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Indonesia Health Sector Review



Pharmaceuticals: Why reform is needed

Objective

Like other countries, Indonesia is attempting to improve health outcomes, provide financial protection from health care costs, and assure consumer satisfaction in a sustainable way through reforms and improvements in its health system.¹ Medicines and vaccines have become an increasingly important input into effective health care services in the last 50 years. Essential medicines are a critical input to effective health services, and a major cost for the public sector and consumers. While spending on pharmaceuticals and vaccines is estimated to be around 30 percent of total health spending in Indonesia, there is overwhelming evidence that Indonesians are not getting good value for money from much of their spending on medicines. It is, therefore, important that the Government of Indonesia's (GoI) medium-term development plan includes a focus on pharmaceuticals.

Recent Performance and Reforms

Indonesia can take pride in many of its achievements in pharmaceuticals policy and its management of the sector. It has a strong foundation for effective regulation of the safety and quality of medicines and has planned a program of activities to strengthen regulation of manufacture, product licensing and distribution.

Local industry meets most of the country's needs. Low cost generic medicines are available to treat many

common diseases. The public sector has generally managed to maintain adequate supplies of the most essential drugs in primary care clinics. There are examples of good practice in management of social health insurance (SHI) pharmaceutical benefits and in promoting the rational use of medicines.

During the past ten years, the public finance and supply systems for pharmaceuticals have faced some major changes. These include the decentralization of most public health services to district governments in 2001, establishment of the *Askeskin/ Jamkesmas* SHI scheme for the poor, the creation of Badan POM

(the National Agency of Drug and Food Control) as an independent therapeutic goods regulatory agency and the introduction of competitive tendering for public procurement of medicines. There have been changes to the regulations covering unbranded generic drug prices and the participation of foreign manufacturers in the national pharmaceutical market, while state-owned pharmaceutical manufacturers have been corporatized and partially privatized.

Where to From Here

The next phase of health system changes will see the gradual implementation of universal SHI beginning in

2009. This change offers new opportunities to influence the efficient and effective use of medicines, and create more price competition in the pharmaceutical market. Since pharmaceuticals benefits are also a major driver of expenditure growth in most SHI systems, management of the benefits package and spending on pharmaceuticals requires some specific interventions. In addition, there is a need to ask whether the growth of health insurance spending on medicines changes the role for budget-financed purchases of medicines for public health care facilities.

In a decentralized health system, what policies should the central government use to ensure affordable

Table 1: Summary of Market Characteristics

Characteristic	Quantification	Comments
Market size, supplier prices	US\$2.7 billion (2007)	Pharmacy purchase price (Rp. 9,083 = US\$1, mid-2007).
Forecast change for 2008	9%	Predominantly price growth.
Imports, as share of market*	11% (2003)	Growing slowly.
Exports, as % of sales by local manufacturers	6% (2003)	Growing slowly.
Number of licensed medicines	16,000	
Number of licensed pharmacies	8,300	
Number of licensed drugstores	6,600	
Number of licensed wholesalers	2,600	Around 10 of these are large nationwide distributors.
Number of manufacturers	204	30-40 of these are multinational or regional companies.
Panel Market		
Share of total market	50% (2004)	Includes all licensed outlets. Falling share.
Hospital share of panel market	Approx. 25% (2004)	Public and private hospitals.
Pharmacy share of panel market	Approx. 49% (2004)	Private retail pharmacy.
Licensed drugstore share of panel market	Approx. 25% (2004)	Licensed drugstores only.
Non-Panel Market		
Share of total market	50% (2004)	Includes sales to doctors, nurses & midwives for own dispensing; plus sales to supermarkets, stores, street vendors, etc. Rising share.
Ethicals (prescription drugs)		
Share of total market	62% (2005)	
Over the counter (OTC) share of total market	38% (2005)	
Unbranded generic market share	10-11%	Static.
Per-capita spending on drugs per year	US\$12	Market size US\$2.7bn assumed
Public sector share of market		
<i>Puskesmas</i> and public health programs, subject to public procurement	Approx. 10-12% of total market	There are around 7,000 <i>Puskesmas</i> (public primary health care centers) which dispense medicines.
Public hospitals	Of the order of 12-15%	

Source: IMS Health

Note: * All shares quoted are shares by value. Data on shares by volume are not readily available, though obviously, unbranded generics form a much higher share by volume.

access to essential drugs throughout the country? Should the central or local governments spend more (or less) on medicines? What should be the future role for central budget funding of medicines and central procurement? Is public procurement and distribution of drugs operating efficiently? How could they be improved? What are the best policy options for using the expansion of SHI to improve access to, and rational use of, affordable essential drugs? These are some of the questions addressed in this policy note.

