Figure 3). This trend is also likely related to the introduction of Askeskin/Jamkesmas in 2005, whereby those newly insured who previously sought private health services are now using public providers, as costs at private providers are not reimbursed; however more analysis is needed to better understand this trend. In 2007, public service provision accounted for 65% (Figure 4 blue shading) of total health service utilization, while the private sector’s share had decreased to less than 30% (World Bank, 2008).

FIGURE 3: OUT-PATIENT UTILIZATION (IN THE PREVIOUS MONTH) TRENDS, BY PROVIDER TYPE, 1999-2007 (PERCENTAGE OF TOTAL POPULATION)



Source: World Bank staff calculations based on various years of Susenas data (World Bank, 2008)

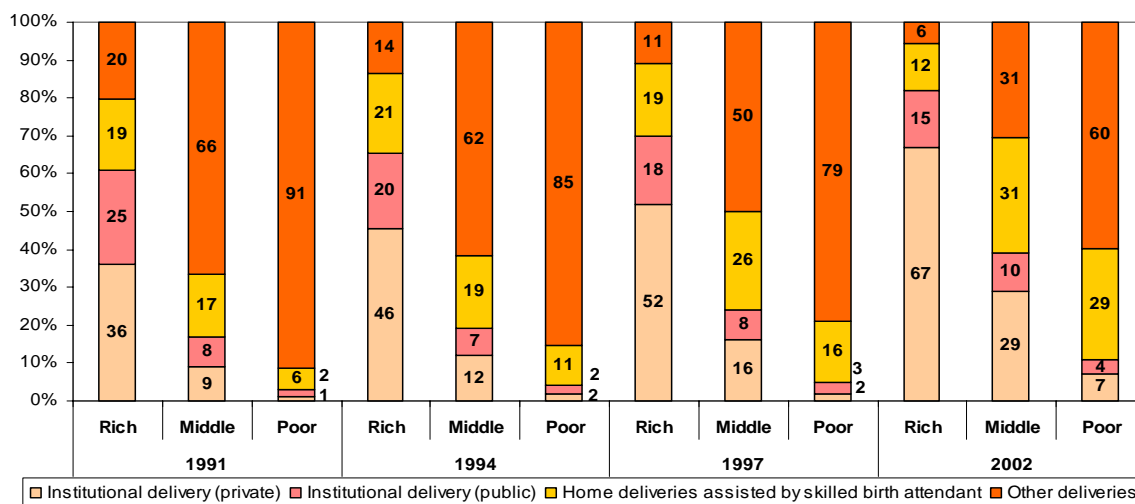
FIGURE 4: CHOICE OF PROVIDER FOR HEALTH SERVICES, 1999-2007



Source: World Bank staff calculations based on various years of Susenas data (World Bank, 2008)

Indonesian women are increasingly giving birth in a facility – and most institutional deliveries take place in private facilities; however there are still significant differences by socioeconomic groups. Overall, institutional births increased from 20% in 1997 to 46% in 2007 (IDHS, 2008), while “other deliveries” decreased consistently across all socioeconomic groups – a major achievement for Indonesia. Most institutional deliveries take place in private facilities or with private providers (midwives’ homes). Across wealth groups and over time, more women deliver in private facilities than in public facilities. Among the poor, the proportion of births in a facility is only 11% of which two thirds take place in private clinics. For middle-income consumers, more than two thirds choose a private facility when delivering their baby in a facility. The rich choose private facilities for 80% of the births delivered in a facility (Figure 5) (World Bank, 2008).

FIGURE 5: DELIVERY BY TYPE OF CARE AND WEALTH STATUS, 1991-2002



Source: World Bank staff calculations based on various years of IDHS. Note: * the sum of two figures (public and private facilities) is the percent of institutional births. The category ‘other deliveries’ are deliveries that are not assisted, or assisted by ‘unskilled’ personnel, such as TBA or family help.

Indonesian consumers rely heavily on private sector sourcing for family planning services – both among retail outlets as well as private providers. Early efforts in Indonesia to promote utilization of private sector providers of family planning services are considered to be largely successful – and contributed to an overall significant shift of users from the public to the private sector. Over the 10-year period from 1987 to 1997 when BKKBN established and actively implemented private sector-oriented policies and programs, the percentage of women who turned to the private sector for contraception increased almost threefold from 15% to 42% – and the increase in urban areas was particularly pronounced where it expanded from 25% to 61%. During Indonesia’s economic crisis, the private sector stepped in to fill the gaps by a weakened public sector, and interestingly, contraceptive prevalence remained stable, and consumers continue to purchase their family planning products in the private sector, despite increased prices.

6.2 FACTORS AFFECTING DEMAND FOR HEALTH CARE SERVICES AND PRODUCTS

There is a relatively large body of international literature that discusses the factors influencing consumer decision-making regarding health care, and preferences related to public versus private sector. In Indonesia, there seem to be relatively few studies available that address consumer preferences and reasons for selecting private providers over the public sector. This section attempts to combine generally accepted assumptions about consumer preferences for health care with the specific information that is available in Indonesia. Better understanding of these preferences is necessary to frame the parameters for a health care market that maximizes both access and quality in the public and private sectors.

In health care decisions, consumer choice about where to seek services is often based on a price-quality tradeoff (Maceira, 2001). In Indonesia, the perception of low quality services in public sector facilities has likely contributed to consumers increasingly seeking care in the private sector. In a health care market where quality is homogeneous among all its products and services, consumer choice is based on price, and consumers will tend to buy the cheapest services offered. If quality services are available in the public sector and perceived to be comparable to private sector services, consumers will seek out public sector services. If other higher quality services are available elsewhere, consumers will make their health care purchasing decisions based on the combination of price and quality. In Indonesia, there is significant documentation that the quality of health care services in public facilities has eroded (in some instances linked to the absence of health care personnel), which has contributed to the increasing shift by consumers to private sector facilities for both in-patient and out-patient services (Government of Indonesia et al, 2008), or more recently, a shift to self-treatment. The Indonesian experience with family planning services also supports the price-quality tradeoff that consumers must make. Even Indonesia’s poorest quintile and most rural audiences switched to the private sector for their contraceptive products between 1997 and 2002, when the economic crisis meant that many public sector facilities did not have contraceptives in stock (Agha and Do, 2008).

While consumers may base their health care decisions on perceived quality, they are relatively limited in their ability to assess clinical quality, and there is evidence that suggests clinical quality is a problem at both public and private facilities. There is some literature that suggests that private (for-profit) providers are more likely to respond to patient preferences (particularly in terms of the “service” aspects of care), while public providers may be more concerned with clinical quality (Tangocharoensathien, 1999). In Indonesia, the literature suggests that there are clinical quality problems in both the public and private sectors. It is widely recognized that

there is little control over quality in the private sector, and the private sector is largely unregulated (Government of Indonesia et al, 2008). One study among private and public providers in 2007 found relatively low knowledge of evidence-based practices – particularly antenatal and adult curative care. Less than half of both public and private providers were aware of the appropriate clinical guidelines (Barber et al, 2007b). However, in general, private physicians had the highest scores for child and adult curative care. Private nurses offered below-average care for all scenarios and all regions. Public health centers offered the highest quality for antenatal care.

The quality-price trade-off in any health care market is influenced by a number of factors. It will be important in Indonesia to understand clearly how changes in health care subsidies will affect supply. For example, reduction of user charges in some countries has had unexpected effects on utilization of services. In South Africa, abolition of user fees for all pregnant women and children under six regardless of income increased demand for curative services in public health facilities, but use of preventive services, notably antenatal care and child immunization and growth monitoring actually fell (Ensor and Ronoh, 2005). These types of mis-targeted subsidies have resulted in inadequate funding for the poor and serve as a disincentive to growth of the private sector. A World Bank-supported pilot project in Pemalang district in Central Java that provided vouchers to poor pregnant women for midwives' services provides some evidence of how targeted subsidies can affect demand in Indonesia. The program greatly increased access of the poor to quality maternal health services provided by contracted midwives who had previously worked in both the public and private sectors. Project midwives had a three-part income, including a monthly base wage for assisting in village health centers a few days a month, fees from vouchers paid by low-income pregnant women, and private practice income. During the project period, the number of district midwives doubled and midwives' coverage of villages reached 95% (World Bank, 2006(a)).

Another important factor affecting selection of health care facilities is geographic accessibility. In 1997, just under half of adults in Java Bali⁴ (46%) and 19% of adults in Outer Java Bali lived in communities with no public facility that offered adult curative care (Barber et al, 2007b). A larger proportion of private physicians worked in Java Bali, while more private nurses worked in Outer Java Bali. These accessibility issues also may account for the large percent of Indonesian consumers that rely upon private nurses for health care services – even though nurses are not legally licensed to practice. Demand-side costs (e.g. transportation) are underestimated in most services – and can account for up to 50% of total costs – and may also impact consumer choice of public versus private provider. In Indonesia, the current distribution of public health facilities and personnel is closely correlated with income distribution, thus establishing the public system as the main competitor of the private sector in exactly the locations most likely to foster private sector growth (Marzolf, 2002).

