DISCUSSION PAPER

The Indonesia Private Health Sector: Opportunities for Reform An Analysis of Obstacles and Constraints to Growth

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Note

This report was prepared by James Marzolf during 2001, through a document review and a consultative process involving a wide range of public and private health sector stakeholders, and edited by David Greene, under the leadership of Samuel S. Lieberman, Lead Human Development Specialist, and in Coordination with Bernard Drum, Lead Private Sector Specialist, of the World Bank Office Jakarta. The paper is intended as a reference and discussion paper to assist analysis and policy development, with a view to improving the performance of the private health sector and its contribution to health improvement and economic development in Indonesia. The views expressed are those of the author, and do not necessarily reflect official views of the World Bank or the Government of Indonesia. Comments and suggestions on the issues and recommendations presented in the paper are welcome and should be directed to Janet Hohnen, Human Development Sector Coordinator, World Bank Office, Jakarta, Jakarta Stock Exchange Building, Tower 2 12th Floor, Jl. Jenderal Sudirman Kav.52-53, Jakarta12190. Phone (62-21) 52993035, Fax (62-21) 52993111. Email: Jhohnen@worldbank.org

Executive Summary

The Indonesian health care system is inadequate to meet the needs of the country's population. The country's health indicators are low in comparison those of other ASEAN countries and public health care resources are not sufficient. Growth of medical services has not kept pace with population growth or demographic changes over the last decade and Indonesia has relatively fewer healthcare assets now than it did in 1990. Decentralization, which began in 2001, will stretch these funds even more. Unless major changes can be effected and more emphasis is given to private healthcare, the adequacy of the system will continue to decline and the hard won gains in health status of the last three decades will be jeopardized. There is a need for new strategies and approaches to meet the healthcare needs of the Indonesian people in which private health care will play a larger role.

The difference between public and private provision of healthcare services and products in Indonesia is not as clear as might be imagined. The majority of healthcare professionals engage in the delivery of both public and private services. Some public facilities have been used to deliver private services and some state owned enterprises are incorporated as private firms even though the sole shareholder is the government. Even the poorest groups report some expenditure for private health care. However, there is no system to collect these data (i.e. no national health accounts system) and there are significant differences between official estimates and reported household healthcare expenditures. Pro-private health sector policies, including some deregulation, are evolving. The MOH adopted a "zero growth" policy for public heath care in anticipation of more rapid growth of private health care. This, combined with the strong, pre-crisis economic growth prompted an increase of up to 70% in some subsectors of health that were opened to private investment. In fact, public health care did not grow appreciably in the 1990's and most of the growth there was, was in the private health sector. The MOH is envisioned as becoming more of a regulatory body than a direct service provider with the services it does provide targeted to the vulnerable groups.

MOH has functioned as a social insurance system, establishing a nationwide network of providers available to all citizens. The fees charged at these facilities ranging from 12%-24% of the actual cost of the services can be viewed as a co-payment of sorts. When faced with the alternative of purchasing private insurance and still making co-payments, there is an incentive to stay with the public "co-payment only" scheme even though it provides a lower level of quality.

Private health expenditures amounted to 76% to 83% of total health care expenditures during the 1990s. Even the poorest economic classes spent most of their healthcare Rupiah in the private sector. Still, there were large disparities in access to healthcare across the income spectrum, and in expenditures. Analysis of utilization across economic classes indicates the primary barrier to access to health care is economic and that there are considerable unmet needs. Untargeted subsidies have resulted in inadequate funding for the poor and serve as a disincentive to the growth of private insurance or managed care. Private insurance and managed care membership account for less than 2% of the population. The contribution of private health care services to improving national health status has not been commensurate with

expenditures. There are indications of supplier-induced demand, moral hazard, market conduct problems, and inefficiency.

Hospital growth has not kept pace with the increase and aging of the population. The ratio of hospital beds to population has declined steadily over the past 11 years and over 120 new hospitals would now be needed to achieve the 1991 ratio. Existing public hospitals have not been well maintained and much of the infrastructure has deteriorated. Development of private hospitals has been limited by lack of risk pooling, insufficient investment incentives, unfavorable taxation, competition from subsidized public hospitals, and the limited population able to pay for uninsured hospital services.

Since 1992, doctors have been permitted to fulfill their government obligation through 2-3 years of government service as "Contract Doctors". After their period of service, they could seek a government job, but, due to the zero growth policy, few were actually available. As a result from 1995 onward, an increasing number of physicians had to seek employment in the private health sector. It is reported that there is considerable unemployment in the health sector except for dentists, pharmacists, and medical specialists. Despite significant numbers of unemployed or under employed healthcare personnel, the regional disparities in public healthcare personnel deployment increased in virtually all categories during the 1993-99 period.

Expansion of private ambulatory care facilities has been three times that of public health centers but even so only slightly exceeded population growth during the 1990's. Government health centers and health posts have not been well maintained or supplied. Their low quality of service results in low utilization rates even at highly subsidized prices. The growth of private health clinics and ambulatory care facilities has been limited by restrictions on foreign investment, lack of credit for establishment of small and medium clinics, subsidized competition from after hours private practice of public health personnel and untargeted subsidies at the government health centers.

The distribution of public health facilities and personnel is closely correlated with the 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. As a result, less affluent areas have less access to both public and private services.

Health care training institutes have continued to produce health care professionals, despite the limited employment opportunities due to the low growth rate of the health sector. Training institutions have suffered from chronic under funding, reducing their capacity to produce quality healthcare personnel.

Restrictions on employment of foreign healthcare personnel combined with the limited output of specialists by domestic healthcare training institutes and the low number of specialized nurses and physicians has resulted in significant deficiencies. This and the poor state of health system infrastructure have contributed to an increase in the export of patients and flow of healthcare expenditures out of the country. In 2000, this was estimated to involve 160,000

patients and over \$300 million dollars, which exceeded the total public healthcare budget for that year.

Health care is taxed as if it were a luxury. Medical benefits and insurance premiums are not tax deductible. Drugs (with the exception of those administered to inpatients) are subject to value added tax. Health service organizations (hospitals, clinics, pharmacies, etc.) are taxed at the usual high corporate rates, which currently exceed those of Sweden. Taxes raise healthcare costs an average of 18%-20%, yet the sector is so underdeveloped that if all taxes due were collected, they would total less than 1% of government revenues.

There seems to be no rational pattern of tariffs on health related products. Import duties and tariffs are 5% on the majority of pharmaceutical constituents, disposables, and equipment, the same on a number of luxury goods. There are protective tariffs of 10% for some domestically produced pharmaceuticals. Basic medical equipment such as surgical instruments, autoclaves, hospital beds, and microscopes are subject to the 5% import tariff and 10% value added tax.

Regulations on foreign investment limit foreign investment in the health sector to hospitals of 200 beds or more in major urban areas, medical check up clinics, new laboratories, pharmaceutical manufacturing, management services and managed care. Investors are subject to 30% corporate taxation, a 30% capital gains tax, and numerous other taxes (value added, billboard, parking, rental, etc.) In addition, many investors are required to provide some services to the poor free of charge or at reduced rates. As a result, investment in healthcare accounted for less than 1% of the total private investment in Indonesia over the last decade.

There is a lack of a unifying approach and priorities to private healthcare. The private sector is the most likely source of growth of the health care, yet policy remains largely focused on the public system. The under-funded public system is stretched thin, the private health sector is not filling the gap, and neither system works all that well. It is estimated that over US\$ 3 billion would be required to refurbish, renovate, and reequip the public health system. Considering the current state of the Indonesian economy, it is unlikely that such funding will be forthcoming. Further, the MOH has made a commitment to target available funds to curative treatment for the poor and on "public goods". The transition from focusing on infectious diseases to an emphasis on chronic illnesses associated with an aging population calls for a significantly different profile of facilities, treatments, and personnel. Current allocations for public health care are insufficient to implement this strategy. This transition, combined with population growth and aging of the population would require over US\$ 11.6 billion in healthcare investment over the next 15 years to provide minimally adequate services to the population.

The health care reform efforts of the 1990's have not delivered the hoped for results. The government has not substantially increased its regulatory role, public subsidies remain untargeted, the health sector workforce is not deployed efficiently or equitably, and the public and private delivery systems, for different reasons, are dysfunctional. MOH officials are aware of the problem and have evidenced an intent to do something about it. Consultations with leading private health sector representatives also revealed a felt need for pro-growth policies.

Both parties felt a more effective interface between the MOH and the private health sector was essential. Thus, there would seem to be the basic ingredients for public/private collaboration.

Population growth and demographic change are the fundamental factors affecting demand for medical services. The classic "epidemiological transition" comprising a decline in the rates of infectious diseases and an increase of the so-called chronic lifestyle diseases has been underway in Indonesia for some time. Even with zero inflation and stable medical services costs, the total health expenditures needed in 2005 will be at least 45% higher.

The total cost of rehabilitating and expanding the health sector is estimated to be \$ US 11.6 billion (\$US 3 billion for rehabilitation of the public system, US \$3.4 billion for new hospitals, US \$2.7 billion dollars for new clinics, US \$2.5 billion for insurance programs) over the next 15 years. Given the current state of the economy, the allocation such an amount of public funds to the health sector over the next 15 years is not realistic. The alternative is to increase the role for the private sector in both delivery and financing of healthcare in Indonesia.

A fundamental change in the orientation and perspective of the MOH is required involving a more global and comprehensive view of the needs and issues of the entire healthcare system both public and private. Public subsidies for the poor and vulnerable populations should be combined with tariff increases for the non-poor to stimulate the insurance and managed care markets. By paying full costs for the poor, the requirement for private hospitals to offer subsidized beds for the poor could be eliminated thereby increasing hospital financial viability and capacity to attract investment. By accelerating the entry of foreign health professionals, patient exports could be diminished and millions of dollars retained in Indonesia.

MOH should establish a unit within its organization that deals with the private health sector issues. The private sector should establish a counterpart entity to engage the MOH unit in dialogue, policy development, and joint planning. Both sides will need assistance and technical support and initial financing. Here there may be a significant role for international development agencies with the institutional depth in finance, investment policy, and private sector development

Public subsidies could be used to purchase insurance or managed care coverage for the poor, thereby enlisting the private health sector in the delivery of pro-poor benefits. The infrastructure needs of the public sector could be addressed through innovative approaches designed to re-capitalize and refurbish public facilities via joint ventures, privatization or long-term leases. Import and value added taxes on medical equipment and supplies could be eliminated and a tax credit system could be instituted in which premiums for insurance or managed care could either be deducted from income or receive a tax credit. This would provide an incentive to those segments of society that need them most to join risk pools. Investment in healthcare could be further stimulated by a package of incentives that not only makes healthcare competitive in comparison with other sectors but also directs investment into areas of the greatest need (i.e. clinic development, geriatrics, health insurance, etc.) Encouragement and support could be given to the pharmaceutical sector in the form of the development of an aggressive export campaign, thus, reducing foreign exchange risk while utilizing dormant production capacity, gaining economies of scale, and serving as an important export resource for Indonesia.

Health professions training and education could be 'internationalized' through investment, multinational faculties, and "twinning" with foreign institutions of repute. Not only would the capacity of Indonesian healthcare professionals to compete in an era of globalization be increased, but an influx of foreign students could occur as well

Recommendations

The report recommends the following actions to initiate the changes needed in Indonesia's private health sector:

Near term measures

- Encourage the development of a National Private Health Sector Advisory Council (NPHSAC) to foster private health sector growth.
- Reach a collaborative agreement between MOH and private health sector representative body specifying the objectives and the responsibilities of both parties and including the terms and conditions of mutual support in implementing the joint public/private agenda.
- Establish healthcare as a national priority by submitting the rationale for such a designation to the Executive Branch, the Parliament, and the Ministry of Finance.
- Develop a short term healthcare investment, tax, and import duty relief plan, steps to:
 - i. Agreement with MOF on a decree exempting health insurance or managed care benefit payments by the employer as taxable income to the employee;
 - ii. Designate the health sector as a priority investment area eligible for investment incentives under the provisions of National Regulations;
 - iii. Secure a decree from the Ministry of Finance exempting health sector venture capital profits from capital gains taxes;
 - iv. Exempt pharmaceuticals, disposables, and rehabilitative services from VAT;
 - v. Obtain VAT exemption for medically related imports under provisions concerning strategic materials; and
 - vi. Apply to the Department of Customs and Excise for accelerated import tariff reduction on healthcare related items.
 - Carry out economic assessment of current MOH initiatives such as the conversion of hospitals to *Perjans*; introduction of compulsory JPKM managed care, and the proposed health fund grants system to ascertain the impact on development of the private public and health sectors.
 - Review national health priorities in the light of the immediate and emerging needs to identify the major areas of deficiency and determine which of these priority areas the public sector will be unable to address within its budgetary or span of control limitations.
- Review current healthcare investment incentives market conditions to determine the potential for private sector involvement and craft policies that channel investment into priority areas

- i. Abolish of the 10%-20% indigent bed requirement on hospitals and elimination of the 200 plus bed requirement and the geographic limitations on foreign investment.
- ii. Eliminate the prohibition on foreign investment in medical, dental, and specialist clinics.
- iii. Eliminate the prohibition on foreign investment in existing medical laboratories.

Longer-term Actions

- Based on a comprehensive assessment of regional healthcare needs and in consultation with district and provincial governments develop long- range development plan for the health sector. This plan would identify the areas where private health sector a) could compete in the market, b) could play an important role with sufficient and proper incentives and c) where healthcare service delivery must remain, for the time being, the responsibility of the government.
- Develop the capabilities of the central MOH to assist the regions in establishing private health sector development plans.
- Assess the regulations governing the transfer of assets to the regions under decentralization and the statutes governing the disposition of those assets. Secure additional tax regulation amendments anticipated to require a longer time period to effect including:
 - i. Extension of health insurance and managed care benefit exemptions from employees only to individuals and non-employer entities such as associations, health insurance and purchasing cooperatives.
 - ii. Introduction of a tax credit program to provide incentives to join risk pools
- Review healthcare workforce policies with three objectives.
 - i. Elimination of the dual or multiple practices of public providers by revision of the compensation system.
 - ii. Identification of the areas of over supply and shortage.
- iii. Evaluation of the need to open the health sector to foreign health workers
- Evaluate potential roles for the private health sector in healthcare financing and service delivery for the poor.
- Intensify efforts to eliminate trade restrictions in the generic drug market and in government drug procurement policies.
- Evaluate strategic options for increasing pharmaceutical exports and harmonizing Indonesia's
 Good Manufacturing Practices (GMP) with those of developed countries

Glossary

AFTA : Asian Free Trade Agreement

Askes : Parastatal health insurance plan for civil servants

BKPM : National Investment Coordinating Board

BUMN : State Owned Enterprise

Contract doctor: Postgraduate non-civil service doctor 2-3 year non-renewable contract

DAU : General allocation grant under decentralization

DPR : The Indonesian Parliament **GOI** : Government of Indonesia

ICW : Colonial Dutch law requiring remittance of all public revenues

Jamsostek : Parastatal benefits program for formal sector workers
JPKM : Managed Health Organization licensed by the MOH

JPS : Social Safety Net (General)
JPS-BK : Social Safety Net (Health)
MOF : Ministry of Finance
MOH : Ministry of Health
MOHA : Ministry of Home Affairs

NPHSAC : National Private Health Sector Advisory Council (proposed)

PCD : Post-Contract Doctor

Perjan: State owned company, assets part of government propertyPerum: State owned company, second stage of developmentPMA: Foreign Capitalized Company under BKPM authorityPMDN: Domestically Capitalized Companies under BKPM authorityPOM: Indonesian Food and Drug Regulatory Agency (now BPOM)

Posyandu : Health post

PP : Abbreviation for National Regulation

PPH : Income Tax
PPN/VAT : Value Added Tax
PRHS : Private health sector

PTT : Temporary contract healthcare employee of the government

Puskesmas: Government health centerSOE: State Owned Enterprise

Susenas : National Socio-economic Survey conducted annually Swadana : National government hospital autonomy strategy

UU : Abbreviation for National LawWTO : World Trade Organization

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I. Introduction

Indonesia's health sector has been chronically under funded and is underdeveloped. The input and outcome indicators of Indonesia's health sector lag behind most other national development indicators and are low in comparison to Indonesia's ASEAN peers. Standard measures such as hospital beds per thousand, ratios of clinics, doctors, and nurses to population are low compared to Malaysia, Thailand, and Singapore. Indonesia simply does not have the healthcare assets needed for a nation of over 200 million people. The continued weakness of the economy in Indonesia has prompted even more austere public funding for healthcare. Decentralization, which began in 2001, will stretch these funds even more. There is a need for new strategies and approaches to meet the healthcare needs of the Indonesian people, in which private health care will play a larger role.

Under the current conditions of weak national economic performance, the GOI is unable to rehabilitate the existing public healthcare system, let alone fund needed expansion. It understands that it must encourage increased private sector investment and service delivery. The private health sector experienced little growth prior to the 1990's, when policy began to shift toward greater reliance on private health care. The MOH instituted "zero growth" policy for public hospitals. This, combined with the strong, pre-crisis economic growth prompted an increase of up to 70% in some sub-sectors of health that were opened to private investment.

However, there is little institutional capacity to identify the means of fostering private health sector growth. A systematic analysis is needed of the constraints to and potential for growth of private health sector growth. This report is intended as a contribution to assessing the private health sector identifying the major obstacles and constraints to its growth; it is divided into four parts.

- Evaluation of the status of the healthcare system, the pattern of private health sector growth in the 1990's, and its relevance for the total system.
- Examination and quantification of the factors affecting future healthcare needs
- Assessment of the regulatory, functional, and structural constraints to expansion and improved functioning of the public and the private health sectors.
- Development of recommendations to provide a starting point and a core agenda for immediate consideration.

The private health care sector must be viewed in the overall context, including the interaction of public and private systems in terms of population served, competition, and personnel. Since the characteristics and performance of the public sector are relatively well documented, the primary focus will be on the private health sector.

II Essential Background

The Indonesian government has a political commitment to provide basic healthcare for the entire population. Before the 1990's, Indonesia had made significant gains in almost all standard measures of national health status. During the late 1970's and 1980's there was a significant expansion of facilities, including hospitals, health centers, health posts, and regional pharmaceutical depots. Infant and maternal mortality rates dropped, contraceptive use increased, population growth declined, and life expectancy rose. This effort carried out with limited resources and under challenging geographical conditions resulted in increased access to modern medical services even in remote areas. However, the expanded network of facilities and personnel had to be maintained with a very limited portion of the total government budget. This limited the MOH's capacity to respond to new challenges.

With the oil and monetary crises of the 1980's it was clear that the public system could not continue to expand to match population growth and healthcare demand. This prompted a wave of healthcare reform, reflected in the National Development Guidelines (GBHN) and the Fourth and Fifth Five-Year Plans (*Repelita*). New priorities were developed, focusing on increasing quality of services, reform of the financing system, and an increased role for the private health sector. The pharmaceutical sector and later the hospital sector were deregulated, permitting not only domestic private investment but also foreign investment. A healthcare financing strategy, DUKM, was established focusing on prevention and cost control. The Ministry of Health initiated a public hospital reform effort, a national generic drug policy, and a Rational Drug Use strategy in the late 1980's. These measures were designed to allow the MOH and the public healthcare system to focus more on public goods, prevention and promotion, and regulation, rather than curative care provision, which was increasingly to be provided by the private sector

A DUKM financing system and cost recovery strategy in the public hospitals were intended to permit the MOH to target its limited budget on critical national healthcare priorities and on the most vulnerable segments of society (poor, young children, etc.) The pharmaceutical policies were designed to increase production capacity, reduce overall drug costs, and increase clinical efficacy in their use. The total package of reforms was called the Integrated Healthcare Reform Strategy (reformasi terpadu) and the prospects for reform and its anticipated benefits looked promising. Thus, Indonesia entered the decade of the 1990's with a full healthcare reform agenda.

III. Anatomy of the Private Health Sector

Over the past two decades the private health sector has grown and played an increasingly important role in the financing and delivery of healthcare services. However, information about the Indonesian private health sector is limited and there has been little systematic collection of data on the private health sector.