The Role of Pharmaceuticals in the Health System and Health Reform Strategy

Pharmaceuticals, vaccines and nutritional supplements are critical inputs in primary health care, and are vital for several of the health-related Millennium Development Goals (MDGs). The goal of reducing the growing burden of noncommunicable diseases (NCDs) makes pharmaceuticals even more important. Most of the medicines required for these conditions are now off-patent, and potentially available as cheap generics. At the same time, there is evidence of widespread irrational use of medicines in Indonesia, including overuse of antibiotics, and of ineffective or even harmful remedies and dietary supplements. It is difficult for patients to judge the quality of medicines and whether the drugs they take are genuinely providing any clinical benefit. Effective regulation of the private pharmaceuticals sector is vital in order to protect citizens from impoverishing themselves or risking their health by buying unsafe, useless, unnecessary, or overly expensive medicines.

Characteristics of the Indonesian Pharmaceuticals Market

Indonesia spends around US\$12 per capita per year on medicines, which is one-third to one-half of the level

in Malaysia and Thailand and two-thirds of the level in the Philippines. The low rate is probably a consequence of Indonesian policies that have achieved greater use and acceptance of low priced generics in the public sector. The *Obat Generic Berlogo* (OGB) initiative (a list of unbranded generics carrying a logo to signal quality) in its early days was designed to build doctor and patient confidence in cheap, unbranded generics and quality-assured generics are now widely available. The government's previous efforts at public education of doctors, patient groups and the public about the substitutability of generics, including bioequivalence, do, however, need to be renewed and sustained.

A striking feature of the pharmaceuticals market is the small share of drugs—less than half—dispensed by



hospitals, *Puskesmas*, pharmacies and other licensed outlets. Table 1 provides an overview of the pharmaceutical market in the country. There are high rates of illegal sales of prescription drugs by unlicensed drugstores, informal outlets, doctors and other health workers. There are some 5,000 unlicensed drug stores and some 90,000 small stores and peddlers. Pharmacies and hospitals are able to

segment the market, and engage in what is sometimes called “monopolistic competition” where richer customers are targeted with costly premier brands, the less well-off with branded generics and the poor with unbranded generics.

There are other anti-competitive practices that reduce price competition and lead to high prices. These include limited production or distribution by only one or two suppliers of pharmaceuticals that are off-patent and available from multiple competitive sources globally. Payment of financial incentives to doctors to prescribe particular brands can also lead to biased advice and high prices.

Although there are both publicly and privately-owned manufacturers in Indonesia, state production and distribution of unbranded generics was the main means by which the MoH supplied the public sector

until the late 1990s. Since then, state production has been converted to state-owned enterprises which are expected to operate on commercial lines. IndoFarma, Kimia Farma and Phapros dominate the supply of unbranded generics and Biofarma dominates the supply of vaccines in Indonesia.

Most Indonesians pay more than they need to for their medicines when they buy from the private sector or from public hospitals (see Table 2). The largest share of medicines sold (by value) in Indonesia are branded generics. The prices paid for most branded generic drugs in hospitals and pharmacies are high—often over six times higher than international reference prices or four to five times higher than the lowest price generic substitute available in Indonesia. For many of these medicines, an alternative low cost, quality-assured unbranded generic is available. There are very wide differentials between the prices of branded generics and originator brands compared with international reference prices. Indonesia has high distribution costs that explain in large part why even the cheapest generics cost more than the international reference price. Wide price differentials are, however, common in countries like Indonesia where: (i) most medicines are purchased out of patients’ pockets, (ii) most patients are not well informed about the safety and substitutability of unbranded generics with branded generics and originator products, and (iii) there is a wide gap in purchasing power between richer and poorer citizens. In these conditions, patients who can afford it are willing to pay extra for branded or originator products.