6.3 DEMAND FOR PRIVATE SECTOR PHARMACEUTICALS AND HEALTH PRODUCTS

The sheer size of the market and degree of market segmentation is such that there can be little doubt that most people access medicines from out-of-pocket expenses. This trend is evident despite the fact that it is difficult to rely on figures from the pharmaceutical industry because it is unclear which elements are included (cosmetics/ 'health' drinks/food supplements, etc.) in the figures or the pricing formulae used. It is reported that the Indonesian pharmaceutical market reached an

⁴ Java Bali is the cluster designated by the Demographic Health Service and Government census bureau. They essentially divide the archipelago into three regions – Java-Bali, Outer Java (which is actually not the island of Java at all), and Outer-Outer Java, which refers to really remote regions and is a designation that is rarely used now.

estimated US\$ 2.6 billion in 2006, in terms of value (Indonesian Pharmaceuticals and Healthcare Report, 2008). The market is forecast to grow by 5-6% per year reaching an estimated US\$ 3.75 billion by 2012 (The Pharmaceutical Market: Indonesia, 2008). There is general consensus that current demand for pharmaceuticals in Indonesia is estimated at around US\$ 12 per capita, with around 10% by value provided by the public sector. Estimates of the percentage of drugs paid for out-of-pocket in Indonesia in value range from 60% to 85%. Compared to more developed countries, the use of generics in Indonesia continues to be low; an estimated 15.4% of the market in 2006 was generic. Usage of generics by the private sector is particularly low.

7. PRIVATE SECTOR SUPPLY OF HEALTH CARE SERVICES

7.1 PRIVATE SECTOR PROVIDERS – NUMBER, DISTRIBUTION, AND SERVICES PROVIDED

No reliable data exist on the number of health service providers as a whole or for those working in a private capacity in Indonesia. Estimation of this figure has been made more difficult due to decentralization, the government-sanctioned practice of dual employment, and incomplete registers among the professional associations. The World Bank has recently tried to triangulate available data from a number of sources and surveys; however there are limitations to the approach and a recognized need to gather more comprehensive and reliable information on the health work force in Indonesia.

For purposes of clarity, the data used here represent the total number of providers in Indonesia and are not specific to the providers practicing in the private sector. This is because so many of the public providers also practice privately, for example a 2004 DFID report estimates that among specialists, 90% work in both the private and public sector at the same time (Berman and Cuizon, 2004). Sources for the data include the three large professional organizations, the licensing division of the Indonesian Medical Council and district level manpower reports, which are aggregated at the national level. The Indonesian Medical Council has the best data on the overall number of physicians. They state that as of July 2007, there are 15,499 specialists and 72,249 medical doctors registered nationally. The Indonesian Nurses Association claims an estimated 500,000 nurses but this number is not reflected in any other public data source. WHO reports that 44,254 private sector midwives are practicing in Indonesia as of 2003 and IBI states they have a membership of 68,772 midwives. A 2007 study in two districts estimated that approximately half of midwives have private practices outside the public sector and about 7% of midwives work exclusively outside the public sector (Makowiecka et al, 2007). Table 2 provides a summary of information on the total number of providers by category received from three sources.

TABLE 2: ESTIMATING THE NUMBER OF PHYSICIANS, MIDWIVES, AND NURSES IN INDONESIA

Provider Category	World Health Report 2003	Ministry of Health Statistics 2004	Indonesia Medical Council 2007
Physicians	29,499	37,531	56,750
Specialists	Not reported	11,000	15,499
Midwives	44,254	61,000	80,000
Nurses	135,705	233,116	500,000 ⁵

The majority of the private sector workforce in Indonesia is comprised of public sector practitioners that also have clinic hours and see clients outside of their government

⁵ The Indonesian Nursing Association uses this number in their brochure. They calculate it by estimating the number of graduates who leave the nursing academies, the number who apply for a Surat Ijin Kerja (Letter Permitting Work) at the district level and subtract those who leave the profession through the mandatory retirement age, although they might still be practicing.

function. One health economist defined the Indonesian system as a “private system with a public subsidy.” The authors of a DFID report published in 2004 found that:

“Surveys conducted by the Indonesian Doctors Association (IDI) have shown high prevalence of private practice among government health professionals. Most doctors conducted private practice in addition to their respective positions with the government; specifically about 80 percent of general practitioners (GPs), 90 percent of specialists, 84 percent of health center personnel, 80 percent of hospital workers, and 93 percent of administrative personnel. The IDI also came up with the finding that in Indonesia, additional involvement in private practice increased gradually with age: 75 percent for those who are under 30 years of age to 77 percent for those in the 30-39 range, and over 86 percent for those in the 40-60 range. Furthermore, 85 percent of those who had retired from civil service continued to see private patients.”
(Berman and Cuizon, 2004)

The January 2009 World Bank Report on Indonesia’s Doctors, Nurses and Midwives puts this figure of dual job-holders at a slightly lower percentage, believing it to be between 60% and 70% of the workforce. The “pure” private sector, in which providers derive no income from the government or are in any way affiliated with government, is small, certainly no larger than 20% to 30%. These providers are primarily found in the urban areas of Indonesia or practicing with the extractive resource industry and functioning as company doctors.

This dual practice workforce is sanctioned by the government although recent increases in absenteeism have underscored the limitations of this approach. Low salaries in the public sector necessitated sanctioning of dual practice so that doctors could earn a living wage. Dual practice, however, has created incentives for health workers to divert patients from the public to the private sector. In addition, in a recent study, absenteeism among health workers in public primary care facilities was estimated to be as high as 40% (Chaudhury et al, 2006). Despite recognition of deficiencies in dual practice, there is not yet an organized effort to change this practice. Some of the proposed changes to the basic legislative acts that govern health providers would promote a reduction in dual employment but there is no certainty that these bills will pass in the current government.

Distribution of all health service providers, including private sector providers, is inequitable and favors urban areas. The distribution of health service providers is uneven within Indonesia. There are inequities of distribution on multiple layers in Indonesia, between provinces, between the urban and rural areas, and between those areas which are affluent and those that are not. More research is needed to understand the extent to which private providers are available in remote, rural and less affluent areas. However, since most providers are serving in both the private and public sector, an analysis of public health sector personnel serves as a proxy for determining where providers can be found. And since the government has reduced its economic incentive program to attract public sector physicians to the more remote areas, there also may have been a corresponding drop of private sector providers, since most of them were functioning in a dual capacity.

This unequal distribution occurs across all types of providers. The 2009 Indonesia Health Workforce Study issued by the World Bank cited the following (based on Potensi Desa (Survey of “Village Potential”) or PODES data): In Java-Bali, in 2006, there were 34.1 doctors per 100,000 people in the urban areas and 4.5 doctors per 100,000 people in the rural sectors. Outside of Java-Bali, there were 40.9 doctors per 100,000 in the urban sector, 8.3 doctors per 100,000 in the rural area, and 6.6 in the most remote areas. There also are inter-regional differences. In Aceh Tenggara, there are 7.2 GPs per 100,000 while in Gorontalo in North Sulawesi there are 5.8 GPs per 100,000. In Ende, a small district in East Nusa Tenggara, the Bupati (chief of district administration) reported that only six out of

28 health centers had a doctor at all. For specialists, the data are not disaggregated by geographic location. However, the majority of specialists, approximately 10,000, are found in Jakarta, Yogyakarta, West Java (Bandung), Central Java (Semarang) and East Java (Surabaya). The province with the lowest specialist per 100,000 population is NTT with only one specialist (this includes the island of Lombok) and another seven provinces have only two specialists per 100,000.⁶ Regarding midwife coverage, a February 2007 brief from IMMPACT found that only 29% of villages have a resident midwife, but the World Bank report found that there were more midwives in the rural areas than in the urban areas. In Bengkulu, one of the wealthier regions, there are 96.6 midwives per 100,000 people while in Palu, in Central Sulawesi, there are only 47.1 per 100,000 (Thabrany, 2006).

The number of private sector hospitals and hospital beds is increasing steadily. The Ministry of Health reported that there were a total of 626 private hospitals in 2005 with about 52,300 beds, an increase from the 352 private hospitals and 31,000 beds that existed in 1990. These figures compare with the 452 public sector hospitals with 66,700 beds in 2005, but neither figure takes into account hospitals belonging to the army, police, other ministries, or state-owned enterprises (World Bank, 2008). In general private hospitals are smaller with fewer beds as they focus on a one-specialty service, such as maternity care. Relying on Ministry of Health data from 2003 on the number and type of public and private hospitals, only 13% of government hospitals provided specialized care while 30% of private hospitals did. The exact definition of what constitutes a “private” hospital are not available in the data, however it would usually include for-profit hospitals, hospitals associated with Catholic and Islamic groups, and hospitals jointly owned by state and private sector interests (e.g., the Mitra Masyarakat Hospital).

Private health facilities and private service providers provide a wide range of preventive and curative services. Due to the nature of dual practice, health providers practicing privately provide a full range of preventive and curative services. As mentioned above, some smaller private hospitals tend provide services in one specialty area, such as maternity care. Since there is a wide spectrum of equipment available in the public sector, private service providers sometimes refer their clients to public facilities for services they do not have, such as microscopy for TB smears, or some gynecological surgeries. A large percentage of consumers turn to the private sector, including the Indonesian Family Planning Association (PKBI) for family planning and reproductive health care, including voluntary sterilization. It is mostly not-for-profit NGOs, both local and international, that are implementing programs in the HIV/AIDS sector in Indonesia. In 2008/2009, funds from the Global Fund will be directed to three local NGOs – PKBI, Aisyiyah (which is the women’s branch of Muhammadiyah) and the Indonesian Catholic Doctor’s Association (PerDaKi). The Indonesia Business Coalition on AIDS is a non-profit group that is dedicated to improving the policies and practices on treating workforce members who are HIV positive within the commercial sector. They have compiled a list of providers and practices that will treat and support HIV-positive clients; there are two for-profit private providers in Jakarta. One of their large policy objectives is to convince the government insurance providers to reimburse for anti-retroviral medication so that private insurers will follow suit. Pilot activities in Jogjakarta have involved private providers in TB case detection with limited success, while an innovative public-private partnership for TB control in Timika, Papua has resulted in high case-finding and treatment completion rates (Ardian et al, 2007).

