



OFFICE OF THE VICE PRESIDENT
THE REPUBLIC OF INDONESIA

The Road to National Health Insurance (JKN)



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THE ROAD TO NATIONAL HEALTH INSURANCE (JKN)

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Glossary of terms, abbreviations and acronyms

APBN	: Annual National Budget / <i>Anggaran Pendapatan dan Belanja Negara</i>
Askes	: Social Health Insurance for Civil Servants and the Military / <i>Asuransi Kesehatan</i>
Aseskin	: Social Health Insurance for the Poor / <i>Asuransi Kesehatan untuk Masyarakat Miskin</i>
Bappeda	: Regional Development Planning Board / <i>Badan Perencanaan dan Pembangunan Daerah</i>
Bappenas	: National Development Planning Agency / <i>Badan Perencanaan dan Pembangunan Nasional</i>
BDT	: Unified Database / <i>Basis Data Terpadu</i>
BLUD	: Agency for Regional Public Services / <i>Badan Layanan Umum Daerah</i>
BOR	: Bed occupancy rate
BPJS	: Social Security Administrative Body / <i>Badan Penyelenggara Jaminan Sosial</i>
BPJS Kesehatan	: Social Security Administrative Body for Health
BPS	: Statistics Indonesia / <i>Badan Pusat Statistik</i>
BPPSDM	: Agency for Developing and Empowering Human Resources / <i>Badan Pengembangan dan Pemberdayaan Daya Manusia</i>
CBG	: Case-based group
CMG	: Case-mix main group
COB	: Coordination of benefits
Dinkes	: Office of Health Affairs / <i>Dinas Kesehatan</i>
Dinsos	: Office of Social Affairs / <i>Dinas Sosial</i>
DJSN	: National Social Insurance Council / <i>Dewan Jaminan Sosial Nasional</i>
DRG	: Diagnosis-related group
FKTP	: Level I health care facilities / <i>Fasilitas kesehatan tingkat pertama</i>
HTA	: Health technology assessment
ICW	: Indonesia Corruption Watch

IFLS	: Indonesia Family Life Survey
INA-CBG	: Indonesian case-based group
INA-DRG	: Indonesian diagnosis-related group
Jamkesda	: Regional Health Insurance / <i>Jaminan Kesehatan Daerah</i>
Jamkesmas	: Public Health Insurance / <i>Jaminan Kesehatan Masyarakat</i>
Jamkes	: Health insurance / <i>Jaminan kesehatan</i>
Jamsostek	: Social Security Programme for Employees / <i>Jaminan Sosial Tenaga Kerja</i>
JKA	: Aceh Health Insurance / <i>Jaminan Kesehatan Aceh</i>
JKBM	: Bali Mandara Health Insurance / <i>Jaminan Kesehatan Bali Mandara</i>
JKN	: National Health Insurance / <i>Jaminan Kesehatan Nasional</i>
JKSS	: Sumbar Sakato Health Insurance / <i>Jaminan Kesehatan Sumbar Sakato</i>
JPK Jamsostek	: Health Care Social Security Programme for Employees / <i>Jaminan Pemeliharaan Kesehatan Jaminan Sosial Tenaga Kerja</i>
JPSBK	: Social safety net / <i>Jaring Pengaman Sosial Bidang Kesehatan</i>
KPS	: Government and private sector cooperation / <i>Kerjasama pemerintah swasta</i>
MDC	: Major diagnostic categories
MTBS	: Integrated childrens' health management / <i>Manajemen terpadu balita sakit</i>
NCC	: National Case-mix Centre
NoKa	: Card Number/ Nomor Kartu
NHA	: National health account
OECD	: Organisation for Economic Cooperation and Development
OOP	: Out-of-pocket
PBI	: Premium assistance beneficiaries / <i>Penerima bantuan iuran</i>
PDPSE Bidkes	: Programme to Reduce the Impact of Fuel Subsidy Reductions on the Health Sector / <i>Penanggulangan Dampak Pengurangan Subsidi Bahan Bakar Minyak Kesehatan</i>
PNPK	: Development of National Medical Services / <i>Pengembangan Nasional Pelayanan Kedokteran</i>
PNS	: Civil servants / <i>Pegawai negeri sipil</i>
PONED	: Basic emergency obstetric-neonatal services / <i>Pelayanan obstetric-neonatal emergensi dasa</i>
PP	: Government regulation / <i>Peraturan pemerintah</i>
PPh	: Income tax / <i>Pajak penghasilan</i>
PPJK	: Health Insurance Payment Centre / <i>Pusat Pembiayaan Jaminan Kesehatan</i>

PPK	: Health services provider / <i>Pemberi pelayanan kesehatan</i>
PPLS	: Data collection for social protection programmes / <i>Pendataan program perlindungan sosial</i>
POPB	: Per person per month / <i>per orang per bulan</i>
PPOK	: Chronic obstructive pulmonary disease / <i>Penyakit paru obstruktif kronis</i>
RITL	: Advanced inpatient services / <i>Rawat inap tingkat lanjut</i>
RITP	: Basic inpatient services / <i>Rawat inap tingkat pertama</i>
RJTL	: Advanced outpatient services / <i>Rawat jalan tingkat lanjut</i>
RJTP	: Basic outpatient services / <i>Rawat jalan tingkat pertama</i>
Rp	: Indonesian rupiah
RPJM	: Mid-term National Development Plan / <i>Rencana Pembangunan Jangka Menengah Nasional</i>
SJSN	: National Social Security System / <i>Sistem Jaminan Sosial Nasional</i>
SKTM	: Poverty declaration letter / <i>Surat keterangan tidak mampu</i>
TKPKD	: Local Coordination Team for Poverty Reduction / <i>Tim Koordinasi Penanggulangan Kemiskinan Daerah</i>
TNI	: Indonesian National Armed Forces / <i>Tentara Nasional Indonesia</i>
TNP2K	: National Team for the Acceleration of Poverty Reduction / <i>Tim Nasional Percepatan Penanggulangan Kemiskinan</i>
UHC	: Universal health coverage
UKM	: Community health initiative / <i>Usaha kesehatan masyarakat</i>
UKP	: Individual health initiative / <i>Usaha kesehatan perorangan</i>
WHO	: World Health Organisation

Foreword

In 2005, the government committed to providing health insurance for the poor with the launch of the Jamkesmas (*Jaminan Kesehatan Masyarakat* or Public Health Insurance) programme. That programme has now begun a new chapter in the evolution towards universal health coverage. On January 01, 2014, the Government of Indonesia launched JKN (*Jaminan Kesehatan Nasional* or National Health Insurance), which aims to protect the Indonesian public from the shock of sudden health crises. JKN is being implemented in stages, with the aim of providing universal health coverage to the entire population by 2019.

Since its launch, JKN has undergone a number of improvements. These include enhanced regulations, increased levels of participation, improved benefits, better-calculated premiums, a more efficient information management system, improved management and the use of the capitation fund at community health clinics, and the use of a prospective payment system for hospitals. However, JKN will face challenges in the future. These include developing a strategy for its sustainability, finding new sources of revenue for the health sector, expanding its membership, improving the readiness of the supply-side and implementing a pharmaceutical policy for the country's health insurance system.

'The Road to National Health Insurance' documents the dynamics of creating and implementing the policies for a social health insurance programme, as well as the efforts made by the National Team for the Acceleration of Poverty Reduction (TNP2K - *Tim Nasional Percepatan Penanggulangan Kemiskinan*) to improve these dynamics. It is our hope that this book will provide a foundation on which to base future improvements in the programme.

We wish to thank the team of writers who have helped produce this book. We hope it will benefit anyone who has an interest or role in the delivery of social health insurance in Indonesia.

Dr. Bambang Widianto

Deputy for People's Welfare and Poverty Reduction and Executive Secretary for the National Team for the Acceleration of Poverty Reduction.

JAKARTA, JUNE 2015



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Introduction



THE IMPORTANCE OF HEALTH AND WELL-BEING, PARTICULARLY FOR THE POOR

All citizens, including the poor and vulnerable, are entitled to proper health care delivered by qualified health-care personnel, as mandated by the 1945 Constitution of the Republic of Indonesia. Health was prioritised in the 2010–2014 national medium-term development plan (RPJMN) and remains a priority in the 2015–2019 plan (Bappenas 2013). The government's current health development objectives aim to increase communities' wellbeing to the highest level possible so everyone can lead healthy and productive lives. Poor health affects productivity and ultimately places an added burden on the community and the government. Generally, the low health status of poor and vulnerable people is due to the lack of financial resources to access health services. Consequently, the central and regional governments are responsible for providing a health-care system that improves access to health services for the poor and vulnerable and protects them against the impacts of ill health. Health indicators will improve if more attention is paid to poverty-related health services (MoH 2008; DJSN 2012).

Previously, the government provided health-care assistance to the poor and vulnerable through the Social Safety Net for Health programme (JPSBK) set up in 1998 in response to the economic crisis. This programme, aimed at poor families, continued as the Programme to Reduce the Impact of Fuel Subsidy Reductions on the Health Sector (PDPSE Bidkes) in 2001–2002 with the goal to provide health and hospital referral services for the poor. In 2003, changes were made to the programme and it became known as the Fuel Subsidy Reduction Compensation Programme for the Health Sector (PKPS BBM Bidkes) (TNP2K 2014). In 2004, to overcome increases in the cost of health care, the government launched a health services programme for the poor and vulnerable that was based more on a health insurance model. The Health Insurance Programme for the Poor (known as Askeskin) was implemented by the Ministry of Health with the establishment of PT Askes (Persero) (the Health Insurance Company) through a Ministerial Decree (SK Nomor 1241/Menkes/SK/XI/2004). Fully funded through the annual national budget (APBN), the programme intended to raise the health status of the poor and vulnerable, thus enabling them to work more productively, escape poverty and avoid dropping back into poverty due to severe illness (TNP2K, UI Consulting 2012).

In 2008, after four years of operation, the government made changes to how the Health Insurance Programme for the Poor was managed. This was due to the need to control the cost of health services and to improve their transparency, accountability and quality. Its name was changed to *Jaminan Kesehatan Masyarakat* (Public Health Insurance, popularly known as and hereafter referred to as Jamkesmas) and participants included



all those registered as poor and vulnerable and in possession of a Jamkesmas card. Early in 2008 it was determined that the target for participation in Jamkesmas would be 76.4 million people nationwide (MoH 2008). The Minister for Health established a target quota for each of the regencies and cities and the regents and mayors sent out official letters to assign each participant a number that was recorded against their name and address. If the number of registered participants exceeded the quota set by the Ministry of Health, the additional participants became the responsibility of the local government. The process of targeting participants used different methods in regencies and cities and was not renewed until 2012. The package of benefits provided by Jamkesmas was considered reasonably comprehensive even though primary

health care was available only through local community health centres (known as *puskesmas*) and inpatient facilities in most government hospitals were only rated at level III. Management of the programme through to the end of 2013 remained with the Ministry of Health and premiums were set at Rp 6,500 per person per month (DJSN 2012).

CHALLENGES TO PROMOTING UNIVERSAL HEALTH COVERAGE (UHC)

Thorough reform to the social health insurance system is crucial because the implementation regulations currently in place are often incomplete or overlap, reducing the system's effectiveness and limiting its ability to reach out to more of the community. The reforms needed are not limited to financial considerations and include reforms in the provision of health care itself. Approximately 36.8 percent of Indonesia's population do not yet have any form of health coverage, including those working in the informal sector (DJSN 2012). This is an important issue in extending health insurance in Indonesia because the informal sector workforce is so much larger than the formal one. Generally, workers in the informal sector consume more than they earn. Consequently, when workers or their family members fall sick, their productivity is affected, resulting in lost income and possible descent into poverty. Thus, assistance with meeting the costs of health care is necessary throughout the community particularly for the poor and vulnerable.

The Jamkesmas approach also raised concerns as non-standard methodology was used to identify participants, leading to complaints about the accuracy of its targeting (numerous exclusion and inclusion errors) and "leakages" to families and colleagues who were not poor or vulnerable. According to National Socioeconomic Survey (Susenas) data for 2009, Jamkesmas reached only 33 percent of the people it was targeting. Additionally, lack of public awareness about the programme meant there were fewer participants than there should have been. The inequality of access to quality health services, especially in rural and remote areas, also meant participants underused the Jamkesmas programme. At the time, Jamkesmas contributions were set without proper accounting procedures and had not been revised since 2008.

To ensure the inception of national health insurance or universal health coverage as mandated by the 1945 Constitution of the Republic of Indonesia and Law No. 40 of 2004 regarding the National Social Security System (hereafter referred to as SJSN), the government launched the National Health Insurance system (*Jaminan Kesehatan Nasional* hereafter referred to as JKN) in early 2014, aiming for universal health coverage within five years. The system requires all individuals to join and be covered by the

programme. Universal health coverage aims to ensure that comprehensive, high quality health-care services are equally accessible to the entire population.

REPORT STRUCTURE

This report looks at the efforts made to establish the JKN programme before it was implemented in early 2014, including the anticipation of challenges to ensure unimpeded progress.

Chapter 2: THE ROAD MAP

Chapter two discusses the JKN road map prepared in 2012 by the National Social Insurance Council (hereafter referred to as DJSN) and other relevant ministries and agencies. The aim of the road map was to provide guidance on both the direction and the steps to take in launching the Social Security Administrative Body (hereafter referred to as BPJS) for Health by 1 January 2014. The process needed to be systematic, coherent and coordinated to ensure that social health insurance would be available to all Indonesians and that it conformed to both SJSN law and the BPJS law.

Chapter 3: INITIAL PREPARATIONS FOR UNIVERSAL HEALTH COVERAGE

The third chapter looks at how the National Team for the Acceleration of Poverty Reduction (hereafter referred to as TNP2K) supported the preparations for universal health coverage and boosted the number of beneficiaries of premium assistance (*Penerima Bantuan Iuran* hereafter known as PBI¹). Adequate JKN funding arrangements were made for this assistance, the management information system was strengthened to identify any errors in the national and regional health insurance programmes and the system of paying providers was reformed.

Chapter 4: FUNDING

Chapter four discusses the funding needed to achieve universal health coverage by 2019. The many issues discussed include: the need for a new source of income for healthcare; options for greater fiscal capacity; a change in ministry priorities; reducing the fuel subsidy; increasing the tax on tobacco; using national income tax for health payments; government collaboration with the private sector in funding health services; a progressive system for paying contributions; improving efficiencies; problems with pharmaceutical expenditures; and combating corruption.

1. The government bears the cost of the national health insurance premiums for all *Penerima Bantuan Iuran*.

Chapter 5: INCREASING PARTICIPATION

Chapter five looks at how to increase the number of participants to full universal health coverage levels by 2019. It discusses the integration of regional health insurance with programmes for participants working in the private sector, the implications of informal sector participation levels and financial assistance for the poor and vulnerable.

Chapter 6: SUPPLY-SIDE ISSUES

Chapter six discusses reforms to health services from the supply-side perspective. It provides a picture of service delivery and the readiness of suppliers, the role of the private sector and recommendations, outlining the immediate steps needed to fulfill universal health coverage expectations by 2019.

Chapter 7: PHARMACEUTICAL POLICY IN THE NATIONAL SOCIAL HEALTH SYSTEM

Chapter seven considers current pharmaceutical policies in the context of the social health system, making recommendations for changes given the implications of the JKN programme.

Chapter 8: CONCLUSION


Chapter eight summarizes the challenges in implementing the JKN programme and suggests ways to overcome them.



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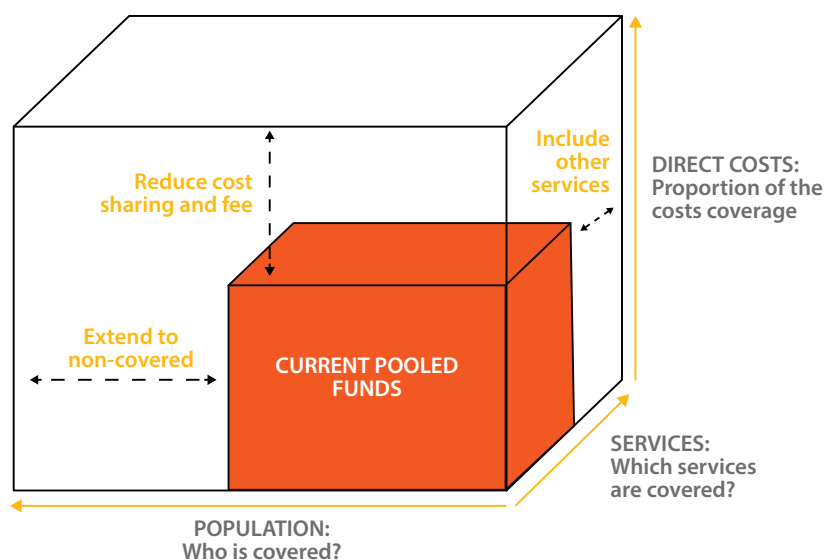
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Road map for the
National Health
Insurance System



In *Health System Financing: The Path to Universal Coverage* (WHO 2010), the World Health Organisation (WHO) introduced three indicators for measuring the success of universal health coverage initiatives. These were: a) the percentage of the population covered, b) the comprehensiveness of the health services included, and c) the percentage of health-care costs still borne by the population. Empirical evidence suggests a linear connection between people’s level of income and a country’s level of social health insurance.