Other countries have demonstrated that, over time, with a combination of policies, it is possible to change prescriber and patient acceptance of generics. Alongside public information and education, SHI carriers can create incentives for increased generic prescribing and substitution through their contracts and reimbursement policies for institutional providers and pharmacists. In the medium term, consideration could be given to allowing licensed pharmacists to carry out generic substitution for some medicines (defined in regulation), without the need for prior doctor approval.

Proactive investigation by the KPPU (*Komisi Pengawas Persaingan Usaha*: Commission for the Supervision of Business Competition) of monopoly and restrictive practices could play a role in tackling some of the causes of high prices for particular products. These need to cover wholesale/distribution and retail levels as well as manufacturing, and look at vertical relationships that

Table 2: Ratio of Private Pharmacy and Hospital Drug Prices To Median International Drug Price

Price Ratio to Median International Indicator Price	Originator Brands	Most Sold Branded Generic	Lowest Price Generic
Private pharmacies	22-26	6-7	2.6
Public hospitals	22	1.7-6	2.15

Source: National Institute for Health Research and Development (NIHRD) survey 2004.

Note: The Median International Indicator Price which is used as a comparator does not include duty, taxes, distribution costs, or wholesale and retail mark-ups. The Indonesian prices quoted do include all of these components.

affect competition—such as the effect of any restrictive arrangements between manufacturers, distributors and hospitals or pharmacies on competition. It would be helpful if the KPPU gave priority to investigations of off-patent essential drugs where prices are high for both unbranded and branded generics, compared to international indicator prices.

Quality and Safety

Enforcement of Good Manufacturing Practice (GMP) standards has improved in Indonesia. Badan POM is well on the way to achieving its goal of 100 percent compliance with the standards recognized internationally by the Pharmaceuticals Inspection Convention Scheme (PICS). Badan POM has drafted regulations on bioequivalence and bioavailability testing for generic drugs to ensure they are high quality substitutes for originator brands. Enforcement of Good Distribution Practice (GDP) by wholesalers and distributors is not yet as systematic, but Badan POM plans a similar program for achieving compliance over the next five years.

Removing barriers to the entry of more streamlined, competitive national distributors could reduce wholesale margins. This would also facilitate Badan POM’s planned focus on enforcing regulatory standards for GDP to reduce the risk of counterfeit or diverted products entering the private supply chain. Policies on importation of drugs are still uncertain. There remain significant barriers to entry by international firms. In cases where domestic competition is limited, or where certain product lines are not produced in Indonesia, the competitiveness of the generics markets and availability of newer drugs could be enhanced by addressing some

of these barriers, while maintaining product licensing and quality control standards.

In the short term, Badan POM's plans to strengthen enforcement of regulation are important. To help tackle the problems of high prices for branded drugs, the government could relaunch a promotion program for generics to educate patients and health professionals about the safety and substitutability of low cost generic medicines.

Regulation of retail pharmacies, drug stores, dispensing doctors and informal sellers is the major, unaddressed challenge in quality and safety regulation in Indonesia. There is a need for strategies that strengthen enforcement of regulation and ethical codes for drug promotion, regulation of pharmacies, drug stores and doctor dispensing. The regulations are set nationally, but responsibility for implementation and enforcement was decentralized to districts/cities in 2001. Enforcement by local authorities is weak and illegal activity is blatant and widespread. Options for dealing with decentralized governments that fail to exercise their regulatory responsibilities adequately will need to be developed. Badan POM is responsible for pharmacovigilance—monitoring and testing medicines in the market. But effective enforcement also requires action by districts/cities against the businesses and doctors who sell the counterfeit or substandard medicines and other products they are not licensed to sell.

Availability of Essential Medicines

In the private sector, availability is largely left to market forces, and is generally good. Since the 1990s Indonesia has gradually opened up its pharmaceutical market to international trade. However, recent changes mean foreign manufacturers that have no manufacturing operation in Indonesia currently face regulatory uncertainty. This has the potential to affect the availability of some more specialized in-patent products. Regulations also impede importation of generics, even for some essential products such as asthma inhalers where there is no domestic manufacture.

In the public sector, the *Puskesmas* network obtains most of its supply of medicines from the drug warehouse operated by their District Health Office (*DinKes*). District drug warehouses are supplied by multiple public sector supply chains. *DinKes*, some provinces and *DepKes*

(the Ministry of Health) all publicly procure drugs for *Puskesmas*; and use central, provincial and district warehouses to manage inventory. Vaccines are financed and procured by *DepKes*, and distributed by *Bio Farma* to provinces, which distribute to districts.