The difference between public and private provision of healthcare services and products in Indonesia is not so clear. The majority of healthcare professionals engage in the delivery of both public and private services. Some public facilities have been used to deliver private

services and some state owned enterprises are incorporated as private firms even though the sole shareholder is the government. For purposes of this paper, the private health sector is defined, in terms of services and products, as those services and products delivered in non-government facilities or produced by non-government organizations. In terms of purchases, it is defined as services and products purchased with non-public funds from whatever source.

A. Private Purchase of Healthcare Services

Sequential national surveys such as the *Susenas* indicate that even the poorest groups report some expenditure for private health care. However, there is no system to collect these data (i.e. no national health accounts system) and there are significant differences between official estimates and reported household healthcare expenditures.

An effort was made in 1990 to measure private health expenditures. It was determined that in 1988 approximately 70% of total healthcare expenditures were private and 30% were public. In subsequent years estimates of total healthcare expenditures were made by assuming that the 70:30 ratio prevailed. However, there is evidence that during 1990-97 private expenditures for health more than tripled in nominal terms, exceeding growth of personal income by more than 50%. (Table 1)

Table 1: Nominal Total and Private Health Expenditures 1990-97 (Currencies in billions)

Year	Total Rp	Private Rp	Private/Total	Total \$	Private \$	Rp/\$US
1990/91	5,206	3,958	76%	\$2.77	\$2.10	1,882
1991/92	6,403	4,872	76%	\$3.24	\$2.47	1,976
1992/93	7,778	5,797	75%	\$3.80	\$2.83	2,049
1993/94	9,365	7,159	76%	\$4.45	\$3.40	2,106
1994/95	11,704	9,179	78%	\$5.21	\$4.09	2,247
1995/96	14,304	11,458	80%	\$6.07	\$4.86	2,358
1996/97	15,513	12,112	78%	\$6.35	\$4.96	2,441

The breakdown of these expenditures by source may be estimated by aggregating of out-of-pocket (OOP) expenditures from household surveys with revenue data from the major state owned medical benefits schemes (*Askes, Jamsostek*), private insurance, and employer benefits surveys. Roughly, OOP expenditures account for 72% of all private expenditures and third party payers for the balance. *Askes and Jamsostek* dominated the third party payer segment with 39.4% followed by employer provided health benefits with 34%. Private health insurance and managed care accounted for less than 18% of the third party expenditures and of these JPKM managed care accounted for 1.2% and only 0.3% of total private expenditures.

The major categories of goods and services on which these funds are spend are hospital inpatient care, ambulatory care including general practice and specialty care, prescription drugs, self treatment (usually over the counter drugs), vitamins and medicinal herbs. The estimated

² Note: all estimates are based on expenditures for goods and services, capital investment is not included.

¹ "Public-Private Healthcare Spending in Indonesia", MOH/USAID report 1990

breakdown of these expenditures indicates a much higher relative expenditure for hospital care by third party payers than for those who pay out of pocket and relatively less for outpatient care. (Table 2) This may reflect the lowering of financial barriers to hospital care by risk pooling and also the fact that much of the health insurance sold in Indonesia consists of major medical and hospital plans. In total, hospital expenditures accounted for 33% of expenditures, which is comparable with other countries such as Germany (34.6%), South Korea (33.7%), or the UK $(42.2\%.)^3$

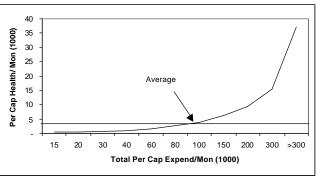
Table 2: Breakdown of Private Health Expenditures by Service/Product Category (1997) (Rupiah billions)

(Itupian om						
Category	Total	OOP	3rd Party	% total	% OOP	% 3rd party
Hospital	4,013	2,488	1,525	33%	29%	44%
Outpatient	3,716	2,746	970	31%	32%	28%
Prescript	2,924	1,980	944	24%	23%	27%
Self Rx	859	859	0	7%	10%	0%
Vitamins*	599	599	0	5%	7%	0%
Total	12,112	8,673	3,439			

^{*}Includes herbal tonics such as Jamu

Drugs accounted for another 36%, two thirds of which were prescription medications and the remainder for over the counter drugs (self treatment) and vitamins, supplements, minerals, and tradition Jamu and Chinese herbal remedies.

There are significant differences across economic classes in terms of total Fig. 1: Total OOP per Capita per Month Health Expenditures (1997) OOP healthcare expenditures and the relative amounts spent on various classes of products and services. In 1997, the total healthcare expenditures per capita per month varied from the highest to lowest total expenditure strata by a factor of over 90 and the highest expenditure strata and the national average by a factor of over 10.4 (Figure 1) In addition, the percentage of total expenditures spent on healthcare



increased steadily from the lowest (1.2 %) to highest (2.9%) expenditure groups.

The top 20% in Indonesian income earners account for 54% of total OOP expenditures whereas the lowest 20% of the population is responsible for only 5%. Even the least affluent classes purchase some private health sector goods and services. As a percentage of total health expenditures by group, private expenditures range from 73% to 93% across expenditure groups from lowest to highest categories with an average of 80%. The more affluent classes spend

³ OECD Health Data 1998

⁴ Susenas 1997: Total out of pocket health expenditure per capita per month are plotted against total per capita expenditures per month

higher percentages on hospital care, private outpatient providers, and prescription drugs, whereas the less affluent groups spend larger percentages on self-care, public services and traditional medicine. (Table 3)

Table 3: Percentage of Total OOP Healthcare Expenditures by Category (1997)

									2 () .	,	
Expenditure	1	2	3	4	5	6	7	8	9	10	11
Group											
Private Total	73%	78%	79%	81%	78%	80%	77%	82%	81%	86%	93%
Hospitals	0%	13%	1%	3%	6%	11%	11%	19%	21%	29%	28%
Outpatient	3%	33%	44%	43%	42%	40%	40%	36%	33%	32%	29%
Prescription	3%	0.6%	2%	3%	5%	6%	7%	11%	12%	14%	19%
Self Treatment	20%	20%	20%	20%	16%	13%	10%	8%	6%	5%	5%
Vitamins, Jamu	6%	7%	8%	9%	8%	7%	7%	6%	6%	5%	10%
Dukun (Healer)	5%	5%	4%	4%	3%	3%	2%	2%	2%	0.5%	1%

The 1990-97 period was one of fairly rapid growth of private health expenditures. The majority of health care expenditures were for private sector medical goods and services, and the proportion of expenditures for private medical care increased during this period. However, in 1997 the economic stability was shaken and, in 1998, Indonesia suffered an economic crash in which the Rupiah underwent 72% devaluation. Medical care costs, which had a significant dollar content, rose sharply. In response, Indonesians decreased their utilization of most healthcare services and increased their levels of self-treatment. Utilization of services, as indicated by contact rates, declined by 17%. The largest declines were for ambulatory care services and primary care with only minor reductions in hospital utilization.⁵ The largest declines in ambulatory care were for public services with smaller declines for private practices and clinics.⁶ Private expenditures for drugs shifted to over the counter medications as opposed to prescription drugs as people attempted to medicate themselves rather than seeking professional care.

By 2000, total private healthcare expenditures had rebounded to about 83% of their 1997 level. Private health expenditures rose as a percentage of GDP from 1.9 % in 1997 to 3.4% in 2000. People were not only beginning to spend more on healthcare but they were spending a larger portion of their income on health.

Apparently, Indonesians are becoming increasingly selective in their healthcare purchases and that perceived quality is important. Enrollment in private health insurance and managed care has increased 4.7 fold since 1991 and total membership has increased by 980,000 or 57% since 1998. This may indicate that Indonesians are beginning to understand the benefits of risk pooling. The professional associations report that private hospital and outpatient facilities are experiencing higher utilization but this is difficult to confirm. The MOH reports that the utilization of paying patients has increased in some hospitals that were refurbished and reequipped with donor funds, however in general, utilization of government facilities remains low.

⁶ Existing data is contradictory, some data show an increase in private outpatient utilization as opposed to a decline.

⁵ Saadan and Pradhan, World Bank, 1999

This supports the conclusion that expenditures and utilization of private sector ambulatory care facilities are increasing.

There has been an increasing exodus of patients from Indonesia seeking medical care in other countries. Estimates suggest that in 2000 as many as 160,000 such trips were made and that aggregate total expenditures exceeded US\$ \$300 million. This represents a significant portion of healthcare expenditures by residents of Indonesia and attests to lengths that Indonesians will go to obtain what is perceived as higher quality healthcare.

In summation, private purchases of healthcare services and products in Indonesia are dynamic, quite variable and, for the most part, unorganized. Their major characteristics include:

- They have always been the largest source of healthcare funding in Indonesia (70%-83%)
- They have increased more rapidly that public expenditures
- Private health expenditures have risen in terms of % of GDP
- Both public and private healthcare services are purchased by all economic classes
- Even the wealthiest classes avail themselves of government-subsidized services.
- They account for the majority of expenditures by all economic classes (73%-93%)
- They are perceived as being higher in quality.
- The majority of private expenditures for healthcare are out-of-pocket (70%-79%)
- The higher the level of income, the larger the percentage spent on healthcare.
- Private insurance and managed care responsible for less than 6% of the total private health expenditures.
- They have rebounded from the economic crisis more rapidly than the general economy.

B. Private Providers of Healthcare Services and Products

The pattern of private expenditures for healthcare demonstrates a strong preference for private services and goods. The question is, what do these consumers get for their money and what are the choices available? There is a wide variety of service providers and products in the private health sector in Indonesia including some that operate in non-health sectors such as financial services and education. Although there is no comprehensive portrait of the private health sector providers, sufficient information does exist to give some idea of what exists and what does not, at least qualitatively if not quantitatively. To the extent possible, the dynamics between the participants in terms of operational practices, motivations, quality, and competition will also be examined with the objective of providing a clearer context for that which follows.

1. Hospitals

In many developing countries, a disproportionate share of healthcare expenditures is spent on tertiary care rather than primary care and prevention. There are two strategies promoted in many developing countries to limit the financial impact of hospital services on public expenditures -- cost recovery in public hospitals and promotion of private provision of tertiary care. Indonesia has elected to do both.

Indonesian private hospitals are predominantly non-profit. A significant number are "faith based," while the balance consists mostly of non-denominational hospital foundations. Prior to the 1997 crisis, 97% of the private hospitals were non-profit institutions. For profit hospitals were primarily beated in major cities. In 1997, there was foreign investment in only two private hospitals although eleven additional applications had been filed for approval with the MOH and the Investment Coordinating Board. By the end of 1999, nine for-profit hospitals had been built as foreign joint ventures, all located in major urban centers and, consistent with the current investment regulations, had 200 beds or more.⁷

The market for private hospital services in Indonesia has four tiers. The first tier is for the most affluent, who, whenever possible, elect to go offshore to Singapore, Malaysia, Australia, and Thailand or even Europe and the United States, for medical services. Offshore hospital care probably accounts for about 25,000 to 30,000 cases per year, with a total outlay of between US\$ 125 and 150 million. The second tier consists of larger, better-equipped, domestic for-profit hospitals that offer a wide range of amenities. The third tier is a mixture of non-profits predominantly from the religious based hospital organizations. The fourth tier consists mostly of smaller non-denominational non-profits. The second tier competes primarily with offshore hospitals and the largest public facilities. The third and fourth tiers compete among themselves and with the better public hospitals, which offer subsidized services and often have more extensive diagnostic services.

Virtually all hospitals offer at least four classes of accommodation (VIP, first, second and third). All private hospitals are required to provide a percentage of their third class beds to the poor at a government-determined rate. Most other hospital charges are geared to the class of bed, that is, a patient in a second class bed pays more for the same lab test or x-ray than a third class patient. This results in an internal subsidy between the higher-class beds and the lower. In practice, patients are often "upgraded" in the class of bed because of "unavailability" of lower class beds. This is particularly true of surgical admissions for the day of surgery, as the surgical and anesthetic fees are geared to the class of bed.

Healthcare providers, including hospitals, are not allowed to advertise their services directly. Referrals by physicians from private clinics or public facilities are a major source of patients. It is not uncommon for specialists who work in both public and private facilities to refer patients with the ability to pay to a private facility, where they are likely to be treated by the same physician. The fees charged by these "visiting" specialists are usually determined by the specialist themselves with little input from the hospital management. Examination of private hospital claims data indicates that physician's fees are the largest single item, accounting for over 27% of the total bill, followed by drugs (26%); laboratory and diagnostic charges only account for 2.8% and 2.4% respectively. The hospital fees charged by physicians vary from below

⁷ Note: the Hospital Corporation of Australia (HCOA) hospital in Surabaya is a 200+ bed facility but is reported to have commissioned only 150 beds to date.

⁸ The balance of the offshore treatment mentioned in the expenditures section includes services such as physical check ups, specialist examinations, diagnostics and so forth.

⁹ If it is assumed that a minimum monthly total per capita expenditure in the range of \$850 - \$1,300 represents the floor on this market segment with an average cost per admission of \$5,000 and an admission rate of 10% per year ¹⁰ The percentages are 10% for for-profit hospitals and 25% for non-profit.

100,000 Rp. to over 7 million with an average of around 680,000 Rp. Moreover, according to one major third party payer, over 75% of the claims received bore evidence of financial abuse and 50% of the hospital cases showed indications of unnecessary procedures, tests, and medications.

Financial incentives are not the sole motivation of private sector hospitals. Other reported motives included the provision of higher quality care, better facility conditions, more modern services, and community service. Nonetheless, even among the religious based, non-profits, the need to operate their hospitals on a viable, commercial basis is recognized.

2. Hospital Growth

For the last 13 years, growth in hospitals and hospital beds in Indonesia has been predominately in the private sector. This is in line with the government strategy hospital autonomy and cost recovery called *Swadana*, and a greater role for the private sector in curative care, particularly in hospital services. This was intended to lighten the budgetary burden of public hospitals and was reflected in a government "zero growth" policy concerning public hospital facilities.

As a result of the decision by the MOH to increase reliance on the private sector for curative services, the number of public hospitals and hospital beds has been static or, in some cases, has declined over the past 12 years. MOH, provincial and district Government hospitals now account for only 38% of the total hospitals in Indonesia and about 35% of the general hospital beds. The number of private hospitals has almost doubled during the period 1988-1997. (Table 4)

Table 4: Hospital Growth and Ownership In Indonesia. 1988-1997¹²

Ownership	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Ministry of Health	57	57	57	58	59	60	60	60	60	60
Province Government	71	72	71	70	70	63	63	64	64	64
District Government	277	275	276	276	278	287	287	289	291	293
State-owned Company	81	81	82	82	84	84	78	73	72	69
Non-Military	486	485	486	486	491	494	488	486	487	486
Military	113	114	112	112	111	112	112	112	113	113
Total Public Hospitals	599	599	598	598	602	606	600	598	600	599
Total Private Hospitals	287	325	352	384	392	420	439	464	474	491
Total Hospitals	886	924	959	982	994	1026	1039	1062	1074	1090

During 1991-97, the total number of hospital beds in Indonesia increased by 10,836; of which 78% were private, in line with the strategy described above. However, over the same period, the population of Indonesia increased by over 22 million. The ratio of beds to population declined from just over 62 per hundred thousand in 1991 to about 60.6 in 1997. (Table 5) Although there are some disparities in MOH data concerning the post 1997 period, it is clear that

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¹¹ The other "public" hospitals are owned by the military or parastatals

¹² Directorate of Medical Services, Ministry of Health

the bed population ratio has continued to decline. By the year 2000, a net increase of only 11,000 to 12,400 hospital beds had been added to the system. This is only 61% - 69% of the total needed to maintain the 1991 bed ratio.

Table 5: Ratio of Hospital Beds to Population 1991-97

Year	Hospitals	Beds	Population	Ratio/100
				thousand
1991	982	111,160	179,103,191	62.06
1992	994	112,779	183,017,957	61.62
1993	1,026	114,474	187,018,290	61.21
1994	1,039	116,847	191,106,061	61.14
1995	1,062	118,306	195,283,181	60.58
1996	1,074	120,083	198,392,200	60.53
1997	1,090	121,996	201,390,300	60.58

One of the objectives of the national hospital strategy was to enable the Ministry to target limited public funds to poor and under developed areas in order to improve equity. However, the strategy did not improve equity of access to hospital care as most of the increase in hospital beds occurred in more affluent provinces and in urban areas. By 1997, Jakarta had 162 beds per 100,000, while Lampung province had only 26. Significant growth in beds was recorded in only 3 provinces and 13 of the 27 provinces experienced declines. Most telling of all, the skew of the distribution of bed ratios across all 27 provinces increased from 0.96 to 1.26 and the maximum disparity also increased markedly.

Expansion of private sector hospitals appears to have continued in 1998-2000, although the available data are inconsistent. The number of public hospitals declined by at least 22, some private hospitals were closed, and 27 new private hospitals were built, adding 2,524 more beds to the system. Private hospital growth was reduced somewhat in the first year of the economic crisis but by 1999 had returned to a pre-crisis growth rate.

Market size and manpower availability were two of the major factors affecting the pattern of private hospital growth during the 1990's. There was a positive correlation (82%) between the number of beds in private hospitals and the size of the middle class (top 20% of the expenditure distribution.) This was particularly marked in the case of the foreign for-profit hospitals (99%). This is evidence that the private hospital sector is responding to some extent to market realities. Moreover, this also suggests one factor that contributes to the increasing bed to population ratio disparity discussed above and is a result that should have been expected from the outset.

Availability of specialists was evidently another factor in determining the location of private hospitals. Accreditation and licensing standards require hospitals to provide the services of at least the basic specialties (surgery, internal medicine, pediatrics, obstetrics, anesthesiology, radiology, and pathology.) Starting a new private hospital in an area with few specialists present would pose significant difficulty. The number of such specialists in Indonesia is limited and their distribution is skewed towards affluent urban areas. Although theoretically deployment of government specialists is based on population and need, this would seem to indicate an economic

basis.¹³ It is worthy to note that during 1993-99, increased deployment of government specialists to a province seemed to precede new private hospital growth in the region by about three years with the exception of South Sulawesi.¹⁴

The private hospital sector does seem to respond to market signals and new hospital construction continued even during the worst year of the economic crisis. However, the most significant fact is that overall growth in the 1990's was not sufficient to match population growth on a quantitative basis and the ratio of hospital beds to population is falling progressively behind.

3. Ambulatory Care Facilities

There are a wide variety of public and private ambulatory care facilities in Indonesia. The main public facility is the health center or *Puskesmas*. There are also sub-health centers, mobile health centers, and health posts, however, in general the services provided by these smaller entities are extremely basic and/or intermittent and will not be addressed in this analysis.

There are two categories of private ambulatory care facility: solo practices (*praktek*) and group practices or clinics (*balai pengobatan* or *klinik*) which have different licensing requirements. Unlike hospitals, private ambulatory care facilities in Indonesia have few requirements to fulfill; there is no national standard for these requirements but rather they are determined at the local level. Requirements for solo practice are minimal and many physicians locate their part time practices in their homes and even in their garages. The Medical Association estimates that over 88% of all physicians in Indonesia maintain a private *praktek* of some kind. Ambulatory care facilities can also be operated by midwives, paramedics, and/or nurses. Thus, there is a wide range of facilities in terms of size, capabilities, services offered, quality of service, and cost.

Similar to hospitals, the interface between private and public ambulatory care provision is very porous. Most government physicians conduct evening clinics on a solo, part time basis to supplement their income. As with hospitals, referral of patients with a higher ability to pay from public facilities to private where the same provider is the referring and receiving physician is common.

The size of a clinic can range from less than 80 square meters to over 2,000 square meters and services can range from little more than those of a solo practice to advanced therapeutic and diagnostic services. Some clinics dispense medications through an arrangement with a pharmacy. Others, along with the solo practices, do not and, aside from injections, prescriptions are given to the patients, which must be filled at a pharmacy. Many pharmacies have arrangements with these facilities in terms of a profit share paid monthly to the provider. Perhaps because of this, "polypharmacy" is common as is a high incidence of injections. On the other hand, laboratory and X-ray examination rates are reported to be very low as most clinics do not possess the necessary equipment and referral lab facilities are limited.

¹³ Most specialists hold government positions as well as work in private hospitals.