Figure 1: The dimensions of universal coverage



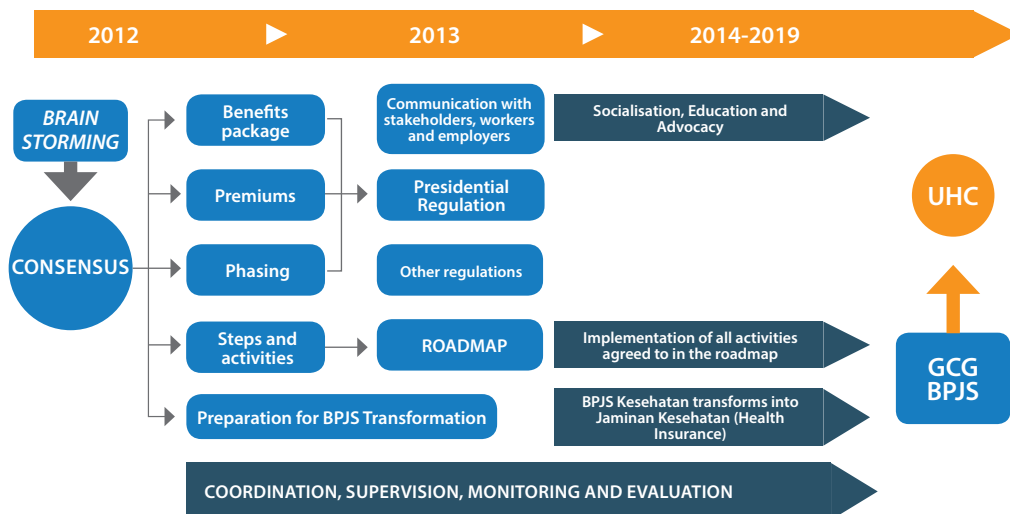
Three dimensions to consider when moving towards universal coverage

Source: WHO (2010:12)

Keeping in mind the dimensions of universal health coverage, as defined by the WHO in **figure 1**, the Indonesian government aims to implement a national social health system that will ensure that all Indonesians pay only a small proportion of their health-care costs (DJSN 2012).

As mandated by Law No. 40 of 2004 on the National Social Security System and Law No. 24 of 2011 on the Social Security Administrative Body, in 2012, DJSN and the Ministry of Health drew up a road map to provide the direction and to outline the systematic, coherent and coordinated steps required within the given timeframe to set up the JKN system. The road map provided an operational framework to the Social Security Administrative Body for Health (BPJS Kesehatan) to set up JKN in 2014 (see **figure 2**).

Figure 2: Road map for the operational framework for health insurance



Source: DJSN (2012)

Based on the operational framework in **figure 2**, the following elements of the plan needed to be completed within a predetermined time.

REGULATIONS

DJSN had to introduce various regulations derived from the SJSN Law of 2004 and the BPJS Law of 2011 to implement the National Social Security System for Health. The aim was to put various regulations in place by the end of 2013. These included the: Government Regulation on premium assistance beneficiaries (PP PBI); Presidential Decree on health insurance; Government Regulation on implementing Law No. 24 of 2011 on the Social Security Administrative Body; Government Regulation on initial funding for the body; Presidential Decree on the procedures for selection and appointment of the Board of Trustees and Directors for BPJS; and Presidential Decision on the appointment of the Board of Commissioners and Directors of PT. Askes (Persero) (the health insurance company) to the Board of Trustees and Directors of BPJS Kesehatan.

These regulations were prepared with the appropriate ministries and completed by the end of 2013, ensuring further progress towards implementing JKN. However, there was insufficient time to ensure that all the key stakeholders were aware of these regulations so the regulations will need to be harmonised and integrated as they are being implemented.

PARTICIPATION

In the road map it was agreed that universal health coverage would be achieved by 2019 when all residents will have health insurance and receive the same medical benefits. This ambitious plan is outlined in the following targets:

1. As of 1 January 2014, BPJS *Kesehatan* will manage 121.6 million health insurance participants. These participants will come from the Social Health Insurance for Civil Servants scheme (hereafter referred to as Askes), the Jamkesmas scheme (public health insurance), the Social Security Programme for Employees (hereafter referred to as Jamsostek), the national armed forces, the national police and parts of the Regional Health Insurance scheme (hereafter referred to as Jamkesda).
2. All those under the Jamkesda scheme will become members of BPJS *Kesehatan* no later than the end of 2016.
3. Employers will register their workers and their families in stages over the 2014–2019 period.
4. Self-employed workers earning an income will register as members of BPJS over the 2014–2019 period.
5. By 2019, no workers will be left undocumented with BPJS *Kesehatan*.
6. Universal health coverage will be achieved by the end of 2019.

Experience from other countries shows that a number of obstacles must be overcome to achieve these goals, especially in reaching out to certain segments of the population. In Indonesia, where a large proportion of the population works in the informal sector, the government needs a special strategy to achieve its targets. Currently, many workers have no health insurance, particularly informal sector workers and those with no permanent workplace. The latter account for 62.1 percent of the informal workforce (BPS 2009). However, many regular wage earners are not yet registered as JKN participants because they do not realise they need to make contributions to the system and many do not understand the benefits it offers.

Another challenge the government faces is the integration of local level Jamkesda schemes with the nationally-managed JKN. Jamkesda implementation varies considerably between locations, in terms of management approach, payment methods, size of contributions, benefits and, especially, the people who are covered. Most regional programmes insure participants who are not covered by Jamkesmas while some cover the entire population of their respective administrative area. Data about regional participants is often unclear, without standard name and address formats. Most Jamkesda schemes have open membership, whereby participants can come and go at their discretion, and many still allow the use of the poverty declaration letter (SKTM) despite already having a list of participants (TNP2K and UI 2012). As of 2

May 2014, 5.9 million of the 31.86 million people participating in the Jamkesda scheme had been targeted by the Ministry of Health's Centre for Health Insurance Payments.

Accurate population data is essential to reaching health insurance participants. At the time this report was written, participation data had not yet been integrated and synchronised with population and workforce figures. Consequently, no accurate figures were available on how many people are without health insurance. Data from the Ministry of Health estimates that the number of people with various forms of coverage is around 151.5 million (or half the population; see **Table 1** for details). But in reality, as of 30 June 2014, the number of registered health insurance members was estimated at approximately 124.5 million.

Table 1: Total participation in health insurance (2012) and total JKN membership (2014)

HEALTH INSURANCE PARTICIPATION, 2012		HEALTH INSURANCE PARTICIPATION 30 JUNE 2014	
TYPE OF HEALTH COVER	TOTAL PARTICIPANTS	TYPE OF PARTICIPANT	TOTAL PARTICIPANTS
Askes	12,274,520	Premium Assistance Beneficiaries (PBI)	86,000,000
Armed Forces/Police	2,200,000	Non Premium Assistance Beneficiaries:	
Jamkesmas	76,400,000	a. Paid Workers	23,761,627
Jamsostek	5,600,000	b. Unpaid Workers	3,565,240
Jamkesda	31,866,390	c. Non-Workers	4,922,121
Self-Insured	15,351,532	Jamkesda	5,904,052
Askes Commercial	2,856,539	Total	124,553,040
Total	151,548,981		

Source: Health Insurance Payment Centre, Ministry of Health, 2012

Source: BPJS Kesehatan (30 June 2014)

Note: Askes = Health Insurance for Civil Servants; Jamkesmas = Public Health Insurance; Jamsostek = Social Security Programme for Employees; Jamkesda = Regional Health Insurance

BENEFITS AND CONTRIBUTIONS

The benefits offered by different health insurance providers vary. Apart from differences in the packages of benefits offered, there are also differences in the services covered, the limitations on benefits and the services that include cost-sharing arrangements. Variations in the benefits in health insurance programmes in Indonesia are shown in **Table 2**.

As seen in **Table 2**, the JKN package of benefits is equitable and in line with the mandate of the SJSN law and as formulated in the Presidential Decree on Health Insurance. Benefits received by JKN participants are comprehensive and include promotional, preventive,

Table 2: Variations in benefit packages for social health insurance programmes in Indonesia

TYPE OF BENEFIT	JAMKESMAS	JAMKESDA	ASKES	JAMSOSTEK
Basic Outpatient Services (RJTP)	Covered	Covered	Covered	Covered
Advanced outpatient services (RJTL)	Covered	Covered	Covered	Covered
Basic inpatient services (RITP)	Covered	Covered	Covered	Covered
Advanced inpatient services (RITL)	Covered	Covered	Covered	Covered max. 60 days p.a. per disability
Catastrophic benefits (hemodialysis, heart operations and similar)	Covered	Covered, except where access to equipment or experts is unavailable	Covered	Not covered
Special benefits	Spectacles, hearing aids, walking aids etc	Spectacles, hearing aids, walking aids etc	Spectacles, hearing aids, walking aids etc	Spectacles, hearing aids, walking aids etc
Exceptions	Services not delivered according to established procedure, infertility, cosmetic, natural disasters, social services, dental prosthetics	Services not delivered according to established procedure, infertility, cosmetic, natural disasters, social services, dental prosthetics	Services not delivered according to established procedure, infertility, cosmetic	Services not delivered according to established procedure, infertility, cosmetic, cancer therapy, hemodialysis etc
Thalassaemia benefit	Covered, including non-participants	Information unclear, not explicit, no information re. exceptions	Covered	Not covered as it comes under congenital abnormalities

Source: TNP2K (2010)

Note: Jamkesmas = Public Health Insurance; Jamkesda = Regional Health Insurance; Askes = Social Health Insurance for Civil Servants and Military; Jamsostek = Health Care Social Security Programme for Employees

curative and rehabilitative services, as well as medicine and medical consumables. All conditions that are medical in nature are covered. Cost sharing will only apply to those services that may raise 'moral' issues.

The size of contributions and the payment system used by existing health insurance programmes also vary. Contributions for Jamsostek are paid by employers, while contributions to PT Askes (Persero) are compulsory. For the police, armed forces and civil servants, the contributions are shared. For Jamkesda, the sources of payments differ greatly. In some, contributions are shared by provincial governments with regencies or

cities. In others, regional programmes offer insurance under their own management (independent programmes where the community pays the full contribution each month).

Contributions for the JKN were organised according to the SJSN law and the Presidential Decree on Health Insurance. To deliver a comprehensive package of benefits and to guarantee equitable services, the government must be able to access a large and readily available sum of state funds. Apart from extending participation (so that healthy participants outnumber ill participants), an accurate calculation of the amount of fees due is also needed.



HEALTH-CARE SERVICES

The implementation of JKN needs to be accompanied by major reform in the health-care system if it is to fully benefit public health. According to the action plan to develop the health services over the 2013-2019 period, prepared by the Ministry of Health (MoH 2012), improving and developing health services should include:

- Developing health-care service facilities;
- Strengthening the referral system;
- Instituting accreditation and standards for medical care to maintain standards at health-care service facilities;
- Improving human resources in health care;
- Developing the pharmaceuticals and medical devices sectors;
- Drawing up standards and costs of health care rates; and
- Introducing relevant regulations.

Strengthening primary health-care service facilities is essential for effective health services delivery. The number of primary health-care service facilities working with BPJS *Kesehatan* as of January 2014 was 15,861, including 9,598 public health centres and 6,263 clinics, doctors or dentists. This could potentially increase to 23,768 between 2014 and 2019. However, both the quantity and the quality of primary health-care facilities need attention. The number of health-care facilities with referral services is adequate at the moment but these services will need to expand by 2019. As of 1 January 2014, 1,701 health-care service facilities were working in cooperation with BPJS *Kesehatan*. These included 533 government hospitals, 109 specialist and mental health-care hospitals, 104 national armed forces hospitals and 45 national police force hospitals. A further 504 facilities could potentially be added to this list, including 56 government hospitals, 42 private hospitals, 396 specialist and mental health-care hospitals and 10 national armed forces hospitals. The referral system also needs to become more efficient and effective in delivering health services (MoH 2012).

Health-care service providers involved in the JKN need to be accredited. This will improve the quality of both the facilities and the health-care workers by setting minimum standards. The level of services that medical personnel should provide is set through the National Development of Medical Services, the Medical Services Guide, Standard Operational Services and “Clinical Pathway”.

Health workers have greatly contributed to the successful development of the health sector. At the national level, based on public health centre figures, there is a surplus of general practitioners, midwives, nurses and other health workers. Any shortages that occur are attributed to uneven distribution of medical personnel. This is in contrast with

hospitals which need many specialists (pediatricians, internists, surgeons, radiologists, physiotherapists, dentists, nurses and midwives). Data gathered in 2012 shows that 79 percent of public health centres have enough doctors to meet or surpass the required

levels while the figure for hospitals is 52 percent. It was hoped that by 2014 these would have increased to 85 percent and 60 percent respectively (MoH 2012).

In implementing health insurance, pharmacies play an important role in ensuring payments for services are cost-effective and sustainable. Managing medications and consumer medical equipment involves three key elements: accessibility, affordability and rational use. The government ensures the availability of drugs and medical consumable materials required by the National Social Security System health services, including for specialist drug programmes (AIDS, TB, malaria, maternal and child health, nutrition and infectious diseases), as well as a national buffer stock. Moving forward, management of the availability of medicines and medical equipment for primary health-care services will be organised by BPJS *Kesehatan* and its partner health-care service facilities. The government will focus on managing drugs, vaccines and medical devices for public health efforts.

Health-care costs and rates need to be standardised so they can be used as a reference for health-care facilities and for BPJS *Kesehatan*. Payment for health facilities is covered by the Presidential Decree on Health Insurance. Service rates for primary health-care services are standardised by calculating the capitation for each service, as decreed in the Ministry of Health's regulation on standard rates for basic level services. For health-care facilities using referral services, service tariffs are standardised by refining the rates from the Indonesian case-based groups (INA-CBGs) which BPJS *Kesehatan* uses, as stipulated in the Ministry of Health regulation on standard rates of health care service facility referrals. In addition, standards for medical services and remuneration for health workers need to be established. Every two years should see a review of the package of benefits and contributions, the average claim cost and the level of usage, as well as an analysis of labour costs for both wage workers (formal) and non-wage earners (informal).



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Preparations ahead
for JKN Coverage



Since early 2014 a number of steps have been taken towards implementing JKN in Indonesia. Reforms are required in all the social insurance programmes involving health, with regard to regulations, participation, benefits and contributions, health services, information management systems and payment procedures. Remedial actions have begun and the Secretariat of the Vice President has played an active role in the changes with guidance from TNP2K.

THE SOCIAL SECURITY ADMINISTRATIVE BODY LAW

In preparing to implement JKN, several changes in BPJS *Kesehatan's* mode of operation were needed. To this end, a Draft Bill regarding BPJS was drawn up in accordance with the mandate of article 5 of Law No. 40 of 2014 on the National Social Security System. Discussions about this Bill had begun in 2007 but they remained deadlocked until the Presidential Statement in September 2010 (issued via Letter No. R.72/Pres/09/2010 and Letter No. R.77/Pres/09/2010). Eight ministries, as representatives of the government, whether independently or jointly, were instructed to discuss the Bill with the Indonesian Legislative Assembly. The ministries included: the Ministry of Finance, the Ministry for State Enterprises, the Ministry for Social Affairs, the Ministry of State Apparatus Empowerment and Bureaucratic Reform, the Ministry of National Development Planning and the Ministry for Manpower and Transmigration².

Since the President's instruction, discussions between the Legislative Assembly and government representatives have been intensive. One crucial issue was the legal structure of BPJS. The Legislative Assembly proposed a single legal entity with a vice-chair in charge of the five social security programmes. The government objected to this proposal, referring to Law No. 40 of 2004 on the National Social Security System (article 1, 2) which states that the National Social Security System is "set up to implement social security programmes through several social security agencies." Following several plenary sessions, chaired by the Vice President and attended by relevant ministers, it was proposed that two entities be formed, namely BPJS *Kesehatan* and BPJS *Ketenagakerjaan* (BPJS Employment). This proposal was presented and explained to the Head of the Legislative Assembly in a list of issues and, following a long debate, was enacted as Law No. 24 of 2011 on the Social Security Administrative Body. Various derivative regulations were developed and, since early 2014, BPJS *Kesehatan* has been operating as a "single payer" by integrating former participants from Askes, the Social Security Programme for Employees (Jamsostek), the armed forces, the national police and the Jamkesmas programme into the one agency. The total number of participants managed by BPJS *Kesehatan* was 116 million at the start of 2014.

2. Report on the Results of Discussing RUU BPJS, 2010 – 2011 (Laporan Hasil Pembahasan RUU BPJS, 2010 – 2011)



BETTER TARGETING FOR SOCIAL ASSISTANCE

Experience shows that the government must improve the targeting of social assistance programmes to avoid the exclusion of the poor and the inclusion of the non-poor. In 2010 the Ministry of Health requested that all regencies and cities update their data on Jamkesmas participants, based on the 2008 data collection for social protection programmes (PPLS). However, only a few responded, delaying the update. In 2011, however, the Ministry of Health began using the Unified Database (UDB) which was based on the 2011 data collection for social protection programmes (TNP2K and UI 2012).