⁶ These provinces are Bengkulu, Lampung, Central Kalimantan, NTB, Central Sulawesi and South East Sulawesi. This information is drawn from World Bank, 2009(b), “Indonesia’s Doctors, Midwives and Nurses: Current Stock, Increasing Needs, Future Challenges and Options (draft).”

One significant contribution to health care that is not captured in the available data is the commercial sector undertaking health service delivery as part of its corporate social responsibility (CSR) efforts. For example, the Rio Tinto Foundation has created a TB program in coordination with Ministry and the National TB Association. They stepped in because the government system could not meet their needs and the productivity of their work force was being reduced due to the high levels of tuberculosis. Shell is implementing a Dengue Fever control program and British Petroleum has a maternal health program. In addition, Freeport has extensive health programs in its mining area in Papua, including a comprehensive program for the prevention of HIV/AIDS.

7.2 PRIVATE PROVIDER NETWORKS

Networks of private health providers are a promising mechanism to expand the supply of quality RH/FP services: they achieve economies of scale in training, procurement and marketing, allow for rapid expansion to increase coverage, improve financial access by standardizing prices, and ensure quality and brand recognition.

There are a small number of private and not-for-profit provider networks in Indonesia, but they have not been taken to scale. Private provider networks include the *Bidan Delima* program which is operating in 203 districts in 15 provinces and whose membership includes approximately 7,500 midwives as of late 2008. *Bidan Delima* is managed by Indonesian Midwifery Association (IBI). Midwives pay a registration fee and dues and receive a *Bidan Delima* sign. The network promotes the quality of care in private sector midwives through certification and external validation. Many *Bidan Delima* midwives offer services to the poor at reduced price. A network of clinics is run by the Indonesian Family Planning Association which offers full reproductive health services, including HIV/AIDS services, in most provinces in Indonesia. The clinics are only loosely affiliated though and change their service options depending on local conditions.

Muhammadiyah, the second largest Muslim organization in Indonesia, manages a significant number of health facilities in Java. Muhammadiyah's health facilities include 98 polyclinics, 69 general and specialized hospitals, 62 maternity clinics, 25 MCH centers, and 16 health centers. Muhammadiyah employs a range of health personnel, though like the public sector have difficulty finding and retaining qualified physicians and specialists. NU also has clinics, including clinics run by its women volunteers that focus on reproductive health.

Local NGOs play an important role in delivering health care to disadvantaged populations, not served by other groups. *Yayasan Kusumua Buana* is a local NGO that has five clinics in North Jakarta which charges fees for service, despite being located in slum areas with very poor populations around them. They offer family planning, HIV/AIDS, and maternal health care, primarily through the use of midwives. A USAID source listed at least 30 NGOs involved in delivering HIV/AIDS care and services, including the NGO Hati-Hati in Bali which serves discrete groups such as People Living with AIDS and several harm reduction programs run by not-for-profit NGOs.

7.3 PRIVATE PROVISION OF MEDICAL AND NURSING EDUCATION

Under decentralization, there has been an explosion of private sector universities and academies turning out physicians and nurses. In the 1990s, there were 183 *Sekolah Perawat Kesehatan* or nursing schools and 76 diploma (D3) Nursing Schools. There are now some 682 nursing

education institutions, turning out 34,000 students annually, including some specifically for the overseas market. There are 465 midwifery academies producing 10,000 midwives annually and the 52 medical schools graduate approximately 5,000 graduates a year. Despite these large numbers, according to the Ministry of Health Human Resources staff, this is still insufficient production. From 2003 to 2010, they anticipated needing 56,845 family physicians but will have produced only approximately 50,000. However, they also only planned on needing an additional 42,933 nurses during the same time period and the number of graduates would point to an oversupply.

There has been little standardization and regulation of the quality of medical and nursing education institutions. The Indonesian Medical Council estimates that the pass rate for the mandated physician competency exam among graduates of new schools is less than half of that compared to the University of Indonesia graduates. Regarding nursing education, according to a paper entitled “A methodology for assessing the professional development needs of nurses and midwives in Indonesia” (Hennessy et al, 2006), a number of issues compromise the development of high-quality nursing graduates. The issues include:

- There is no statutory regulatory authority for nurses and midwives, and consequently there are no regulatory standards for education and clinical competence;
- One consequence of the lack of regulatory standards for education and clinical competence, and the absence of proper job descriptions, is that the level of education and training of many health care professionals does not necessarily match the nature of the work being undertaken;
- Despite the lack of standards, it is estimated that 60% of nurses and midwives have inadequate training and preparation for the role, which creates the potential for substandard care delivery; and
- Many nurses and midwives practice with little or no supervision, which engenders a situation whereby practitioners, under pressure from the mounting health demands of the population, may feel obliged to undertake clinical activities that exceed their education or their competence level.

7.4 QUALITY OF CARE AMONG PRIVATE PROVIDERS

Quality of care remains an issue throughout the Indonesia health care system, in both public and private sectors. In a 2007 article by Barber et al on the quality of care they found:

“In private clinical settings, structural quality and equipment were basic. Most did not have in-patient beds, with the exception of some midwives. About 8.1 percent of solo physicians had microscopes, although it was common to refer for microscopy at a public health center, hospital, or private laboratory. Just over half of physicians offered tuberculosis services. Few nurses and fewer than one in four physicians had vaccines in stock, although a substantial proportion of midwives carried vaccines.”

Scores for technical quality in both public and private facilities across all three types of care that were examined in the study (maternal, IMCI, and general curative) demonstrated relatively low knowledge of evidence based practices, particularly prenatal and adult curative care. Despite the low overall scores, private physicians scored higher than public physicians for curative care among adults and children. Among nursing care, the study found that for all three types of care, “private nurses had the largest quality deficiencies. Lower quality for nurses could stem from weak initial training as well as few opportunities for supportive supervision and professional development.” (Barber et al, 2007(b)).

One area where quality appears to be slowly improving is the *Bidan Delima* franchise supported by USAID. Their quality assurance instruments have been updated and they are routinely supervised by a facilitator. A 2008 study found that private sector midwives in Palembang, where *Bidan Delima* has been long established, made greater improvements in their practices than a control group in Bengkulu, where the program was not operating (USAID, 2008).

There is limited information on the public's perception of quality of care and how this influences utilization patterns. The issues of how to define private sector services, who is using the private sector, and their reasons for doing so, are also still not fully understood and are complicated by the extensive self-treatment practices among Indonesians.

There is no institutional and systematic commitment to quality assurance and monitoring in Indonesia. While there are independent efforts being implemented on a local scale, none of the professions has a consistent approach to quality assurance. In addition, as the education market has become privatized and there are an increasing number of graduates from institutions that are not adhering to either international or national standards, the quality of new graduate skills is declining. Among nurses, one of the other issues contributing to poor quality is that there are no job descriptions or core competencies established.

There are few sanctions or penalties if institutions or practitioners are found to be working at sub-standard levels. The government and the professional organizations are well aware of the pressing nature of this issue but as of yet have not been able to agree on approaches to address this. USAID has been working with private midwives on quality assurance within the *Bidan Delima* program but they reach only 10% of the midwives in Indonesia. The Nurses Association has promoted a set of standards but since they currently do not have national licensing or accreditation systems, they have not been able to get the standards approved by the Ministry of Health.

7.5 REGULATORY ISSUES AFFECTING SUPPLY OF PRIVATE SECTOR HEALTH SERVICES

The practice of private sector service providers is regulated by Indonesian legislation. Annex 2 shows the pertinent existing national legislation. Legislation mandating the different services for health providers can be generated at all levels of administrative management, including at the gubernatorial, provincial, and district level. This can create a conflict between different regulations that must be mediated at a higher level. This section looks at regulation of the establishment of private practice, licensing and accreditation of private providers, and licensing and accreditation of private facilities.

7.5.1 ESTABLISHMENT OF PRIVATE PRACTICE

Regulations governing establishment of a private physician practice are fairly straightforward. For a physician to have a private practice, s/he must have passed the national competency exam (providers graduating prior to 2007 are grandfathered in) and have been approved by the Indonesian Medical Council. The Council gives the physician three certified copies of licensure, which is in line with the 2004 regulation that providers are limited to practicing in no more than three sites. In addition, the provider must obtain permission from the District Health Office to open his/her practice. Solo-practice licensure in Jakarta requires an examination table, stethoscope, otoscope, three tongue depressors, thermometer, syringe and needle, prescription pad, and basic medical record system. There

are other published regulations which govern the physical infrastructure of the facilities, the location of the services, the fees charged, etc.