¹⁴ MOH hospital and manpower data 1993, 1996, 1999

¹⁵ Solo practice licensure in Jakarta basically required an exam table, stethoscope, otoscope, 3 tongue depressors, a thermometer, a syringe and needle, prescription pad, and a rudimentary medical record system

Competition in the ambulatory care field is also quite varied. Some large, well-capitalized clinics focus on niche markets such as expatriates and wealthy Indonesians. Others locate near large factories, remote natural resources sites, white-collar areas, or even in hotels and shopping complexes. Location does seem to be a critical factor in ambulatory care competition as indicated by membership data from JPKM managed care companies where over 65% of the members indicated that "convenience" and "proximity to home" were the major factors in their clinic choice. The majority of clinics are located in urban areas and surveys indicate that urban dwellers are over 3.5 times more likely to visit a private specialist and over twice as likely to visit a private general practitioner than their rural counterparts. This would seem to give further evidence of the effect of proximity and convenience on provider selection.

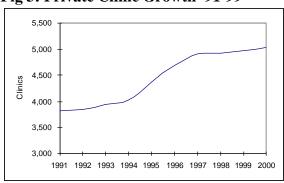
4. Clinic Growth

During 1991-1999 the number of private clinics grew by 29% and government health centers by 26%. (Table 6) In addition, the percentage of larger clinics (> 100 square meters) increased from 10% to 13%. Nonetheless, the majority of new clinics were small and the average clinic in 1997 was between 100-200 square meters and the mode for all clinics remained below 80 square meters.¹⁷

Table 6: Ambulatory Facility Growth 1991-99

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Year	Clinics	100 or less	Solo Pract	Gov HC
1991	3,816	89.9%	22,696	5,656
1992	3,851	89.8%	24,979	5,976
1993	3,938	89.7%	27,554	6,954
1994	4,018	89.6%	29,132	6,984
1995	4,367	88.7%	30,897	7,105
1996	4,696	87.8%	32,271	7,110
1997	4,914	86.8%	NA	7,145
1998	4,925*	86.7%	NA	7,181
1999	4,972*	86.5%	NA	7,195
*Estimated f	rom partial data	i	•	•'

Fig 3: Private Clinic Growth '91-99



There was significant growth of new clinics in 1994-95 when the first of the post Contract Doctors completed their term of service and many entered the private labor pool. ¹⁸ (Figure 2) This suggests that the combination of "zero growth" policy and the Contract Doctors strategy has contributed to the growth of private sector medicine. However, it is not known how many of these clinics actually absorbed post Contract Doctors. It is known that commercial credit was extremely difficult to obtain for these young doctors. ¹⁹

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¹⁶ In JPKM managed care programs members are required to select their primary care provider. Only 12% indicated location as the main factor in choice of hospital provider.

¹⁷ Public facilities, Profil Kesehatan 2000, private facilities pre-1998 derived from proprietary investment prospectus Merrill Lynch DIG with independent verification in 4 districts in 2000.

¹⁸ Contract Doctors - post medical school 2-3-year term of service in a government health center after which they may compete for government positions that are limited or seek private sector employment.

¹⁹ Credit Analysis of Family Doctor Clinics, Coopers & Lybrand, USAID, 1994

There is little reliable data on utilization rates in private clinics and solo practices, however the National Socioeconomic Survey (Susenas) measures self-reported utilization. The 1998 Susenas indicated that only 1% of the population utilized clinics while 9.7% utilized private doctors. (Table 7)

Table 7: Physician Based Ambulatory Care (Susenas 1998)

Primary Care	% Population	Patients	Millions	% of Total
	Utilizing	per Day	/Month	
Puskesmas	11.0%	119	22.15	45.5%
Private Doctor	9.7%	18	19.48	40.0%
Clinic	1.1%	26	7.05	14.5%
Private Total	10.8%	NA	48.68	54.5%

However, the reported utilization rates for public facilities are rarely consistent with the facility level data therefore, the self-reported utilization rates for private facilities should also be viewed with caution.²⁰ Nonetheless based on these data, the private sector has provided the majority of ambulatory curative services since 1995. (Table 8) This would seem to indicate that the ambulatory care portion of the national health strategy has yielded greater returns than has the hospital strategy in terms of infrastructure growth. Further, the growth of private ambulatory care facilities has progressed despite low access to capital and/or commercial credit.

Table 8: Estimated Public-Private % of Ambulatory Services 1991-1998

Year	% Public	% Private
1991	51.7%	48.3%
1992	50.5%	49.5%
1993	53.2%	46.8%
1994	51.2%	48.8%
1995	49.3%	50.7%
1996	47.4%	52.6%
1997	54.1%	45.9%
1998	45.5%	54.5%

5. Pharmaceuticals

The experience with pharmaceutical providers was somewhat different than the hospital and ambulatory care subsectors in that the number of

pharmaceutical manufacturers declined during the 1990's, despite increasing total drug expenditures. Much of this is attributable to market consolidation. However, during the same period the number of retail distribution outlets increased markedly with pharmacies and drug stores increasing 60% and 50% respectively. The number of distributors also increased during this period but peaked in 1996 and has declined thereafter. ²¹ (Table 9)

²⁰ For instance, the Welfare Statistics report of 1998 reported the equivalent of 119 daily patient visits at the government health center; the reported data in the Health Profile Indonesia for 1998 is only 90 visits per day. ²¹ Data obtained from GP Farmasi

Table 9: Growth of Pharmaceutical Infrastructure 1991-2000

	Manufacturers				
Year	Domestic	Foreign	Distributors	Pharmacies	Drug Stores
1991	219	37	1,049	3,136	3,822
1992	222	36	1,069	3,238	3,931
1993	220	36	1,173	3,520	4,845
1994	189	35	1,271	3,868	4,854
1995	185	35	1,366	3,988	5,115
1996	183	34	1,612	4,572	5,521
1997	181	34	1,578	5,016	5,740
1998	172	34	1,569	5,120	5,811
1999	169	34	1,550	5,240	5,926
2000	169	34	1,550	5,363	6,048

Four of the domestic manufacturers are State Owned Enterprises (BUMN) producing generic drugs and vaccines. An additional 50 private companies produce generics under license and contract with the BUMN's and government. The remaining domestic companies produce what are known as "branded" generics. All of the foreign manufacturers produce trademarked products and are prohibited from participation in the generic drug market. Pre-crisis generic drugs accounted for only 6% of the total, branded generics 80%, and trademark drugs the remaining 14%. Due to the nature of investment regulations, the pattern of development of the industry has resulted in numerous manufacturers producing small quantities of a wide range of products and a tendency for each company to produce the same products. Thus, there is little in the way of economies of scale.

In terms of overall expenditures, the pharmaceutical sector is more privatized than either the health insurance or services sectors. During the last decade, public expenditures on pharmaceutical ranged between 8.2% and 13.4% of the total. (Table 10)

Table 10: Government & Private Pharmaceutical Expenditure 1991-2000 (billions Rp.)

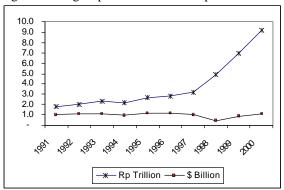
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Year	Gov	Private	Total	% Gov	%
1991	145.9	1,625.3	1,771.2	8.2%	91.8%
1992	186.5	1,812.8	1,999.3	9.3%	90.7%
1993	235.2	2,048.5	2,283.7	10.3%	89.7%
1994	286.4	1,851.3	2,137.7	13.4%	86.6%
1995	337.6	2,347.8	2,685.4	12.6%	87.4%
1996	362.4	2,432.8	2,795.2	13.0%	87.0%
1997	391.8	2,738.1	3,129.9	12.5%	87.5%
1998	622.1	4,305.6	4,927.7	12.6%	87.4%
1999	841.8	6,133.4	6,975.2	12.1%	87.9%
2000	952.1	8,267.3	9,219.4	10.3%	89.7%

Although the growth exhibited in Table 10 above seems significant, the vast majority of the raw materials for pharmaceuticals are imported thus, when expenditures are viewed in both Rupiah and dollars, a much different picture of the trends emerges. (Table 11 & Fig 3)

Table 11: Drug Expenditures Rp., \$US, and Per Capita

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Year	Rp Trillion	\$ Billion	PCDE
1991	1.771	0.982	\$ 5.48
1992	1.999	1.050	\$ 5.74
1993	2.284	1.044	\$ 5.58
1994	2.138	0.951	\$ 4.98
1995	2.685	1.150	\$ 5.89
1996	2.795	1.154	\$ 5.82
1997	3.130	1.039	\$ 5.16
1998	4.928	0.460	\$ 2.27
1999	6.975	0.851	\$ 4.15
2000	9.219	1.054	\$ 5.06

Figure 3: Drug Expenditures '91-'00 Rp. & USD



From this standpoint, the picture is not so robust. The annualized increase in Rupiah expenditures from 1991 to 2000 translates into a 0.7% growth per annum in dollars and, if adjusted for population growth, a contraction of 0.8%. Even in the pre-crisis period, per capita expenditures for drugs in dollars only increased by 6% from 1991-1996 while the population increased almost 11% during the same period. When adjusted for population growth, the pharmaceutical sector averaged only 1.1% growth per annum during 1991-96, which cannot be considered strong relative to the general economic growth rate of the country.

There are some exports of pharmaceutical products. Exports of drugs rose from US\$ 20 million in 1990 and reached an all time high in 1999 of US \$61 million. Pharmaceutical production dropped drastically in 1998, however exports, as a percentage of total, increased from 5.8% to 9.6% in the 1997-98 period, perhaps reflecting one response of the private pharmaceutical industry to the devastated domestic market. *GP Farmasi* reports that as much as 40%-50% of the domestic pharmaceutical industrial capacity is unutilized. Increasing exports could provide a twofold benefit by providing a source of foreign exchange and utilizing unused capacity. However, there are significant obstacles to this. First, there is no organized effort and most exports are conducted by individuals on a one-to-one basis. Second, many of the Indonesia pharmaceuticals are "me too" products, which have to compete in the international market with original products. Finally, Indonesia's Good Manufacturing Practices (GMP) are not consistent with those of developed countries. There seems to be no active interest, or support for organizing an aggressive export effort, despite the excess production capacity to supply the ASEAN generic drug market.

There has been little investment in expanding facilities. Over 1995-1999 investments in the pharmaceuticals sector approved by the Investment Coordination Board (BKPM) totaled US \$304.3 million, or only 0.12% of the total investment approved.²² Of the investments approved, 40% were foreign and 60% domestic. However, 66% of total domestic investment approvals occurred in 1995. Both foreign and domestic investment approvals declined significantly from September of 1997 and were essentially at zero by 1999. Further, actual investments proved to be much lower than the approved level. Actual foreign investment only reached US \$52 million

²² Badan Koordinasi Penanaman Modal, Investment Summary Report 2000

dollars and domestic (including US \$6 million in the State Owned Companies) was only US \$81 million. Although a significant portion of the production capacity is still unused, if new investment cannot be secured, the ability of the pharmaceutical industry to keep pace with population growth and new therapeutic interventions may be impaired.

6. Training, Education and Workforce

The health sector labor pool is comprised of a wide range of professionals and technicians. It is composed exclusively of Indonesians who, with the exception of a small management and specialist elite, have all been trained in domestic institutions. Prior to 1990, it was taken for granted that the vast majority of healthcare personnel would be employed in the public system. In 1990, a policy decision was made which required doctors to fulfill their government obligation through a one time, non-renewable contract of 2-3 years of government service ("PTT" or "Contract Doctors"). After their period of service, they could seek a government job, but, due to the "zero growth" policy, few were actually available. As a result, from 1993 onward, an increasing number of physicians had to seek employment in the private sector. Subsequently, the PTT strategy was applied to dentists and midwives.

The MOH workforce statistics only reflect public sector employees and, as the "PTT" exit the system, they have become statistically "invisible." However, estimates can be made based on the cumulative number fulfilling their PTT obligation versus the number who were inducted into the public system. (Table 12)

Table 12: Contract Doctors (PTT): Completion and Absorption (Health Profile 2000)

Year	PTT	Post	Retire	Increase	Post PTT	Difference	MOH
		PTT	Decease	Positions	Absorbed		Physicians
1991							
1992	3,200						
1993	3,133						
1994	2,841						24,303
1995	2,452	3,200	784	197	981	2,219	24,500
1996	2,424	3,133	803	603	1,406	1,727	25,103
1997	2,396	2,841	797	(205)	591	2,250	24,898
1998	2,369	2,452	803	197	1,000	1,452	25,095
1999	2,342	2,424	809	199	1,008	1,416	25,294
2000	2,315	2,396	816	198	1,014	1,382	25,492
Totals	23,472	16,446	4,812	1,189	6,001	10,445	

Several trends are evident. First, the absolute numbers of post graduate physicians entering the PTT program were declining. Second, the number of civil service physicians has been increasing slowly despite the zero growth policy. Third, over 10,000 post Contract Doctors have exited the public health system over the last 5 years. Even given private sector replacement rates and growth, it is likely that many of these young physicians are under or unemployed as healthcare providers.

In 1999, 80,592 nurses were employed in public hospitals. However, the number of nurses completing training each year averages 30,000. Even if there were a 10% turn over rate in the public sector, almost 22,000 nurses a year would need to seek private employment. It is estimated that well over 40,000 nurses are currently under- or unemployed.²³

There is considerable un- and underemployment reported throughout the health sector except for dentists, pharmacists, and medical specialists. With these three categories, there is a relative shortage. By way of comparison, Indonesia has less than 10,000 total specialists for a population of more than 211 million people while the Philippines has about 10,000 obstetrics and gynecology specialists alone for a population of 77 million.²⁴ Indonesia has a little over 6,000 dentists, which is enough to provide one dental visit per person every 9.5 years.²⁵ If utilization of dental services were equal to Singapore an additional 7,100 dentists would be needed.²⁶

Despite this significant number of unemployed or under employed healthcare personnel, regional disparities in public healthcare personnel deployment increased in virtually all categories during the 1993-99 period.²⁷

7. Professional Training

The healthcare educational system in Indonesia is a mixture of "schools" and "academies." Available training includes physician (including some specialties), nursing, pharmacy, public health, and allied health personnel, such as physiotherapists, lab technicians, radiographers etc. ²⁸

There are 33 schools of medicine in Indonesia of which 17 are private. Despite the 28% decline in the number of graduating doctors (1992-00) and weakened prospects for employment, enrollment in medical schools has been on the rise since 1999 and almost 3,500 students enrolled in the first year class in 2000.

The cost of medical education in Indonesia varies from about US\$1,700 US per year in tuition and fees in public universities to as much as US \$8,000 per year in some private medical schools. This is quite expensive relative to per capita income and beyond the reach of most Indonesian families.

The quality of medical education varies, but is reported to be improving steadily as many schools have established relationships with foreign medical schools. Some of these arrangements have been termed "sister schools" or "twinning" but, to date, none have achieved degree equivalency.²⁹

²⁸ Laboratory and radiological technician, physical therapy, nutrition, etc.

²³ Yani Achir, President of the Indonesian Nursing Association

²⁴ Dr. Gunawan Setiadi, Director of Pusdiknakes

²⁵ Assuming an average of 30 minutes per patient and 260 working days per year.

²⁶ Published utilization statistics, MOH, Singapore, 2001

²⁷ MOH manpower statistics

²⁹ Degree equivalency means that graduation from the domestic institution is deemed equal to that of the foreign institute.

About ten of the larger public medical schools offer training in medical specialties, however, not all specialties are offered at all schools and subspecialty training has not been initiated. Between 350-600 specialists complete training each year and over the past 10 years the total number of specialists has risen by 4,470. There has been a concerted effort to increase the number of training positions in recent years to address the shortages but it is not known if the current production is sufficient to improve the ratio of specialists to population.³⁰

Foreign investment in Indonesian universities has been permitted since 1993, however to date, there have been no medical school joint ventures. MOH reports that two applications to establish new medical schools have been filed but whether foreign capital is being invested was not revealed.

Overall, The continuing interest in physician training and the increasing enrollments in view of the weak market and the level of unemployment seems paradoxical. The rationale offered by MOH officials and the dean of a private medical school is that a doctorate in medicine provides a "portable" skill. If of sufficient quality, this training both prepares Indonesian physicians to compete when the health professional sector is opened up in 2003 to foreign professionals and also provides the potential for employment in other countries.

The situation with other health professions is somewhat similar. There are 866 accredited training programs for other health professions of which 415 are private sector. In 2000, the total enrollment was over 127,000 and the last total graduating class was 39,517. The number of graduates per year is increasing by about 4% per year, though it appears that two categories, nutrition and physical therapy, are decreasing significantly. (Table 13)

Table 13: Healthcare Training Institutions and Enrollment

Programs	Private	Total	Total Enrollment	Year 1/ Year 3	
Nursing	259	613	92,647	102%	
Pharmacy	61	80	11,951	130%	
Public Health	21	46	5,710	119%	
Nutrition	9	29	4,373	88%	
Physical Therapy	12	15	1,827	97%	
Medical Technician	53	83	10,449	121%	
Total	415	866	127,007	106%	

Nursing is by far the largest category with 613 accredited training programs of which 259 are private. The current enrollment is reported by the Ministry of Health to be about 92,600 and the last total graduating class from these institutions was 29,625.

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³⁰ The ratio of population to specialists was 21,500 in 1999. If the entire population were to utilize specialist and inpatient care at the same rate as the highest economic quintile of the population (24.07 and 5.85 per month per thousand respectively) a ratio of 13,500 would be required. Assuming a 3% annual combined retirement and mortality rate, the addition of 1,050 specialists per year would produce a ratio of 13,588 in 2015.

There are ten schools of public health of which five are private. These schools offer extension, masters and doctoral programs, with a range of curriculum and subject offerings. The current enrollment is approximately 8,000. Annual tuition and fees range from around US \$1,400 to more than US \$3,600 for some doctoral programs. According to leading educators in public health, the management and economics curricula are gaining favor over the more traditional fields such as epidemiology and environment. Courses are also offered in the health insurance and the University of Indonesia has established a collaborative relationship with the Health Insurance Association of America (HIAA) to provide a standardized curriculum and certification system.

The healthcare education and training system in Indonesia adds more than 45,000 professionals to the workforce annually. This is equal to almost 17% of the entire public medically trained workforce. Given the slow growth of private facilities and healthcare spending, it seems unlikely that 45,000 new jobs are generated every year. This seems to significantly exceed the growth of the health sector and turnover rate.

8. Insurance, JPKM, and Other Financing Schemes

Financing mechanisms are a key determinant of sustainability, growth, and quality in the health sector. The major health financing mechanisms in Indonesia include public expenditures, out-of-pocket payment, and risk pooling mechanisms. Existing risk pooling schemes account for no more than 22%-24% of the total healthcare expenditures and provide benefits for less than 13% of the population. Expansion has been slow although some categories demonstrate significant growth. There six types of existing schemes - health insurance, JPKM managed care, *Askes, Jamsostek*, employer self insurance, and "substitution products."

a. Health Insurance

Health insurance has been available in Indonesia since the 1950s but growth has been slow until recently. The Ministry of Finance regulates health insurance schemes. Under the National Insurance Law No. 2 (1992) and National Regulation No. 73 (1993) licensed life insurance companies are permitted to sell voluntary health insurance policies. General insurance companies were excluded but, despite this, they continue to sell a large portion of the group insurance policies. The organizations marketing health insurance products are in general adequately capitalized and possess professional management capabilities. At least 12 of them are the affiliates of major multinational insurance companies.

Information on the actual number of people covered by health insurance is both scarce and contradictory. The reporting requirements for both types of insurance companies do not disaggregate health insurance premiums or enrollment from the other product lines. The number of enrollees in health insurance in a 1991 study was reported to be 576,000. Estimates from the Indonesian Insurance Council of premiums and membership indicate that in 1997 the number covered had increased to slightly more than two million, or about 1% of the total

³² Inventarisasi Kegiatan JPKM di Tujuh Kota Propinsi di Indonesia, Yakmi 1992

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³¹ This includes the two State Owned Enterprises PT Askes and PT Jamsostek.

population. A poll of 26 major health insurers in 2001 yielded an aggregate enrollment of 2.16 million.