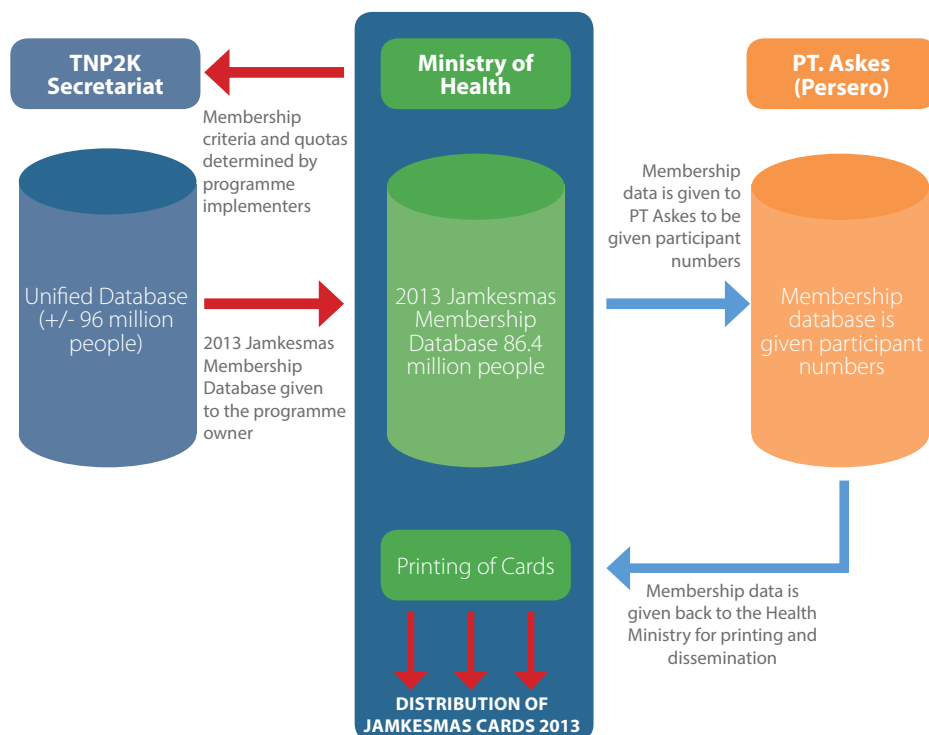
The Unified Database for social protection programmes consists of social, economic and demographic information of around 24.5 million of the poorest households or 96 million people. It is compiled from the data collected by Statistics Indonesia between

July and December 2011 (PPLS 2011). The Unified Database was used to improve targeting, planning, budgeting and human resources of social protection programmes. The database allows both the target number of and the individual beneficiaries to be analysed from the beginning of the planning process, helping to reduce targeting errors. It contains an array of data, including economic and social details of member families (name, gender, date of birth, age, disabilities, chronic diseases, marital status, ownership of identity cards, education and economic activities of household members) and their level of welfare (information about their housing, assets owned, access to schooling/health/sanitation etc.)

The Ministry of Health, TNP2K and PT Askes all played an important role in making targeting more accurate for the Jamkesmas programme in 2013 (see **figure 3**). On April 17, 2012, following a request from the Ministry of Health, TNP2K provided electronic files with details of about 76.4 million participants. The information came with a memorandum of agreement between the ministry and the agency, RI Nomor 04/TNP2K/04/2012 and JP.01.01/X/616/2012, on using the names listed in the Unified Database within the framework of the Jamkesmas programme. Following agreement from the Legislative Assembly, the number of participants was increased by 10 million, bringing the total number of targeted Jamkesmas participants to 86.4 million. This second handover of data on 1 November 2012 included details of 9,990,269 people, in accordance with the TNP2K Executive Secretary's Letter No. B-856/Setwapres/D-3/TNP2K.03.04/11/2012 on the proposal to supplement Jamkesmas participation data in 2013. This data was given to the Directorate General of Health Services, within the Ministry of Health.

Since the Unified Database was based on 2011 data, it was not considered up to date when used in 2013. However, an exercise to compare UDB data (from December 2012) with data on Jamkesmas participants in East Java (from 2010) revealed a 95.46 percent match. 10,095,953 of 10,576,065 Jamkesmas recipients were represented in the UDB. Similarly, 1,176,384 of 1,256,793 (93.6 percent) recipients of Jamkesda in East Java matched the Unified Database data. In December 2012 a spot check of 454 targeted households conducted by TNP2K and the University of Indonesia in eight regencies, revealed that 416 (92 percent) were in the database and people from 400 households (88 percent) could be interviewed (the spot check locations included the city of Palangkaraya and the regency of Katingan, the city of Bukittinggi and the regency of Agam, the city of Sorong and the regency of Raja Ampat, the city of Kupang and the regency of Belu). Of the 400 households interviewed, 388 (97 percent) were from decile 1 (the lowest 10 percent in socioeconomic terms) and 12 households (3 percent) were from decile 2. These findings suggest it is difficult to target programmes without some exclusion or inclusion errors. However, much can be done to improve and refine the process and reduce the number of errors (TNP2K and UI Consulting, 2012).

Figure 3: Role of the Ministry of Health, TNP2K and PT Askes in the early stages of Jamkesmas participation

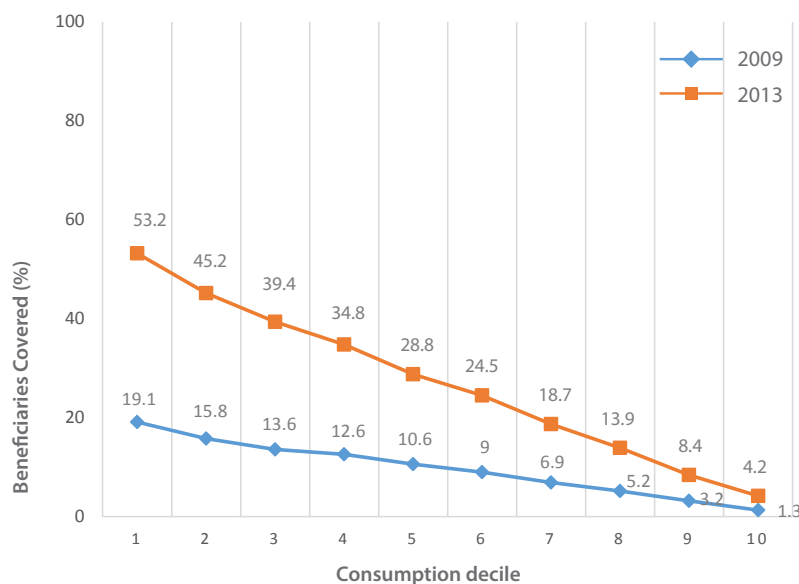


Source: TNP2K (2013)

Using the Unified Database to enhance participation rates in the Jamkesmas programme had a significant impact. **Figure 4** shows how the incidence curve for household beneficiaries is flatter in 2009 than in 2013 which implies that there were many more beneficiaries in decile 1 in 2013 (53 percent) than in 2009 (only 19 percent). Although it has been suggested that the 2013 increase in decile 1 households is attributable to additional participation, it nevertheless shows that the government can improve targeting, as indicated by the incidence curve for households participating in Jamkesmas in 2013.

Once the Ministry of Health receives the updated data from the regions, the data is handed over to PT Askes which is responsible for reviewing and allocating identification numbers. After card numbers are received from PT Askes, the new data – arranged by name and address of Jamkesmas participants – is then returned to the Directorate General of Health Services in the Ministry of Health for the printing and distribution of cards.

Figure 4: Targeting effectiveness of the Jamkesmas programme in 2009 and 2013



Source: Statistics Indonesia; Susenas (2009 and 2013)

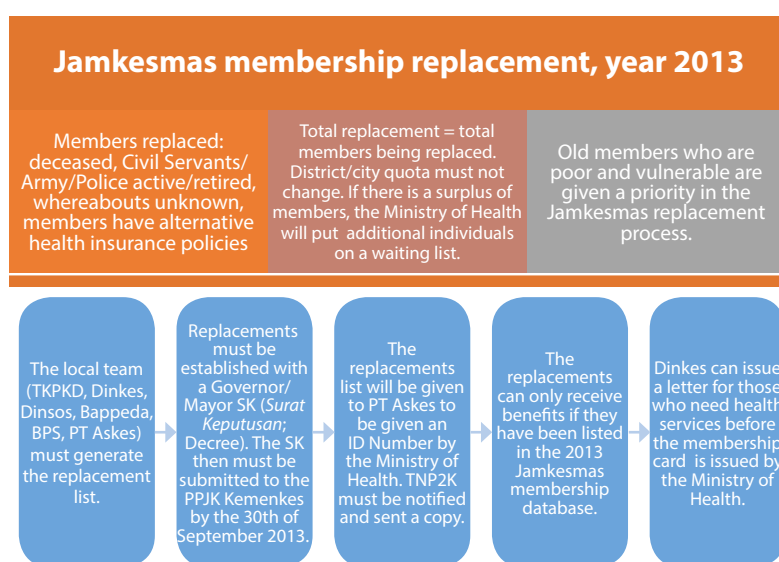
For the 2013 Jamkesmas card, the Directorate General of Health Services worked with a third party, *Balai Pustaka*, which was responsible for printing and distributing cards at the regency and city level. To support the distribution of the cards, the Ministry of Health issued a set of technical guidelines for the 2013 fiscal year through Ministry of Health Decision No. HK.02.04/I/1994/12. This required every regency or city to form a team responsible for the distribution of the cards by involving the relevant sectors at district government level and by going through the public health centre in each location. Distribution occurred in two phases: 76.4 million cards were distributed in phase one and about 10 million cards were distributed in phase two, in January and February 2013. Distribution began in eastern Indonesia.

The distribution of the cards was a vital part of implementing the Jamkesmas programme because the delivery of the cards signaled to community members that they were beneficiaries and were entitled to medical care. The distribution of cards had to be monitored and evaluated at the time to identify issues and propose solutions.

Using the 2013 monitoring results provided to the Directorate General of Health Services, TNP2K analysed the number of regencies that had already filed reports on the card distribution process. The analysis revealed that by 6 December 2013, 381 of the 497 (76.6 percent) regencies or cities had reported on the distribution of cards and 72.93 million cards (84.4 percent of the target 85.4 million) had been distributed to Jamkesmas participants. Of this total, 8,616,163 (11.8 percent) cards were returned for reasons including death, relocation, nonpoor or civil service status.

To overcome the problem of undistributed cards, the Ministry of Health asked communities to check participation in their areas through local health services and health authorities. This was possible because the Jamkesmas database belongs to the health authorities and is available at health-care facilities, such as public health centres and hospitals. Furthermore, the Minister of Health issued Circular No.149/2013 allowing Jamkesmas participation to be adjusted for the following: people who had died, civil servants or members of the police force, pensioners, veterans, people who had relocated and people whose addresses were not found (**figure 5**).

Figure 5: Changes in 2013 Jamkesmas participation as covered by Minister of Health's Circular No. 149/2013



Source: TNP2K (2013) adapted from Ministry of Health Circular No. 149/2013

Updating the Jamkesmas participation data for 2013 was a time-consuming venture. From when the changes began through to 30 June 2012, 150 of 497 regencies or cities had reported to the Ministry of Health (data as of 9 June 2012)³. Of this total, the data that TNP2K received from the Health Insurance Payment Centre amounted to only 138 items per regency or city (TNP2K 2013). The data entered did not always comply with the format required by Circular No.149/2013, making it difficult for the Ministry of Health team to determine which participants should be substituted. Changes that did not follow the right format had to be returned to the area concerned for correction. Mindful of the limited number of regencies and cities that had submitted changes to participant lists in 2013, the Meeting of the Combined Secretariats for JKN moved the deadline for updating Jamkesmas participants to 30 September 2013. However, on 5 November 2013, the Ministry of Health's Health Insurance Payment Centre noted that

3. Health insurance payment centre, Ministry of Health, verbal report.

only 326 regencies or cities had sent information on changes to the 2013 Jamkesmas participation. Of this figure, only 254 provided data to PT Askes (**table 3**). The reasons for missing data included:

- The format returned by the regency or city did not fit the requirements of Circular No.149/2013;
- The data provided was merely an annex and/or its accompanying letter was not signed by the Regent; and
- The data was submitted in hard copy instead of electronically and could not be verified by a computer.

Table 3: Recapitulation of nomination of Jamkesmas substitute participants per regency or city from 31 provinces as of 5 November 2013

DETAILS	TOTAL
Total number of regencies or cities that sent data to the Health Insurance Payment Centre, Ministry of Health	326 regencies or cities
Total number of regencies or cities that gave data to PT Askes	264 regencies or cities
Total number of regencies or cities yet to give data to PT Askes	62 regencies or cities

Source: compiled from MoH (2013)

Many regencies and cities that did not send the Ministry of Health data on changes in Jamkesmas participation in the correct format are now facing their own problems as a result. There is a distinct need for an evaluation of the process and mechanism for handling changes to Jamkesmas participation. Cooperation is urgently needed between the Ministry of Health and regional governments, including provincial, regency and city governments, to generate a sense of responsibility for everyone to help improve the participation data currently available.

IDENTIFYING PREMIUM ASSISTANCE BENEFICIARIES

The data on changes to the 2013 Jamkesmas participation list that were sent to PT Askes had to be validated according to Circular No.149/2013, before they could be used to establish the number of premium assistance beneficiaries (*penerima bantuan iuran*, hereafter known as PBI) as of 1 January 2014. Validating the changes involved not only a business arrangement between the Ministry of Health and PT Askes but also agreements on all the variables the adjustments entailed. It was agreed that the following would invalidate a participant's data: not specifying gender; not including the

date of birth; using the wrong date format; including only the person's age; duplicating Jamkesmas data; duplicating data for a substitute participant; altering the name and date of birth in a regency or city; or leaving the participant's identity number blank.

In keeping with these guidelines, PT Askes developed a validation process involving their own validation and information and technology units. The Jamkesmas data replacement process was plagued by a number of issues, for example:

- **Data was submitted in stages** and often with no explanation of whether data was revised or added;
- **Data was not in Excel format**; and
- Although **data from some regencies and cities** at the Ministry of Health **were still to be validated** and the figures on PBIs were about to be finalised.

As of 6 December 2013, PT Askes had validated 1,284,064 entries from 257 regencies or cities. After the validation process, as shown in **table 4**, 679,433 entries or 53 percent from the total submitted were given a card number.

Table 4: Validation process for Jamkesmas replacement data at PT Askes

VALIDATION PROCESS FOR JAMKESMAS REPLACEMENT DATA (PT ASKES)	VALIDATION UNIT	IT UNIT
PT Askes receives Jamkesmas replacements data in Excel format from the Health Insurance Payment Centre, Ministry of Health	V	
Review according to Jamkesmas replacements Circular 149 format	V	
Verify the total number of Jamkesmas replacements using Excel		V
Migrate Jamkesmas replacements from Excel to SQL		V
Multiple data validation, NoKa Jamkesmas replacements, existing NoKa Jamkesmas		V
Correct invalid Jamkesmas replacements	V	
Provide NoKa to valid Jamkesmas replacements		V
Agree on valid Jamkesmas replacements	V	
Merge databases and deactivate data of replaced participants		V
Receive the merged Jamkesmas replacements data	V	

Source: Validated Jamkesmas Substitution Data, PT Askes (Persero) (2013)
Note: SQL = Structured Query Language; NoKa = Card Number (Nomor Kartu)

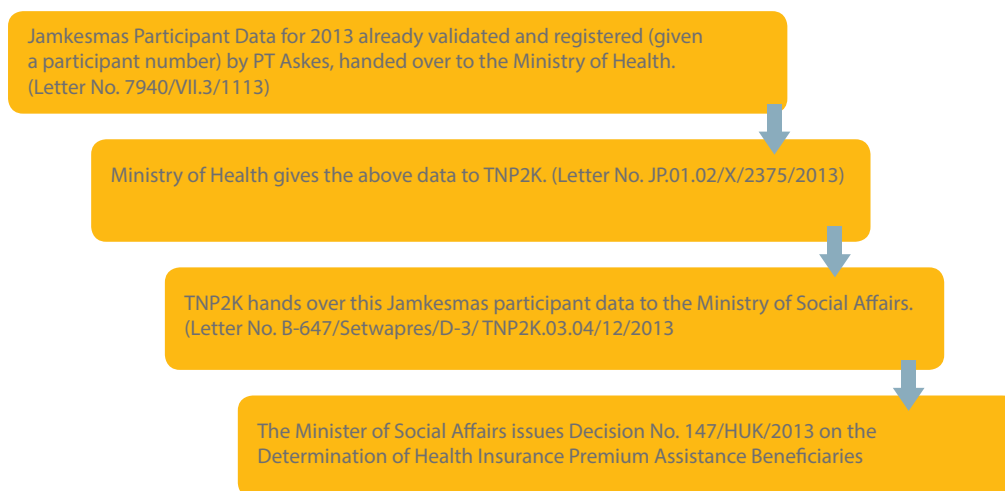
Given all the issues that have arisen, the Jamkesmas participant replacement process needs to be improved, both in terms of the regulations or technical guidelines given and the supervision offered to the regions. The regulations and guidelines need to be clarified and the system altered to accommodate problems in the field. Equally important is supervising local areas in the participant replacement process. With

problems such as mismatches between *Surat Keputusan* (SK) or Decision Letter data and names and addresses, a doubling of members would occur if the replacement process is not monitored.