Availability of a core list of essential drugs for infectious diseases and mother and child health at minimal or no charge is quite good in *Puskesmas*. But variation in district government performance affects access to essential medicine for the poor and near poor. A small number of mainly poorer, rural districts have problems with availability due to low budgets, high transport costs and the low procurement price ceilings set by MoH for OGB drugs. Availability appears to have improved or been maintained from 2004–2006, though slightly less so in rural areas (see Table 3).

Public hospitals ensure availability of a wide range of medicines principally by entering into partnerships—often some form of profit sharing agreement—with private pharmacies or *Kimia Farma* to operate on the hospital site. Thus they make use of private sector supply chains, which are more effective than hospitals' own procurement at ensuring availability and managing inventory, though prices paid are higher than public procurement prices.

In order to meet all of the essential drugs needed for the poor and near-poor population, many district governments need to raise the level of public spending on essential primary care drugs. Over half of districts spent less than US\$0.55 per capita in 2007 and some spent less than US\$0.10. Districts need to spend around US\$1.50 per capita or more on average (assuming

Table 3: Perceived Medicine Availability in Puskesmas

Change in availability of medicines (2004–06)	Got Better	No Change	Worsened
Households	66%	25%	4%
<i>Puskesmas</i> & DHO heads	56%	24%	13%
Rural <i>Puskesmas</i> & DHOs	55%	24%	14%
Urban <i>Puskesmas</i> & DHOs	58%	25%	12%

Source: Preliminary results of GDS (Governance and Decentralization Survey) 2.

the central government continues to provide around US\$0.55 per capita for *Puskesmas* drugs) to provide all the primary care medicines recommended by WHO. The government could strengthen its influence over poorly performing districts by including one or two indicators of expenditure and availability of essential drugs in the set of local government indicators monitored by central government. The MoH could also target technical support and supervision for medicines management to poorly performing districts, review the system of procurement price ceilings, and offer districts more responsive and efficient pooled procurement and logistics services.

In the medium term, monitoring information on district performance in ensuring access to essential medicines can be used to develop stronger incentives for districts over time. For example, the government could introduce conditions and reciprocal responsibilities for districts that repeatedly call on provincial or central buffer stocks. It could develop a program of targeted technical support and training as well as a performance-based component to fiscal transfers which might include access to medicines among the performance targets.



planning, budgeting and procurement processes that is too cumbersome to respond to local variation in demand. Planning is made more difficult by a rigid, highly compressed annual procurement cycle at both central and district government levels. Idiosyncratic procurement regulations and very low regulated procurement price ceilings for many unbranded generic drugs have impeded competition in public tenders, entrenching the dominance of state-owned enterprises in the supply of unbranded generics. Greater decentralization of planning and budgeting, combined with central monitoring and support for districts that have local capacity and management problems could reduce the need for excessive coordination.

Some straightforward changes to budget and procurement regulations and practices in the public sector could increase competition, and reduce the need for the system to hold unnecessarily high levels of inventory, as well as reduce the risk of stock-outs. The use of multi-year contracting regulations for purchasing medicines, allowing the distribution and payment period to span fiscal years to

provide more continuous supply and initiating the drug and vaccine procurement process at the start of the fiscal year would assist in alleviating supply bottlenecks.

Efficiency and Value for Money in Public Procurement & Logistics

The MoH procures generic drugs at low prices—but inefficiency in public supply chain management leads to hidden costs. There are high levels of inventory at every level of the system causing high, unquantified and hidden financing costs, and creating the risk of leakage, spoilage or waste through date expiry of medicine stocks. Despite high inventory levels, many districts and *Puskesmas* have a combination of overstocking for some products and stock-outs of others. Problems in supply chain management arise for several reasons that are related to procurement policies and procedures. The supply chain for essential drugs for *Puskesmas* uses a very complex mix of centralized and decentralized

While needs assessment, planning and budgeting could be more fully decentralized, procurement should remain centralized. Options could be explored for transforming the MoH's central procurement and logistics system into a more continuous and demand-driven pooled procurement and logistics service for districts but only if the MoH's procurement function could be transformed into a more responsive and timely service, enabled to procure on behalf of districts or hospitals. This change could substantially reduce the need for each district to undertake its own tenders every year.