The health insurance products available consist mostly of standard group and individual indemnity products, with the majority being major medical (hospital care) or cash benefit plans. With few exceptions, insurers view health insurance coverage as a second line product, which they bundle with other insurance products (i.e. risk, life, etc.) into employee benefit packages. Several insurance executives indicated that there was not much interest on the part of insurers in aggressively marketing health products due to the high volume of transactions, high loss ratios, and the difficulty of controlling healthcare costs.

b. JPKM Managed Care

The major private sector alternative to health insurance is an Indonesian variety of managed care termed JPKM. JPKM's legislative basis was established in 1992 with the National Health Law No. 23 and subsequent ministerial regulations and decrees in 1993-95. It was intended to provide healthcare coverage to the more affluent groups and regions in Indonesia, thereby permitting the MOH to target public funding to the poor and vulnerable segments of society and increase funding for preventive and promotional programs.

JPKM managed care has shown some signs of growth and development. As of September 2001, 24 companies had received full JPKM licensing. Their aggregate membership has grown from somewhat less than 36,000 in 1996 to almost 500,000 by the end of 2000. The JPKM Directorate at the Ministry of Health reports that total enrollment had topped one million by the end of June 2001.

To date, JPKM appears to confined to the island of Java and concentrated in Jakarta and its surrounds. Thirteen of the licensed JPKM carriers are headquartered in Jakarta, four each in East and West Java, and two in Central Java. The distribution of enrollment follows a similar pattern however the greatest numerical growth in enrollment between 1997 and 2000 was in East Java and the highest growth rate was in Central Java. (Table 14) Managed care is beginning to emerge in other provinces as two firms in Riau have applied for licenses.

Table 14: Distribution of JPKM Enrollment

Province	1997	2000
Jakarta	65.4%	34.1%
East Java	12.0%	27.3%
West Java	16.7%	20.5%
Central Java	5.9%	18.1%
Other	0.0%	0.0%
Enrollment	108,381	500,000

The cost of JPKM managed care products roughly parallels that of health insurance. However, JPKM managed care carriers are required to provide a minimal comprehensive benefits package that includes not only hospitalization but also ambulatory care and preventive services, while the health insurance sector has more flexibility in product offerings. Some health insurance products are termed cash benefit plans and pay a fixed per day of hospitalization or per hospitalization regardless of actual costs. These are very low risk products for insurers and are marketed at low prices. The other major insurance product is a hospital benefit with internal and

total limits. JPKM on the other hand is required to cover all costs of services in the basic benefit package. This greater span of coverage and higher risk translate into higher premium costs, which from the price standpoint are less competitive. In response to this, some JPKM carriers have developed products for which the choice of providers is limited to government healthcare facilities and based on subsidized prices.³³ Aside from these "subsidized" products, JPKM competes for the same market as the health insurers but faces some significant obstacles. First, Indonesian consumers do not have much experience with or understanding of the risk transfer mechanisms of insurance and managed care. The internal limitations featured in most hospital insurance products result in average claim reimbursements of only 40%-60% of the total costs, while managed care benefits cover nearly 100%. The consumer does not have the information necessary to evaluate this, thus, looks primarily at the premium price. Second, managed care companies are required to contract a panel of providers and the members are required to limit their service utilization to their selected provider. These "closed panels" of providers are supposed to receive pre-payments in the form of capitation and to participate in external quality review processes. Establishment of such panels has proven to be difficult. Insurance companies on the other hand are able to provide an essentially unlimited choice of providers, as their sole requirement is to pay fee-for-service claims based on the covered benefits. Consumers are generally not able to evaluate the quality of care, thus, confining the selection of providers to a small network is not seen as a benefit but a limitation.

Marketing efforts by JPKM carriers focus on the benefits of comprehensive coverage and quality of care and it may be with time that what constitute obstacles now may yield a competitive advantage. At this point, it is impossible to tell. What is clear is that JPKM managed care has established a beachhead, albeit tenuous, in the Indonesian healthcare market and has shown some signs of growth and development.

c. State Owned Enterprises

PT Askes, a parastatal, is a compulsory social insurance scheme for civil servants and civil and military pensioners. It is funded through a 2% monthly wage deduction. The estimated active membership is 14.6 million. Its providers are almost exclusively public and it insures either the subsidized co-payment for public services or, in some instances, a negotiated lower rate. These distributions to public providers are based on either a flat per capita basis or a package tariff for tertiary care and have little connection with the actual costs of services. One result has been the accrual of significant losses over the years by public providers and, in this sense; the Askes program constitutes a subsidy from the Ministry of Health to the government employees.

PT Askes has used compulsory membership as a springboard to enter the private voluntary health insurance market where it competes with health insurance and JPKM managed care. Voluntary membership has grown to over 800,000. The voluntary products offered by PT Askes are a mix of managed care and, more or less, standard indemnity packages, which are marketed on a commercial basis.

³³ This defeats one of the major objectives of JPKM, namely, allowing the government to lower service subsidies for all but the poor.

The future of *Askes* in its current form is uncertain. As a parastatal, it is included in the National Master Plan for State Owned Enterprises under which attempts are being made to privatize many SOE's, but it is not considered a good candidate for privatization because of its significant unfunded liabilities. National Insurance Regulation 73 (1993) stipulates that state owned insurance companies with compulsory memberships are forbidden to engage in any other business. This would seem to apply to the growing voluntary membership of *Askes*. A number of alternatives to privatization have been suggested, ranging from divestment of voluntary membership to dissolution of compulsory membership for civil servants. Whatever alternative is chosen, *PT Askes* will almost certainly continue to function as a major health insurer.

The parastatal *PT Jamsostek* operates a compulsory employee security plan for the formal sector, which provides a modest provident fund, death benefit, and occupational health and disability benefits. It also offers a semi-compulsory health benefit based on managed care principles for which an opt-out provision allows employers to provide equal or better medical benefits by other means. Contributions for health are 3% of wages for single workers and 6% for families. The network is a mix of public and private providers. Membership in the health scheme is reported to be 3.2 million, although it is known that many companies have exited the program since 1998. The use of some private providers combined with a defined set of benefits and contributions based on a percentage of wages resulted in some financial losses during the initial years of the economic crisis, but the reserves of *Jamsostek* were reported to be adequate to accommodate these losses.³⁴

The future role of *PT Jamsostek* in the health sector is not clear. *PT Jamsostek* is also featured in the national plan for SOE's but is not considered a strong candidate for privatization due to low profitability. One alternative strategy being considered is to establish *PT Jamsostek* as a fiduciary trust. Both its current organizational structure and that of a fiduciary trust do not lend themselves well to managed care operations and some outsourcing the management of the health benefit has already been implemented. What this bodes for the future participation of *PT Jamsostek* in the health sector is not clear.

d. Other Risk Pooling Options

Despite the available options of Jamsostek, health insurance, and JPKM, the majority of employers in Indonesia continue to self insure via schemes ranging from lump sum annual payments, reimbursement for services with or without an annual ceiling, to direct provision of some services. A survey of employers in 1990³⁵ found that the major factor influencing the employers' choice was cost and that risk premiums paid to insurance carriers were considered excessive. Indeed, for large and financially sound companies self-insurance is the best option, as their internal risk pools are of sufficient size to eliminate significant variation in annual medical benefit costs. However, this is not the case for medium and small companies, which mostly control their exposure through the use of annual limits. Since the beginning of the economic

³⁴ Dr. Bambang Purwoko, Managing Director, Jamsostek

³⁵ "Survey of Private Sector Health Benefits in Indonesia", PSDK Project, USAID 1990

crisis, an increasing number of companies are purchasing insurance and managed care coverage to control costs.

Aside from self insurance, there are a large number of unlicensed, "substitution product" schemes that conduct pre-paid health financing operations. These include hospital clubs, so called HMO's, *Tabulin*, "Managed Care", and *Dana Sehat*, For the most part, these schemes operate without regulatory oversight and or the application of standard prudential measures. The latter, *Dana Sehat*, is a village health fund scheme that has been in operation in Indonesia since the 1970's. It has been hampered by contribution rates as low as 100 Rp. per family per month, risk pools too small to be viable, and inadequate management. Whereas the membership in the "substitution" market is unknown, *Dana Sehat* has been reported to involve 10 million people on some basis.

In pursuit of the goal of universal compulsory coverage, proto-JPKM bodies were established during 1999 by the MOH in almost every district in Indonesia in an attempt to introduce JPKM management principles into the administration of the JPS-BK safety net. The trial was not entirely successful and donor funding was discontinued in 1999-2000. Nonetheless, the proponents of this model remain enthusiastic and have submitted a draft National Law to Commission VII of the Parliament for informal review. The proposal is to establish a national compulsory, universal healthcare financing scheme with contributions based on some type of income redistribution process. This proposed legislation has met considerable opposition from the investment and business community due, among other things, to its expected impact on the cost of labor and its status is uncertain. The proposed legislation is a superior of the cost of labor and its status is uncertain.

In summary, there are a wide variety of insurance, managed care, and other risk pooling schemes currently operating in Indonesia. They range from the relatively well-regulated insurance industry to large, compulsory parastatals to village health funds comprised of a relatively small number of families with very low contribution rates. The lack of consistent and current data attests to the chaotic nature of the situation.

C. Investment in Healthcare

During the 1990s, the private health care sector added 166 hospitals, 2,227 pharmacies, 2,226 drug stores, 150 distributors, more than 1,200 clinics, 24 managed care companies, and probably at least 10,000 private practitioners. The total healthcare investment during the 1990's was a minimum of US \$2.5 billion.³⁸ Given that this was less than 1% of the total investment in

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³⁶ The Minister of Health reiterated support for a universal, compulsory, progressive contribution scheme to Commission VII of the Parliament June 11, 2001.

³⁷ International Business Forum letter to the Ministry of Health and Ministry of Finance.

³⁸ Of the hospitals constructed during this period, 157 were domestic investments; 121 were general hospitals and 36 were specialty hospitals. The general hospitals had an average bed capacity of 103 while the specialty hospital's average was only 43 beds. A hundred-bed general hospital on average requires a minimum of US \$5.2 million in medical equipment while a 50- bed specialty facility requires about US \$1.6 million (this varies per specialty.) Medical equipment usually constitutes about 21% of a hospital investment, however, in Indonesia with lower construction costs and facility standards the percentage is closer to 35% of the total investment. This would mean the 157 hospitals conservatively represent about US \$1.96 billion dollars in investment. Foreign private investments, excluding pharmaceutical manufacturing, totaled US\$ 415 million from 1993 to 2000. Thus, the total

Indonesia during this period it could not be considered a strong performance in terms of attracting investment capital.

Foreign investment seems to have played an increasingly significant role. Over the 1993-99 period foreign investments were about 45% of the total and, since 1995 about half. Examination of the sum total of approved foreign investments between 1993 and 1999 in the Indonesia health sector totaled \$596 million dollars almost \$70 million of which was for two hospital projects. By way of comparison, a total of 4,362 foreign investments were approved during 1995-99 only 30 of which were in the health sector and the dollar value of these health sector investments was only 0.38% of the total. Also during this same period, 197 foreign hotel investments were approved with a total value of \$3.7 billion dollars in contrast to only 11 hospitals with a total value of only \$316 million. By both measures, foreign investment in the health sector has been rather anemic.

The variety of foreign investments has also been limited. Hospitals and pharmaceutical manufacturing combined were responsible for almost 95% of the total investments approved. (Table 15) Other areas of investment included equipment manufacturing, managed care, nursing homes, medical evacuation services, management services, a dental lab, and a clinical laboratory. Geographically, over 75% of the total approved investment was located in Jakarta and its environs.

Table 15: Category and Value of Approved FDI in the Health Sector 1993-99⁴⁰

Year	Hospitals	Pharmaceuticals	Equipment Manufacture	Other	JPKM	Total/Yr
1993	\$ 68.6	\$ 26.7				\$ 95.3
1994		\$ 31.5				\$ 31.5
1995		\$ 36.7	\$ 21.0	\$ 0.3		\$ 58.0
1996	\$ 164.2	\$ 43.3		\$ 3.7	\$ 1.6	\$ 212.8
1997	\$ 57.7	\$ 37.2			\$ 0.6	\$ 95.5
1998	\$ 30.0	\$ 5.5		\$ 3.0		\$ 38.5
1999	\$ 63.6	\$ -		\$ 1.0		\$ 64.6
Total	\$ 384.2	\$ 181.0	\$ 21.0	\$ 8.0	\$ 2.1	\$ 596.2
% of Total	64.4%	30.3%	3.5%	1.3%	0.4%	100%

There are other investments not reflected in these figures such as investments by health insurance companies to develop and market health insurance products, the development of traditional medicine (*Jamu*) manufacturing facilities, capital investment in training institutions, and a growing number of small firms that manufacture non-medical equipment (i.e. foot stools, gurneys, etc.) for the health care industry. However this investment is probably not that substantial and would not affect the conclusion that investment in the private health sector has been extremely low and, further, has declined since the beginning of the crisis.

healthcare investment that can be estimated or accounted for during the 1990's is a minimum of \$2.5 billion dollars. As for the other categories of investment only rough estimates are possible but with the exception of distribution companies most of them require very minimal start up capital.

³⁹ Data from the Investment Coordination Board (BKPM)

⁴⁰ Data from BKPM and the Ministry of Finance

D. Competition

Although, all participants in the private provision of healthcare services and products compete at various levels among themselves, a ubiquitous competitor for almost all of them is the public sector itself. This includes medical services provision, healthcare financing, and education. In addition, the "export" of patients overseas has been mentioned in the expenditure and hospital sections above. A more detailed examination may indicate the nature of this competition and how significant a factor it really is.

During the expansion of the public system in the 1970's and 80's, it was still common for public sector physicians to have private practices. However, with the initiation of the "zero growth" policy and implementation of the Contract Doctors program, competition arose between public physicians and the post-Contract Doctors (PCD) for the private ambulatory care market. Public sector physicians had three significant advantages; they enjoyed a small, guaranteed income to cushion possible low utilization of their private practice; they could shift public patients with the ability to pay to their private practice; and they had usually been practicing medicine longer than the newer PCD's and had more opportunity to establish a regular clientele. Although the Contract Doctor strategy was predicated on higher concentrations of public physicians in less affluent areas and PCD's in the more affluent areas, public sector doctors are in fact concentrated in richer areas competing with the PCD's for the same market.

The intent of hospital autonomy was to make the public hospitals more self-sufficient through cost recovery, thus permitting the MOH to allocate more of its budget to primary care. Equity of access to hospital services was to be maintained by cross subsidizing third class bed costs with higher-class beds. From a group of five government hospitals that participated in the initial pilot tests of cost recovery (*Swadana*) in the early 1990's, the number quickly expanded to over one third of public hospitals by 1997. Swadana *per se* effectively ended in 1997 with the promulgation of National Laws 18 and 20, which required all revenues collected by government entities to be remitted to the general revenue account. Although their autonomy was reduced, public hospitals continued to collect charges that were then remitted to the government. This practice may intensify during decentralization as the regions try to increase their local revenues and these public hospitals will increasingly come into direct competition with private sector hospitals.

Swadana hospitals did provide higher quality services when the funds collected were used to improve the facilities and purchase new equipment. In several districts public hospital utilization rose while private hospital utilization declined. This would seem to indicate that the Swadana hospitals were competing quite well. However, there is evidence that public subsidies were not focused solely on third class beds and indigent care but also subsidized higher-class

⁴¹ This was basically a return to the Indische Comptabiliteits Wet (ICW) 1925 - a statute from the Dutch colonial era requiring remittance of all pubic revenue to the general account.

⁴² Public hospitals can theoretically receive some of the remitted funds back from general revenues, however the process is reported to be sometimes protracted and to yield variable results.

bed.⁴³ In effect, this constituted subsidized competition and provided a notable advantage to public hospitals.

In many ways, the Ministry of Health itself has functioned as a social insurance system, establishing a nationwide network of providers available to all citizens. The fees charged at these facilities ranging from 12%-24% of the actual cost of the services can be viewed as a copayment of sorts. When faced with the alternative of purchasing private insurance and still making co-payments, there is an incentive to stay with the public "co-payment only" scheme even though it requires acceptance of a lower level of quality.

The Health Card (*Kartu Sehat*) program was initiated in 1994 as part of the national poverty alleviation strategy. The poorest were to receive cards that would permit them to receive free curative healthcare services at government health centers and hospitals. Public providers were to receive 500 Rp. as remuneration for each outpatient curative visit by a cardholder and 50,000 Rp. for a hospital admission. In reality, the remuneration system did not work well and the Health Card program essentially became an unfunded mandate.

The Health Card strategy was revived and intensified during the economic crisis and a major effort was made to issue cards to the most vulnerable classes. The program did not target the poor very well and the lowest consumption quintile, the target of the health card program, received only 35% of the cards while even the highest quintile (the wealthy) received 6% of the cards. Further, the wealthy used their cards more than the poor, and there is evidence it affected their selection of provider. Fifty seven percent of the rich who possessed a card used it as opposed to only 45.8% of the poor. Those wealthy with Health Cards had a 43% higher rate of selection of public hospitals as their outpatient provider and a 42% lower rate for selection of the private sector than non-card holders of the same economic class.⁴⁴ Although the Health Card was intended to assist the poor by providing access to free health services, there are evidently fees charged to some cardholders although usually at a lower rate than for non-cardholders. Paradoxically, only 5.74% of wealthy cardholders using public hospital outpatient services were charged a fee when using their card as opposed to 32.6% of the poor. The implication of this is that wealthy cardholders received more benefit when using their cards than did the poor. 45 Most significant to this analysis, selection rates for private inpatient and outpatient providers were 44% and 36% lower among all cardholders. The Health Card program, which did assist the poor, has in fact also exacerbated the subsidy distribution problem.

Overall, the public health system competes with the private system on numerous levels both intentionally and unintentionally. Cost recovery efforts at public facilities are obviously focused at those with the ability to pay and thus constitute direct competition with the private facilities. Untargeted services subsidies and the Health Card program are enjoyed by some of the very economic classes that could pay for private healthcare and without these subsidies probably would have.

 $^{^{\}rm 43}$ "Budget Based Cross Subsidization: A Practical Demonstration", USAID, 1998

⁴⁴ Data for these calculations from: The effectiveness of the Healthcard as an instrument to ensure access to medical care for the poor during the crisis, F. Saadah, M. Pradhan and R. Sparrow, World Bank, October 2000 ⁴⁵ Ibid.

Competition in healthcare training and education is more straightforward. Tuition and fees are lower at most government medical and public health training institutions because government subsidizes them. Also, donor supported efforts to upgrade curriculum and/or facilities rarely include private institutions. The tuition differentials are in some cases significant but this has not seemed to affect the private institutions, which maintain high enrollment rates. 46

The situation is somewhat different for training academies. Many private academies have been hard pressed to maintain their operations since the beginning of the crisis and are in dire need of capital. Many private nursing academies have been urged by the MOH to reduce enrollment due to the oversupply of nurses. The need to charge higher tuition and fees combined with significant infrastructure needs have reduced the ability of many private academies to compete with their public counterparts.

In general, the subsidies for training institutions and academies do not seem to be as problematic and lower tuition fees permit some less affluent students to gain a medical education that otherwise would be reserved largely for the more affluent.

If the public healthcare system competes with the private from the bottom, then overseas healthcare providers compete with the Indonesian private health sector from the top of the market. Reports from Singapore and Malaysia indicate that over 5,000 patients a month are received from Pekan Baru in Sumatra and 1,000 patients from Medan alone. Except for emergencies, hospitals in Batam are reported to be largely empty as Indonesians take advantage of Batam's low exit fee and inexpensive water transportation to Singapore. Patients in West Kalimantan routinely use the improved road to Kucing, Malaysia to obtain healthcare at the Normah Specialist Medical Center. The Center's strategic plan includes aggressive competition for a share of the Indonesian market.

Four Jakarta companies specialize in medical evacuations and two medical referral firms specialize in making arrangements for overseas elective treatment. Although generally thought to target the expatriate population, one referral firm reports that the majority of its clients are Indonesians.

The Royal Darwin Hospital in Northern Australia has working agreements with at least one major insurance program for the referral and/or evacuation of patients to Darwin from the Eastern Provinces. Western Australia has pursued a vigorous marketing program in Indonesia for several years and it is reported that a substantial number of patients from Indonesia are treated at facilities in Perth such as the Princess Margaret Hospital.

It is generally thought that overseas treatment is an expensive luxury limited to the elite, however, it appears that this is not always the case. Many patients treated in Malaysia find that high quality medical care is actually less expensive than in Indonesia. One example is a Malaysian company that offers a complete executive physical exam for US \$125 including the airfare from Medan and a night's lodging at a five-star hotel in Penang.