Physicians are now able to establish private practices immediately upon graduating from medical school. Indonesia has abandoned its mandatory service role for physicians, although it still uses voluntary contracting with economic incentives to attract providers to the more remote parts of the archipelago. With the lifting of this regulation, there is nothing to prevent providers from gaining permission from the District Health Office and establishing a practice, after they have passed the national competency exam and received their licensure from the Indonesian Medical Council.

Current regulations allow midwives to have private practices, referred to as *Bidan Pratek Swasta* (Private Practice Midwife). Since the 1996 program to put a midwife in every village (*Bidan di Desa*), midwives, including private sector midwives, have been a major focus of development and donor efforts. Midwives must demonstrate that they have practiced for three years in another facility before opening a private practice. Multiple programs, including USAID's Maternal and Neonatal Health Program (1999-2004), STARH (Sustaining Technical Achievements in Reproductive Health 2000-2006), and the Health Services Program (2004-ongoing), have supported the development of a private sector midwives network, including quality assurance mechanisms for private midwifery practices. Nationally, across all income groups, an increasing number of deliveries are performed by private sector midwives.

While there are also no regulatory barriers preventing a midwife from opening a private practice, there may be financial barriers. IBI estimates that to equip a basic maternity, including the building, can cost about US\$ 50,000 and may go as high as US\$ 70,000. This is for a two-room facility, with no autoclave, two partus sets and two suturing sets and other basic equipment. Commercial bank loans are extremely difficult to obtain for small enterprises such as private midwifery practices so *bidans* primarily rely on private investors or family in order to get funds to start or expand practices. USAID supported a revolving loan fund for midwives prior to the 1998 economic crisis that was extremely successful, but at present there are no donors actively supporting this initiative.

Private practice in Indonesia usually refers to physicians and midwife practices; under the existing nursing practice acts, nurses are not empowered or authorized to have private practices. However, anecdotally, many in the health sector acknowledge that nurses are providing private services, particularly at the district level. One study found that 10% of the 2,849 nurses in Jogjakarta were conducting private practices, despite it being illegal (Muhusan, 2007). Private nursing practices in Bali are focusing on wound care and staffing hospitals, while in Kalimantan a private nursing practice provides home health services.

7.5.2 LICENSING AND ACCREDITATION OF PRIVATE PROVIDERS

Licensing, registration, and accreditation for providers and institutions is not yet widespread. The government does have a system of registration and licensing of health care providers, however, providers must only fulfill a series of administrative criteria rather than demonstrating the minimum competence required to perform professional work (Government of Indonesia, et al, 2008). This is contributing to significant variation in the quality of care among providers. There are no penalties or sanctions in place for practicing at sub-standard levels, although the Indonesian Medical Council can pull licenses of physicians.

As of 2007, physicians are required to take a mandatory competency test in order to get their license. If they do not pass the test, they do not get a license and cannot practice legally. Nurses do not have a national competency exam but two provinces, Central Java and Banten,

have started a pilot trial and are requiring all nurses practicing in those provinces to take a competency exam. The Governor's office and the Council for Health Sector Practice are implementing this initiative.

Physicians are required to earn 250 continuing education units in a five year period in order to be eligible for license renewal. Nurses and midwives have a renewal period every three years. IBI just completed a pilot project in four provinces (West Java, Central Java, Banten, and West Sumatra) wherein midwives have to pass a competency exam before they will be given permission to receive their license. In Jakarta and West Java, midwives must take and pass a competency exam administered by IBI before their license is renewed.

Under current regulations, foreign physicians and nurses are prohibited from practicing in Indonesia unless they complete a course called "adaptasi" to demonstrate their competence. However under the Mutual Recognition Agreement (MRA) which is part of the ASEAN treaty, Indonesia is meant to open its doors to foreign graduates in 2010. This change is of concern to the professional organizations that may fear competition, and places additional pressure on the legislature to pass laws concerning licensure, accreditation and regulation.

There currently is no inspection or ongoing accreditation process to ensure adherence to the regulations. One of the lessons learned under a previous USAID-funded project that created private practice networks of midwives was that without routine and frequent inspection, the desired standards of practice were not maintained, particularly when it came to infection prevention. A combination of provider incentives and regular monitoring may be useful to ensure adherence to standards of practice.

7.5.3 LICENSING AND ACCREDITATION OF PRIVATE FACILITIES

Hospital accreditation is conducted by KARS, the Komisi Akreditasi Rumah Sakit. KARS accredits both public and private hospitals, but does not regulate the many private practices that physicians and midwives run. The accreditation commission examines five categories according to its accreditation procedures – management and administration, medical services, emergency services, nursing, and medical records. A WHO report from 2000 found that only 10% of hospitals were accredited and in compliance with existing standards. More private sector hospitals are accredited than those in the public sector.

7.6 THE ROLE OF PROFESSIONAL ASSOCIATIONS

There are many professional organizational bodies in Indonesia but their functioning at present is limited. They do not for the most part certify standards, monitor quality or penalize providers. They do provide legislative input and lobby the Ministry of Health for changes in the health laws. While these professional groups play an important role in providing opportunities for continuing education and offer significant consultative advice to the government for standards and regulations, they do not have regulatory power, with the exception of the Indonesian Medical Council, which can rescind the license of a doctor. The largest of these professional associations include:

- Indonesian Doctors Association
- Indonesian Midwifery Association (IBI)
- Indonesian Nurses Council

- Indonesian Pediatric Doctors Association
- Hospital Association of Indonesia
- Indonesian Medical Council
- Hospital Accreditation Commission
- Association of Obstetricians and Gynecologists in Indonesia
- Nurse Anesthetists Group

The Indonesian Nurses Association has promoted national standards for nursing and sent them to the Ministry of Health for review and approval but as of yet, no national common standard exists. A study conducted in 2004 in Jogjakarta found that only 10% of nurses interviewed were actually members of the professional organization. As of yet, Indonesia is still creating a Nursing Council to issue licenses for practice. In interviews with the Indonesia Nursing Association, they described a complicated process of multiple permits issued at the district level for a nurse to be able to practice. The responsibility for disciplining nurses and revoking their licenses remains at the provincial level with the Council for Disciplining Health Staff (*Majelis Disciplin Tenaga Kesehatan*).

7.7 LEVEL OF COORDINATION BETWEEN PUBLIC AND PRIVATE SECTOR PROVIDERS

Dual practice makes it difficult to analyze the level of cooperation between public and private sector providers; however there is an overall impression of good cooperation.

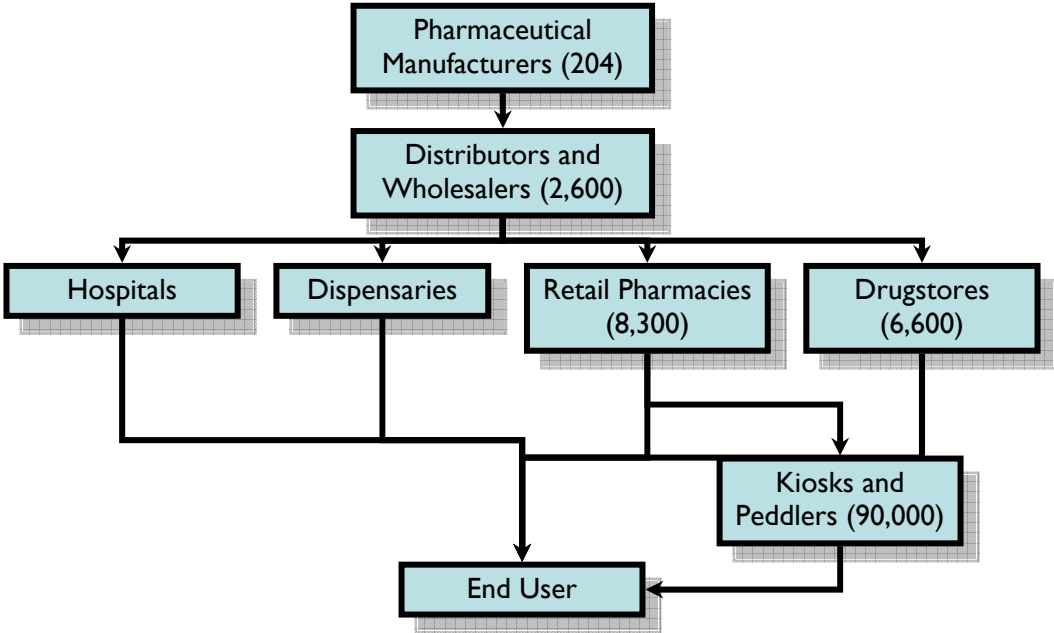
There is also good cooperation within the referral networks, for example, private physicians often refer to public laboratories for the diagnosis and treatment of tuberculosis. Private practice midwives also typically refer to government hospitals in the event they need to have a client treated for hemorrhage or other complications. One troubling issue raised by the World Bank is that private health providers do not report on their activities and therefore nearly 40% of health service delivery and spending is not captured by regional and national health information systems. The MCC-Immunization program confirmed this to be true in conducting a field assessment in East Java, where private providers gave immunizations but did not report their data to the appropriate government office. USAID's Health Services Program is planning to conduct a small study in several districts in early 2009 to examine the referral practices and health information and reporting systems among private sector midwives.