Such a system would need to emulate many of the features of more efficient private sector logistics systems, including more frequent procurement and delivery of smaller batches rather than an annual purchase and distribution, use of flexible volume contracts, better

use of information and communications technology and using framework contracts that allow for greater variation in the volumes districts draw down under contracts each quarter. Alternatively, the options of contracting a private company or SoE to manage logistics for the MoH and districts, or of tendering for both supply and distribution jointly (as PT. Askes does), could be explored. These options require strong governance: effective checks and balances, and a high level of transparency.

Affordability/Financial Protection

The price of medicines is only one component of the cost to patients of accessing primary care or hospital care. Access to medicines can be impeded if other charges and copayments are unaffordable or if patients live far from a health facility. Conversely, unaffordable charges for medicines deter patients from utilizing health facilities. Members of PT. Askes—the mandatory insurance scheme for civil servants—face high copayments for hospital fees. As a result, only 42 percent of members who fall sick seek care.

In primary care, the predominantly poor and near-poor patients who use *Puskesmas* can obtain essential drugs and vaccines free of charge so long as drugs are in stock. A small number of districts have, however, introduced different policies for financing and managing *Puskesmas*, and do allow *Puskesmas* greater freedom to charge patients for medicines. Patients pay only a small service fee (*retribusi*) for consultations. *Puskesmas* drugs for the poor and near poor are financed from multiple public sources including the central MoH budget and provincial and district budget sources for essential drugs for *Puskesmas*. The central government role in financing has increased in recent years as a result of the *Askeskin/Jamkesmas* insurance scheme for the poor and near poor. Some financing for *Puskesmas* drugs is also provided by social insurance funds for their members.

Most patients who are prescribed drugs by private sector doctors or who buy them without prescription from private pharmacies pay out-of-pocket. PT. Askes is piloting a scheme in one district to pay for private sector family medicine coverage for its members. Under this scheme, it makes a capitation payment to cover both doctors' services and essential drugs provided by contracted private clinics. For chronically ill patients, PT. Askes reimburses the cost of medicines prescribed

from its formulary by contracted doctors and dispensed by contracted private pharmacies. *Jamsostek* can also reimburse medicines for chronically ill patients in the community.

For those who have no insurance, the government has some policies that are intended to moderate private sector medicine prices. It regulates the retail prices of OGB medicines and sets a maximum retail margin of 50 percent for all medicines. It also requires manufacturers to print a recommended retail price (set by the manufacturers) on the pack. Regulated OGB medicine prices are low and are set at the same level throughout the country, regardless of the higher transport and inventory holding costs in some areas. These products account for a very small share of medicines sold in the private sector.

In addition to regulating retail margins for medicines, a number of countries also require industry to put maximum recommended retail prices on labels of privately sold medicines. There is growing evidence, however, that these types of regulations can have unintended effects—in addition to being difficult to enforce. Depending on the market structure, maximum retail prices set by the industry can reduce price competition. Fixed wholesale and retail margins can reduce availability of cheap generic drugs in remote or sparsely populated areas while allowing urban pharmacies to obtain high discounts.

Public and private hospitals charge patients for medicines, and make some profits on sale of drugs. Public hospital patients pay prices similar to private pharmacy prices. Where hospitals and doctors profit from drug sales, they face incentives to sell higher-priced, higher-margin products. More stringent enforcement of regulations on unethical marketing incentives and doctor dispensing can reduce brand-name and irrational prescribing.

Private and SHI schemes reimburse hospital care on a negotiated fee-for-service basis. They reimburse the cost of hospital drugs for their members, so long as the drugs prescribed are within the insurer's formulary. The three main SHI schemes—PT. Askes, *Jamsostek*, and *Jamkesmas*—and the various other public and private health insurance schemes each has a different formulary and reimbursement policy.

Universal SHI should reduce the amount individuals spend on essential drugs from their own pockets and

bring more of the unregulated private market activity under some form of control. The example of PT. Askes (described below) provides a guide for future models of influencing private sector operation. Once social insurance covers a substantial share of the market, it can also put pressure on private sector prices.