After the replacement data was validated, the data was registered and combined with the Jamkesmas data, bringing the total quota to 86.4 million. PT Askes (Persero) then handed over the information on Jamkesmas participants who had received card numbers to the Head of the Centre for Health Insurance Payments at the Ministry of Health, as stipulated in Letter No. 7940/VII.3/1113 of 29 November 2013.

The Ministry of Health then handed the participant data to TNP2K via a letter from the Secretary General of the Ministry of Health, No. JP.01.02/X/2375/2013, on 2 December 2013. Following this, the data was forwarded to the Ministry of Social Affairs (Kemensos) to confirm the JKN PBIs for 2014. The Ministry of Social Affairs next issued Decision No. 147/HUK/2013 on the Determination of Health Insurance Premium Assistance Beneficiaries (*Penerima Bantuan Iuran – PBI*) (see **figure 6**).

Figure 6: Transforming Jamkesmas data into JKN premium assistance beneficiaries data 2014



ADEQUATE FUNDING FOR JKN PREMIUM ASSISTANCE

Prior to the launch of JKN in early 2014, Indonesia had four large health insurance providers managed by governments at the central and local levels, namely:

- Jamkesmas (Public Health Insurance);
- Jamkesda (Regional Health Insurance);
- Askes (Health Insurance for Civil Servants and the Military); and
- Jamsostek (Health Care Social Security Programme for Employees).

These providers differed in their benefits packages, in the size of their contributions and

in their systems for making contributions. While the Jamkesmas and Askes schemes provided health insurance for all illnesses, Jamsostek did not cover costly illnesses, such as cancer, alcohol and narcotic related illnesses, venereal diseases, AIDS, heart surgeries, hemodialysis and expensive specialist medical tests. The benefits package offered by Askes was more comprehensive but the premiums were relatively high although services were provided by health-care facilities that were also Askes partners. Jamkesmas covered all illnesses and did not impose premiums. But, unlike Askes and Jamsostek which could provide level I or level II services, Jamkesmas participants received only level III care. As for Jamkesda, the package of benefits offered varied from area to area with some offering packages equivalent to Jamkesmas and others only covering services from the local public health centre (TNP2K 2011). With such a variety of health benefit packages, these earlier health insurance providers did not fulfill the principle of equity as mandated by the SJSN law.

In accordance with the mandate of the SJSN law, health insurance is to ensure all participants receive health care for their basic needs (article 19 paragraph 2). The entire population needs to have access to health-care services that are proactive, preventive, curative and rehabilitative, as well as the necessary medication and medical supplies. In line with article 19, the ideal benefits package would be comprehensive and would guarantee health services according to an individual's medical needs for all forms of illness.

The benefits package and its funding are intertwined issues. The basic principle in developing a benefits package is to ensure delivery of good services, as promised. The breadth of benefits to be applied nationally and the estimation of the contributions, along with an analysis of the financial impact are all important considerations in implementing JKN. Any benefits package developed must be feasible in relation to the SJSN law and must consider the condition and capacity of health service providers as well as the prevailing financial situation. Additionally, the principles of "adequacy" (premiums must be sufficient to pay for the claim or health cost) and "reasonableness" (premiums must be commensurate with the benefits received) are important issues in developing the package.

ESTIMATING THE CONTRIBUTION

With a comprehensive benefits package that fulfills people's medical needs, the size of the contribution or premium becomes crucial in increasing usage, quality of service and sustainability of the scheme. The monthly Jamkesmas contribution was set at Rp 6,000–6,500 per person without adequate actuarial calculations and it has not been reviewed since 2008. Several studies on the benefits package show that to estimate the finances needed and determine the contributions for health insurance, data

on funding from the national budget and from foreign aid need to be aggregated. Based on the studies, monthly contributions ranged from Rp10,950 up to Rp20,000 per person. However, estimating contributions using aggregate data is not seen as a convincing way to persuade decision makers.

In response to the need to increase contributions, in 2011 TNP2K developed a calculation model using payment claims from three large health insurance providers. The data on payment claims came from Askes, Jamsostek and Jamkesmas for the period 2009–2012. Additionally, data from these programmes for the 2005–2010 period was collected and aggregated to determine trends and to act as a basis for testing assumptions. The calculation model included all payments for health services across the three providers divided across three types of payment: basic outpatient payment (RJTP); advanced outpatient payment (RJTL); and advanced inpatient payment (RITL). With this claim data average costs for a number of health services could be generated. This data could then also be used to calculate the estimated premium assistance contribution.

Calculating contributions for PBIs

In calculating the premium assistance contribution there are two major components that affect the size of the contribution, namely the cost of the health care and loading factors as defined by the following formula:

$$\text{Contribution (Rp, POPB)} = [(MC) + (LF)]$$

Where,

- **Contribution** is a nominal amount (Rp per person, per month – POPB) that is used to finance health insurance benefit packages and incidental service fees;
- **MC** is the medical cost per person each month
- **LF** refers to loading factors.

Calculating the cost of health care services

The cost of health care (medical costs – MC) is the allocation of funds to be used in paying for health-care services according to the level of benefit agreed upon. The amount of the MC is the amount of money that will be paid to the health-care service provider (hospital, public health centre, doctor) that offers health insurance packages. The estimated cost of health care uses a probability factor (D_{ij}) with the tariff for each type of service (P_j). Thus the basic formula for calculating the cost of health care (j) for the individual (i) is as follows:

$$\text{Health Payment, } (MC_{ij}) = [(D_{ij}) * (P_j)]$$

Usage

The probability figure for the usage of health services is usually quite small and is often calculated per million or per thousand participants. This figure indicates the total usage by people per month per thousand. For example, usage of basic outpatient services that measures 62 POPB per 1,000 means that of every 1,000 participants, 62 use level 1 outpatient services (public health centre or doctor's practice) every month. To ensure the principles of "adequacy and reasonableness", it is necessary to adjust the usage figure. Adjustment should take into consideration: age; gender; morbidity; whether the patient is insured; geography and the impact of developing health infrastructure; and the cost control measures to be implemented. Each of these adjustment factors has a different impact on the probability factor and tariffs (TNP2K 2014).

Health care service tariffs

The tariff for a particular kind of health service over a fixed period is calculated by dividing the total number of claims for that service by the total usage of health services. As with usage, adjustments are also needed in calculating the tariff for the health-care service. It is also necessary to keep in mind that inflation in the health sector is usually higher than general inflation.

Calculating loading factors

The tariff is then adjusted with the addition of loading factors, including programme management costs, administration costs, salaries, programme development fees, a technical inventory and incidental margins.

Scenarios for calculating PBIs' contributions

Before calculating contributions, the differences between the programmes in question need to be analysed. Two scenarios need to be considered in calculating contributions, one where comprehensive benefits are offered and one where the 50 most expensive illnesses are omitted. Based on calculations using these two scenarios, the difference in the contribution is not large, amounting to only Rp 1,868 or a difference of 8.41 percent (**table 5**). In line with the concept of social insurance protecting the individual from becoming poor as a result of catastrophic illness, the SJSN law provides comprehensive coverage, consequently the calculation selected was the one which reflected the comprehensive coverage scenario.

Table 5: Comparison of comprehensive and non-comprehensive benefit scenarios

BENEFIT SCENARIO	ESTIMATED PBIS' CONTRIBUTION
Comprehensive benefits	Rp 22,201
Benefits excluding 50 most expensive illnesses	Rp 20,333
Difference (Rp)	Rp 1,868
Difference (%)	8.41%

Source: TNP2K (2011)

In the contribution model providing comprehensive coverage, two scenarios were developed to accommodate differences in assumptions about the level of usage, namely a moderate usage scenario (assuming a conservative increase in usage) and a high usage scenario (assuming a strong increase in usage). The average cost is assumed to be the same for each area of service.

The assumptions used to estimate the level of usage are shown in **table 6**. The methodology used in the calculations in each model were discussed in a variety of academic forums with the involvement of relevant stakeholders.

Table 6: Assumptions in calculating PBIs' contributions 2014

	MODERATE	HIGH
Basic outpatient payment (RJTP)	Doctor's practice gets Rp6,000 capitation with the aim of improving the distribution of medical staff and improving its effectiveness as a gatekeeper.	Doctor's practice gets Rp 6,000 capitation with the aim of improving the distribution of medical staff and improving its effectiveness as a gatekeeper.
Beneficiary usage (RTJL + RITL)	Based on usage data from Jamkesmas	Based on usage data from Jamkesmas
Assumptions about increase in beneficiary usage (RJTL + RITL)	Usage increases 70% (2010 to 2014) because: <ul style="list-style-type: none"> No insurance effect Increase in usage unclear due to age of the programme Normal public awareness programmes No significant improvement in distribution and availability of health facilities 	Usage increases 110% (2010 to 2014) because: <ul style="list-style-type: none"> The effect from insurance is more significant on the lowest quintile group Very large public awareness programme Significant improvements in the distribution and availability of health facilities A surge in the usage of social health insurance (SHI) as experienced by many other countries
PBI Management Fee	Management fee 5%. With a large number of participants, this is considered adequate.	Management fee 5%.
Contingency margin	Contingency margin for PBI and non-PBI is 5% due to the large number of participants	Cost reserves PBI and non-PBI 5%

Source: TNP2K (2011)

Note: RTJL = Advanced outpatient services; RITL = Advanced inpatient services; PBI = premium assistance beneficiaries

After taking into account the difference in the assumed levels of usage, the contribution figure is calculated. The calculation includes six components, namely: basic outpatient services, advanced outpatient services, advanced inpatient services, adjustment for age, management fees and a cost reserve (*biaya cadangan*). Calculating advanced outpatient services and advanced inpatient services involves several subcomponents, for example, using medical care and medicine for advanced outpatient services and accommodation, medications and medical costs for the intensive care, intensive cardiac-care or high care units in advanced inpatient services. The final amount calculated for PBIs' contributions ranged from Rp19,286 for the moderate usage scenario and Rp22,201 for the high usage scenario (**table 7**).

Table 7: Summary of PBIs' contributions for 2014 as calculated by TNP2K, 2011

ESTIMATION OF PBI CONTRIBUTION - TNP2K 2011		
MAIN COMPONENT	MODERATE	HIGH
1 Cost of First Stage Outpatient (RJTP) per person per month	6,000	6,000
2 Cost of Advance Stage Outpatient (RJTL) per person per month	3,020	3,731
- Medical	1,232	1,522
- Drugs	1,788	2,209
3 Cost of Advance Stage Inpatient (RITL) per person per month	7,762	9,589
- Medical	3,075	3,798
- Drugs	3,268	4,037
- ICU/ICCU/HCU	310	383
- III Level Accomodation	1,109	1,370
4 Risk Adjustment of the Population Age per person per month	750	864
5 Management Cost per person per month	877	1,009
6 Reserve Cost per person per month	877	1,009
PBI CONTRIBUTION / PERSON / MONTH	19,286	22,201

The government used the TNP2K approach to calculate the amount of the PBI contribution and the Ministry of Health and Ministry of Finance used this to negotiate a contribution rate that balanced adequate health cover with the government's fiscal capacity. After a long discussion with all relevant stakeholders, in July 2013 a coordination meeting led by the Indonesian Vice President agreed on a monthly premium of Rp19,225 per person (**table 8**). The amount of the contribution as defined in Presidential Regulation No. 111/2013 article 16A is almost three times that of the previous figure of Rp 6,500 per person each month. This decision highlights government's commitment to supporting the implementation of JKN, amounting to Rp 19.8 trillion for the year 2014 in support of 85.4 million PBIs.

Table 8: Calculating estimated PBI contribution for 2014

PREMIUM 2014	PBI Class III
Usage RJTL per 1,000	9.70
Usage RITL per 1,000	2.40
Payment RJTL	Rp 331,748
Payment RITL	Rp 3,088,244
Payment per person per month RJTL	Rp 3,218
Payment per person per month RITL	Rp 7,411.79
Capitation RJTP	Rp 7,000
Premium – sub-total	Rp 17,630
Management fee	Rp 1,595
PREMIUM	Rp 19,225

Source: MoH (2013)

Note: RTJL = advanced outpatient services; RITL = advanced inpatient services;
RJTP = basic outpatient payment; PBI = premium assistance beneficiaries

DEVELOPING SOFTWARE FOR ESTIMATING CONTRIBUTIONS

TNP2K's calculation of PBI contributions in 2011 used data from 2009 and 2010 and the calculation was done again to estimate the size of the contribution for 2014. After JKN is implemented another review will be necessary to check whether the assumptions in the calculation were valid. If assumptions change significantly, the premium assistance contribution may not be adequate. Updating the calculation of the contribution needs to be based on new data from 2011– 2014. This update will also involve a change in source data, namely in the use of individual Jamkesmas claims and the Indonesian case-based groups (INA-CBG) tariff. Changes in the structure of the data would lead to adjustments in the methodology so that the data can be used optimally. The methodology will be used not only to update the contribution calculation but also to estimate the contribution over the following years.

To facilitate the work of ministries, agencies and stakeholders in calculating the contributions, TNP2K used Microsoft Excel to develop a tool called "Calculating Estimated Contributions for PBI". The use of this tool encouraged transparency and helped ensure that information reached all stakeholders involved in implementing JKN. All the key stakeholders were introduced to the tool through workshops and TNP2K developed a set of step by step technical guidelines on how to use the tool as well as a separate guide on the theory and methodology used to calculate the contribution and the process of updating it (TNP2K 2014a, 2014b). These guidelines are expected to provide a full and clear explanation of how to determine the amount of the PBI contribution, an important process in implementing JKN. These are just the first versions of the guidelines as there will undoubtedly be room for improvement and the information system will be strengthened and developed by the various key stakeholders.

STRENGTHENING THE INFORMATION MANAGEMENT SYSTEM FOR IDENTIFYING PROBLEMS IN JAMKESMAS AND JAMKESDA

Claims by Jamkesmas and Jamkesda adherents contain valuable information on health services usage – for example, about age, gender, diagnosis and cost of services. However, this data has so far not been used optimally although it would help in monitoring and evaluating health programmes at both the central and local level. A robust and integrated information management system that can analyse data and produce useful information is required. This information could be used to formulate proactive and preventive approaches to overcoming health problems, and to assist in making policy decisions and overall health policy.

In 2013, TNP2K developed an information management system for health facilities featuring a variety of indicators. It took the form of a “dashboard” and covered health-care services usage at hospitals using individual Jamkesmas claims. The dashboard was developed using Tableau 8.1 to monitor health-care service facilities usage for illnesses based on the WHO’s “International statistical classification of diseases and related health problems 10” (ICD-X), sorted by age grouping, gender, and so on. The system is used not only by central government (Ministry of Health and BPJS *Kesehatan*) but also by local governments (local health departments and hospitals) to examine the spread of disease in each area. If it is used continuously, it provides useful serial data for planning future activities such as Individual and community health efforts.

Apart from developing the information management system, TNP2K also analysed health service claims from three Jamkesda programmes: Aceh, Sumbar Sekato and Bali Mandara in 2013. One of the aims of this was to obtain information about health services usage, payments, the most common diagnoses and the most expensive diagnoses in each of the three provinces. The source data were health-care services claims managed by PT Askes (Aceh and West Sumatra) and information from the Provincial Health Department (Bali). The data came from basic inpatient services, advanced outpatient services and advanced inpatient services .