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⁴⁶ Dr. Samsi Jacobalis, Dean, Faculty of Medicine, Tarumanagara University; Vice Chairman, National Commission for Hospital Accreditation.

It would seem that these organizations are not passive by any means but are innovative and focused in their competition for a share in the Indonesian health market. Healthcare service programs in Singapore and Malaysia regularly advertise in Indonesian newspapers. Service arrangements can be made through the Internet. If the development of the healthcare system in Indonesia continues to lag, there seems to be little question that these foreign competitors will increasingly benefit from the export of patients.

In summation, the competitive forces at play in the Indonesian health sector are complex with changing and multiple roles, conflicting motivations, and a playing field that is not level. The Indonesian private health sector faces not only competition amongst themselves but with the public system, state owned enterprises, and foreign providers as well. How well they fare in the future will largely be a matter of the resources they can muster and the environment in which they must compete.

E. Resilience and Response to Crisis

At the onset of the economic crisis, the MOH focused on a few key issues: protection of the vulnerable groups, the poor, women and children, maintenance of basic services, and the generic drug supply. Due to the erosion of the value of the Rupiah and the public sector's lack of resources, donor and development bank assistance was organized on a large scale. Donor efforts were focused on securing the supply of essential generic drugs and establishing a temporary social safety net.

1. Financing and Drug Supply

Over 90% of pharmaceutical ingredients are imported. As a result of devaluation drug manufacturers faced up to 500% increases in raw materials costs. In response, over US \$673 million in relief was mobilized to protect the essential drug supply. In addition, humanitarian relief in terms of finished pharmaceutical products began streaming into Indonesia

In August 1998, pharmaceutical manufacturers pressed for 200% price increases; however, the MOH introduced price controls on the branded generics and limited the increase to 10%. As a result, private production came to a halt. An additional price increase of 15% was approved by the MOH in February of 1999, but the impact was minimal and domestic production remained at a standstill except for four parastatal drug companies that had access to the generic drug relief fund. As these four companies did not produce the full range of generics, generic drug production capacity was not sufficient to meet the total national needs, and the total formulary of generics produced in Indonesia did not cover the entire spectrum of needs in terms of critical therapeutics.

To address the capacity and formulary problems, the four parastatals subcontracted with some of the 50 private producers of generics to obtain at least the full range of generic drugs and together the parastatal and private production output increased by 48%. However, the majority of the domestic production capacity remained dormant. In mid-1999, facing critical drug

shortages, the government relaxed price controls and production began to recover, but with 12 fewer companies in the industry and many others seriously weakened. The result was a diminution of the total drug market and a shift away from branded generics and trademark drugs to generics. In terms of volume, branded generics experienced a 61% reduction in production and sales and trademark drugs a 68% reduction. (Table 16)

Table 16: Market Proportion - Production 1996 & 1998

Category	Pre-crisis	Crisis	Increase
			Decrease
Generic Drugs	6%	20%	48%
Branded	80%	70%	-61%
Non-Generics	14%	10%	-68%
Market Size	100%	44%	

The current situation in the pharmaceutical industry is similar to that in 1997-98, with the Rupiah still low in value. Manufacturers are facing production costs that are difficult to pass along to consumers. The number of manufacturers has declined to 180 and it is reported that as many as 140 of these companies may not survive a prolonged economic recession. The government has announced a 20% increase in generic drug prices, which may have a positive effect on the private pharmaceutical manufacturers by reducing the price differential. Unfortunately, it will also increase the financial barrier for the purchase of medications by the consumer.

Overall, the crisis was damaging to the private pharmaceutical sector primarily because of its unavoidable dependence on imported raw materials. Tangible policy support during the initial years of the crisis through import credits, production subsidies, and/or the non-acceptance of finished products from foreign sources, which could have ameliorated the impact, was not forthcoming. What is likely to emerge from the current crisis is significant market consolidation with large multi-nationals and foreign joint venture producers dominating the market through direct production or through share holding in the parastatals (SOEs) scheduled for privatization.

2. The Health Services Sector

Virtually all foreign assistance received by the government for health was designated for use in public healthcare facilities. In addition to the supply of generic drugs, a social safety net program termed JPS-BK was initiated to ensure that essential health services for the poor were continued.⁴⁷ The program focused on poor families, pregnant women, new mothers, and malnourished infants and children. Subsidies in the form of per capita and per family allocations were provided for the health centers and midwives. Funds were also allocated to health posts and to provide additional operating funds to the public hospitals to ameliorate the cost of services to the poor.

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⁴⁷ Two components of this program were linked to the "Health Card" and proto-JPKM programs described previously.

One factor not considered was the ongoing requirement that all private sector hospitals provide 10%-25% of their beds for the poor. Despite the lack of compensation for these subsidies, many of the non-profit and faith-based hospitals continued to provide services to the poor and it is reported that their indigent care beds had 100% occupancy rates while their higher-class beds were increasingly empty. No private hospitals were immune and almost all suffered some losses. It is currently reported that at least 93 private hospitals in Java are in poor financial condition or insolvent.

In the early months of the crisis, it was projected that the government policies would result in a significant shift in utilization from the private health sector to the public based on price alone. The opposite seems to have occurred. The crisis resulted in a 17% decline in contact rates for the total health sector. Use of public facilities fell 26% while the private health sector experienced a 9% reduction. The sole exception to this pattern was public hospitals, where a 6% increase in contact rates was experienced during 1997-98, while private hospitals declined by 2.4%. This shift may have in part been prompted by the provision of generic drugs and supplementary operational budgets to the public hospitals. Contact rates in other public facilities such as the health centers and health posts fell 30% from already low levels, despite the provision of generic drugs and social safety net funds. In terms of private sector ambulatory care facilities, private clinic use declined by 12% but the rates for private practices only declined by 7.1%.

This would seem to indicate that the private sector was performing significantly better in the crisis than the public sector. The market share of the private health sector increased from 53% in 1997 to 58% in 1998. This may not be entirely due to healthy competition but may represent an intensification of referral by civil service providers to maintain their personal income. Reliable sources also reported cases of government generic drugs being dispensed by private practitioners.

3. Risk Pooling

The crisis also adversely affected the insurance and managed care (JPKM) industry. Premiums paid a year in advance but subject to claims based on interim increases in the cost of medical care resulted in inevitable losses for both. The consequences of these losses for insurance as opposed to JPKM were quite different.

It is difficult to disaggregate the impact of insurance company losses due to health insurance from other losses. Premiums for health insurance constituted less than 7% of the total insurance industry premiums, so the impact was probably minimal. However, a significant percent of whole life policies were "cashed out", and total 1998 claims exceeded premium revenues. Similarly, the general insurance industry usually employs nominal indemnification in the premium currency and thus had minimal foreign exchange exposure. In addition, these losses were offset by windfall profits from investments in monetary instruments due to rising

⁴⁸ Dr. Felix Gunawan, Chairman of the Catholic Hospital Association

⁴⁹ Confidential communication with CEO of major financial services corporation with 93 hospitals in portfolio.

interest rates. In 1998, life insurers posted about a 79% increase in interest revenues, which exceeded their premium income. Although the general insurance industry did not perform quite as well, overall, the insurance industry weathered the initial year of the crisis and emerged reasonably intact.

This was not the case where healthcare was the only line of business. As the cost of healthcare services rose continually, the managed care industry began to suffer financially. Most JPKM carriers were not utilizing capitated risk-sharing contracts with providers but were engaging in indemnification. This resulted in the insolvency of at least two of the major carriers and unpaid claims amounting to billions of Rp.⁵⁰ The JPKM carriers who suffered the least were those associated with a particular provider group (hospitals and clinics) or who predominantly covered "captive markets" where a great deal of price and benefit control could be exercised. It is likely that the smaller and less vital JPKM carriers emerged from 1998-99 significantly weakened despite the overall growth in JPKM membership.

The government response to the economic crisis in the health sector was to focus on the public health sector with few actions to assist the private health sector. The imposition of price controls on pharmaceuticals resulted in fewer drugs available and had to be abandoned. A Ministerial Decree, in June of 1998, designed to assist private practitioners by allowing them to dispense drugs directly was rescinded within one week of being issued due to protests of the pharmacists association. ⁵¹ In addition, donor assistance was reserved for the public sector.

In 1998, the private health sector found itself in an environment where operating costs exceeded the realizable prices it could charge. Further, the inputs in terms of drugs and disposables were scarce and exorbitant. Durable equipment purchases were postponed, maintenance schedules abandoned, and operating costs slashed as the drug industry, the providers, and insurers struggled for dwindling revenues. The extent of the damage to private health sector was significant and has yet to be thoroughly documented. One persisting result is the perception by the private health sector that the government has little interest in its survival and cannot be depended upon for assistance under adverse conditions that effect the entire health sector. ⁵²

F. Utilization of Services

Utilization of healthcare services in Indonesia dropped during the initial years of the crisis and may now be rebounding, but even prior to the crisis utilization levels were quite low when compared with other countries. (Tables 17 & 18)⁵³

⁵⁰ JPKM Regulatory Sub directorate, Ministry of Health and Social Welfare

⁵¹ F. Bafen, Legal Bureau, Ministry of Health and Social Welfare

⁵² Private health sector advisory council meeting April 11, 2001

⁵³ Note in Table 17 utilization of services is expressed in services per thousand people per month. The "outpatient" consists of an aggregation of all categories of ambulatory care both public and private. Specialist" refers to hospitals polyclinics used here as a proxy for specialist treatment. "Hospital" refers to both public and private admissions but does not include maternity nor does it include inpatient care rendered in public health centers or private clinics with beds.

Table 17: International Comparison of Service Utilization Rates*

Level	Indonesia	Singapore	S. Korea	Bulgaria	US
Outpatient	185.47	NA	791.67	461.9	312.92
Specialist	16.78	56.90	Combined	95.97	91.7
Hospital	2.11	8.10	5.13	13.48	12.75

^{*}Indonesian rates from 1997 Susenas

Table 18 Comparisons of Hospital Days & Outpatient Visits per Year

Country	Hospital Days	Outpatient visits
	per Capita	per Capita
Indonesia	0.1	2.4
Singapore	0.8	1.6*
South Korea	0.8	9.5
UK	1.7	5.9
France	2.6	6.3

^{*}Visits to Public Clinics only

Not only are average utilization levels for all levels of healthcare low compared with other countries; they are lower still for the less affluent and rural populations. These low levels of utilization do not seem to be attributable to better health but rather to physical access and cost, which appear to be two major, limiting factors. There is a significant difference in per capita health expenditures between the poor and the affluent. This also holds true for utilization of services. The lower total expenditure groups have lower levels of utilization with the exception of lower cost outpatient services. (Table 19) This would imply that cost is a major factor.

Table 19: Reported Illness and Utilization Rates by Expenditure Quintile

					1	
Quintile	1	2	3	4	5	Ave
Outpatient	188.91	192.70	190.82	186.73	168.18	185.47
Specialist	11.91	14.17	16.01	17.73	24.07	16.78
Hospital	1.78	2.00	2.13	2.26	2.36	2.11
Sick	264.65	251.39	242.18	225.70	198.07	236.40

Source: Susenas 1999

The cost factor is further evidenced by disaggregating public and private services, and examining how much of the total utilization for each category is attributable to each quintile. (Table 20) In terms of primary care visits (outpatient), the differences are not that great although private services do increase and public services decrease as total expenditure levels rise. However, the differences between the first and fifth expenditure quintiles in utilization of private hospital and specialist services are striking--17 fold and almost 4 fold respectively. As public services are subsidized, the less affluent groups would be expected to use public services more often than private. However, even the most affluent quintile utilizes a significant number of public services with the exception of hospitalization.

Table 20: Percentage of Total Utilization by Category of Service

Ouintile	1	2	3	4	5
Private	Sector				
Outpatient	17%	19%	20%	21%	22%
Specialist	10%	14%	17%	21%	39%
Hospital	3%	8%	17%	19%	52%
Public	Sector				
Outpatient	23%	22%	21%	19%	15%
Specialist	17%	19%	20%	21%	22%
Hospital	25%	25%	22%	23%	5%

Source Susenas 1999

There are also urban/rural differences in utilization, some of which may be due to availability or geographic access. Rural areas have fewer hospital facilities, private clinics, specialists, and even general practitioners than urban areas. In 1997, only 5% of the outpatient utilization in rural areas was hospital based as opposed to 15% in urban areas. There were also much higher utilization rates of sub-health centers, health posts, and traditional healers in the rural areas plus a higher incidence of self-treatment. (Table 21)

Table 21: Urban - Rural Ambulatory Care Utilization 1997 (Services per 1000 per month)

Service	URBAN	RURAL	Rural/Urban
Public Hospital	15.90	7.07	0.44
Private Hospital	11.96	3.37	0.28
Private Doctor	66.84	30.30	0.45
Clinic	6.32	4.69	0.74
Private Non-Doctor	20.55	52.65	2.56
Public Health Center	55.60	60.01	1.08
Sub-Health Center	6.95	32.53	4.68
Health Post	1.07	3.35	3.13
Traditional Healer	6.08	15.46	2.54
Self Treatment	139.23	155.27	1.12

These differences are not entirely due to geographical access factors and it is apparent that purchasing power exerts a tremendous influence on the choice of service provider among both urban and rural populations. A much larger portion of the rural population is in the lower expenditure brackets and the rural mean per capita health expenditures in 1998 were half that of the urban population. Part of this can be attributed to lower unit costs to the consumer due to utilization of more subsidized public services although the reported prices paid for rural public services averaged 4% higher than in urban areas, while private services were a third less. Of the differences in expenditures, the pattern of utilization could account for about 50% and prices the other half.

It might be speculated that the lower rural utilization rates and the differences in utilization profile might in part be due to more robust health. In 1998, the number of persons reporting an incident of illness during the previous month in rural areas was marginally smaller than urban areas. However, it seems that the rural people who did fall ill remained ill for a

longer time and the total days-of-illness per person in rural areas per month were 5% higher despite fewer people falling ill. (Table 22) Apparently, rural populations utilize health services at lower levels than urban populations despite their higher level of morbidity.

Table 22: Percentage of Days of Illness attributable to Length of Illness

Days Sick/Month	Urban	Rural
< 3	19.2%	15.8%
4-7	37.7%	36.2%
8-14	12.7%	14.2%
15-21	10.5%	12.1%
22-30	19.9%	21.6%

(Source: BPS 1998)

In summation, utilization levels for all levels of healthcare are low in Indonesia compared with other countries. Furthermore, they are lower still for the less affluent and rural populations. These low levels of utilization do not seem to be attributable to better health but rather to physical access and cost, which appear to be two major factors limiting the demand.

G. Demand versus Need for Healthcare Services

The need for increased health facilities, manpower, and capabilities is often discounted due to the low utilization levels described above and other measures such as the low bed occupancy rates (BOR) in hospitals. While true, it does not take into account the economic barriers to healthcare. The fact that the majority of private healthcare expenditures are out-of-pocket limits utilization.

Current utilization levels in both hospitals and clinics do not indicate what the actual need is or the level of demand would be if the financial barriers to care were removed. Average per capita expenditures for health are very low and there is a significant difference in per capita expenditures between the less and more affluent. In addition, the costs are not evenly distributed within expenditure groups but are attributable to a relatively small number who are severely ill and/or chronically ill. The distribution of healthcare costs within an economic cohort (same expenditure level) demonstrates a nineteen-fold difference between what the top one per cent pays and the average. Further, the top 21% of a cohort pays almost 66% of all costs. Conversely 25% to 60% of the individuals may have no healthcare costs at all. In a situation where income levels are low and the majority of the population is not participating in a risk pooling mechanism such as health insurance, relatively few are able to afford the healthcare services they need. Healthcare expenditures in excess of 20% of household annual income pose a significant threat of financial failure.⁵⁴ Probably less than 2% of the Indonesian population can afford the full costs of a single hospitalization. As depicted in Table 23, there seems to be a significant financial barrier effect across the per capita expenditure strata as evidenced by the increasing percentage of untreated illness in the lower expenditure levels. 55

⁵⁴ William McGreavy, World Bank, unpublished results.

⁵⁵ "Sick" refers to those who reported an illness in the previous month, as reported there is no indication of the level of severity

Table 23: Self-Reported Morbidity	&Health Seeking Behavior b	v Expenditure Quintile*
Tuble 201 bell Reported Morbidity	continuity believed by	y Experiarial Camer

Category	Q1	Q2	Q3	Q4	Q5	Ave	Variance
% Sick	26%	25%	24%	23%	20%	24%	6.6%
% Sought care/sick	53%	58%	60%	62%	65%	59%	18.9%
% Total sick	22%	21%	20%	19%	17%	20%	4.7%
% Total receiving no care	46%	25%	12%	10%	8%	20%	253%

^{*}Susenas 1997

Another qualitative indication of this barrier can be obtained from the comparison of the utilization rates of the general population versus insured populations. In Table 24, the overall utilization rates of an insurance membership of about 22,000 located in 43 cities across Indonesia is compared with the utilization rates derived from the 1998 *Susenas* data for the highest quintile and the national average. The insured population differed from the general population in the following ways; it is a working population and therefore had few members over 55 years of age; there were proportionately more females 19-49 and a higher marriage ratio that the general population; and, there was proportionately less family planning use, more births, more children under 5 years of age, and fewer children between 5-19 years of age.

Table 24: Comparison of Insured vs. Uninsured Utilization*

Treatment	Insured	Adjusted	Top 20%	Ave
Self Care	NA		116.20	146.42
Primary	312.92	288.30	168.18	185.47
Specialist	98.67	30.93	24.07	16.78
Inpatient	4.05	3.97	4.07	2.11
Maternity	4.50	1.89	1.78	0.21
Total Hosp	8.55	5.86	5.85	2.32

^{*}Services per 1000 people per month

The high primary care utilization rate for this insured population may result from 100% pharmaceutical coverage, which reduces the incentive for self-care. Specialist utilization was also very high; however part of this may be due to the fact that 32% of the insured members could access specialists without a referral. However, when adjusted based on demographics and benefit design, the utilization rates are similar to that of the highest expenditure quintile. But what is most striking is the comparison with the national average, which the adjusted insured population's utilization exceeded in every treatment category. Further, the difference becomes more marked as the costs of the services increase (55% higher primary care, 84% higher specialist care, and 153% in hospital care.)

If the current utilization rates for the fifth quintile in Table 23 were adjusted to account for the increased morbidity of the other quintiles, an additional 39 million primary care visits, 30

⁵⁶ Proprietary data kindly contributed from a major healthcare insurer in Indonesia

⁵⁷ Note that addition of the top 20% self care rate to primary care yields a utilization rate of 284.38 very close to 288.30 for the insured population

⁵⁸ It should be noted that this insured population is composed primarily of factory workers not white collar.

million specialist visits, and 5.7 million hospitalizations would be generated. The hospitalizations alone would exceed current full occupancy capacity by 44%. About 5,300 additional general practitioners and 8,300 specialists would be needed immediately plus the treatment facilities for them to work in. This is a large deficit by any standard, yet if all Indonesians were to enjoy the level of healthcare currently received by the top 20% this is what would be required.

IV. Future Demand

The present shortfalls of the Indonesian healthcare system have been summarized above. Current factors that will shape future healthcare demands and trends must also be considered to understand the actions required now so that the system can deal with what shall come in the future. There are some basic trends that do not vary rapidly and are of some use in assessing what these future demands may be.

A. Population Growth and Demographic Changes

Population growth and demographic change are the fundamental factors affecting demand for medical services. The very young and the very old are subject to a variety of greater health risks, as are women of childbearing age. The most important trends in Indonesia are increasing life expectancy and declining population growth. Population will have increased approximately 14% between 1995 and 2005. Moreover, life expectancy in Indonesia has been rising steadily for decades--from 54.4 years in 1980 to 64.9 years in 1999. The success of the Indonesian family planning effort and reduced neonatal mortality mean that, the population of Indonesia is aging at a significant rate. In the last half of the 1990's, the increase in number of those eligible for retirement (over 55 years of age) added to the population was 2.3 million compared with an increase of less than 250,000 children under 5 years of age. The population under 5 years of age will remain essentially stable over the 1995-2005 while retirees will increase 28% and those over 65 years of age increase by 35%.