8. PRIVATE SECTOR SUPPLY OF PHARMACEUTICALS AND HEALTH PRODUCTS

8.1 STRUCTURE OF PRIVATE SECTOR PHARMACEUTICAL SUPPLY

Supply of medicines to the private sector is considered to be relatively straight-forward following a simple pyramid structure from manufacturer to wholesale distributor to dispensing unit, but with very many players at each level. Figure 6 below provides a graphic representation of the structure.

FIGURE 6: STRUCTURE OF PRIVATE SECTOR PHARMACEUTICAL SUPPLY IN INDONESIA



There is an abundance of pharmaceutical manufacturers, distributors, and retailers in Indonesia. Around 16,000 medicines are registered in Indonesia. There are currently 204 licensed pharmaceutical manufacturers in Indonesia, of which around 30-40 are multinational companies or regional companies operating in the local market. The market remains dominated by domestically produced products, though imports and exports are rising gradually. Many aspects of business regulation are ambiguous or uncertain, which creates impediments to international participation. Production is concentrated in Java, though there are some producers in Sumatra and one in Bali. Most

local companies are producing branded generics; some are producing copies of patent-protected medicines. Around 85% of raw materials are imported.

A distinctive feature of the Indonesian industry is the presence of large State Owned Enterprises (SOEs), of which one (Kimia Farma) also has a distribution arm and over 300 retail outlets. These were originally established as arms of the Ministry of Health to ensure the availability of cheap generics to the public sector, and were subsequently converted into SOEs, now subordinate to the Ministry for State Owned Enterprises, though the SOEs continue to be expected to support the Ministry of Health's access to medicines objectives as well as pursuing commercial objectives.

Among the local manufacturers, there are only a few large producers, and common ownership relationships further concentrate the market. For a significant number of off-patent medicines, there is only one domestic manufacturer. The leading companies by market share are the largest private domestic companies (Kalbe Farma, Dankos, Darya Varia and Sanbe Farma), which concentrate on branded generic production. The three SOEs dominate the market for unbranded generics. Other smaller producers of unbranded products mostly sub-contract or cooperate with the SOEs. Unbranded generics account for around 10% of the market by value (10.5% in 2004).

There are around 2,600 licensed pharmaceutical wholesalers in Indonesia – an unusually large number for the size of the market. The large number is in part driven by local government business regulations that require a business to be registered separately by the district administration in order to operate in the locality. In reality, there are around 10 large nationwide distributors which have district affiliates, and altogether perhaps only around one third of the wholesalers have ongoing, substantive operations. The remaining distributors are small businesses that may only have periodic operations for a small number of products, and many have been established specifically to participate in district and provincial public procurement, following decentralization in 2001. A number of the larger manufacturers have established their own subsidiary distribution companies, many others have appointed a single authorized distributor. Distributors of medicines are not permitted to be foreign owned. Additionally, “grocers” also sell bulk medicines, typically to drugstores, and are a lower cost source of supply than licensed wholesalers. Well organized illegal medicines markets in Jakarta and other large centers sell over-the-counter and prescription drugs to drug stores, dispensing doctors and members of the public.

There are around 8,300 licensed retail pharmacies and around 6,600 licensed drug stores – a relatively small number for the population size. Licensed drug stores operate under a second-tier regulatory status: they are not required to have a pharmacist on staff (unlike pharmacies), and are supposed to sell over-the-counter medicines only. However, many also sell some ethical (prescription) drugs, and both pharmacies and drugstores are known to sell ethical drugs without doctors' prescription. Badan POM has introduced a regulation to increase oversight of drugstores – the apotik rayat scheme, which would legalize dispensing of prescription drugs by drugstores so long as they are supervised by a pharmacy, with a maximum ratio of one pharmacist per four apotik rayan. A small share of the formal retail market is now in the hands of chains, though none are yet national (they are concentrated in Java), except for the SOE Kimia Farma. Kimia Farma is in effect vertically integrated into distribution and manufacture. There are in addition many unlicensed drug stores (estimated to be around 5,000 in 2005) and other informal outlets, including around 90,000 plus small stores and street-peddlers. Many public and private hospitals have one or more licensed commercial pharmacy outlets on-site.

Direct dispensing by health care providers now appears to be a significant segment of the market. Dispensing by doctors (and increasingly by midwives and nurses) is reportedly a very large aspect of the retail market, and has been growing over the past five years or more. The Indonesian Pharmacy Association estimates that around 30% of prescription drugs are dispensed by doctors, nurses, and midwives.

8.2 PRICES OF PHARMACEUTICAL PRODUCTS

The consensus view is that medicines in Indonesia are considerably more expensive than international norms and other countries in the region; some medicines are significantly more expensive. Although there are numerous concerns on the exact methodology used and the overarching difficulties of international price comparisons for medicines, reports have indicated that: the prices of medicines in Indonesia are high with only small variations between public and private sector and between regions. In general, the prices of the innovator brand products were much higher than international reference prices; on average they were more than 20 times higher. They also were about 2-7 times higher than the most sold generic equivalents and, in some cases, more than 10-15 times higher. The lowest price generic equivalents also were expensive. The patient prices in public hospital pharmacies and in the private for-profit sector (private retail pharmacies and private hospitals) are almost identical. Affordability analysis showed that treatment of diabetes with innovator brand glibenclamide from a private pharmacy would require 8.4 days' wages to pay for a month's supply. In contrast, treating diabetes with generic glibenclamide is less than one-tenth as expensive, requiring 0.6 days' wages in both public and private pharmacies. A week's treatment for pneumonia would require 1.5 days salary to pay for innovator brand amoxicillin, 0.4 days for a generic (Center for Health Services Technology Research et al, 2004-05).

All medicines in the private sector are subject to a variety of taxes; it has been estimated that the tax burden adds around 22% to the retail cost of drugs. There is no policy to exempt pharmaceuticals and medical products from taxation as exist in other countries, and pharmaceuticals are subject to a variety of taxes. These taxes range from import duties on raw materials, through packaging materials to VAT on sales. In addition, there is no over-arching pharmaceutical price regulation within the private sector, but specific areas are subject to control:

- Companies are required to print the recommended maximum retail price on the packaging;
- Retail pharmacy margins are capped at 50%; and
- There is price control for the Ministry of Health sponsored Berlogo scheme of sale of generic medicines in the private sector (*Obat Generik Berlogo* or OGB).

8.3 POLICY AND REGULATORY FRAMEWORK FOR PRIVATE SECTOR PROVISION OF PHARMACEUTICALS ⁷

8.3.1 DRUG POLICY

Although there are overarching national policies on pharmaceuticals which include private sector operations, in practice little attention has been paid to private sector contributions in implementing those policies. There is a National Drugs Policy which incorporates policy on both public and private sectors; a series of regulatory controls and statutory functions of various agencies; multiple essential drugs lists; and large number of Ministerial decrees with specific regulations pertaining to specific areas. While various published policies relating to pharmaceuticals exist, implementation of these policies is uneven and regulatory control post-manufacture and during distribution may also be improved.

The Ministry of Health published an updated National Medicines Policy (KONAS or *Kebijakan Obat Nasional*) in 2006. ⁸ Key features of this policy, taken as extracts from the English language translation of the KONAS include:

- Access to medicines particularly essential medicines is considered a human right. Therefore, the supply of essential medicines is the obligation of the government and health service institution, public or private.
- National Medicines Policy includes financing, availability and fair distribution, affordability, selection of essential medicines, Rational Use of Medicines, control and administration, research and development, human resource development, monitoring and evaluation.
- Safety, efficacy and quality of medicines and public protection including the community protection from misuse and abuse of medicines.
- Evaluation on safety, efficacy and quality through registration, guidance, control and administration on import, export, production, distribution and medicine services is integral part through reliable competence, accountable, transparent and independent efforts.
- Legal ground and consistent law enforcement with deterrence effect for each violation or infringement.
- Government must present guidance, control and administration of medicines, meanwhile, pharmaceutical companies are held responsible for the quality of medicines as per the functions. The tasks related to the control and administration being the responsibilities of government must be assumed in professional, accountable, independent and transparent manner.
- Sustainable financing of medicine supply, public or private, under the Law No 40/2004 on National Social Security System elaborated in various forms of Community Healthcare Security.

⁷ The sections of this review regarding the pharmaceutical sector rely heavily on World Bank. 2009(a). "Assessment of the Pharmaceutical Sector in Indonesia with a Focus on Public Finance, Expenditure and Public Sector Supply Chain." Jakarta, Indonesia: World Bank.

⁸ Decree of the Minister of Health – Republic of Indonesia. Number: 189/Menkes/SK/III/2006. March 27, 2006. http://www.binfar.depkes.go.id/data/files/1206328770_The%20Book%20of%20National%20Medicines%20Policy.pdf

- Application of National Essential Medicine List in each health service, personal or public, through the use of therapy guideline and best-scientifically proven based formularies.
- Medicines procurement in health services and National Health Security (JKN) scheme by reference to National Essential Medicine List (DOEN).
- Establishing public medicine financing target at national scale (WHO-recommended minimum allocation of US\$ 2 per capita).
- Application of JKN scheme and other Health Care Security System must implement full health care services.