Based on experience in other countries, however, it will take many years to achieve near universal SHI coverage of the large informal sector with a consequential impact on prices. As a middle-income country, Indonesia will have to set priorities for the medicines it can afford to cover in the SHI benefits package. Insured patients will, therefore, continue to supplement the mandatory benefits package by buying some medicines from their own pockets.

In relation to essential drugs for which there is little or no competition, it may be timely to review the options for drug price regulation in Indonesia. Many upper-income countries regulate prescription drug prices. In contrast with Indonesia, the main focus of price regulation in upper-income countries is on in-patent drugs or other drugs where there is little or no competition. Unlike Indonesia, upper-income countries increasingly use competitive methods to determine the prices of off-patent, multi-source drugs.

Social Health Insurance Now and in Future

The *Jamkesmas* financial protection scheme introduced in 2008 now covers some 76.4 million poor and near-poor Indonesians. Other insurance coverage is provided by PT. Askes, *Jamsostek*, private health insurance and other public and community schemes. Indonesia faces a major financing and implementation challenge to implement its plans to extend social insurance coverage to the 100 million citizens who are currently uninsured.

As SHI coverage expands, control of pharmaceuticals expenditure will be critical for financial sustainability. Hospital medicines constitute a relatively high share of the spending of health insurance funds. *Jamsostek* and *Askeskin* spent around 40 percent of their health payments on medicines in 2007. But with effective policies and management practices such as those PT. Askes uses, this spending can be controlled. PT. Askes spending in the same year was 25 percent and still declining (see Table 4).

Table 4: PT. Askes Expenditure on Medicines Relative to Total Health Expenses

Year	Health Services Expenses (Millions of IDR)	Medicines Expenses (Millions of IDR)	Medicines as Percentage of Total
2002	547	243	44.5
2003	814	301	37.0
2004	1,075	361	33.6
2005	1,496	441	29.5
2006	1,809	482	26.7
2007	2,450	600	24.5

While the right pharmaceuticals policies can help Indonesia to achieve its health system goals, the converse is also true—well-designed health systems reforms can help to manage pharmaceuticals spending and rational use. Financial incentives—the profit/income motive—are currently driving irrational use of drugs and use of high cost medicines in cases where a cheaper equivalent is available. The way that doctors, pharmacists, clinics and hospitals are organized, paid and held accountable needs to be reformed to encourage more ethical, efficient practices in relation to medicines. Regulation can help—but only if the systemic reasons for weak enforcement of regulation are addressed.

Models of good practice exist in Indonesia for SHI management of pharmaceuticals benefits. PT. Askes—has a system for managing drugs expenditure that has many good practice features: a formulary based on independent, scientific advice; prioritization linked to budget availability; prescribing protocols for high-cost drugs; competition to obtain discounted prices for drugs listed in its annual reimbursement list; publication of the price lists; and payments to pharmacists based on fixed fees and regressive margins rather than a percentage mark-up.

The good practices used by PT. Askes to limit spending could be considered for adoption by other parts of the SHI system when Law No. 40/2004 on universal coverage is implemented. But it takes a lot of monitoring and enforcement effort to make this type of system work well—to limit doctors' prescribing outside the formulary, to control leakage of discounted drugs into the market, and to ensure that the discounted products are always available to members. Scaling up effective drug management systems to control

expenditure with much larger SHI membership will require substantial resources for implementation and systems development.

There are transitional risks for pharmaceuticals expenditure and utilization as well as potential opportunities with the expansion of SHI. Once SHI covers a substantial share of the population, it becomes the most powerful lever for influencing private sector prices for essential drugs. The SHI formulary and social insurance prescribing protocols are also powerful methods of promoting rational prescribing. But the experience of poorly controlled cost escalation with the rapid expansion of insurance coverage of the poor and near poor under *Askeskin* illustrates the transitional challenges.

In the medium to longer term, it is desirable to develop methods of paying health care providers—hospitals and primary care clinics—that include the cost of drugs within an aggregated price for inpatient services and most outpatient services. There has been a global trend in middle- and upper-income countries towards this approach that makes the hospital or clinic manager responsible for controlling the prescribing and prices of medicines. This requires a change of mind-set among hospital managers: from seeing pharmacy as a profit center to seeing it as a cost center.