Primary care needs are very high for children, approximately the same as for 55-59 year old males. However, the hospitalization risk is over 3.5 times higher for males and 2.5 times higher for females of the 55-59 year cohort as compared to the children. Considering that a single hospitalization is between 8 and 30 times as expensive as a primary care visit, the implications for future healthcare needs and costs are clear. Even with zero inflation and stable medical services costs, the total health expenditures needed in 2005 will be at least 45% higher than in 1995. Sixty five percent of this increase will be due to the demographic shift alone. This impact will extend to the types of facilities and equipment needed as well as the profile of healthcare providers due to the change in the patterns of illness: more hospitals and more specialists will be needed.

B. Epidemiological Patterns of Disease

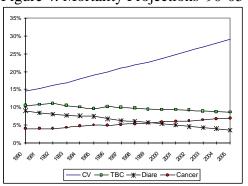
The pattern of diseases to which demographic groups are subject to is also a major determinant of health risks and costs. The classic "epidemiological transition" comprised of a decline in the rate of infectious diseases and an increase of lifestyle chronic diseases has been

underway in Indonesia for some time. Projections of this transition and their implications for healthcare policy were carried out as early as 1993.⁵⁹ For the most part, these projections have held true and death rates from both cancer rates and cardiovascular diseases have been increasing steadily while infectious and water borne illness such as diarrhea have been decreasing. From 1990 to 2000 the percentage of deaths due to cardiovascular diseases such as strokes and heart attacks increased 64%. The percentage of deaths attributed to cancer increased 44% during the same period while tuberculosis and diarrhea death declined 11% and 40% respectively. Combined with population growth, the actual number of cardiovascular and cancer deaths have increased 76% and 54% respectively in just 10 years. As a percentage of total deaths, cancer and cardiovascular diseases increased from 19% to 30% during the last decade. Cardiovascular deaths will increase another 27% and cancer another 22% in the next 5 years. (Table 25 and Figure 4)

Table 25: Mortality Projections 4 Conditions

Year	CV	TBC	Diarrhea	Cancer
1990	14.4%	10.4%	9.0%	4.1%
1995	18.9%	9.6%	7.4%	5.1%
2000	23.7%	9.3%	5.4%	5.9%
2001	24.8%	9.3%	5.0%	6.0%
2002	25.9%	9.2%	4.6%	6.2%
2003	26.9%	8.9%	4.3%	6.5%
2004	28.0%	8.8%	4.0%	6.7%
2005	29.1%	8.6%	3.6%	6.9%

Figure 4: Mortality Projections '90-05



Prevention of cardiovascular diseases, cancer, and metabolic diseases such as diabetes must be vigorously pursued, but there is a significant residual of these diseases that require maintenance therapy and/or life saving interventions. Chronic diseases are expensive to treat relative to most infectious diseases. Diabetes and hypertension often require daily medication and regular visits to the treating physician. Renal failure requires either regular dialysis or a renal transplant. The costs of cancer treatment can be staggering. Heart disease requires pharmaceutical and, in many cases, surgical intervention. The cost of a normal birth in a third class bed in a private hospital averages 390,000 Rp. at the current price while the average price of a coronary bypass is 16 to 20 million Rp. Treatment of a case of common diarrhea can cost as little as 5,000 Rp., whereas, an inexpensive maintenance regimen for a hypertensive patient will cost a minimum of 5,000 Rp every day for medication alone.

Not only are these diseases expensive to treat, they require adequate facilities and at least some technology. Common diarrhea, simple lacerations even tuberculosis and malaria can be treated at the government health centers. However, government health centers have only the most rudimentary laboratory equipment; they cannot measure blood glucose in diabetics, electrolytes in hypertensives, or cholesterol in heart disease patients. They are not usually equipped with electrocardiograms or the capability of treating an acute myocardial infarction. Nor is this limited to the health centers, many government hospitals also lack these capabilities.

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⁵⁹ Analysis of the Health Transition in Indonesia: Implications for Health Policy, Indonesian Public Health Association, 1993.

C. System Accommodation

The current system must be transformed into one that can accommodate the full range of healthcare needs at an acceptable level of quality. This would require rehabilitation of existing facilities, expansion of the system to meet population growth, reconfiguration to the new epidemiological pattern of illness in an aging population, and expansion of risk pooling programs.

1. Rehabilitation

Most government facilities have equipment that is inoperative and many are structurally unsound. A recent assessment in Yogyakarta, found that one third of the public healthcare facilities were unsalvageable and another third would require extensive repairs and reequipping. A project design assessment in Sulawesi funded by JBIC during 2000 determined that three out of four C class hospitals were structurally deficient, with inadequate plumbing, and electrical hazards. All *Puskesmas* required significant repair and renovation. Less than 10% of the medical equipment was functional and, even if operative; the hospital equipment profiles were inadequate. Staffing profiles did not meet government standards. Detailed costs of bringing these district healthcare systems to an operational status were calculated based on needed construction, procurement, management systems, and training. The average district per capita investment needed about 141,000 Rp. (Table 26)

Table 26: Breakdown of Per Capita Average Upgrade Costs

Category	Rp per Capita	% Tot
Construction, Renovation	51,734	36.6%
Equipment	81,428	57.7%
Retraining and Other Manpower	4,961	3.5%
Management Systems	3,098	2.2%
Total Per Capita	141,221	

This would permit an average rehabilitation expenditure of US \$2.5 million for a C class hospital and about \$123,600 for a health center, its surrounding sub-centers, and health posts. When extrapolated to the national level the total cost would be about US \$3 billion.

2. Population Growth, Aging and Access

The "aging of the population" affects the levels of utilization, the costs, and the types of facilities, personnel and treatments required. When combined with the population projections and assuming elimination of the problem of financial access, increases in total services needed

⁶⁰ Findings of the World Bank PHP 1 Yogyakarta Dinas 2000

⁶¹ International Techno Center Ltd., Project Design Report, "Improving the Medical Referral System of Sulawesi", December 2000

over the 2000-2015 period would be between 77% and 168% with the largest increases in specialist and hospital inpatient services. (Table 27)⁶²

Table 27: Total Increase in Services 2000-2015

Measure	Primary	Specialist	Hospital
Net Increase	76.6%	168.1%	138.5%
Population Growth	24.8%	11.3%	13.7%
Increased Access	26.6%	50.4%	20.1%
Aging Population	48.6%	38.2%	66.2%

Hospital cases would rise from about 5.9 million per year in 2000 to almost 14 million in 2015. If the average length of stay were five days, about 70 million bed days would be needed in 2015, or 87.3 million at a bed occupancy ratio (BOR) of 80%. This is equivalent to 239,000 hospital beds or an increase of 117,000 over the present 122,000 beds. At US\$ 4.4 million for a new 150 bed hospital, total investment needed for new hospitals would be US\$3.4 billion over 15 years to accommodate population growth, aging, and access problems

Primary care and specialist visits would increase by 367 million. A 360 square meter clinic, manned by 8 physicians and 2 dentists run on a 24-hour basis could treat 3,950 patients per month. This means 7,740 new clinics would be required to meet the increased demand. At a cost of \$ 345,500 per clinic, the total investment over 15 years would be almost \$2.7 billion dollars. 63

3. Expanding Risk Pooling

If risk pooling through insurance or managed care is going to be introduced on a large scale in Indonesia, the costs of doing so must also be calculated. Providing just a basic benefit for the entire population would require 170,000 trained personnel, about US \$419 million in reserves, US \$600 million in working capital, US \$180 million in equipment, office space, and systems. In addition, US \$17 million in training costs and US \$1.2 billion in start up capital would be required. The total cost would be about US \$2.5 billion to provide this benefit to a population of 201 million.⁶⁴

The total cost would be \$ US 11.6 billion (\$US 3 billion for rehabilitation of the public system, US \$3.4 billion for new hospitals, US \$2.7 billion dollars for new clinics, US \$2.5 billion for the insurance programs.) Given the current state of the economy, the allocation of over US \$11.6 billion dollars in public funds to the health sector over the next 15 years is not realistic.

⁶² Using a standard actuarial table, which segments the relative risk for utilization by sex and 5-year age intervals in conjunction with Central Bureau of Statistics (BPS) population growth, projections can be made as to what the levels of utilization will be in the future \blacktriangleright [(population_{asg} x risk factor₀) \blacktriangleright population_{asg}] = relative risk. Relative risk x average utilization rate = utilization rate for the group. There were 6 sets of risk factors used in this model which were comprised of: 1) utilization factors for primary care, specialist care, and hospitalization 2) cost factors for primary care, specialist care, and hospitalization.

⁶³ Richmond International Clinics Org., Feasibility Study, Kalimantan, Dec 2000

⁶⁴ Notes on JPKM Basic Benefit Strategy Calculations, J. Marzolf, ADB HNSP Project, Presentation to the Minister of Health September 1999

One alternative is to increase the role for the private health sector in both the delivery and financing of healthcare in Indonesia. However, the evidence is that the private health sector has, to date, not developed in a manner commensurate with the actual need. To effect the growth needed, the major obstacles and constraints to growth of the private health sector must be removed.

Before addressing these factors, there are three ongoing developments in the health sector that must examined due to their potential impact on the role of the government and the future of the private health sector: decentralization, the draft National JPKM Law, and the emerging healthcare strategy for the poor.

V. Decentralization

The process of decentralization has been underway in Indonesia for a number of years but began in earnest in January 2001. The increase local regulatory authority and the efforts to raise local public revenues have direct ramifications for the health sector in general and the private health sector in particular.

Regional governments are receiving greater allocations from the central government in the form of block grants (General Allocation Grants - DAU) but they are also being assigned greater expenditure responsibilities. In terms of healthcare, the increase in allocations will be largely consumed by the payroll costs of decentralized civil servants. Experience in numerous other countries indicates that, in the process of decentralization, the healthcare system rarely receives much attention or is designated a priority issue. This would seem to be the case in Indonesia. In November 2000, district governors made a commitment to allocate 15% of their local revenues to healthcare. This commitment will be difficult to fulfill and it has already been reported that the actual allocations have been are less than half of the commitment.

Regional autonomy will allow district and provincial governments to raise local revenues to fund their recurrent and development costs. Regional public health facilities have long been considered sources of revenue by local governments and it is anticipated that shortfalls in public funds for health will prompt increased cost recovery efforts in public health facilities. If the price differential between public and private health services narrows, private services should become more competitive if market forces are allowed to work. Competition will be based more on quality than price. The declining utilization of public services, even during the economic crisis indicates that the public is reluctant to pay for lower quality services even at a highly subsidized rate. Tariff increases could result in even lower levels of utilization and thereby less total revenues.

⁶⁵ Statement of the Minister, MOH testimony to Commission VII Parliament, June 11, 2001 revealed that salaries of the decentralized personnel would consume almost all of the APBN allocation for health unless reduction in forces can be realized.

⁶⁶ Devolution in Latin America has had poor effects on health care BMJ 1999;318:961 (3 Jul 99),

⁶⁷ Attempts to decentralize in recent Brazilian health policy: issues and problems, 1988-1994. Araujo Junior JL, Int J Health Serv 1997;27(1):109-124

⁶⁸ An example is Banyumas, Central Java which has budgeted only 5.8% of its funds for healthcare

Local governments could elect to meet competition by improving the quality of the services provided in the government facilities. However, this would require capital expenditures for refurbishment, renovation, and equipment and the amount required would be significant. Under current decentralization regulations, regional governments are permitted to fund capital works through loans, however, they are limited as to the amount of domestic borrowing and prohibited from foreign borrowing without central approval. It is not clear that regional governments will be willing to utilize their limited borrowing power to finance development of the public health system. The answer may hinge on the expected return on the investment. As mentioned, the regions have traditionally viewed their government health facilities as a source of revenue primarily because the budgetary support for operations came from the central budget. Under decentralization, it does not and, unless tariffs can be raised to a level of at least 50% of full costs, the local governments will face the prospect of spending a larger percentage of their budget on healthcare than they gain through cost recovery. Faced with this, some regional governments might seek to divest themselves of this burden through privatization of healthcare assets, which is another option.

Under decentralization, regional governments are both permitted to dispose of their public assets and have the authority to approve direct investments. Revenues from asset sales could provide additional funds for the regional governments. Equity transfer to the private sector could finance the needed capital improvements through direct investment and obviate the need to increase government debt. Transfer of the decentralized healthcare personnel to the newly privatized system could lower regional payroll costs. What public funds there are for health could then be focused on public goods and healthcare services for the poor. Despite the potential benefits, if the experience with the State Owned Enterprises is any indication, regional governments will not initially embrace privatization. Nonetheless, experience elsewhere indicates that the factors that favor privatization may be beyond the government's ability to resist. ⁶⁹ This assumes that market forces are allowed to work, however, there is another possible response from the local governments, which could nullify this assumption.

A good degree of regulatory control including licensing, accreditation, and implementation of the healthcare system will now devolve to local governments. One temptation may be to enact local regulations favoring the public health system in order to increase or protect public revenues. This dual government role of regulator and competitor may discourage private health sector investment and development. In response, the private sector may seek districts that are more market oriented. This would result in increasing disparities between regional healthcare systems, although the pattern of disparities may not be as expected. Under decentralization, at least five provinces will be relatively well off due to natural resource revenues. Two of these provinces have plans to significantly increase public expenditures for healthcare including construction of new facilities and provision of higher service subsidies for all residents. These provinces are precisely where there is the economic base to support private health sector growth.

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⁶⁹ Devolution in Swedish healthcare: Local government isn't powerful enough to control costs or stop privatization, Finn Diderichsen, BMJ 1999; 318:1198-1200 (1 May)

⁷⁰ One example of this is the four district parastatals that have already been established to operate managed care companies.

Another aspect of decentralization may pose a negative impact specifically on the JPKM managed care industry, namely, the proposal to devolve the licensure of the JPKM managed care companies to the district level. This would create a significant disadvantage for managed care firms where their clients are companies with employees in several provinces and districts as they might need to obtain multiple licenses. This would also cause increased difficulties in regulating the managed care industry and open the system to inter-jurisdictional issues and market conduct problems. As the JPKM managed care sector is already subject to numerous constraints, this may further diminish growth. In contrast, there are indications from the Ministry of Finance that licensure of life insurance companies and thereby health insurance carriers will remain a central function and insurance licenses will continue to allow them to provide coverage nation wide. Similarly, almost all of the critical functions of licensing of pharmaceutical products, patent issue, and so forth have remained at the central level. At this point, there are no signs that the dilemma posed by the devolution of JPKM licensure authority is widely understood or that a solution will be forthcoming.

Overall, decentralization seems to hold both a threat and a promise for the private health sector. It could provide that basis by which the regions enlist the private sector to deliver and develop the health system. On the other hand, a lack of perception by the government could result in new constraints arising.

VI. Risk Pooling and the National JPKM Law

The absence of significant risk pooling is a major factor limiting growth of private healthcare. The need for widespread risk pooling is essential to finance the healthcare needs of the Indonesian population. However, there are different methods by which this could be accomplished and opinions vary widely as to which would be optimal for Indonesia.

Membership in JPKM managed care has not experienced the expansion hoped for by some. One reason may be that the two prerequisites of a reduction of public subsidies for the non-poor and effective enforcement of regulations on pre-paid care have never been fulfilled. Enrollment in risk pools of any kind is predicated on the difference between perceived risk and actual risk. It is this perception that makes insurance an economic possibility. Untargeted public subsidies have served to reduce perceived risk, making both insurance and JPKM unattractive. As mentioned, the variety of healthcare financing schemes in Indonesia is great but aside from the two parastatals, *Askes* and *Jamsostek*, only insurance and managed care have any legal basis. The numerous unlicensed schemes are not subject regulatory control and sometimes operate with the tacit approval of the government. They are not subject to any organizational requirements or prudential measures. Many assume no fiduciary liability and when the funds are exhausted contributors are left without protection. Excused from expenses such as professional staff and statutory reserves and, further, absolved from any liability, these substitutions can out-compete the licensed insurance and manage care carriers on price alone. As long as this pattern exists, the development of significant voluntary risk pooling cannot be expected.

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⁷¹ National JPKM Managed Care Association, May 2001

There is a pervasive opinion that raising the tariffs in public facilities is politically unacceptable given the current status of the economy. Indeed, sharp rises in public health tariffs would reduce access to healthcare for many. Yet public subsidies cannot be targeted at the poor and vulnerable without doing so. One possible solution would be to establish a national compulsory tax or wage-based scheme in which contributions would be based on a percentage of income. This would shield individuals and families from tariff increases and from the high costs of hospital care. It is a method elected by many countries to finance healthcare and there is draft legislation being considered by the Indonesian parliament.

One of the major consequences of universal coverage scheme is that the benefits derived are an average of all contributions divided by all recipients. As currently characterized in draft legislation, there is no ceiling on the wages to be assessed for contributions. As a result, the three highest expenditure strata would be subject to contribution rates ranging from 300% to over 900% of the average. Whereas from a collective equity viewpoint this may be acceptable, the impact on the existing private health sector would be significant. The top 20% of the population currently is responsible for 57% of all tax revenues, 56% of all private health sector expenditures, and 75% of all private hospital expenditures. The redistribution through the proposed system of percentage contributions would reduce the effective purchasing power of this stratum by approximately 48%. The question is whether or not the proposed universal benefit would be sufficient to purchase private healthcare services. The answer is dependent on the total amount of funds collected. Assuming that the poor do not pay the contributions and, as currently proposed, income was assessed at 6%, an additional \$2.9 billion dollars could have been generated in year 2000 for the health sector which would seem very salutary.⁷²

The impact of the "average benefit" on private sector providers can be estimated by calculating average service payments based on a standard package of JPKM benefits and the average contribution, which in the year 2000 example above would have been about 287,000 Rp. per year per person. This would have been sufficient to pay 17,500 Rp. per primary care visit, 58,000 Rp. for a specialist visit, and about 1.4 million Rp. for a five-day hospitalization. Some private health sector providers in Indonesia can provide services for these amounts, though most cannot. Analysis of 30,000 private sector claims from 11 provinces yielded average costs of 100,000 Rp. for a general practitioner, 398,000 Rp. for a specialist visit, and 3.4 million Rp. per hospitalization. It would seem that the level of service remuneration of the proposed scheme is on the low side and it may be difficult for many of the current private healthcare providers to continue to operate and maintain solvency without significantly lowering their costs.

This scheme could also affect the magnitude of investment needed in the health sector, as discussed previously. There will be significant private investment in the health sector only if the return on that investment is attractive compared to other available investments. Under this scheme it would not. For example, take a 200 bed general hospital costing US\$ 20 million, that operates at an 80% bed capacity ratio and its ambulatory specialist clinic runs at full capacity. If

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⁷² With a GDP growth rate of less than 4%, the contributions would be equivalent to over 85% of the total growth for that year. It does not seem likely that the GOI would choose to do this given the economic conditions, but perhaps some other lower percentage may be found to be acceptable.

they could somehow lower their unit costs such that the remuneration rate mentioned above returned an after tax profit of 18%, the annual return on investment would be 2.0%. This is less than the yield on time deposits and low risk bonds. In addition, the risk of investing or operating in the health sector will be increased as there would be little in the way of alternative revenue sources and providers would be obligated to deliver a defined set of services at a price set by the government. With low rates of remuneration, the current private sector incomes of professionals and facilities could be maintained by delivering the lowest acceptable quality of care and depending on large volumes of patients.⁷³ This would undoubtedly discourage some investments as well.

Other effects would include a predictable increase in utilization or, at least, demand (the "insurance effect") and an increase in purchasing power of the less affluent groups and regions. This would generate more employment opportunities for the Indonesia healthcare workforce. Further, many of these opportunities would be in areas that currently have a low workforce to population ratio. This might assist in reducing the disparities between regions and between urban and rural areas. However, the increased demand for specialist and hospital services may exacerbate the shortage of specialists.

The effects of the scheme would not be limited to healthcare providers. If no ceiling is put on the income assessed for contribution, the health insurance industry would be somewhat redundant and would likely diminish in size. If the contribution rate is higher than 3 per cent, employers and individuals will be contributing to the scheme the total amount they use now to purchase insurance or pay for services. For the pharmaceutical industry, it is likely that a larger shift towards generics will occur that is even greater than that prompted by the economic crisis.