Using Tableau 8.1 the claims analysis can be presented in the form of a dashboard and provides the following information to policy makers in a visual form:

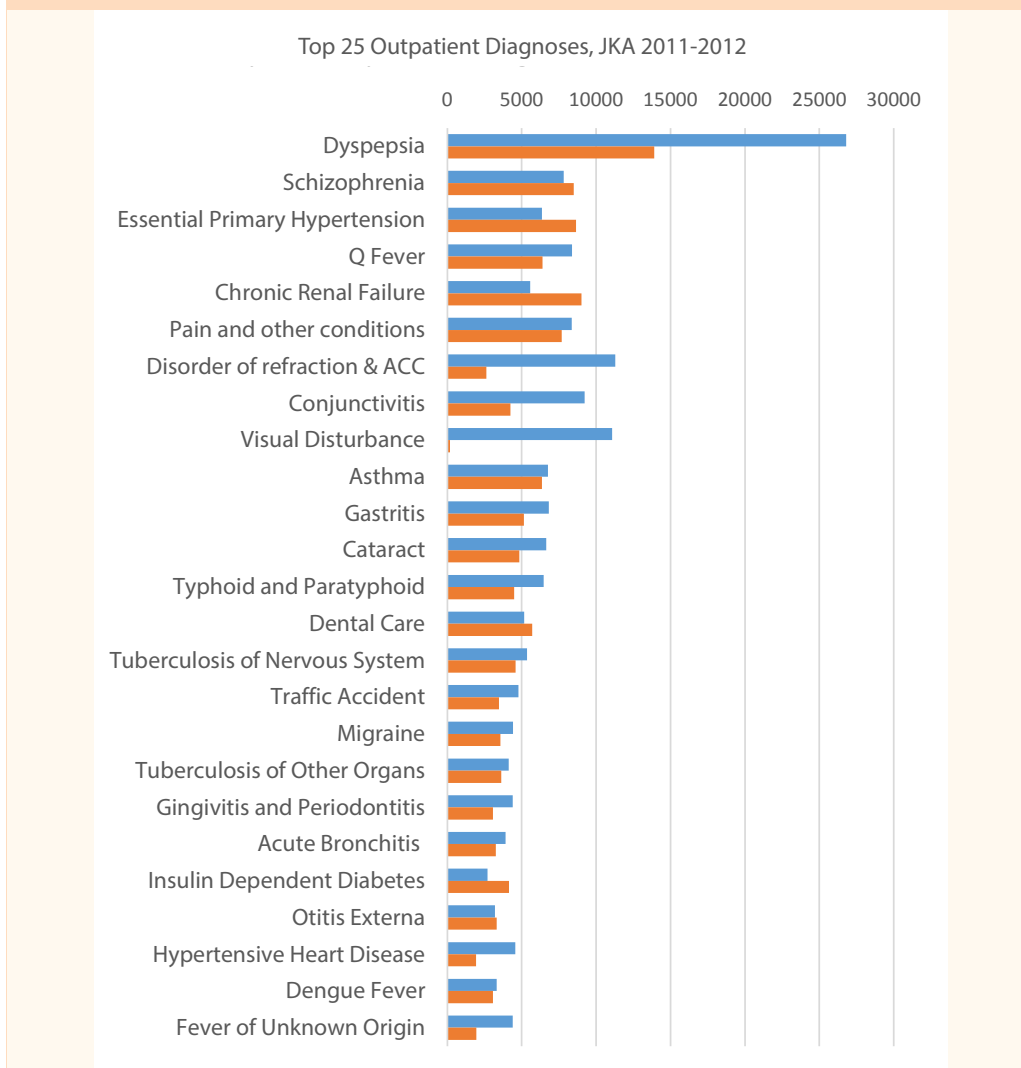
- the 25 most commonly diagnosed illnesses suffered by Jamkesmas participants (see **figure 7**); and
- the monthly level of advanced outpatient services used by Jamkesmas participants in 2011–2012 per 1,000 residents, by to regency or city of origin (see **figure 8**).

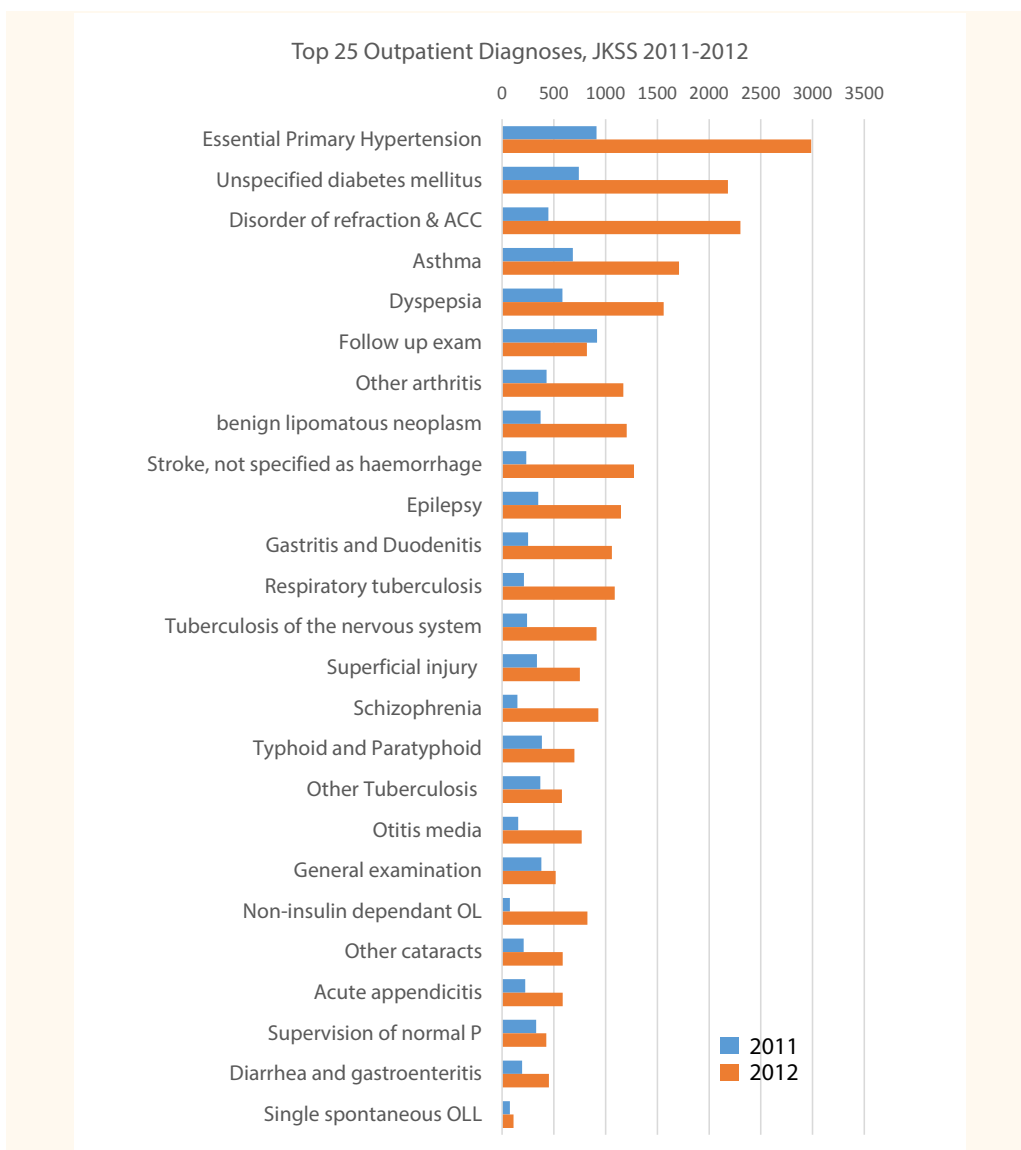
BOX 1. THE IMPORTANCE OF KNOWING THE MOST COMMON DIAGNOSES IN A REGION

Information about the most common diagnosis in a single region is important in planning improvements to programmes or activities, whether for individual or community health initiatives. For example, if a region has a lot of cases of dengue fever, planning activities should prioritise preventive activities in the community.

It is also worth noting the differences in diagnoses between regions. Local governments need to know how widely spread a disease is across its territories to best plan how to respond. In such cases, governments can use information such as that shown in **figure 7**.

Figure 7: Dashboard of the 25 most common advanced outpatient services diagnoses in the Aceh (left) and in the Sumbar Sekato regional health programmes (right), 2011–2012





Source: TNP2K (2014)

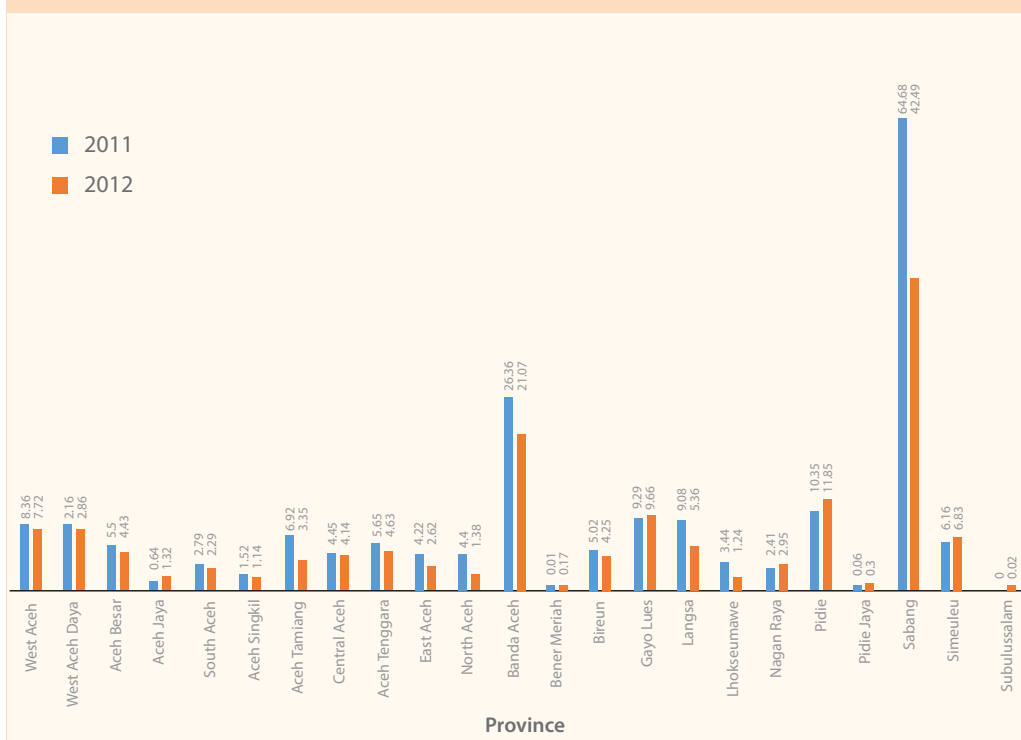
Using the information in **figure 7**, a range of information regarding the most common diagnoses for advanced outpatient services cases can be quickly and simply obtained. For example, in Aceh, dyspepsia was the most common illness in 2011–2012. Meanwhile, during the same period in West Sumatra, essential primary hypertension was the most common.

BOX 2. INFORMATION ON HEALTH-CARE SERVICES USAGE

The goal of implementing health insurance is to increase public access to health-care services. The usage of regional health-care services can be measured to reveal how accessible health services are, how easy or difficult it is to travel to them, and how ready and capable the health facilities and health workers are in each region.

Figure 8 provides an information on levels of health-care usage in each region.

Figure 8: Dashboard of the monthly levels of advanced outpatient services usage per 1,000 residents in the Aceh regional health programme, 2011–2012



Source: TNP2K, 2014

With such dashboards, it is easy to extract information about advanced outpatient services usage in Aceh. In the cities of Sabang and Banda Aceh, for example, advanced outpatient services usage is the highest among other regencies and cities in 2011-2012.

In addition to the examples in boxes 1 and 2, dashboard information that can improve programme planning and the identification of health-care service delivery include:

- the number of cases and level of usage by age and gender;
- moving patients from their area of residence to areas with sufficient and adequate health-care facilities; and
- profile of diagnoses by age, gender and other information.

Analysis can be developed based on health-care claims figures from Jamkesmas and the three Jamkesda programmes (Aceh, Sumbar Sekato and Bali Mandara) well-structured programmes. However, the information systems used by the programmes are not equipped nor robust enough to produce analyses required by programme managers. By better managing the data in an integrated system, information about claims can become extremely useful, as shown in the examples in this report.

Such analyses is useful in improving health programme planning, including proactive and preventive intervention activities and in improving financial management and overall management of health-care service facilities (hospitals and public health centres and their networks). Such analysis informs medical staff planning and strengthens facilities and infrastructure to ensure they are appropriate for the profile of illnesses recorded in each region. JKN, through BPJS *Kesehatan*, as the programme manager, must prepare this information for both internal management purposes and for the government (central and regional) management.

REFORMING PAYMENTS TO PROVIDERS (CAPITATION AND INDONESIAN CASE-BASED GROUPS)

Management and use of the capitation fund to improve level I service quality (Presidential Decree No. 32 2014)

Reforms to national health insurance require improvements to regulatory environment, health services and to the system of paying health-care facilities at all levels. To pay for basic health-care facilities, reforms have been made in the management and use of the capitation fund for non-regional public health centres, as regulated in Presidential Decree No. 32 2014 on the management and use of the national health-care capitation fund for level I health-care service facilities owned by village governments. Nominating and endorsing this regulation involved the Ministry of Health, Ministry of Finance, Ministry of Home Affairs, BPJS *Kesehatan*, the Supervisory Board for Finance and Development, the State Audit Agency and other ministries and agencies under the coordination of the Indonesian Vice President.

The capitation fund refers to the amount paid in advance each month to level I health facilities based on the number of enrolled participants and regardless of the type and number of health services provided. When Jamkesmas was set up, the capitation fund was set at Rp1,000 which was considered insufficient to cover actual costs. Furthermore, the capitation fund paid by the Ministry of Health to health departments was not passed on fully to the public health centres because, according to regulations (Law No. 2004 on the State Treasury, Law No. 32 2004 on regional autonomy, Ministry of Home Affairs Decree No. 13 2006 on guidelines for regional financial management), these funds should be deposited as local revenue and thus not all of them are used to improve individual health initiatives.

Based on this experience, the monthly capitation figure was increased to Rp3,000–6,000. The distribution of funds to regions was based on Presidential Decree No. 32 2014. This was complemented by both the Ministry of Health technical regulation No. 19 2014 and by the Ministry of Home Affairs' Circular No.990/2280/SJ which regulates the management of capitation funds paid directly by the BPJS treasurer through the capitation fund account, according to the number of participants registered at each health centre. While these capitation funds still cannot be separated from local revenue, these new regulations should optimise their use as an incentive for medical staff and as additional revenue for operational costs (including medicines, disposable medical supplies, medical equipment) and thereby improve the quality of the health services.

Some weeks after these regulations were released it was evident that several regions were still uncertain about how Presidential Decree No. 32 2014 should be put into operation (TNP2K 2014). Consequently, with encouragement from the Indonesian Vice President, a "National Work Meeting" was convened in Samarinda, East Kalimantan on 18 June 2014. All governors, regents and mayors throughout Indonesia were invited to the workshop as part of the overall outreach effort to promote and strengthen local government commitment to implementing JKN. During this meeting a memorandum of understanding on optimising the role of local government in implementing JKN was signed between the Ministry of Home Affairs and BPJS *Kesehatan*. Also, the 125 governors, regents and mayors agreed to a decree appointing a treasurer for the capitation fund and assigning it an account number in preparation for implementing the new policy at public health centres. The Vice President took the opportunity to emphasise the vital role of local governments in expanding and upgrading health facility networks.

USING THE INDONESIAN CASE-BASED GROUPS PAYMENT MODEL IN IMPLEMENTING JKN

Payments made to advanced level facilities were reformed through Ministry of Health regulation No. 69 2013 on the standard tariff for health services. These reforms were applied to level I and advanced level health-care service facilities under regulation No. 71 2013 on JKN health services. When Jamkesmas was first launched (2009–2010), payment of claims was based on the Indonesian Diagnoses-related Group (INA-DRG) but this was developed into the Indonesian case-based groups (hereafter referred to as INA-CBG) and has been used since 2011. As of 2014, it is not only used for patients who are PBIs but also for non-beneficiaries.

The INA-CBG payment model is the amount of the claim that BPJS *Kesehatan* pays advanced health-care facilities for their services, according to the diagnosed illnesses.



The tariffs are determined and issued by a team known as the National Case-mix Centre (NCC), under the Ministry of Health. Every year the team meets and processes data from hospitals and Jamkesmas to determine the tariffs and improve the methods used for calculating them, as shown in **table 9**.

Table 9: Calculating the INA-CBG tariffs for Jamkesmas, 2009 - 2013

DETAILS	TARIFF 2009-2012	TARIFF 2013
Number of cases	127,554	1,048,475
Number of hospitals providing payment data	15	100
Year	2006	2010
Level of hospital care	A and B	A, B, C, D, and special
Patient distribution	Not Normal	Not Normal
Trimming method	L3H3	IQR
Choice of tariff	Mean	Median
Adjustment factor	-	Regionalisation
Number of DRG/CBG outpatients	288	288
Number of CBG inpatients	789	789

Source: MoH

Note: INA-CBG = Indonesian case-based groups; DRG = diagnosis-related group; CBG = case-based group

The steps taken in classifying diagnosis-related group patients are:

- Establish the major diagnostic categories (MDC), otherwise known as the case-mix main group (CMG);
- Separate the major diagnostic categories according to whether they involve surgery or medical treatment (no surgery required);
- Sort into groups based on the adjacent diagnosis-related group or break down the surgery into smaller groups; and
- Categorise as either in the diagnosis-related or case-based group.

A panel of doctors determines the major diagnostic categories or case-mix main groups in the Indonesian case-based groups as the first phase in making patient categories clinically consistent. Generally major diagnostic categories are formed according to the body organs or etiology associated with a particular medical condition. This prevents one patient being included in two categories. However, categories are more commonly established according to the body's major organs (for example, respiratory, circulatory and digestive systems) rather than according to the etiology (for example, malignant or infectious). A disease which combines a specific organ and a specific etiology (for example malignant neoplasm of the kidney) is entered into the major diagnostic categories according to the organ concerned.

However, not all illnesses can be categorised according to the organ involved and several categories have been established in the diagnosis-related group for these cases, such as, systemic infectious diseases, myeloproliferative diseases and poorly-differentiated neoplasms. Infectious disease, such as food poisoning and shigella dysentery, are included in the digestive system category, while pulmonary tuberculosis is included under the respiratory system. On the other hand, infectious diseases such as miliary tuberculosis and septicemia usually affect the whole body and are included in the systemic infectious diseases category. In the case-based groups the categories are usually referred to as the case-mix main groups and in 2013 there were 23 of these groups (see **table 10**).