8.3.2 ESSENTIAL DRUG LISTS

Implementation of essential drug lists (EDLs) has been quite effective in public primary health care and across all insurance-based sectors, but have met with little coordinated and effective use in the private sector. While there is a series of different EDLs in use, there is no coordinated list for the private sector (outside insurance schemes). The different lists in use include:

- National Essential Drugs List (*Daftar Obat Essensial Nasional* or DOEN) ⁹
- A list of medicines and formulations permitted for use in Public Health Facilities
- ASKES – Social Insurance
- DPHO – *daftar dan plafon harga obat* – a list of permitted medicines and prices

8.3.3 PHARMACEUTICAL SECTOR REGULATION

There is a wide range of regulations governing the pharmaceutical sector, but the split of responsibilities for enforcement of regulations which occurred during decentralization has both diffused private sector regulation enforcement and introduced variation among different areas of the country. There is a range of laws, ministerial decrees, and operating instructions which concern pharmaceutical regulation, with special conditions for poisons, narcotics and psychotropic medicines, and all modified by overarching public health, decentralizing regulations, producing a highly complex and confusing situation.

In general regulation of the pharmaceutical sector occurs at two levels:

- *Badan POM* (<http://www.pom.go.id/>) – the national agency for drug and food control – was established in 2001 as an independent agency and is responsible for:
 - Legislation, regulation and standardization;
 - Licensing and certification of pharmaceutical industries – manufacture based on Good Manufacturing Practices and wholesale distribution;

⁹ http://www.binfar.depkes.go.id/def_menu.php

- Pre-market evaluation of products;
 - Produce registration;
 - Post-marketing vigilance including product sampling and laboratory testing, inspection of production and distribution facilities, investigation and law enforcement;
 - Pre-audit and post-audit of product advertisement and promotion;
 - Research on drug and food policies implementation; and
 - Public communication, information and education including public warning.
- District and city governments are responsible for licensing and monitoring of retail pharmacy outlets and drugstores and for enforcing regulations governing prescribing and dispensing.

Badan POM retains responsibility for pharmaco-vigilance and has authority to inspect and test products sold in the distribution chain, but has no direct authority over local governments. Decentralization therefore has resulted in a somewhat variable and confused enforcement environment.

Overall, Indonesia has reasonable and improving regulatory controls for product quality with a relatively moderate rate of counterfeit and fake medicines at around 25% by value of the market (approximately 5% by volume). However, there may be cause for concern as more recent reports suggest that this could now be as high as 40% by value (approximately 8% by volume). This situation warrants further investigation and possible effective action to strengthen regulatory functions if confidence in the quality of all medicines in the country is to be maintained.

There is evidence that products are leaking from the legal distribution chain into illicit outlets, together with evidence that in some cases there is unsafe adulteration of products in this process (e.g. reformulation of products that combine traditional medicines with APIs of prescription drugs, which are then sold as traditional medicines with lighter regulatory requirements). *Badan POM* plans to put in place more stringent requirements for inspection of distributors and a systematic process for issuing warnings, follow-up and sanctions as part of a planned effort over the next five years.

There have been recent pharmaceutical regulations which have the potential for long-term impact on the industry and especially for foreign operators in Indonesia. At this time the exact interpretation and likely degree of enforcement remains unclear with confusion within the industry being perhaps the only certain element.¹⁰

8.3.4 PUBLIC- PRIVATE INTERACTIONS

The Ministry of Health has devised a potentially useful program for ensuring the availability of low cost, good quality generic medicines in the private sector. In the 1990s, the Ministry of Health developed a generic drug program (*Obat Generik Berlogo* or OGB) to promote affordable unbranded generics in the private sector. These quality-assured, unbranded generics, almost entirely produced by the state-owned enterprises, carry a logo that was promoted to the public as a symbol of

¹⁰ For details, refer to the following articles: <http://www.ft.com/cms/s/0/e70fd6dc-eb49-11dd-bb6e-0000779fd2ac.html> and <http://www.heradiani.com/2008/11/consumers-real-losers-in-pharma-wars.html>.

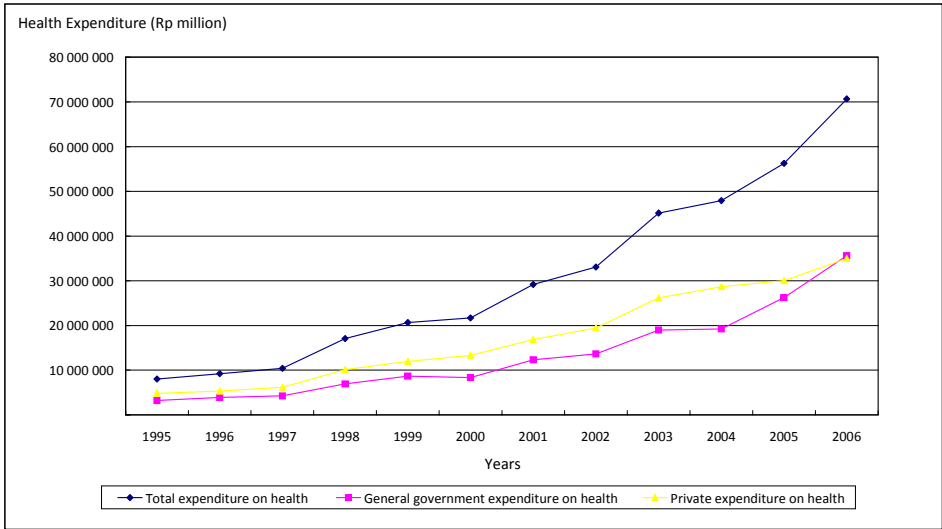
quality in the initial stages of the program. Around half of the DOEN EDL drugs are included in this program. There is a lack of reliable data on market share by volume, but the market share of unbranded, low priced generics has been rather static at around 10% by value. It would be important to understand if this program is achieving its full potential.

9. PRIVATE HEALTH CARE FINANCING AND EXPENDITURES

9.1 SOURCES OF HEALTH CARE FINANCING

The Indonesian government has made significant efforts to increase investment in health especially in the past year. Private investment was the major source of health care financing over the past decades. Based on WHO’s latest national health accounts (NHA), there has been a dramatic increase in government investment in health since 2000, from Rp 8.4 trillion to Rp 35.6 trillion in 2006, a more-than fourfold increase during this six-year period (Figure 7) (WHO, 2008). Public health spending increased from 38.5% of total health expenditure (THE) in 2000 to 50.4% in 2006, while financing from private sources, which accounted for 61.5% of THE in 2000, declined to 49.6% in 2006 – that is, the amount of general government health expenditure now surpasses that of private health expenditure. Among government expenditures, investment in social security has jumped from about 4.8% of total government health expenditure in 2004 to 20.1% in 2006. This dramatic increase is probably due to the health insurance scheme for the poor (*Askeskin*), launched in 2005.

FIGURE 7: TRENDS IN INDONESIA HEALTH EXPENDITURE, 1995-2006



Even with increased public spending on health, the private health sector plays an important role in supplying health services to all populations, including the poor. In addition, there is significant potential for private businesses to expand their health investment through prepaid health plans. Almost half of THE in Indonesia comes from private sources, primarily out-of-pocket payments including user fees (66.3%), with a small proportion from private prepaid health care

plans (9.7%), and the rest spent by NGOs and private firms (Table 3).¹¹ If the social insurance program (*Jamsostek*) could indeed cover the majority of its intended target population, THE (and demand for health care services) could be increased dramatically, and out-of-pocket payments reduced significantly.

TABLE 3: TRENDS IN INDONESIA'S NHA, 2000-2006

Indicator	2000	2001	2002	2003	2004	2005	2006
Total expenditure on health (THE) as % of GDP	1.7	1.8	1.8	2.2	2.1	2.1	2.2
Per capita THE (US\$ at average exchange rate)	12	13	16	24	24	26	34
General government expenditure on health (GGHE) as % of THE	38.5	42.2	41.2	42	40.1	46.6	50.4
Social security expenditure on health as % of GGHE	7.4	10.5	3.4	4.8	4.8	20.7	20.1
Private expenditure on health (PvtHE) as % of THE	61.5	57.8	58.8	58	59.9	53.4	49.6
Out-of-pocket (OOP) expenditure as % of PvtHE	63.3	66.1	65.8	69.7	69.2	66.4	66.3
Private prepaid plans as % of PvtHE	8.4	7.1	9.2	9.1	8.7	9.7	9.7 ¹²

Source: WHO, 2008

Total health expenditure as a percentage of GDP and per capita total health expenditure are still low. Although the government of Indonesia has increased public health spending in recent years, the country's THE is still very low compared with other comparable income countries. Indonesia spends 2.2% of GDP on health, while other countries with similar per capita incomes spend at least 3-4% of GDP on health (Table 4) (Government of Indonesia et al, 2008).

TABLE 4: NHA IN COMPARABLE INCOME COUNTRIES

Location	Total expenditure on health (THE) as % of GDP	Per capita THE at average exchange rate (US\$)	General government expenditure on health (GGHE) as % of THE	Social security expenditure on health as % of GGHE	Private expenditure on health (PvtHE) as % of THE	Out-of-pocket (OOP) expenditure as % of PvtHE	Private prepaid plans as % of PvtHE
Indonesia	2.2	34	50.4	20.1	49.6	66.3	9.7
Thailand	3.5	113	64.4	12.4	35.6	76.6	15.6
Cambodia	6	30	26.1	0	73.9	84.4	0
China	4.5	90	42.0	54.1	58	92.9	6.3
Lao People's Democratic Republic	3.6	22	20.8	12.9	79.2	93.5	0.5
Malaysia	4.3	255	45.2	0.8	54.8	73.3	14.8
Philippines	3.3	45	39.6	27.2	60.4	80.2	10.6
Samoa	4.9	120	81.0	1.1	19	79	0
Viet Nam	6.6	46	32.4	38.8	67.6	89.5	2.5

Source: WHO, NHA

¹¹ NHA data on private sector expenditures presented by WHO in July 2008 differ from previous NHA data cited in the World Bank's Investing in Indonesia's Health report (World Bank, 2008) and seem to have been updated in 2007 for 2006 and prior years. Data cited in the World Bank report estimated private health expenditures to be 65% of total health expenditures, with out-of-pocket payments comprising 74% of private sector expenditures.