In total, the proposed system would have a significant impact on the market structure of the health sector, not all of it bad. However, it seems unlikely that the universal, compulsory scheme will be legislated or implemented in its current form for numerous reasons. Among them the lack of resources mentioned in the section on future demand, the perpetual failure of such systems worldwide to enroll the informal sector, the political acceptability of no contribution ceiling, the potential threat to the existing private health sector, and the inconsistencies with some aspects of decentralization. Nonetheless, the importance of establishing widespread risk pooling and the persistent and lengthy effort of the MOH to enact some sort of national legislation indicate that some significant changes will occur. Further, that these changes will have a range of effects on how the private health sector operates.

VII. National Poverty Strategy

One of the responses to the economic crisis was the establishment of a temporary social safety net that featured a healthcare component (JPSBK.) An effort to develop the successor to JPSBK is emerging. This may be a system of Poverty Healthcare Grants (PHG) that would fund the full cost of health care for the poor. It is envisioned by some that these PHG would be in the

⁷³ The other alternative it to increase remuneration rates and reduce access to care through queuing, which is a common method of rationing healthcare in such systems.

form of "special" earmarked grants outside of the General Allocation Grant (DAU) and strong arguments have been made that this poverty benefit should be funded at full cost. However, the sheer magnitude of this commitment may prompt the GOI to modify it downward. It has been calculated that the PHG program would, if fully funded, cost over 2.6 trillion Rupiah in the first year based on current costs and the estimated number of eligible poor. Combined with essential "public goods" the total would equal 6.2 trillion Rupiah, which exceeds the entire public healthcare budget. There will be significant pressure to both reduce the funding for poverty and to seek to introduce an element of fungibility through foreign assistance. If this pressure can be resisted there could be some very tangible benefits.

If healthcare services for the poor were funded at full cost it would effectively eliminate the problem of untargeted public health subsidies simply because there wouldn't be funds available for much else. This would necessitate sharp increases in tariffs for the non-poor at public facilities. This in turn feeds back into the funding problems of the public health system under decentralization discussed above, the proposed national JPKM legislation, and the potential role of the private health sector. At full cost, it would obviate the need for current requirement that private hospitals to provide 10%-25% of their beds for indigent care at below cost. They could provide care to the poor without incurring operational losses as they do now and thereby improve their financial health and viability. If this were passed on to the patients, in terms of better quality and service, it would be a positive development.

VIII. Obstacles and Constraints to Growth

Consultations were held with a wide range of public and private health sector stakeholders. In addition an evaluation was made of the regulations on investment, taxation, import duties, and healthcare licensing, as well as the policies on the private health sector to determine the differences, if any, between the constraints reported and the official legal environment.

A. General Constraints

The overwhelming constraint to the health sector is the general state of the economy. The current situation of the health sector is strongly related to the import content of healthcare and the desperate and immediate infrastructure needs. This impact is augmented by the fact that over half of healthcare expenditures are out-of-pocket and many of those pockets are now empty. The effect of actions to alleviate the constraints and obstacles specific to the health sector will not be fully effective until the ability of Indonesians to pay for medical goods and services increases.

The stagnant domestic, commercial credit industry and the uncompetitive nature of current investment regulations also impact the health sector, as credit and investment are scarce in general and for the health sector practically non-existent.

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⁷⁴ Proposal for Establishing National Poverty and Health Funds, Ministry of Health, G. Setiadi & J. R. Marzolf, October 2001

Reform of the regulatory and judicial systems poses a major obstacle not only in terms of the direct impact on the economy but also in terms of patents, trademark, copyright and other intellectual property protection pertaining to the health sector. The enforceability of contracts is crucial to the healthcare system just as it is to other sectors.

Until these fundamental problems can be remedied, the health sector is not likely to fare well. However, ameliorating some specific factors that constrain the health sector now could bring early benefits and would also prepare the health sector to take advantage of future improvement in general economic growth.

B. Government Policy, Regulation and Practices

The impact of untargeted public subsidies, subsidized competition, workforce deployment, weak regulatory enforcement, and conflicting roles has been described to some extent. However, there are additional aspects to some of these as well as other obstacles and constraints to private health sector development that result from policies and regulations of the government that warrant examination.

1. Taxation and Healthcare

Taxation reduces both the affordability and the amount of healthcare received by Indonesians and the capital gains tax on potential investment weakens investment incentives. The primary tax issues that have emerged from this analysis pertain to income tax and value added tax as their impact far exceeds that of other levies.

a. Income Tax

Several sections in the National Income Tax Law PPH 1994 and the recent changes of 2000-2001 impact on the health sector.

1) Private Expenditures

The existing tax code is inconsistent and not very favorable to healthcare. Specifically, medical benefits receive by employees are taxable as income. One of the guiding principles of the Indonesian Income Tax Law is that benefits (cash or non-cash) given by the employer to the employees that increase the employees' economic strength (*kemampuan ekonomi*) must be treated as taxable income to the employee, although tax deductible to the employer. Consistent with this, health insurance premiums for employees are deductible for employer but become taxable income for employee. Individual expenditures on health insurance or JPKM are not tax deductible. Direct employer payment or reimbursement for healthcare expenses is also taxed as income to the employee. On the other hand, insurance loss payments (including health insurance) are tax exempt to the individual (or company.) Under this system, for employees

⁷⁷ UU PPH 1994. Article 4.2.e

⁷⁵ UU PPH 1994. Article 4.1.a & 9.1.d

⁷⁶ UU PPH 1994 Article 4.1.i

who experience an illness that requires expensive treatment there may be a significant tax advantage in possessing health insurance as opposed to direct employer payment for health services. However, for similar employees who are healthy or experience only minor illness, there may actually be a disadvantage in possessing health insurance as the tax on premiums may exceed their direct healthcare costs.⁷⁸

The principle in the tax code is that, if the employee enjoys an individual benefit from what the employer gives them, it will be taxed as income. But the tax code is inconsistent in applying this principle. For instance, pension fund contributions by the employer are not treated as taxable income for the employee.⁷⁹ The stated reason for this is that taxation of the contribution would lower the right (hak) of the employee to the full benefit of the pension fund contributions. Similarly, clothing, safety equipment, transport, (even meals and housing in remote areas) and training are deductible to employer and not taxable for employees. The rationale is that these contributions benefit the employer and are necessary to carry out the work of the company, therefore, they are not an individual benefit. The addition of healthcare benefits to the list of exceptions would seem to be justifiable. This could be accomplished at the ministerial level by issuing a *Surat Keputusan* (ministerial decree) from the Minister of Finance. Worldwide, the tax deductibility of healthcare and health insurance is often used to increase insurance coverage and to increase the ability to pay.

2) Healthcare System Development

Indonesia's high taxes on corporate profits and capital gains discourage foreign private investment in healthcare. The top corporate taxation rate exceeds that of Sweden (30% versus 28%.) Capital gains are treated the same as normal income. However, as with corporate and individual income tax, there are exceptions and mechanisms to grant more favorable treatment. For example, venture capital profits can be afforded capital gains relief by the MOF in the form of a 0.1% tax on shares sold outside of the stock market if invested in small or medium businesses or in a "priority" sector. Investment tax allowances and favorable income tax treatment are available for sectors such as steel production, oil, wood technology, electronic & telecommunication components, oil technology, biotechnology, and research instrumentation. Favorable treatment can also be gained through import duty and tariff exemptions. The 1999 edict provides some relief for the health sector in terms of the raw materials for pharmaceuticals,

⁷⁸ There is no tax incentive either way for individuals who purchase health insurance. As mentioned previously, since individuals already pay taxes on their wages, and because part of these taxes are used to fund the government subsidies for healthcare, the incentive for individuals to purchase private health insurance or JPKM managed care benefits is reduced.

⁷⁹ UU PPH 1994 Article 4.3.g & 6.1.c & 21.2.3b

⁸⁰ Distribution payments from pension funds are taxed as income.

⁸¹ UU PPH 1994 Article 9.1.e

⁸² UU PPH 1994 Article 6.1.g

⁸³ UU PPH 1994 Article 9.1.e

⁸⁴ Note the provisions discussed are currently under review and may undergo substantial revision.

⁸⁵UU PPH 1994 Article 4.3.j

⁸⁶ SE 41/PJ.43/1999

⁸⁷ SE 50/PJ.43/1999

but only a few materials are included. If Health were identified as a priority sector for taxation purposes, there would be substantial incentives for the much needed investment.

b. Value Added Tax

Value added tax (VAT) reductions offer yet another means to increase the affordability of healthcare and stimulate health sector growth. Essentially all pharmaceuticals, disposables, lab reagents, and medical equipment are now subject to a 10% VAT which is scheduled to be increased to 12.5%. The VAT is applied to the sales price, which incorporates the income tax liabilities of the importer, manufacturer, and distributor. It is estimated that the VAT on pharmaceuticals increases the price of drugs 14%. Combined with the import tariffs on the raw materials and income tax, the consumer price of pharmaceuticals is increased on average 22% before the additional costs of dispensing, service, and the associated taxes on those services.

There are few exceptions. A recent government regulation exempted polio vaccine (the only exception pertaining to the health sector.)⁸⁸ This regulation is prefaced by statement that the exempted items are "high priorities on the national scale" to "facilitate national development." However, items exempted include: arms and ammunition, fishing boats, aircraft, and railroad trains (and spare parts to maintain and repair these items.) Another exception is the VAT exemption on drugs administered to patients while hospitalized. These are considered an integral part of the "unit of care" and thus exempted under the provisions of PP 144. However, VAT is charged on drugs received by patients attending the ambulatory care clinic or emergency room. Also, any medications or disposables sold from the hospital pharmacy are subject to VAT, however, at a rate of only 2% of the value of the goods sold.⁸⁹ Why pharmacies nested in hospitals should be able to offer the same prescription medications at a lower tax level than freestanding pharmacies is not clear.

Almost all medical services, except for rehabilitation services, and health insurance premiums are exempted from VAT by virtue of PP 144 / 2000 including: physician treatment, maternity services, hospital care, laboratory tests, dental care, and even veterinary services.

c. Other Taxes

The health sector is subject to a variety of other taxes: a rental tax to hospitals for examination rooms used by physicians, parking taxes, and billboard taxes on the hospital sign indicating the location of the hospital and the emergency room.⁹⁰

2. Differential Tax Burden on Healthcare

It is not known exactly how much tax revenue the government receives from the health sector. In general, collections of tax revenues are very low compared to the official marginal tax rates. However, if all taxes and tariffs due from the health sector in 1998 had been collected, it

⁸⁸ PP NOMOR 146 /2000 also see Ministerial Decree 10 /KMK.04/2000

⁸⁹ Minister of Taxation SE-06/PJ.52/2000

⁹⁰ Reformasi Perumahsakitan Indonesia, S. Soejitno, A. Alkatiri, E. Ibrahim, 2000, p 124

would have amounted to only 2.7% of the total tax revenues, 0.75% of total government revenues, and 0.2% of the GDP. If the government exempted healthcare from taxes and tariffs, their losses in revenues would be minimal but the resulting increased healthcare expenditures and investment would be very significant.

Exemption of pharmaceuticals from VAT would effectively increase the drug supply by almost US \$114 million, more than the total public expenditure for drugs in 2000. If the purchase of health services were deemed tax deductible and out-of-pocket expenditures doubled, the estimated reduction in income tax revenues would only be 3.9%. Each 6.9 Rupiah spent on healthcare would be the equivalent of 1 Rupiah in reduced tax collection. In nominal terms, if \$1.0 billion in tax deductions were allowed for health care expenditures, income tax revenues would only decline by \$145 million. If this deductibility were extended to insurance and managed care premiums, an additional 25 million Indonesians would have a significant incentive to purchase coverage. Deductibility of healthcare expenses parallels the progressive tax rate brackets, thus, greater benefit is accrued by those in higher tax brackets. To provide a greater stimulus for the less affluent non-poor, other measures such as tax credits may warrant consideration. ⁹²

Reductions in other taxes on the healthcare system such as income tax on provider organizations and pharmaceutical manufacturers could similarly reduce the costs of care and further increase the relative purchasing power of a significant proportion of the Indonesian people, if the savings were passed on to the consumer. In summary, the current tax treatment of the health sector constitutes a significant obstacle to growth. Reformation of the tax statutes relating to healthcare and a coherent tax policy could yield significant stimulus.

3. Import Duties and Tariffs

In May 1995, the Indonesian Government unveiled a comprehensive tariff-reduction package covering roughly two thirds of all traded goods, designed to reduce most tariffs to less than 5% by 2003. All tariffs of 20% or less would be reduced to no more than 5% by 2000, and items with rates of more than 20% would be reduced to no more than 20% by 1998, and 10% by 2003. This tariff reform generally exceeds Indonesia's commitments under the Association of Southeast Asian Nations (ASEAN) Free Trade Area (AFTA.)

As of January 2000, 62% of Indonesia's tariff lines were assessed import duties ranging between 0% and 5%. The average un-weighted tariff is 8.9% percent, compared to 9.5% in 1999 and 20 percent in 1994. Imported materials or items constitute a relatively high proportion of the costs of medical services. Due to the life saving nature of many of these items and the lack of any substitutes, it is seems logical that on humanitarian grounds alone, the levels of import duties

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⁹¹ This estimate is based on the Susenas expenditure profiles, the income tax rates year 2000 and an average per capita out of pocket health expenditure of \$11.08 and the percentage of expenditures for health ranging from a low of 1.21% to 2.88%.

⁹² For a review of the topic see Universal Coverage Without Mandates, S. Tuffnel, J.Kirby, The National Center for Policy Analysis: Brief Analysis No. 108 June 1994; Decentralization and Healthcare Financing Policy, ADB Aug 2000 p 28

should be low to prevent diminution of the national therapeutic capability. In fact, healthcare did not fare to well.

There are currently 7,248 import items of which 162 pertain specifically to healthcare. The items in these categories are generally subject to an importation duty of 5%. There are some exceptions: 61 categories are subject to no import duties. This includes some vitamins, hormonal preparations, raw materials for contraceptives, most vaccines, autoclaves, wheelchairs, and dental cements. However, critical life saving items such as surgical instruments, some types of suture material, hypodermic needles, insulin, most antibiotics, pacemakers, artificial joints, respirators, bone reconstruction cements, and so forth are subject to a 5% import duty. 94

There is no logical pattern to import duties other than isolated instances of protective tariffs such as the case of two locally produced antibiotics, ampicillin and amoxycillin, which are subject to a 10% duty. Similarly, sterile surgical gloves are subject to a punitive 20% duty. Wheelchairs are not subject to import duty but repair parts and accessories are subject to a 10% duty. Vitamin E is subject to no duty while Vitamin C is levied at 5%. Theophylline, a life saving drug in the treatment of asthma, is levied at 5% while pseudoephedrine a common cold antihistamine of no therapeutic value is subject to no import duty.

It does seem that, in terms of import duties, healthcare has not been prioritized and duty reductions on healthcare related items have not been as accelerated as for some other less critical items. As there is little domestic production of medical equipment, disposables, or pharmaceutical raw materials, acceleration of duty reductions would seem to offer yet another strategy to increase the affordability of healthcare and stimulate health sector growth.

4. Healthcare Investment Policy

Domestic investment in general has dropped more than 81% in nominal dollars since 1998 and foreign investment has largely been confined to attempts at debt-equity swaps for existing indebted Indonesian companies. It is recognized that significant foreign investment is needed to stimulate economic recovery in Indonesia however the present picture is far from encouraging. The investment and currency risk loads are both currently 6%, the highest among Indonesian's ASEAN peers. Indonesia was recently rated 134th out of 135 countries in terms of "attractiveness" for foreign investment. With these general conditions, the health sector may have little potential to attract more foreign direct investment until such time as these global factors change. Even if they should change, the health sector will be competing with every other sector in Indonesia hungry for investment and the health sector did not attract much investment even in more robust economic times.

The magnitude of capital investment required for health sector growth is so great and the previous investment so limited that an examination of the regulations under which they were made is critical in order to determine what could be done to correct this disparity.

⁹³ Handbook of Import Duties, Tariffs, and Value Added Tax 2001, Directorate General of Customs and Excise of Indonesia

⁹⁴ Ibid. Chapters 29, 30, 37,40,42, 49, 54, 70, 80, 84, 87, 90, 94, and 96

The Investment Coordinating Board, BKPM, plays a critical role in most major domestic and foreign healthcare investments. Registration with the Investment Coordinating Board by domestic investors as a PMDN (domestically capitalized company) is optional, however, there are advantages such as the exemption from import duties on equipment deemed the "means of production" for up to four years. 95 Registration of the investment with BKPM is compulsory for foreign investors in the healthcare field. The health sector is somewhat unique in that most other investments channeled through BKPM require the co-approval of the Ministry of Industry and Trade. Healthcare investments require co-approval by the Ministry of Health. ¹⁰¹

Foreign investment regulations for the health sector were amended in 1998 and 2000, but these amendments represent little improvement over the previous regulations and in some ways are regressive. According to Presidential Decree No. 118 (2000), the areas of the health sector that are open to foreign investment require a domestic joint venture partner. Foreign equity in some areas such as hospitals and hospital management services has been reduced from 100% to 95%. In two areas, managed care and mental rehabilitation services, the maximum foreign equity has been increased from 90% to 95%. In contrast, foreign equity of 100% is permitted in life insurance companies who may offer health insurance. 96 Further, the discriminatory financial requirements posed on foreign and domestic insurers are in the process of harmonization.

There has been no change in the specific areas that are open to foreign investment, which are still limited to:

- Pharmaceutical Manufacturing
- Hospitals of 200 beds or more in major urban areas
- Medical "check up" clinics
- Medical clinical laboratories (new)
- Mental rehabilitation services
- **Nursing Homes**
- Prosthetics manufacture and repair
- Managed care (JPKM)
- Medical equipment rental, repair and maintenance
- Medical evacuation services
- Hospital management services

Over 65% of all previous health care investments and 94% of all the investment funds were confined to pharmaceutical production and hospitals. The reasons for this are manifold but the overriding factor is low market demand, for professional management services and as well as for new freestanding labs. The reasons cited by several foreign investors that JPKM organizations are not an attractive investments is a combination of the untargeted government subsidies, unfair competition, the unregulated nature of the market, and the formidable challenge of contracting networks of providers on a managed care basis. Some areas of potential interest to

⁹⁵ Ministerial Decree No. 135/KMK.05 / 2000, Ministry of Finance

⁹⁶ Indonesia committed to allow 100% foreign ownership for non-bank financial companies that are publicly listed; including insurance companies in the 1997 WTO financial services agreement.

foreign investors are still closed, including general medical clinics, specialist referral clinics, dental clinics, maternity clinics and pharmaceutical distribution. The limitation of foreign investment to major cities and facilities of 200 beds or more restricts it to where it is least needed. There are other major disincentives to investment in healthcare such as the requirement for hospitals to provide 10% of their bed capacity to the poor and/or provide monetary support for a local health center for the poor. There is a similar requirement that clinical laboratories must offer a lower price to the poor for laboratory examinations (no demand limit is specified.) The limitation of foreign investment in "new" laboratory facilities would seem to preclude use of foreign capital to improve existing laboratories.

Overall, regulation of foreign healthcare investments is somewhat confining and protectionist. This has left certain vital components of the healthcare system starved for capital. In addition, there is no congruence between the national health priorities as espoused in "Healthy Indonesia 2010" and the current investment regulations. There is virtually no opportunity for foreign investment in prevention, promotion, and primary care, either independently or as a partner with an Indonesian enterprise. This would seem to be an area where significant results could derive if a coherent health sector investment policy could be crafted.

5. Functional and Structural Issues

There are also obstacles and constraints that issue from the actual practice as opposed to what is written. In many ways, these factors may have hobbled the private health sector to a greater extent due to the lack of dialogue and inconsistencies in implementation of policies and regulations and may prove to be both the most critical and the most difficult to remedy. The evidence that government ministries and private sector advocacy can effect changes that favor expansion and development may be seen in the patterns of import tariffs, tax legislation, and investment regulations of other sectors that did experience marked growth. Part of this problem derives from the organizational structure of the Ministry of Health. In keeping with its long tradition as a National Health Service, there are few structural components of the MOH, which have any responsibilities for or interaction with the private health sector.