Table 10: Case-mix main groups within the Indonesian case-based groups 2013

CMG Codes	Casemix Main Groups (CMG)
A	<i>Infectious & parasitic diseases Groups</i>
B	<i>Hepatobiliary & pancreatic system Groups</i>
C	<i>Myeloproliferative system & neoplasms Groups</i>
D	<i>Haemopoietic & immune system Groups</i>
E	<i>Endocrine system, nutrition & metabolism Groups</i>
F	<i>Mental health and behavioral Groups</i>
G	<i>Central nervous system Groups</i>
H	<i>Eye and Adnexa Groups</i>
I	<i>Cardiovascular system Groups</i>
J	<i>Respiratory system Groups</i>
K	<i>Digestive system Groups</i>
L	<i>Skin, subcutaneous tissue & breast Groups</i>
M	<i>Musculoskeletal system & connective tissue Groups</i>
N	<i>Nephro-urinary system Groups</i>
O	<i>Deliveries Groups</i>
P	<i>Newborns & neonates Groups</i>
Q	<i>Ambulatory Groups-Episodic</i>
S	<i>Injuries, poisoning & toxic effects of drugs Groups</i>
T	<i>Substance abuse & dependence Groups</i>
U	<i>Ear, nose, mouth, & throat Groups</i>
V	<i>Male reproductive system Groups</i>
W	<i>Female reproductive system Groups</i>
Z	<i>Factors influencing health status & other contracts with health service Groups</i>

Source: MoH

The next categorisation is determined by the procedures or operations within each case-mix main group. In the case-based groups the classification is according to whether cases are surgical or medical, based on the different resources required, for example, whether there is need for an operating room, recovery room and anesthesia. A panel of doctors determines any procedures or steps taken and whether an operating theatre

is required. If a patient undergoes a procedure requiring an operating theatre, it will be classified as surgical, for example, closed heart valvotomy, cerebral meninges biopsy and total cholecystectomy. However, bronchoscopy, thoracentesis and skin sutures are not included in the surgical category (Averill 1991).

The surgical and medical categories can be broken down into smaller groupings referred to as adjacent diagnosis-related groups. The surgical cases breakdown is based on the type of intervention taken while the medical cases breakdown is according to the primary diagnosis. For example, the case-mix main group D, haemopoietic and immune system, in the surgical category includes: bone marrow transplants, spleen procedures, blood-related procedures and procedures involving other blood-forming organs. Examples of adjacent medical groups include: agranulocytosis, blood clotting disorders, sickle cell anemia crisis and disorders of the blood and blood-forming organs.

Classifications are generally based on whether or not there is a secondary diagnosis (comorbidity or complications). An additional diagnosis is likely to impact the resources needed at the hospital in the treatment process. Also, the patients' age is sometimes used as a basis for grouping. Generally, these classifications are according to the resources required by the hospital. Creating the groups is a highly iterative process involving a combination of statistical results and clinical considerations. A panel of physicians classifies each secondary diagnosis of a complication or comorbid condition so not all secondary diagnoses count. A secondary diagnosis is considered a complication or comorbid if, along with the primary diagnosis, it will increase the required nursing care by a minimum of one day for at least 75 percent of patients (Averill *et al.* 2003) or its presence will increase the level of hospital resources required to care for the patient (Euler 2005). In the Indonesian case-based groups all adjacent groups are graded according to three levels of severity: level I is minor (low demand on resources), level II is moderate (intermediate demand on resources) and level III is major (high demand on resources) (table 11).

Table 11: Example of classifying case-based groups based on severity level

CODE INA-CBG	DESCRIPTION
G-1-30-i	Low spinal procedure
G-1-30-ii	Intermediate spinal procedure
G-1-30-iii	Severe spinal procedure
G-4-10-i	Low spinal injury and disorder
G-4-10-ii	Intermediate spinal injury and disorder
G-4-10-iii	Severe spinal injury and disorder

Source: TNP2K, 2014

Calculating the tariff based on diagnosis-related groups

The diagnosis-related group tariff is determined using a formula derived from: cost weight, hospital-based rate and diagnosis-related group price. Cost weight (1) is the weighting of the fixed diagnosis-related group inpatient cost as against other diagnosis-related group inpatient costs. The case-mix index [2a] illustrates the average cost handled by the hospital. The higher the case-mix index the more complex the illness.

The hospital-based rate [2b] (HBR) is the overall cost of the patients in the hospital in terms of the overall cases handled by the hospital. The base rate is basically the amount of money paid for the disease with a cost weight equal to 1.00. While the diagnosis-related group is the result of multiplying the cost weight for every diagnosis-related group case with the hospital-based rate (3).

$$(1) \text{ COST WEIGHT} = \frac{\text{Average DRG fee}}{\text{Average fee (all cases)}}$$

$$(2a) \text{ CASEMIX INDEX} = \frac{\sum(\text{Cost Weight} \times \text{Cases})}{\text{Total cases per hospital}}$$

$$(2b) \text{ HOSPITAL BASED RATE} = \frac{\text{Total Fee}}{\text{Total Cases} \times \text{Casemix Index}}$$

$$(3) \text{ TARIFF DRG} = \text{Cost weight} \times \text{HBR} \times \text{Adjustment Factor}$$

Adjustment factors can be added to the formula for calculating diagnosis-related group rates, for example, the geographic location of the hospital, whether the hospital functions as a teaching hospital and the number of poor patients treated. Also, there are adjustment factors for certain cases, for example for specific and costly cases, referral cases and situations where the case handling is incomplete. This is important as a means of overseeing the hospital, reducing its financial risks, and avoiding double payment. In the Indonesian case-based groups, the geographical location of a hospital is an adjustment factor. Therefore, in accordance with the Minister of Health's Regulation No. 69, Indonesian case-based groups rates in 2013 were divided into four regions.

This method has a number of advantages:

- It allows greater transparency in managing and financing hospitals;
- It provides an incentive for greater efficiency and better quality of service in hospitals,



- It enables paying agencies to have more control over the amount they pay hospitals for services; and
- It helps the paying agencies better predict their future hospital costs.

Aside from these advantages, however, it also has disadvantages that need special attention. For example, a patient's diagnosis may be given a weightier or more severe coding than it warrants. This is known as "up-coding" and will result in the health service provider getting a higher payment for the case. Sometimes health service providers deliberately miscode. To guard against such actions a number of countries have developed measures (reward systems) to encourage correct encoding. However, researchers have found that sometimes the documentation provided is insufficient to assign a correct diagnosis-related or case-based code.

Also, case-based groups payments do not distinguish between high and low risk cases although the cost to the hospital is greater in high risk situations. This means that the case-based groups approach creates financial incentives for hospitals to avoid high-risk patients and this threatens the equity of access to health services.

One issue that needs to be anticipated in using the case-based groups payment system is the tendency to reduce the number of days of health care provided. However, as suggested by a number of studies, a decline in the number of days is usually accompanied by an increase in the number of visits. Because the method is used for both inpatient and outpatient treatment, the increase in visits is due to the use of assumptions derived from the case-based groups about increases in both inpatients and outpatients.



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Funding



THE NEED FOR A NEW REVENUE SOURCE FOR THE HEALTH SECTOR: OPTIONS FOR GREATER FISCAL CAPACITY

Achieving universal health care by 2019 will require a combination of actions. Changes will be needed in health policy and state finances for health will need to become more efficient. The possibility of a tobacco tax allocated to health care will need to be considered as well as how to guarantee assistance for local payments.

Recent studies show that better health does not have to wait for the economy to improve. Steps taken to reduce the burden of disease and to improve childhood health and life expectancy will in themselves generate a better economy (Bloom and Canning 2005). The Lancet Commission on Investing in Health (Jamison *et al.* 2013) estimated that up to 24 percent of economic growth in low and middle income countries is due to better health outcomes. The results of this research are significant as the commission concluded that investment in health returns a dividend of nine to twenty times the original investment.

As a result of this finding, the President of Indonesia and the Ministry of Finance have looked more closely at health as an investment in improving people's health, improving productivity (at the micro level) and increasing future gross domestic product (GDP). There are several ways the government can increase revenue for health.

Reprioritising health

There are several justifications for reprioritising public spending to provide more money for health.

First, Indonesia has been investing in human capital and future growth will depend on greater investment in health and education (IMF 2012: article IV). Currently, 45 percent of the population is under 25 years old and to fully benefit from this demographic situation, the government will need to invest more in health and education to increase productivity within this population segment (Bi *et al.*, World Bank 2014).

To begin with, government needs to operationalise regulation No. 36/2009 on health which stipulates that the central government should spend 5 percent of its budget on health (excluding salary payments) and provincial and local level governments should spend at least 10 percent of their budgets on health. However, this still may not be enough.

Priorities within the health sector need to be reassessed in terms of international benchmarking. In 2011, public spending on health at all levels of government was USD32 per capita, just 0.92 percent of gross domestic product. Indonesia's per capita expenditure was ranked as the third lowest in relation to other countries, just ahead of Myanmar and Pakistan. This is also one reason why out-of-pocket spending (OOP) is still high in Indonesia despite improvements in funding.

Other fiscal options are needed to realise universal health coverage in Indonesia. Although the central government is currently the dominant source of financing for BPJS, local financing in the form of contributions from the non-poor working in the informal sector (for example, as in the health insurance programmes in Aceh, Bali and Jakarta) would help. However, local-level information is limited so the amount of the fee required and how it should be implemented is unclear.

Reducing the fuel subsidy

Another option concerns the fuel subsidy, which had reached Rp350 trillion at the time this report was written. The proceeds from reducing fuel subsidies could be a source of funding for health in Indonesia. Although the government is committed to this and the subsidy has begun to decline, there is room for a more significant reduction. Those who benefit most from the subsidy are the wealthy. In 2011 the World Bank reported that the top 50 percent of households by income consume 84 percent of subsidised gasoline, while the poorest 10 percent of households by income consume less than 1 percent. Most of the subsidy is used for vehicles privately owned by wealthy households. Lowering the fuel subsidy and reallocating the subsequent revenue to health funds to finance BPJS would signify a clear shift towards pro-poor expenditure for Indonesia.

Increasing tobacco tax

Increasing the tax on alcohol and tobacco is another way of generating income for health expenditure in Indonesia (see box 3). Tobacco use, in whatever form, is the main cause of preventable death in the world. Smoking killed almost six million people in 2011, with 80 percent of these deaths occurring in low and middle income countries like Indonesia. Tobacco companies prey upon large middle-income countries like Russia, Brazil, India, Indonesia and the Philippines by targeting young people who are unaware of the dangers of smoking. Cigarette manufacturers in Indonesia have earned huge profits in this way. Furthermore, outsiders see the number of smokers in Indonesia as a sign that it is still the low-income country it was in the past.

**BOX 3. ALCOHOL AND TOBACCO TAXES FOR FINANCING UNIVERSAL
HEALTH COVERAGE IN THE PHILIPPINES**

Tobacco and alcohol excise rates in the Philippines are among the lowest in Asia and the world (Kiyoshi et al, IMF 2011). This is probably one reason why it has one of the highest smoking rates in the world and is the Southeast Asian country with the second highest alcohol consumption rate. The Philippines is home to about 17.3 million tobacco smokers, with 1,073 cigarettes consumed per capita per year. Also, 38.9 percent of the population are light alcohol drinkers (occasional) and 11.1 percent are regular alcohol drinkers (DO, GAT Report, Filipina 2010; situs *sin tax*; Labajo, PDF). The consumption of tobacco and alcohol in the Philippines has significant social and economic consequences: the WHO estimates that ten Filipinos die every hour due to cancer, strokes, and heart and lung disease caused by smoking. Also, the state loses almost PHP500 billion per year through health costs and productivity losses due to the consumption of cigarettes and alcohol (Info News Questionnaire, Philippines, undated).

Since the 1980s, various laws have been enacted to tax tobacco and alcohol in the Philippines. With the enactment of Republic Act 8240 in 1996, the Philippines introduced a multi-tiered excise schedule for tobacco and alcoholic products based on the net retail price (including VAT) of each brand, where cheaper brands taxes are lower than taxes for the more expensive brands. Republic Act No. 9334, which came into force in 2005, gave a mandate for the level of increases on all brands of cigarettes and alcohol products to vary every two years until 2011 (Albert 2012). However, the multi-tiered tax system contributed to a decline in tax and customs revenues and resulted in a decline in manufacturers' standards as they sought to produce cheaper brands.

The 10351 Republic Act (also known as the 2012 tobacco and alcohol tax reform) was signed into law in December 2012 and aimed to restructure alcohol and tobacco tax and generate government revenue to finance universal health care. The main features of the reform included:

- To gradually shift from a multi-tiered tax structure to a more unified and specific tax structure (to protect producers and consumers from the downshift to brands with lower tax rates);
- To ensure more predictable earnings and to simplify the tax administration;
- To implement an automatic tax rate increase of 4 percent per annum

for distilled alcoholic beverages, effective from 2016, and the same increase for cigarettes and beer, effective from 2018, (to safeguard against inflationary impacts);

- To have the classification of tobacco and alcohol products determined every two years (to remove any freeze on a classification price);
- To comply with the World Trade Organisation ruling on distilled liquor and also conform to the WHO framework.

It has been reported that the tobacco and alcohol tax generated PHP21.75 billion (USD504.2 million) in the first four months of 2013, an increase of almost 25 percent compared to the same period in 2012, despite the increase in smuggling and production that was not reported. As a result, health coverage for the poor and vulnerable increased by almost 10 million people.

Source: Bi *et al.*, World Bank (2013)

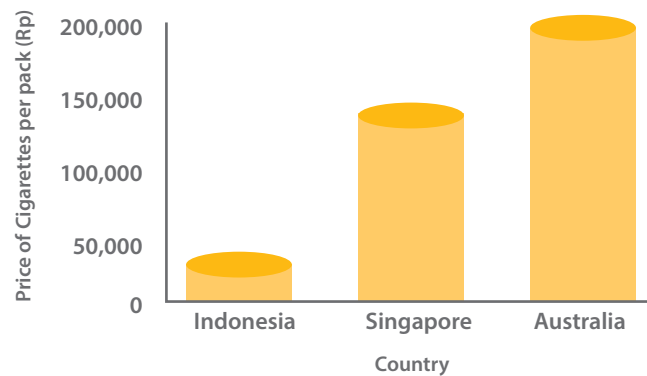
At the current rate, smoking will kill 8 million people a year by 2030. Smoking-related deaths and illnesses (including chronic diseases such as lung cancer and heart disease) cause billions of dollars of economic loss throughout the world each year (WHO 2011). Analysis shows that being a smoker between the age of 20 and 40 years increases the risk of lung cancer by 20 times compared with those who do not smoke. This is supported by the fact that many of the deaths occur during the prime working years (30–69 years), causing an overall reduction in productivity and often the loss of the family breadwinner (Anh *et al.* 2011).

Given such a grim picture, what can be done to stop tobacco addiction? How have other countries dealt with this? Several countries have shown that increasing the price of tobacco through higher taxes is the most effective method of reducing tobacco consumption and improving communities' health status (WHO 2011). High tobacco prices encourage smokers to quit, discourage young people from starting, and decrease the total amount of tobacco consumed by heavy smokers. Also, despite the resulting decreased demand for tobacco, revenue from tobacco tax can be increased from time to time. Currently, the price of a pack of cigarettes in Indonesia is surprisingly low by international standards (**figure 9**). For example, a packet of cigarettes costs on average Rp10,000. While in nearby Australia, it is around Rp170,000 because of the difference in tax between the two countries.

Tobacco is currently causing a health emergency in Indonesia. More than 67 percent of males over 15 smoke. Meanwhile a quarter of males between 13 and 15 also smoke. Among Indonesian women, fewer than 10 percent smoke which is lower than in

countries such as the United States, Canada, Poland or Brazil where 20 percent or more women smoke. However, the prevalence of smoking among Indonesian women has increased 4 percent since 2006 and had reached 5.1 percent by 2009. It usually involves relatively young women and approximately one in every four girls try smoking before they are 10 (WHO 2009). Although fewer women than men smoke the government cannot ignore the growing problem.

Figure 9: Average price for a packet of cigarettes in Indonesia, Singapore and Australia

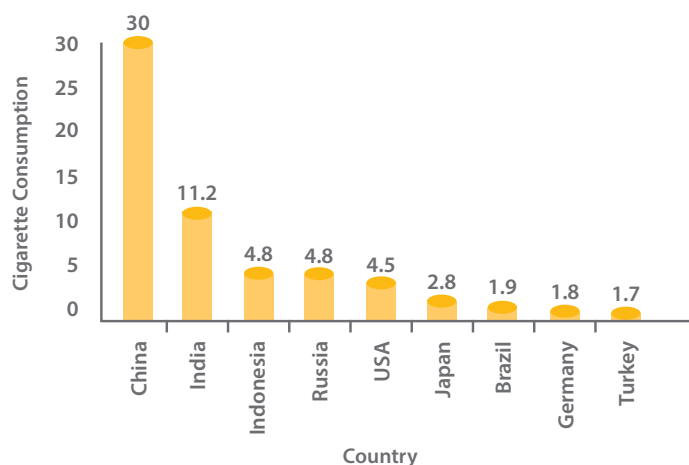


Source: Graham (2014)
Note: Based on an exchange rate of Rp12,000 per USD1, February 2014.