¹² The remaining 24% of private expenditures comes from NGOs and private firms, but no specific figures are included in WHO's NHA figures of July 2008.

9.2 PRIVATE HEALTH SECTOR FINANCING

There is little information on the amount of funding that the private sector obtained from either the national level or facility level. A comprehensive analysis of health care financing should include the flow of funds from financing sources to financing agents (managers or programmers of health funds), to health care facilities, and to the beneficiaries. In particular, little information is available to estimate the flow from institutional payers to health care facilities, including private sector facilities. More comprehensive resource tracking and data analysis efforts are needed to understand the development and functioning of the private sector in the overall Indonesian health care system.

Funding of the private health sector comes from health insurance programs (both social health insurance and private health insurance), government service purchases, and individual out-of-pocket spending. Table 5 displays the major health financing sources and their allocation mechanisms to health care providers in Indonesia. Due to lack of data on health expenditure by function and by provider, we are not able to quantify the level of funding from each financing mechanism.

TABLE 5: HEALTH CARE FINANCING IN INDONESIA

Financing sources	Fund management agency	Beneficiary	Health providers	Payment mechanism
Public financing through general taxation	Government	Total population	Public providers	Budgets: direct investment/subsidy to health care providers
Public financing through general taxation	Government	Targeted population	Public providers / Private providers	Budgets/contract for specific health programs
Public financing through general taxation	<i>Askes</i>	Civil servants, military personnel, pensioners and their dependants	Public providers	Capitation for primary care Reimbursement of fees paid
Public financing through general taxation	<i>Askeskin</i>	Health insurance for the poor	Mostly public providers	Reimbursement of fees paid
Private financing: employer/employee contribution	<i>Jamsostek</i>	Private employees	Public providers / Private providers	Reimbursement of fees paid
Private financing: employer/employee contribution	JPKM (Community Medical Services Insurance)	Private employees	Public providers / Private providers	Negotiated contracts with registered providers
Private financing: community member contributions	<i>Dana Sehat</i> (social funding scheme)	Rural communities	Public providers	Reimbursement of fees paid
Private financing: employer/employee contribution	Private insurance (commercial)	Private employees	Private providers	Reimbursement of fees paid
Private financing: individuals income	Out-of-pocket payment	Total population	Mostly private providers	Fee-for-service

There is little information on how provider payment mechanisms currently being used in Indonesia – budget, capitation, contract, and fee-for-services – create different financial incentives that affect the behavior of facilities and providers. Better payment incentives could be effectively used, along with regulatory and administrative tools, to improve the performance of the private sector and could play a critical role in the development of public-private partnerships.

There is conflicting information about the price and quality of services in the private sector compared with the public sector. Additional investigation on price and quality issues could help decision-makers understand how to improve the performance of the delivery system in both the public and private sectors.

9.2.1 FUNDING FROM HEALTH INSURANCE

Although health insurance coverage is very low, it is an important funding source for the private sector. Based on the Indonesia Public Expenditure Review, health insurance coverage has started to increase remarkably, largely due to rapid development of the Askeskin health insurance scheme for the poor. However, health insurance coverage has been very low, only about 27% of the population, according to *Susenas* (household consumption and expenditure) data. If the target number of Askeskin, 76.4 million, is added in, a total of 95.1 million persons or 43% of the total population is estimated to have health insurance coverage, according to the International Labor Organization (ILO) (ILO, 2006). Other than Askes (*Asuransi Kesehatan Pegawai Negeri*), which generally purchases services from public health care facilities only, all other health insurance schemes allow beneficiaries to seek services from contracted providers, regardless of whether they are public or private facilities. To date, however, there is no accurate information to quantify how much insurance is utilized for services provided by private sector providers.

Askes is trying to include private family doctors as an alternative source of primary health care services for its enrollees. Askes has provided health insurance coverage for civil servants, military personnel, pensioners, and their dependants for almost 40 years. This mandatory scheme requires a contribution of 2% of basic wages from all eligible employees regardless of their marital or family status, topped off by a government contribution of 0.5% of the basic salary. According to the ILO, Askes currently covers 15.6 million people or 7% of the population (ILO, 2006). PT Askes, a state-owned company, has administered the scheme since 1992. Many Askes beneficiaries prefer services provided by private health facilities to services provided by the Askes provider network, which as noted above are provided primarily by public health facilities. Many beneficiaries (especially upper-income ones) pay out-of-pocket for services outside the network. *Susenas* household survey data showed that only about 42% of Askes members who had one symptom of illness sought care and only 21% of those used the public provider network that is covered by PT Askes (World Bank, 2008). Recently, Askes set a new policy that includes the Private Family Doctor as an alternative choice of primary health services for the enrollees. However, there is no detailed information on the use of funds of the Askes scheme, which makes it difficult to analyze how much funding from the scheme has flowed to the private health sector.

Askeskin is using private hospitals to provide in-patient services to the poor. Askeskin, implemented throughout the country since 2005, to achieve sustainable financing of health services for the poor, has been expanding rapidly. It combines health cards for the poor, grants based on capitation to *Puskesmas*, and reimbursement for third-class in-patient services. The target coverage of Askeskin program was 76.4 million in 2007. Under current regulations, private hospitals are required to provide 25% of beds to the poor to supplement public providers (Thabrany, 2003). In this case, private hospitals may receive government subsidies in the form of cash, building construction, or medical equipment.

Available data do not include information on government payments to *Askeskin* for their enrollees' use of public and private facilities.

Jamsostek (Jaminan Sosial Tenaga Kerja), the social health insurance scheme for private employees, allows beneficiaries to seek both public and private services. *Jamsostek* was established in 1992. It requires contributions of 3% (if one is single) and 6% (if married) of gross wages, paid entirely by the employer. However, participation in the scheme is not required, i.e., employers can “opt-out.” Employers that have provided health benefits for their employees or can purchase more generous health insurance are exempted from the scheme. As a result, the majority of employers choose to buy health insurance from insurance companies or *JPKM bapels* (a commercial health maintenance organization, or HMO) instead of *Jamsostek*. Currently *Jamsostek* covers 3.1 million people, less than 5% of the intended target population (ILO, 2006). The program allows beneficiaries to seek public as well as private care. For example, the in-patient services covered by the program are limited to second-class rooms in contracted public hospitals or third-class rooms in contracted private hospitals. Again, there is little accurate information on the use of funds of the *Jamsostek* program among public and private health facilities.

JPKM (Jaminan Pemeliharaan Kesehatan Masyarakat) is equivalent to a U.S. HMO. Private businesses are encouraged to develop *bapels*, which should provide comprehensive health services and quality assurance at approved facilities. The health providers are paid on a capitation payment basis. Currently, there are 67 private insurance companies and 22 licensed *JPKM bapels* selling health insurance and covering less than a half a million people in Indonesia, which is only about 0.7% of the population (World Bank, 2008).

9.2.2 FUNDING FROM GOVERNMENT SERVICE PURCHASES

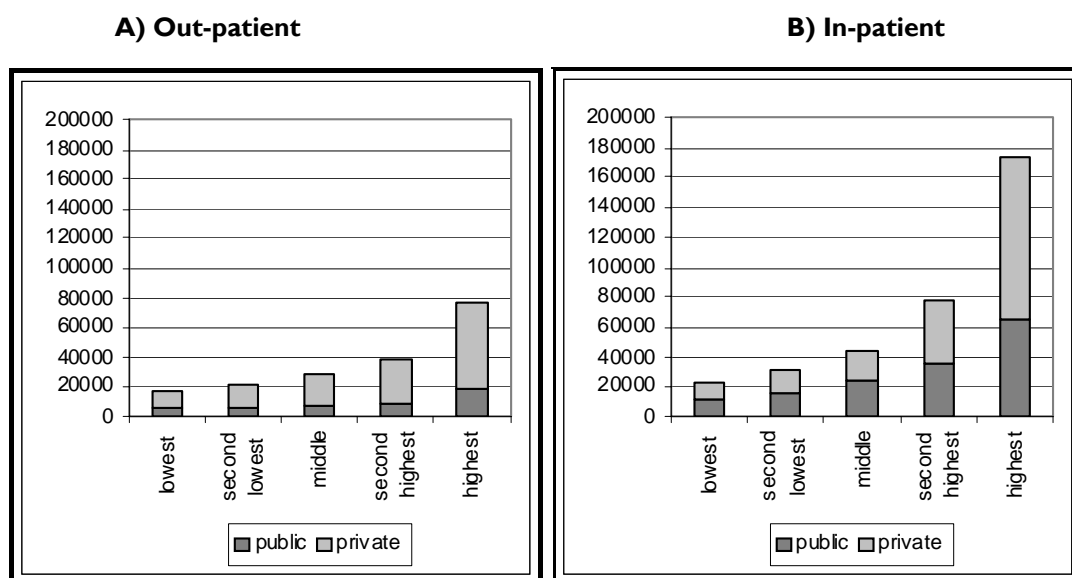
In addition to risk pooling and insurance mechanisms, there are other public financing mechanisms to mobilize the private health sector, through both the supply side and demand side, in the form of salary payments, allowances, vouchers, and reimbursement. A successful example of a financing mechanism to improve the provision of health care to underserved or vulnerable populations is the village midwives program. In Indonesia, the majority of maternity services are provided by midwives who practice in public and private sectors simultaneously. A recent study that analyzed midwives' income found that they obtain almost two-thirds of their income from private clinical practice and one-third from public sources, the latter composed of basic salary, top-up allowances, and public income from the *Askes* public insurance scheme (Ensor et al, 2009). Average income from public sources is US\$ 1,530, of which US\$ 1,232 comes from public basic salary, US\$ 141 from the top-up allowance, and US\$ 157 from insurance. The midwives were employed in various positions, such as civil servant (PNS), central limited-term contracts (PTT), and district government contracts (TKK). Their public income is largely influenced by the type of contract they have: Midwives employed as PNS receive about 50% more than PTT midwives, and 65% more than TKK midwives.