The Food and Drug Directorate (POM) attempts at price controls in August 1998 and February 1999 combined with the exclusion of the private pharmaceutical sector in the trade subsidy program during the height of the crisis demonstrates misperception of the potential role of the private pharmaceutical sector. This is further evidenced by the prohibition of foreign joint ventures from competing in the generic drug market or tendering for government procurements.

Private hospitals must obtain licenses and, if processed through BKPM, investment coapproval by the MOH. A sub directorate of the Directorate of Medical Services, which is also responsible for tuberculosis sanitariums and leprosariums, carries out this task. Managed Care (JPKM) organizations must be licensed by the JPKM Regulatory Unit, a sub directorate of the Directorate of Community Services. This unit is limited by a lack of resources and has been required to devote much of those resources to the development of the proposed universal, compulsory scheme discussed above. Apart from these three units of the MOH, there is little formal interaction with the private health sector. Last year the Food and Drug Directorate was

separated from the MOH leaving two sub-directorates with narrow mandates as the sole link with the private health sector.

The long history of an almost exclusive focus on the public provision of healthcare services has not been conducive to the development of an understanding of economics or market forces by the MOH. Regulations PMK 159b/Menkes/PER/II/1988 and SK Menkes 378/Menkes/PER/1993 mandating the social function of both public and private hospitals clearly demonstrate this. Recent proposals that JPKM managed care firms use a portion of their premiums to cross subsidize benefits for the poor and that all managed care firms should be required to operate on a non-profit basis indicate that this understanding has not increased appreciably.

The MOH is attempting to engage the private health sector in a dialogue about provision of services but there is an undercurrent of uneasiness due to the perception that "social" and "commercial" functions are mutually exclusive. What has emerged is an uneven pattern of interventionist policies, which attempt to divert private sector revenues directly into public sector activities rather than establishing a facilitative role and avoiding direct competition with the private sector.

The structural reforms proposed for decentralization include reorganization the MOH to focus more on regulatory activities, healthcare for the poor, and infectious disease control. However, so far there is no evidence of any provision for addressing the deficiencies of the entire health sector, considering public and private elements as part of a whole, or of any organized approach to address the tax, tariff, and investment issues that impede the private health sector from playing its full role.

C. The Private Sector

Of all the limitations and constraints faced by the Indonesian private health sector some of the most significant derive from the private health sector itself. Discussions with private sector stakeholders indicate a resistance to change and innovation. There is a persistent pattern of wasteful and inappropriate prescribing practices, supplier induced demand, and inattention to service quality and client satisfaction. National Standards of Care have existed since 1993 but few use them. Attempts to establish external peer review systems have met with obstruction.

Providers have avoided pre-paid, risk sharing managed care contracts. Some MOH officials consider this one of the reasons that a compulsory national health insurance system should now be contemplated. Private providers also oppose the entry of foreign competition or healthcare professionals. The general perception is that the entry of foreign competitors will take a share of an already small market. But a significant share of this market has already been lost through patient exports. The potential benefits of multinational staff and greater mobility for Indonesian professionals does not seem to outweigh the perceived threat. This extends to the domestic pharmaceuticals industry as manufacturers and distributors seem more focused on protecting their own market rather than trying to expand their market beyond Indonesia's borders.

In the normal growth of markets, strategic alliances emerge to strengthen the competitive edge of the allies. Given the complex and vigorous competition in the healthcare industry of Indonesia there are definite incentives to cooperate. Networks of clinics, independent physician associations (IPA), hospital chains allied with clinics, group procurement initiatives, insurance and managed care alliances with provider networks would all afford economies of scale, better market access, and better quality care. There have been attempts, but there have been few successes. Initial enthusiasm in collaboration is often followed by disintegration as the parties attempt to implement the strategy each to its advantage. In fact, there has been little meaningful cooperation or collaboration in the Indonesian private health sector aside from the Indonesian Medical Association, the denominational hospitals associations, and a few others.

As discussed in Section III of this report, the professional and business ethics of the private health sector are all too often subsumed by pecuniary motives. Unnecessary drugs are prescribed. Unneeded procedures are performed. Pervasive mark-ups and kickbacks on procurement of medical equipment and supplies diminish the impact of what funds are available to improve the system. Health insurance billing practices drive premium costs up to the extent that the potential market is reduced. All of these practices may increase short term profits but could not be considered conducive to longer term market development.

Overall, it seems that development efforts, which could improve the quality and financial health of the private health sector, are frequently confounded by the very parties that would benefit from them.

IX. Potential for Reform

Reform has been on the healthcare agenda since the mid-1980's and major new directions have been pursued with variable degrees of success. However, reform efforts must be accelerated and intensified if there is to be any hope of providing the Indonesian people with adequate healthcare.

Though not the sole factor, the most absolute limitation has been financial. There has never been enough investment, public or private, in healthcare in Indonesia to develop a system commensurate with needs. Moreover, health is evidently not considered a national priority by the government, outside of the Ministry of Health, in any meaningful, substantive way. This has contributed to the erosion of the healthcare system and its failure to keep pace with population growth and demographic trends. However, public statements of the current Minister indicate that the MOH not only understands the broad nature of the problem but also the solution:

"... We also realize that the government cannot do it all. We will have to depend much more on the community to push for better services at the local level and for more private sector involvement in health service delivery" ⁹⁷

"...Government funds will be severely restricted through this recovery period. Ministry of Health staff will be reduced at all administrative levels. Thus, the government must turn to the

⁹⁷ Interview with Minister of Health, Dr. Achmad Sujudi by Jeremy Gross, Healthcare Quarterly Feb 2000

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."⁹⁸

The MOH has evinced an awareness of many of the specific issues such as the need for increased private sector investment and the unfavorable tax treatment of healthcare. There have been attempts to address some of these issues though without much success yet. It was acknowledged by the Minister and upper echelon officers that the MOH is hampered by the lack of the necessary, dedicated expertise in these matters. There is also an awareness of the impending effects of decentralization and globalization on the healthcare system and the need for a comprehensive strategy to engage the private health sector. Further, there are also signs of innovative thinking. The Director General of Medical Services stated that the MOH did not have the capacity to refurbish or repair the public hospital system but was open to the possibilities of outsourcing, resource sharing and joint operating arrangements with the Private Health Sector and that even outright sale of some public facilities warranted consideration.

Most promising, a need was expressed in several meetings for a unit or some sort of entity within the Ministry to address these issues and provide an effective interface between the Ministry and the private health sector. There was also a need for the private health sector to organize a counterpart for this unit to facilitate better collaboration.

Decentralization provides a rare opportunity for the MOH. It will be freed of many of its former responsibilities, which will devolve to the provinces and districts. The role of the Ministry will change and, based on the findings in this brief analysis, it would seem that this new role of the MOH should possess a significant focus on the private health sector. Such a focus would serve both as the key to appropriate growth of the health sector overall and the means by which the MOH can target its budgetary resources on its stated commitment to public goods and the poor without severe negative impact on the balance of the population.

Private health sector stakeholders consulted also expressed a need for a constructive interface with the MOH and the need to represent themselves in a more coherent fashion regarding issues that affect them. In the past, the private health sector stakeholders felt that the government has often implemented policies that were detrimental to it. If there were a forum for developing mutually beneficial policies, there would evidently be enthusiastic support from the private health sector.

External factors primarily pertaining to decentralization and the economy may favor the formation of such a partnership at this time. Effective partnership with the private health sector could bring additional resources to bear precisely when they are needed. Likewise, the private health sector would benefit substantially if a coherent and effective public/private alliance could be developed.

⁹⁸ Opening Remarks of the Minister of Health at the Partners for Health Meeting, January 25, 2000

A. Options for Growth

Whatever actions are taken regarding the public/private dichotomy, it is likely that decentralization will proceed, and the population will continue to grow and age at some rate. The epidemiological pattern will shift from infectious conditions towards the chronic, lifestyle diseases with a few possible exceptions such as malaria and tuberculosis, which are in ascendance. The ramifications of these trends are clear but what the response will be is not.

If there are no major policy changes in the health sector regarding subsidy distribution, health card, manpower policies, taxation, import duties, or investment, the infrastructure of the healthcare system will continue to degenerate and fall behind. Most Indonesians will not be able to afford necessary, good quality healthcare. Voluntary risk pooling options such as insurance and managed care will not expand rapidly. Investment in healthcare would remain low and unemployment high. The export of patients to neighboring countries would continue and increase over time. The chance of meeting the country's goals in reduction of IMR and MMR might recede due to continued low total spending on healthcare, but the aging of the population may be reduced somewhat by cardiovascular disease, cancer, and chronic diseases due to the lack of facilities and services.

There are several measures the MOH and the GOI could take to encourage growth of private sector health provision, and engage the private sector in meeting national health goals. These would include revision of the tax code to exempt pharmaceuticals from value added tax and the inclusion of health insurance and JPKM managed care premiums on the list of tax exempt employee benefits. It could also include institution of zero import duties and exemption from VAT of medical equipment, supplies, and raw materials. Areas of the health sector still closed to foreign investment could be opened and venture capital investments in healthcare afforded some capital gains tax relief.

While amendment of the prevailing tax, import, and investment regulations may provide a significant stimulant for private health sector growth, this alone may not be enough. A more fundamental change in the orientation and perspective of the MOH is required and also extended to the regional governments. This should encompass a more global and comprehensive view of the needs and issues of the entire healthcare system both public and private sectors. The new perspective could also provide the context under which the MOH could implement an array of strategies that would significantly augment any tax or investment measures taken.

Combining the targeting of public subsidies at the poor and vulnerable populations with tariff increases for the non-poor would stimulate the insurance and managed care markets. Widespread risk pooling would increase the affordability of healthcare for everyone. By paying full costs for the poor, the subsidized bed requirement for private hospitals could be eliminated increasing their viability and capacity to attract investment. By accelerating the entry of foreign health professionals and permitting them to work in their full capacity, patient exports could be diminished and the attendant outflow of millions of dollars retained in Indonesia.

Public subsidies could be used to purchase insurance or managed care coverage for the poor thereby enlisting the private health sector in the delivery of pro-poor benefits. The

infrastructure needs of the public sector could be addressed through innovative approaches designed to re-capitalize and refurbish public facilities via joint ventures, privatization, long-term leases, etc. In addition to tax and import duty exemptions, a tax credit system could be instituted in which premiums for insurance or managed care could either be deducted from income or receive a tax credit. This would provide an incentive to join risk pools for those segments of society that need them most. Investment in healthcare could be further stimulated by a package of incentives that not only makes healthcare competitive with other sectors but also directs investment into areas of the greatest need (i.e. clinic development, geriatrics, health insurance, etc.) Encouragement and support could be given to the pharmaceutical sector in the form of an aggressive export campaign reducing foreign exchange risk while utilizing dormant production capacity, gaining economies of scale, and serving as an important export resource for Indonesia. Qualified foreign medical professionals could be actively recruited to fill deficiencies in the workforce. This, combined with improved facilities, could not only attract Indonesians who now seek medical care in foreign countries to receive their treatment in Indonesia but attract foreign patients as well. Health professions training and education could be 'internationalized' through investment, multinational faculties, and "twinning" with foreign institutions of repute. Not only would the capacity of Indonesian healthcare professionals to compete in an era of globalization be increased, but an influx of foreign students could occur as well

The public health system must establish the organizational capacity to develop and implement such policies. This is requires a greater understanding of the dynamics of the private health sector and provides a justification for the establishment of some sort of substantive bilateral relationship.

The organizational structure of the public health sector must reflect this new role in terms of both functions and resources. If the private health sector is enlisted as the predominant method of the expanding health services, the MOH and regional governments must adapt to carry out an increasingly regulatory role. This will require personnel trained as regulators and administrative systems that differ greatly from what currently exists. In addition, the division of regulatory responsibility and authority between the central government and the regions must be developed in balanced manner. Excessive variation in the nature of regulations and in enforcement will contribute to disparities in quality, public protection, and the proliferation of interregional commerce problems. This will not be conducive to growth.

B. Private-Public Interface

There are a number of ways the public and private health sectors could interact. All require providing the participants with the opportunity to determine their specific roles and what channels of communication and actions are most practical. However, the starting point for this process is an initial commitment from the MOH and some representatives from the private health sector.

On the part of the MOH, the establishment of a dedicated, structural unit, tasked with the development of the institutional knowledge of the private health sector, would provide the means of developing a coherent private health sector policy and would be tangible evidence of the Ministry's commitment. Formation of this private health sector unit would require recruitment of

expertise and sufficient support to develop a strong rationale and factual basis to advocate the changes needed at the national level. ⁹⁹ The functions of such a unit could include: evaluation and monitoring of economic trends and legislation, formulation of policy responses for the MOH, and/or collaboration with other elements of the Ministry to develop a sector wide approach. It might also monitor and evaluate private health sector development to identify further needed policy changes. In addition, it could provide a primary point of contact for the private health sector not only for collaboration but possibly also to actively assist and facilitate private sector investment and development in conjunction with BKPM.

NGO's and professional groups such as the Private Hospital Association, the Pharmaceutical Manufacturer's Committee, and the Medical Association already interact with the government and articulate the needs of their membership. However, there may be a need for a group that represents the entire spectrum of stakeholders in the private health sector. Such a body could provide a forum to address cross cutting issues such as taxation and investment and provide feedback on compliance with international treaties and conventions. It could function as a National Private Health Sector Advisory Council (NPHSAC) to foster private health sector growth. If a relationship between the MOH and a NPHSAC could be established, the real task of addressing the priority issues and establishing an effective Public /Private agenda could begin.

X. Conclusions and Recommendations

The culmination of this brief analysis is a series of recommendations to effectively address the critical issues and to indicate the relative priority of these issues. Some actions could be taken immediately, as they address general impediments and will support subsequent actions regardless of their nature. Yet other recommendations will require further analysis and evaluation.

A. Phase I Recommendations (time frame - short term)

- 1. Encourage the development of a National Private Health Sector Advisory Council (NPHSAC) to foster private health sector growth.
- 2. Reach a collaborative agreement between MOH and private health sector representative body specifying the objectives and the responsibilities of both parties and including the terms and conditions of mutual support in implementing the joint public/private agenda.
- 3. Establish healthcare as a National Priority by submitting the rationale for such a designation to the Executive Branch, the Parliament, and the Ministry of Finance.
- 4. Develop of a short term healthcare investment, tax, and import duty relief plan, including be initiated in steps to:

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⁹⁹ Although it is beyond the scope of this report to detail the skills mix and requirements of such a unit, it is clear that the minimum requisite capabilities should encompass: economics and finance, law and legislation, investment banking and venture capital, healthcare policy, and practical business experience in the health sector.

- Obtain a decree from the MOF exempting health insurance or managed care benefit payments by the employer as taxable income to the employee
- Designate the health sector as a priority investment area eligible for investment incentives under the provisions of National Regulations
- Secure a decree from the Ministry of Finance exempting health sector venture capital profits from capital gains taxes
- Obtain exemption of pharmaceuticals, disposables, and rehabilitative services from VAT
- Obtain VAT exemption for medically related imports under provisions concerning strategic materials
- Apply to the Department of Customs and Excise for accelerated import tariff reduction on healthcare related items.
- 5. Carry out economic assessment of current MOH initiatives such as the conversion of hospitals to *Perjans*; introduction of compulsory JPKM managed care, and the proposed health fund grants system to ascertain the impact on development of the private public and health sectors.
- 6. Review national health priorities in the light of the immediate and emerging needs to identify the major areas of deficiency and determine which of these priority areas the MOH will be unable to address within its budgetary or span of control limitations.
- 7. Review current healthcare investment incentives market conditions to determine the potential for private sector involvement and craft policies that channel investment into priority areas
 - Abolish of the 10%-20% indigent bed requirement on hospitals and elimination of the 200 plus bed requirement and the geographic limitations on foreign investment.
 - Eliminate the prohibition on foreign investment in medical, dental, and specialist clinics.
 - Eliminate the prohibition on foreign investment in existing medical laboratories.

B. Phase II Recommendations (time frame 1-2 years)

- Based on a comprehensive assessment of regional healthcare needs and in consultation with district and provincial governments develop long- range development plan for the health sector. This plan would identify the areas where private health sector a) could compete in the market, b) could play an important role with sufficient and proper incentives and c) where healthcare service delivery must remain, for the time being, the responsibility of the government.
- 2. Development of the capabilities of the central MOH to assist the regions in establishing private health sector development plans.
- 3. Assess the regulations governing the transfer of assets to the regions under decentralization and of the statutes governing the disposition of those assets. Secure additional tax regulation amendments anticipated to require a longer time period to effect including:

- Extension of health insurance and managed care benefit exemptions from employees only to individuals and non-employer entities such as associations, health insurance and purchasing cooperatives.
- Introduction of a tax credit program to provide incentives to join risk pools
- 5. Review healthcare workforce policies with three objectives.
 - Elimination of the dual or multiple practices of public providers by revision of the compensation system.
 - Identification of the areas of over supply and shortage.
 - Evaluation of the need to open the health sector to foreign health workers
- 6. Evaluate potential roles for the private health sector in healthcare financing and service delivery for the poor. 100 .
- 7. Intensify efforts to eliminate trade restrictions on the generic drug market and government drug procurement policies.¹⁰¹
- 8. Evaluate strategic options for increasing pharmaceutical exports and harmonizing Indonesia's Good Manufacturing Practices (GMP) with those of developed countries

C. Resources

As previously mentioned, consultations with both the MOH and the private health sector elicited a very candid admission that the Ministry does not currently possess the expertise needed to prepare unaided a private sector development strategy or to staff the proposed unit. A practical plan must be developed to provide assistance in establishing this unit and supporting it through the initial phase of development.

The representative group of the private sector convened to provide input for this report indicated enthusiasm for moving forward. All were of the opinion that the private health sector is currently fragmented and compartmentalized with no single segment able to present a coherent message regarding the overall needs and priorities the private health sector. Further, if such a group could be formalized into something akin to the NPHSAC described in this report, it could be both an effective advocate for the private sector and an ally for the MOH in lobbying for changes conducive to the health sector. ¹⁰²

Open competition based on price and value may not benefit some domestic producers but would benefit the people. The question is whose priorities are paramount.

The International Business Forum consisting of the combined foreign Chambers of Commerce have already

¹⁰⁰ This is very common not only in countries such as the US where most state Medicare and Medicaid programs are administered by the private sector but also in countries like Argentina and Colombia.

¹⁰² The International Business Forum consisting of the combined foreign Chambers of Commerce have already offered their assistance and pledged their support to the MOH concerning needed amendments to the tax and investment issues described in this report.

A cohesive stance and a coherent message to the relevant government departments and the parliament from such collaboration could be a positive force for change. The establishment of both entities and the development of the collaborative basis may proceed in any event, driven by necessity. However, this is where international development agencies, in particular, development banks which have affiliated private sector investment organizations, and institutional depth in economic and investment policy, and private sector development, could contribute not only in the initial financing but more importantly with the types of expertise needed. In addition, once rational policies are crafted, these organizations could assist the MOH in the articulation of the critical issues to the other relevant elements of the GOI. Most attractive would be the prospect of leveraging relatively minor funding into significant, sustainable development through private sector investments.

XI. Summary

The Indonesian healthcare system requires significant development to meet the Government's health goals and to accommodate the current and future healthcare needs resulting from population growth, aging of the population, and a changing epidemiological profile. To meet the challenge private health sector growth must play its full part. To effect this, a meaningful alliance between the public and private health sectors is required.

The MOH is faced with an unprecedented opportunity. It will be relieved of many of its prior obligations and duties under decentralization. The Ministry now must define a new role that should not only prioritize public goods and care for the poor and vulnerable but also take responsibility for the performance of the total healthcare system in terms of planning, regulation, and facilitation. Achieving this goal will not be so much a matter of old routines of annual budgeting or personnel placement but rather the creation of an environment sufficiently attractive to foster spontaneous private health sector growth on an unparalleled scale. It will require building mutual public/private trust combined with the restraint necessary to refrain from excessive government intervention

It is imperative that both the Government of Indonesia and the private health sector take this opportunity to make a serious commitment to a public /private alliance to achieve the development of the Indonesian health sector. The private health sector must find a way to contribute to the improvement of the national health status to ensure its own future. The MOH must actively seek ways to facilitate and stimulate its growth. Together, it may be possible to address the most fundamental problem facing the health sector in Indonesia.