Passive smoking is also a major problem. Tobacco smoke contains 7,000 substances classified as poison that are forced upon men, women and children throughout Indonesia.

Indonesia has the largest tobacco industry in the world and at least 3,800 cigarette companies, including home-based companies. Around 3,000 of these companies are in Central Java and East Java. These two provinces are also the largest tobacco producers in Indonesia. In the past two decades, cigarette sales in Indonesia have increased almost 50 times from Rp1.4 trillion in 1981 to Rp51.9 trillion in 2001. These sales accounted for 95 percent of excise revenues derived from the cigarette industry.

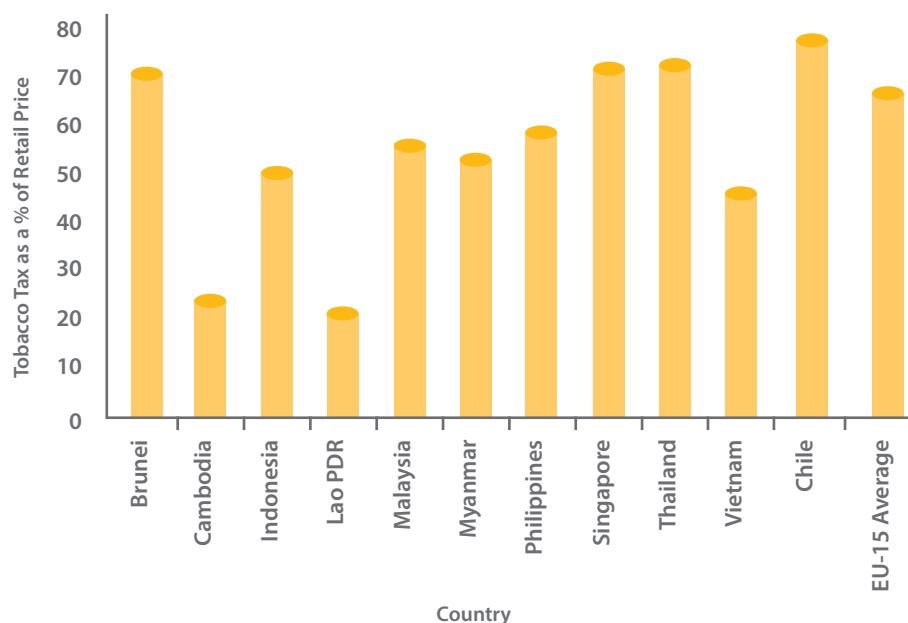
Figure 10: Nine countries with high smoking rates



Source: WHO (2009)

Although cigarettes are cheap in Indonesia compared to in other countries, smoking is expensive for families and most costly for the poor. Currently, smoking is the second largest household expense after rice and is included in the consumption expenditure of 57 percent of households. For poor households the figure is even higher (UI 2013). In 2013 tobacco was taxed at a rate of 38 percent of the price of cigarettes. This is well below other countries in South East Asia and around the world where the tax is better implemented, such as in Thailand, the European Union and other Organisation for Economic Cooperation and Development (OECD) nations like Chile (see **figure 11**). Indonesia increased the excise tax in 2014 but only by 8.5 percent.

Figure 11: Tobacco tax as a percentage of retail price, 2013



Source: SITT-SEATCA (2013) and WHO (2012)

The impact of smoking is also expensive for the government. The total annual cost of inpatient health care for three major diseases resulting from smoking in Indonesia was at least Rp3.95 billion (USD4.3 million). This represents around 0.74 percent of gross domestic product for the same year and 29.83 percent of health expenditure. The largest part of this expenditure was for chronic obstructive pulmonary disease (Rp35.1 trillion or USD3.6 billion per year), followed by lung cancer (Rp2.6 trillion) and ischemic disease (Rp1.68 trillion) (Nugrahani *et al.* 2013).

High rates of disease are associated with low levels of productivity and macro-economic growth. In Taiwan it has been reported that workers who smoke take more days off sick. The impact on the gross domestic product of other countries has also increased to as much as 3.5 percent, as seen in Poland (Lu Ling 2008). Economic losses related to smoking in the United States are reported to be as high as 50 percent for health costs and 50 percent for productivity (World Bank 2014).

Indonesia has put pictorial health warnings on a number of tobacco products. The Indonesia Broadcasting Commission and the National Commission for Child Protection have suggested that the Legislative Assembly ban cigarette advertising. Young people attending cultural performances and music or sporting events are often the target of inappropriate cigarette advertising, in addition to the advertising aired daily on television. The World Health Organisation (WHO) has stated that prohibiting cigarette advertising and preventing cigarette companies from sponsoring events is one of the most cost-effective ways of reducing the demand for cigarettes. Indonesia is the only country in the Association of Southeast Asian Nations that still allows cigarettes to be advertised. While Indonesia has made a breakthrough in more severe restrictions on cigarette advertising in its new rules, it still faces obstacles in implementing these rules.

As mentioned earlier, the proven most effective way of preventing tobacco use is to increase the price of tobacco products (Adeyi *et al.* 2009). Raising taxes on tobacco products can be a win-win solution in that it increases government revenue for every packet sold while, over time, lowering the prevalence of cigarette smoking, decreasing smoking-related health-care costs, increasing the population's health status and achieving higher productivity in the workforce.

In 2012 the government received Rp79.9 trillion in tobacco excise but, due to smoking-related diseases, the country also suffered economic losses and health-care costs amounting to Rp240 trillion (Natahadibrata 2013).

A modest proposal for the future is to raise the tobacco tax to cover the health and economic costs of smoking-related diseases. Several other problems also need to

be addressed immediately. One of them relates to agricultural crops (tobacco) and the revenue they generate, primarily in poor areas. In Indonesia, however, most of the tobacco used in the industry is imported and, based on the experience of other countries like the United States, over time it is relatively easy for farmers to switch to other crops.

The last issue is employment which is a long-term concern that cannot be resolved immediately. One challenge, among others, in increasing tobacco prices will be the reduced profits for tobacco companies and the possible loss of jobs in these companies. Such issues are likely to be on the agenda in discussing a tobacco tax. To overcome these problems, the government needs to offer training programmes or other types of subsidies. The main compensation will be the increase in revenue to fund universal health coverage and, most importantly, to improve the health status of the population of Indonesia. Countries in Europe and North America as well as in Asia (Singapore, Thailand and the Philippines) have implemented a higher tobacco tax to provide more funding and achieve better health gains.

However, the latest tax system is not working well. The new tax system for alcohol is complicated, the tobacco tax rate structure is multi-tiered and a portion of the increase in taxes will be used by regional governments for health promotion programmes. This latest model is likely to undermine efforts to collect excise. Furthermore, revenue sharing with local governments will not be tracked in terms of actual spending commitments. The concern is also whether this new fund will not result in local governments reducing their commitment to health care by reducing other local health programmes

The Ministry of Health and Ministry of Finance need to work together in developing tobacco tax reform proposals for Indonesia, especially in the context of the country's newly-elected president in 2014 and government planning for the next five years. Further analysis is needed to:

- Design features to simplify the tax structure, to analyse the elasticity and optimise the revenue increase and to encourage behaviour change;
- Assess whether the tax needs to be allocated specifically for health care. In most countries this allocation is lighter and less of a problem from the analytic point of view;
- Undertake an analysis of the industry to help predict income and prevent irregularities aimed at avoiding tax, such as “frontloading” the warehouse prior to policy implementation and changing the number of cigarettes in a pack to avoid taxes on standard size packages;
- Assess the impact on tobacco farmers and other workers who manufacture

- cigarettes and consider developing training programmes or farmer subsidies;
- Examine ways of stopping smuggling and instituting law enforcement programmes under the new Act;
- Develop a strategy to phase in the reforms.

Support from the President is needed for a new tax and a new tax structure.

The next question is on whether revenues from the new tobacco tax should be allocated specifically to health. Although fiscal capacity will increase, the tax may also replace previous health funds (and not add to the existing budget most of which is already allocated to other sectors) so that in the end the tax may not have a significant impact on the overall resources for health (World Bank 2001; Schieber and Cashin 2012).

Using value-added tax

Other taxes could be explored to support health in Indonesia. A few countries, such as Ghana, have allocated value-added tax (VAT) to finance universal health coverage. This has proven to be a progressive tax and a stable source of income in Ghana (Schieber and Cashin 2012). Despite increasing revenue through additional dues or through taxes earmarked specifically to reduce fiscal constraints on universal health coverage, how the revenue is raised is important. Increased revenue by means of regressive, inefficient, excessive taxes can lead to problems that are more harmful to the overall economy. Developing these options requires additional background analysis and detailed discussion on the pros and cons for each possibility.

Cooperating with the private sector: Increasing private sector insurance ⁴

The government should support the expansion of the health insurance market through private sector involvement. This will generate more funds for the health sector and shorten queues for health-care services such as surgery, diagnostic tests and widen access to drugs.

The first step should be to restructure the package of benefits that provides only inpatient class III rooms for all patients under BPJS. Some contribution costs could also be introduced. The special drug service for civil servants, established at the beginning of 2014, needs to be eliminated. The government should allow private insurance companies to sell additional policies for the provision of class I and II inpatient room services, special drugs and wider access to laboratory and diagnostic tests, as happens

4. Private insurance products globally are divided into several categories, including: "primary" – the main source of health coverage to populations or subpopulations; "duplicate" – guaranteeing services and a package of benefits similar to that of the public system; "complementary" – guaranteeing contributions implemented by the public system; and "added" – guaranteeing services not covered under the public system.

in other countries, such as Singapore. The sale of additional health insurance by private parties should not be limited to life insurance companies that sell life insurance as their main product.

At the same time, the government needs to develop complementary legislation to monitor and regulate private insurance. The kinds of regulations required to arrange private insurance include:

- standard finance and non-finance arrangements for the influx of patients and operations;
- rules for reporting the arrival and departure of patients; and
- consumer protection and mechanisms to enhance fairness.

One example of the lack of regulation is the absence of a mechanism to coordinate the benefits package – the basic as well as the additional benefits. BPJS is negotiating for private insurers to handle both kinds of benefit packages as a way of coordinating a better benefits package and bringing private companies under JKN. However, the current private insurance arrangement allows access to private hospitals that are not included in the JKN scheme. Global experience has shown that private insurers can provide access to and can easily choose to send commercially-advantageous patients to hospitals that are not under BPJS. Hospitals cross-subsidise their services between the case-based groups codes. The codes for cancer, maternity, neurosurgery and cardiac surgery reveal areas where the profit margins were low (or even negative) in 2014. However, other codes may yield a higher profit margin. Cross-subsidies help because the elderly or the poor might require more resources or need more prescription medications, social support and other services that incur additional costs. Additional costs may also be incurred by poor people who have an additional illness (comorbidity).

If private insurers in Indonesia can filter out women patients with pre-existing diseases, patients with cancer and patients with cardiovascular problems, and can increase premiums to filter out low-income patients or increase co-payments to filter out elderly patients, they are more likely to have a pool of commercially-advantageous patients.

By contrast, revenues from coordinating the benefits package should apply only to JKN hospitals, not to hospitals outside the network. If this is not enacted, private hospitals could leave JKN if they consider it unprofitable. This has happened in the “added-value” health insurance market in other countries when the insurance also included a standard package. It results in patients who are “commercially advantageous” or suffering an illness with a high case-based group rate being sent to affiliate hospitals. Consequently, BPJS hospitals would no longer get cross-subsidies (both between and within case-based group codes). The challenge for BPJS hospitals will be sustaining revenue over costs versus the case-based group rates already issued. If this situation continues,

hospitals in the private sector will cease contracting with BPJS and government-owned general hospitals will be operating with reduced funding and suffer a deterioration in quality.

BPJS needs to ensure there is transparency and access to all data. It must also process the claims for the standard package and develop an electronic system to differentiate between standard and additional benefit packages. If not, the private operators will severely affect the BPJS programme and create greater cost to the system. This is just one example of the kind of regulatory framework that needs to be put in place.

Increasing income tax

Another option is to increase revenues by raising income tax which could be done in the following ways:

- By doubling civil servants' income tax. Currently, civil servants receive a special benefits package in terms of drugs and inpatient treatment rooms. Civil servants in any country have high inelastic demand and will abide by new taxes so increasing income tax would be a reliable source of new revenue.
- Abolish the salary ceiling in calculating the levy on employers and employees in the private formal sector. By eliminating the ceiling – a policy in many countries – the progressive tax will increase equity by applying a tax on the top income group and increasing new revenue.

Contributions by the uninsured should remain at the same level or be lowered, depending on the outcome of trials to cover the uninsured and the informal sector.

Increasing efficiency

The increase in resources is only one part of the overall picture. Higher resources will not solve the problem of Indonesia's health system if additional expenditures do not translate into improved health outcomes and increased financial protection.

A survey by the National Institute of Health Research and Development conducted by the government in 2007 showed that there was a high number of incorrect diagnoses every year and a misallocation of scarce health resources. This error rate would not be tolerated in other sectors of the economy. Households bear a large part of the burden for this in the form of unwarranted out-of-pocket payments. Over 50 percent of the time, people pay to be treated for health problems they don't have with medicines they don't need.

In 2007, the inaccuracies occurred most frequently with heart and vascular diseases which are among the most common non-infectious diseases in Indonesia and the

leading cause of death. The accuracy rate of diagnosing heart and vascular disease was less than 10 percent at the time and, even among the wealthiest sections of the population, it was only 16 percent. The survey estimated that there were about two million people with the disease and that the high rate of diagnostic errors, apart from the impact on individuals' lives, was a challenge for the health-care delivery system to perform better. For all treatments, about 55 percent of all diagnoses are estimated to be inaccurate.

Some improvement can be seen by comparing the Indonesia Family Life Survey (IFLS) of 1997 with its counterpart in 2007. However, the changes are marginal and the overall quality of service is still low with only about half of the health-care workers responding correctly to standard questions about procedures. There is a high rate of absenteeism among Indonesia's health workers, as is also seen in various regions in countries such as India, where doctors set up private practices during afternoon and evening hours.



Resolving pharmaceutical expenditure errors

Several options are available to increase the efficiency of pharmaceutical expenditure. Official National Health Account figures show that pharmaceutical expenditures account for 33 percent of total health sector spending but a separate calculation showed that the share is even higher, at an estimated 44 percent. The proportion of drugs for outpatient care is around 58 percent, while for hospitalisation it is 31 percent. This is higher than the total pharmaceutical spending of most OECD countries, which is only 10–20 percent.

Regardless of the exact share of pharmaceutical expenditure in a given year, more than half could be saved with the correct diagnoses, thus generating the resources to expand and improve services for all the people of Indonesia. A limited study by Dunlop (2013) found that 42 percent of antibiotic prescriptions written at two hospitals were unnecessary (Hadi *et al.* 2008) and 34 percent of dengue fever treatments were not required. The study also found high rates of nosocomial infections in a neonatal care hospital and in a surgical ward. A more systematic review of technical efficiency would be useful to identify ways of producing better outcomes for the investments made in the health system.

REDUCING CORRUPTION


One way of increasing efficiency is to stop bribery and corruption. The Indonesia Corruption Watch (ICW) found that between 2009 and 2013 the state lost Rp466 billion in the health sector because of bribery and corruption. This included, for example, using the budget to fund political campaigning, procuring the wrong drugs and equipment, filling procurement committees with “pre-selected” candidates, and marking-up budgets for building and renovating facilities. Banten and North Sumatra were the two provinces with the worst records last year (Halim 2014).



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Moving Towards
Universal Coverage
in 2019



According to the DJSN road map, Indonesia will have universal health coverage by 2019 – the whole population will have health coverage and enjoy the same medical benefits. To achieve this, efforts must be made to expand participant numbers by integrating existing Jamkesda programmes that involve private-sector employers and employees and reaching out to informal-sector workers who are not yet members of any scheme.

INTEGRATING JAMKESDA AND PRIVATE BUSINESSES

Health coverage in Indonesia is still only partial and must be expanded to achieve the objectives of the 2019 road map. This process includes integrating:

- hundreds of Jamkesda programmes that operate individually in the regions;
- various health services provided by employers to employees; and
- the informal sector that still has no health coverage.



According to the road map, integrating Jamkesda into a single national health security system will begin in 2015 and all programmes are expected to be integrated into JKN by the end of 2016. An essential element in achieving this is involving and coordinating local governments in carrying out the following:

- Linking the existing Jamkesda programme with JKN;
- Paying any of the costs not covered by the central government;
- Facilitating the participation of citizens who can afford to contribute;
- Ensuring the availability of functioning health facilities at the regency level.