In addition to paying salaries, the government also purchased services directly for underserved or vulnerable populations, either by reimbursing the family for specified services or by providing the family a health certificate (voucher) giving them free access to health services. After the economic crisis, a safety net program was created to reimburse providers who provided services to indigent families (Ronsmans et al, 2001). For example, the local health office would reimburse a midwife for services provided to indigent patients upon receipt of a detailed description of the services the midwife rendered (Shrestha, 2007).

9.2.3 FUNDING FROM INDIVIDUAL OUT-OF-POCKET PAYMENTS

Out-of-pocket spending accounts for a significant proportion of THE Indonesia. Out-of-pocket expenditures come from not only the uninsured but also the insured, due to high co-payments and very limited benefits (World Bank, 2005). For example, Askes has very high co-payments and Jamsostek excludes coverage for catastrophic events. Out-of-pocket expenditure goes mostly to pharmaceuticals (World Bank, 2008). People’s first source of health care in the event of an illness is a private seller of pharmaceuticals, whom they pay out of pocket. Earlier analysis found that 73% of total household health expenditures went to services provided by private facilities in 2001. Figure 8 illustrates the average monthly health expenditures by facility and wealth quintile among those who utilized out-patient or in-patient services. It shows that even the poor population made most of their health expenditures in private facilities; 68% and 51% of out-patient and in-patient health expenditures were spent in private facilities (Saadah et al, 2006). Another study also suggested that the private sectors provided 67% of all in-patient care (Ramesh and Wu, 2008). Since out-of-pocket payment goes from the individual patient directly to the provider, the quality and cost of services are less likely to be controlled due to information asymmetry and consumer vulnerability.

FIGURE 8: MONTHLY OUT-PATIENT EXPENDITURE BY FACILITY TYPE AND HOUSEHOLD WEALTH STATUS AMONG THOSE WHO UTILIZED OUT-PATIENT SERVICES (RUPIAH)



Source: SUSENAS 2001, cited from Saadah et al, 2006.

9.3 PRIVATE EXPENDITURES FOR PHARMACEUTICALS AND HEALTH PRODUCTS

Out-of-pocket expenditure is the main access method for pharmaceuticals on either volume or value estimates. Unfortunately, huge differences in the prices of medicines between generic and branded products complicate understanding of the pharmaceutical market. While some value estimates are available, relative volume estimates can often be little more than indicative (Table 6). However, due to the estimated sizes of the various segments, the overall picture is clear – out-of-pocket expenditure is the primary source of funding for pharmaceuticals and other health products. The current total national market for pharmaceuticals is estimated at around US\$ 12 per capita, with

around 10% by value provided by the public sector, equating to a market size of around US\$ 3 billion (Espicom Business Intelligence Ltd, 2008).

TABLE 6: ESTIMATED PHARMACEUTICAL EXPENDITURE BREAKDOWNS

Source	Value US \$	Value %	Estimated Volume %
Total Market	3,000,000,000		
Public			
Primary Health Care	330,000,000	10%	20%
Public Hospitals	360,000,000	12%	15%
Social Health Insurance schemes	340,000,000	11%	16%
Private			
Private			
Insurance	255,000,000	9%	7%
Out of pocket	1,715,000,000	59%	42%

With health sector decentralization and lack of reporting from districts to central level on pharmaceutical expenditures, it is difficult to determine the exact level of public sector funding for pharmaceuticals. However, in 2007, it was estimated that around 12,000 Rupiah (around US\$ 1.32) per capita was spent from all public sources on essential drug list (EDL) drugs for primary care. Almost half of this came from the central government budget. It has been estimated that this is equivalent to around 30% of volume of the essential medicines supply. Expenditure between districts varies widely and there are large geographical differences in spending levels.

When sick, around half of the population relies on self-treatment, most commonly from a private seller of pharmaceuticals. Pharmaceuticals are a large share of out-of-pocket spending. There are many traditional healers and unlicensed drug sellers, selling their services and products without any quality assurance to urban and rural poor people.

Around 50% of medical insurance costs are used to fund medicines, and insurance operators have been reasonably efficient in forcing cost-effective medicines use, including mandating use of generics and controlling drug expenditure. Greater use of medical insurance schemes could help to control expenditures on medicines by enforcing rational drug use and use of cheaper generic medicines.

10. CONCLUSIONS

In many ways, Indonesia is an ideal environment for further engaging participation of the private sector in delivering priority health services. The private sector is vibrant and active, Indonesians rely on private sector providers for a large proportion of their health services and products, and both the Indonesian government and donors are receptive to identifying new ways to collaborate with the private sector in achieving common health sector goals and priorities.

The desk review summarized what is currently known about private sector health in Indonesia. It also revealed a number of areas where additional information about the private sector would be useful in contemplating how best to harness private sector resources to improve health outcomes, such as:

- More comprehensive data on the number and location of health workers engaging in private sector health through dual practice or exclusively in the private sector in order to more accurately assess geographic access and inequities;
- Market share and income generated by private providers to assess the potential for forming networks and introducing performance-based financing mechanisms;
- Fee levels and pricing of services in both public and private sectors to better understand financial incentives facing providers and financial barriers that may be affecting households;
- Consumer health seeking behavior in selecting public or private health care providers based on quality, price, and availability;
- Quality of pharmaceuticals on the market, including the availability of fake and counterfeit medicines, given the high levels of self-treatment; and
- Resource tracking and data analysis of private health care financing, including the flow of funds from financing sources to financing agents, to health care facilities, and to the beneficiaries.

The desk review is intended to serve as a useful foundation to help Indonesian counterparts to identify key issues, challenges, and opportunities in working with the private health sector. It is hoped that the review document also will aid stakeholders in exploring a number of options to address the key issues that have been identified, in order to further encourage and manage private sector participation in the delivery of health care services and products for improved health outcomes in Indonesia.

ANNEX A: LIST OF PERSONS CONTACTED

1. Dr. Gita Maya, Staff, Directorate for Community Health, Ministry of Health
2. Habullah Thrabany, Professor, University of Indonesia Faculty of Public Health
3. Prof. Dr. Farid Anfasa Moeloek, Chair, Indonesia Medical Council (former Minister of Health)
4. Dr. Firman Lubis, Director of Yayasan Kusumua Buana, Professor at University of Indonesia School of Public Health and Medical Faculty
5. Dr. Yeni, Head of the Indonesian Nurses Association, Faculty of Nursing, University of Indonesia
6. Asmuyeni Muchtar, Indonesian Midwifery Association
7. Taslima Lazarus, Country Coordinator, Indonesia Business Coalition on AIDS
8. Danny Yatim, Independent Consultant for Health and HIV/AIDS
9. Dra Junarsih, Sekretaris Jenderal, Indonesian Nursing Association

ANNEX B: LIST OF REGULATIONS AND LAWS GOVERNING MEDICAL PROVIDERS

Name	Year	Main Function
National Constitution	1945	Guarantees “the right to health” as a realization of general welfare
Presidential Instruction	1974	Mandated that all new medical graduates serve in under-served rural districts for 1-3 years
Presidential Regulation No. 37	1991	Regulates the recruitment of doctors as temporary employees.
Health Act 23	1992	Regulates health personnel training and education as conducted by government and private sector institutions.
Government Rule No. 23	1996	Regulates type of health personnel
Ministry of Health Regulation No. 916	1997	Regulates the licensing of Medical Practitioners
Ministry of Health Decree No. 1239	2000	Nurse’s Registration and Practice regulations
Ministry of Health Regulation No. 1540	2002	Regulates the placement of health doctors during the service period
Ministry of Education Act No. 20	2003	Develops standards for higher education for medical professionals
Medical Practitioner Act No. 29	2004	Regulates that every doctor and dentist has to ensure quality services and cost containment.
Social Security Law No. 40	2004	Mandates the nature of social security contributions and services
Local Government Authority Act No. 32	2004	Provides each local government the authority to recruit their own medical personnel as local government authority
Ministry of Health Regulation No. 1419	2005	Regulates the conduct of medical and dental practice

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