The transition to these new payment methods will require an increase in medicines management and purchasing capacity in hospitals. It will also require support for hospital managers to review the way they contract with retail pharmacies in hospital sites to serve their patients, alongside programs to support hospital and clinic managers to adopt and implement formularies, strengthen their influence on their doctors' prescribing, and procure drugs at lower prices. If a responsive central pooled procurement service is established, it could enable public hospitals to get the benefit of large volume procurement.

When Law No. 40/2004 is implemented, decisions will also be needed on a range of detailed pharmaceuticals policies for SHI providers. The issues to address include; (i) whether to have a national drug formulary for all SHI carriers, (ii) how each SHI carrier will set reimbursement prices for medicines, (iii) how much choice of product they will allow, and (iv) how to deal with prescribing outside the formulary.

One option would be to try to scale up a single nationwide approach—such as the approach used by PT. Askes. Another option would be to allow each SHI fund to develop its own system of setting reimbursement prices. There are trade-offs: having multiple formularies and reimbursement price schedules for different insurers creates complexity for healthcare providers and increases control and monitoring costs.

In theory, having a single national system for setting the formulary and drug reimbursement prices could be more efficient, and could achieve greater downward pressure on drug prices—but the governance, transparency and administrative efficiency of the system would be crucial. There are practical and political considerations in a country as large and diverse as Indonesia. The challenge of controlling fraud, monitoring availability of reimbursable drugs, and monitoring and managing out-of-formulary prescribing for a much-expanded scheme is enormous. It takes some years of development and capacity building to get such a system working. Simpler, less sophisticated control mechanisms will be needed while this type of system is developed.

The *Puskesmas* network is predominantly focused on mother and child health and communicable disease. SHI will be one of the most powerful levers the government can use to tackle the growing burden of chronic NCDs. The future benefits package for NCDs needs to focus on primary care and other outpatient settings as well as covering essential medicines for prevention and treatment of common NCDs. Coordination between social insurance and development of public and private primary health care provision is also important. The family medicine pilots and other initiatives of PT. Askes and international and local SHI schemes could inform this development.

Making the best possible use of social insurance to achieve health goals requires continuous innovation and development, and coordination with complementary strategies for developing the capacity, skills and practices of health care providers and health professionals. A major program of in-service training for general practitioners, together with revisions to undergraduate medical education, is usually needed to enable primary care to play an effective role in chronic disease management.

Policy Options

This note has identified a number of areas where further development of pharmaceuticals policy and management systems could produce benefits. To summarize:

1. Focus on improving performance of districts where availability of essential medicines is poor and create stronger incentives for district government responsibility. In the short term:
 - monitor district level spending for pharmaceuticals as a measure of performance;
 - clarify local government responsibilities to finance essential drugs from local budgets; and
 - clarify the role of *Jamkesmas* and other central budget allocations in covering local medicine supply costs.In the medium term:
 - use monitoring information to develop stronger incentives for districts. For example, develop a performance-based component to fiscal transfers which might include medicine access against performance targets; and
 - develop a technical support program in parallel.
2. Strengthen competition in public procurement and reduce hidden costs of excessive inventory and stock-outs. In the short term:
 - adapt budget and procurement regulations and practices.In the medium to longer term:
 - decentralize needs assessment, planning and budgeting and make better use of comparative strengths of central agencies in managing the supply chain; and

- ensure central procurement is more timely and responsive to achieve economies of scale, while reaping the benefits of decentralized planning and budgeting.
3. Make proactive use of the potential of expanded SHI to influence medicines markets and rational use of drugs, while managing transition risks. In the short to medium term:
 - scale up good practices used by PT. Askes;
 - once Law No. 40/2004 is implemented, adopt a single national formulary; and
 - use the SHI benefit package as one of the most powerful levers to achieve the GoI goal of addressing the growing burden of NCDs.In the long term:
 - move to provider payment models which include the cost of medicine within an aggregated price for in- and out-patient care; and
 - make best use of SHI by complementary strategies to develop skills and innovative practices of health care providers.

4. Increase attention to the dominant private sector to empower patients to get better treatment and better value for money. In the short term:
 - relaunch the promotion of generics to reduce high prices for branded drugs.In the medium term:
 - strengthen enforcement of regulation and ethical codes for drug promotion, regulation of pharmacies, drugstores and dispensing doctors;
 - support KPPU investigations of anti-competitive practices; and
 - review options for price regulation drawing on international experience.

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