REACHING OUT TO THE UNINSURED AND THE INFORMAL SECTOR

The Indonesian government supports universal health coverage as an important goal in developing a system for health funding but acknowledges that this is a long-term commitment. There is no single formula for achieving universal health coverage and international evidence suggests the process is complex and requires years and often decades of effort. The road travelled by each country is determined in part by its history, by the funding system already in place and by social preferences regarding the concept of solidarity in a country. Global experience shows that most reforms for universal health coverage have been implemented gradually, starting with civil servants, the formal sector and the poor. However, the informal sector is harder to reach and sectors of the population just above the poverty line take longer to incorporate. The transition toward universal health care often occurs over several decades as, for example, in Japan (40 years), Korea (29 years), Thailand (20 years) and China (which aims to achieve it in 2020).

Indonesia's economy and labour market is dominated by the informal sector. The 2012 National Labour Force Survey (known as Sakernas) found that of the 120 million people of working age, about 95 percent (114 million) can be classified as having work. Out of those employed, about 68 million (or approximately 62 per cent) work in the informal sector.

Further analysis showed that among informal workers:

- 20 million (28.3 per cent) are unpaid family workers (for example, people work in a small family business without getting a salary but receive food, accommodation and clothing);
- 35.6 million (about 31.5 percent) work less than 35 hours per week or are nearly jobless;
- 55.5 million (49.2 percent) did not pass elementary school; and
- the average income is only Rp1.5 million per month.

A recent study by the National Development Planning Agency (Bappenas 2013) reported that 32.5 million informal workers would not be covered by health insurance in 2014. This figure does not include their family members.

The impact of the informal sector on scope and participation

The size of the informal sector in the country creates additional challenges. One challenge is that informal-sector workers' income is not stable or regular and farmers have to wait for their harvest before they earn an income. This makes developing a contribution-based scheme extra complex as it hampers the process of collecting regular contributions and can result in people dropping out. Another issue is the cost of administration. Collecting dues from informal workers presents its own challenges and is costly. The cost could even come close to or exceed the actual income from the dues collected. As a first option, a country can expand non-contributory financing from general tax, including financing for the poor, the informal sector and all other citizens. As a second option, it can extend formal sector contribution schemes to the informal sector wherein all residents must pay dues (Tangcharoensathien *et al.* 2011). There is no strict dichotomy between the two financing mechanisms. However a third approach to financing health care comes from a mix of tax-based subsidies and dues (Kwon 2011) and this is increasingly being used in other countries (Kutzin, Cashin and Jakab 2010; Langenbrunner and Somanathan 2011). The decision to implement funding based on one of the three approaches is usually adapted to the conditions of the country and can reflect political, economic, cultural or a combination of factors. The first issue to resolve is which approach is most cost-effective (from the perspective of administration) in terms of building the infrastructure needed to collect dues. Or would it be better to provide full subsidies to the informal sector workforce who are not categorised as poor?

Having to choose between collecting dues from at least part of the informal sector or financing the entire informal sector through central government revenue creates further concerns. If the government pays the fees for all informal workers, this may lead to yet more "informalisation" (companies may change their workers' status to informal to avoid paying their health insurance) and ultimately undermine the contribution-based system for formal workers. Also, government assisting large numbers of informal workers raises issues of fairness and equity. It would take only a slight increase in dues and the informal worker whose income is near the cut-off point for assistance will pay the full fee and vice versa.

Other issues arise when all informal workers (including high earners) are financed by the government. People with the same ability to pay dues will be treated differently

and a worker's job status (formal or informal) will dictate if they must pay for at least part of the contribution or if the contribution will be completely subsidised by the government.

Countries such as the Philippines and Vietnam have implemented a defined contribution approach. They have introduced various measures to try and collect insurance scheme contributions from informal workers. For example, they have offered subsidies for dues, provided information on the guarantee scheme; taught people how to register; explained the advantages of participation; and made registering easier by doing it through banks and convenience stores or by using cell phones, as well as adjusting the dates for payment of the contributions. However, in the Philippines and Vietnam, these interventions have only partly been successful.

Nevertheless, there has been progress in the last few years. Each time a country attempts to introduce innovative and convenient ways to expand health insurance to the informal sector, it has some results. South Korea has probably been the most successful among countries maintaining defined contribution schemes. It has introduced several different and innovative initiatives to identify the informal sector and bring it into its scheme. South Korea has a relatively homogenous population, a centralised governance structure, rapid economic development and the overall smaller population which helps speed up the registration process for informal workers.

Other countries, such as China and Thailand, have largely or entirely replaced defined contribution schemes with funding through taxes to accelerate the expansion of insurance coverage. In every instance, there is a political dimension that plays an important role in responding to the call to increase services for its participants. China enjoys a strong and growing economy that provides sufficient fiscal capacity and it wants to change its macroeconomic policy to a model based on greater consumption. When insurance is covered by the government, people tend to spend more of their savings on consumer goods (Barnett and Brooks, IMF 2009). In Thailand, the economic crisis in the late 1990s was met with a countercyclical fiscal policy so, while the country suffered economic collapse, it spent more on social security programmes to improve protection for its young and productive workforce.

The dependence on contributions paid by individuals and families reflects some of the policy objectives of the finance and health ministries but these may turn out to be conflicting. Health coverage and revenue collection are both needed and they have become the same policy objective for both ministries. However, given the high cost of identifying participants and collecting dues, the overall revenue from the levy will be lower than government expenditure on its administration. This is especially true if



a separate revenue collection mechanism has been developed by the social security programme. By relying on already existing tax collection mechanisms, South Korea largely avoided this administrative burden.

Many countries have started using new systems for separate revenue collection in recent years (Kutzin, Cashin and Jakab 2010) or they are poorly managing existing tax collection mechanisms. Going forward, expanding insurance coverage to informal-sector workers may depend on: how well the country adapts to the existing local situation; whether it offers a variety of innovative approaches; and how effectively it manages to streamline the registration process and the collection of contributions.

In addition, the health services system needs to function properly and be high-quality so it is perceived as good value by workers and their families. Social marketing programmes may be needed to improve informal workers' understanding of social health coverage and how it will benefit them. If there is a lack of awareness about the

importance of paying contributions and the benefits of participating, any efforts to expand coverage in the informal sector are likely to fail.

Financial assistance for the poor and vulnerable

While the Indonesian government decided to provide assistance to the poor and vulnerable in paying contributions, other sectors of the population, including individuals in the informal sector, have to pay their own fees. The policy referred to in the Presidential Decree on Health Insurance (PP No. 12/2013) states that “dues from informal sector workers are not covered by the government”.

Excluding the informal sector from government assistance with dues has led to unresolved and complex problems in collecting contributions from informal-sector workers, including inefficiencies and high administration costs. Many questions have arisen from this decision. What are the implications for social health insurance in the informal sector? What will happen if informal sector workers cannot pay their dues regularly? Will there be a penalty for those who do not participate? Will they be charged when they are accessing health services?



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Readiness
of the
Supply Side



THE CURRENT SUPPLY-SIDE SITUATION

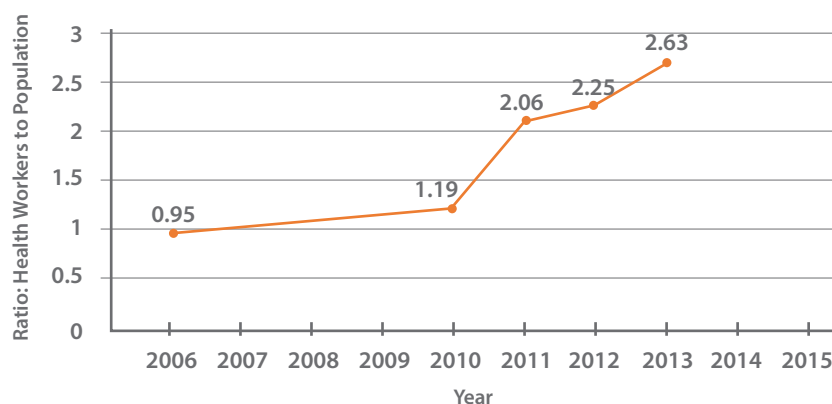
The World Health Organisation (WHO) has developed a conceptual framework of six health “building blocks” for assessing health services and the readiness of the supply side with respect to the availability and preparedness of public and specific health services. These core blocks are:

- service delivery;
- health workforce;
- health information systems;
- access to essential medicines;
- financing; and
- leadership or governance.

Indonesia’s aim to achieve universal health coverage by 2019 through the JKN programme will require functional, well-supplied health-care facilities. All Indonesians need access to good quality health services that are proactive, preventive, curative, rehabilitative and palliative; and these services must be delivered efficiently. At the same time, it is imperative that using the service does not cause patients financial difficulties. Health services and the readiness of the supply side are fundamental to the health system and vital to improving health outcomes and developing quality human resources as a key driver of economic growth.

Health-care services in Indonesia have advanced significantly over the last decade. The tangible improvement in the ratio of health workers to the overall population (**figure 12**) means that the total number of health workers currently exceeds the minimum recommended by the WHO. Most of the increases came from the private sector and particularly through investments in medical schools. Out of the 72 medical schools in Indonesia, about 60 percent are private.

Figure 12: Increase in health workers to population ratio

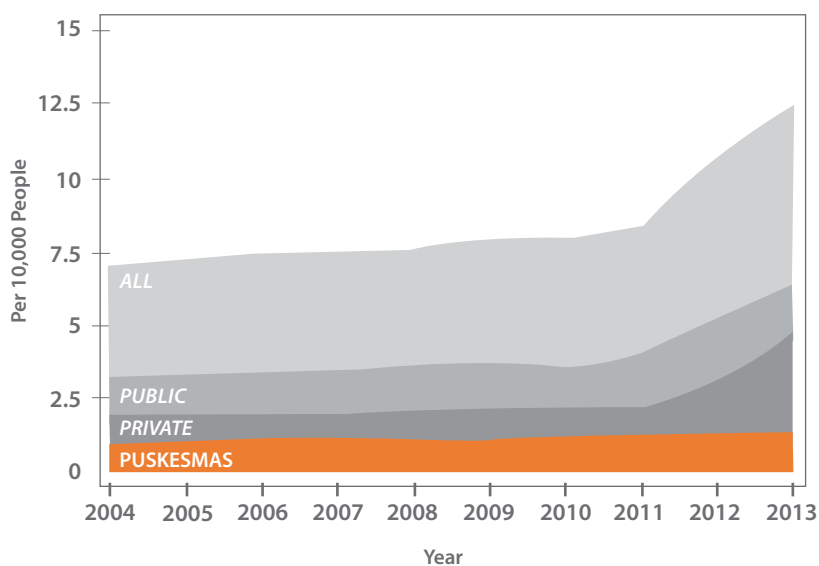


Source: BPPSDM (2014)

The number of hospitals has also increased almost two-fold: from 1,246 in 2004 to around 2,228 in 2013, with over half of these being private hospitals (profit and non-profit). The number of clinics also increased from 7,550 in 2004 to 9,654 in 2013.

The usage rate of inpatient beds per capita has increased from 7.0 to 12.6 per 10,000 people (**figure 13**). Outpatient and inpatient care usage has increased continuously, especially among the poorest 40 percent of the population, and is also increasing at private facilities. Public services health facilities have progressed and more than 90 percent of clinics have electricity, special rooms for patient consultation, adult scales, stethoscopes, sphygmometers, standard auto disable disposable syringes, oral rehydration fluids and paracetamol. Specific health services have also expanded, for example, 65 percent of public health centres and about 60 percent of integrated health posts provide antenatal care. About 74 percent of public health centres provide family planning services, 86 percent provide immunisation services, 66 percent provide preventive and curative services for children, 76 percent provide services for diabetics, 73 percent assist with chronic respiratory diseases and about 80 percent provide for cardiovascular disease.

Figure 13: Inpatient beds per capita, 2004–2013



Source: MOH

SUPPLY-SIDE CHALLENGES

Despite significant advances in health-care services and the readiness of the supply side in Indonesia over the last decade, major challenges persist, especially since the JKN programme was launched at the beginning of 2014. The demand for health services has already increased and mandatory membership of JKN will open up opportunities

for those who previously had no health insurance coverage to participate through BPJS *Kesehatan*. The anticipated increase in the demand for health care needs to balance with the availability of adequate health services.

Nationally, the supply of health-care workers is greater than the demand and exceeds the minimum figure suggested by the WHO. However, their uneven distribution and the increased demand for medical services following the launch of JKN, have led to quite a number of health-care facilities being understaffed. Consequently, TNP2K helped the Ministry of Health develop a scenario for the spread of available general practitioners at the regency and city level. Assuming that two doctors serve approximately 5,000 JKN participants, it was apparent that available general practitioners are disproportionately distributed. In addition, general practitioners are still concentrated on the more densely-populated islands of Java, Bali and Sumatra. The distribution of the need for doctors is presented in **figure 14**.

Figure 14: The number of doctors needed based on a scenario of two doctors per 5,000 participants

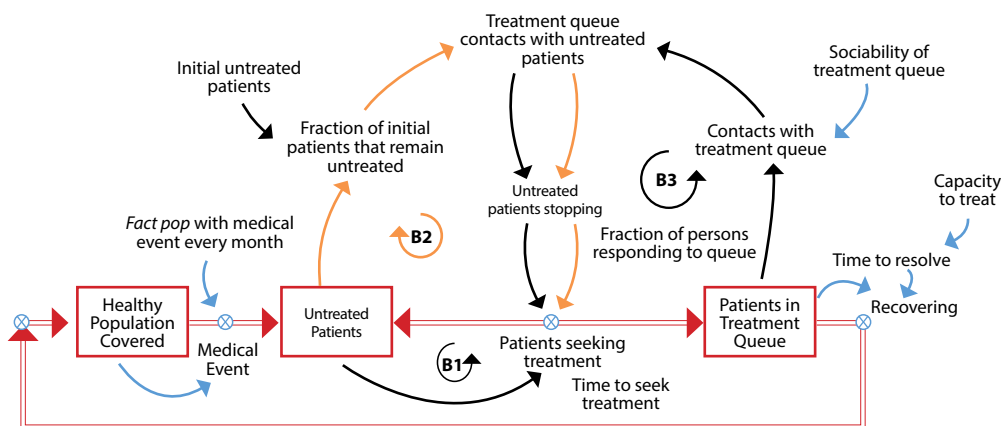


Source: MOH

In addition, TNP2K estimated the preparedness of the supply side at the national level (TNP2K 2013) using “dynamic modelling” to determine the shortage of health workers nationwide (see **figure 15**). They used a simulation of five health insurance programmes (former participants in Askes, Jamkesmas, Jamsostek, army and national police programmes) and calculations revealed a national shortage of 21,930 doctors and 54,560 nurses, as well as a lack of 32,820 beds in 2014. This calculation still needs to be conducted at the regency and city level to accommodate some core elements in

the model, such as, geographical factors, population density, cultural factors, healthcare search patterns, socioeconomic conditions, demographic considerations, and other social factors.

Figure 15: Dynamic modelling system used to estimate the readiness of supply



Source: TNP2K (2013)

BOX 4. QUEUING FOR PATIENT CARE AT HOSPITALS IN JAKARTA

TNP2K studies conducted in June 2014 show that, shortly after JKN commenced, the outpatient queues in some hospitals in the greater Jakarta area were long and tiresome (**figure 16**) (TNP2K 2013). Many patients complained about the long waiting time to access advanced outpatient services. The queues were also long for specific types of inpatient services, such as for heart disease, cancer, the intensive care unit and the pediatric and neonatal intensive care unit for newborn babies. The issue of the adequacy, availability and distribution of doctors (general and specialist) as well as other health workers needs to be resolved.

Patient figures also increase due to more referrals by first-level health facilities. TNP2K also found that once a patient receives a referral, his consultation and medical treatment must be at the same hospital, regardless of the ailment. Consequently, when a patient attends a public health centre he immediately requests a referral. The referral scheme has not worked well and trials to improve procedures need to be implemented as soon as possible. This

situation cannot be allowed to continue and central and local governments must find a solution to protect the rights of participants.

Figure 16: Patient queues at a hospital in Jakarta



Source: TNP2K, 2014

The usage ratio of 12.6 beds per 10,000 inhabitants was still far below the WHO norm which is 25 per 10,000. The uneven distribution of the bed usage was also a significant issue.

Regarding access to health-care facilities, while the average distance to health facilities for Indonesia is only 5kms, in provinces such as West Papua, Papua and Maluku, it can be more than 30 kms. More than 18 percent of Indonesians take over an hour to reach a public hospital (using various forms of transport). More than 40 percent of people in Western Sulawesi, Maluku and West Kalimantan encounter obstacles in accessing health services. Public health centres are more accessible than hospitals, with only 2.4 percent of the population taking over an hour to reach them. Of that 2.4 percent national total, travel time to public health centres is worse for people living in the provinces of Papua (27.9 percent of the population), East Nusa Tenggara (10.9 percent) and West Kalimantan (10.9 percent).

Usage rates are low compared to global standards and large gaps persist between provinces. Inpatient usage rates in Indonesia were 1.9 percent which is less than one-fifth of the WHO suggested rate of 10 per 100 people, and the differences between provinces can be as high as five-fold.

A TNP2K study of former participants from Askes, Jamkesmas, Jamsostek and Jamkesda revealed discrepancies in usage levels for hospital outpatient services. For example, outpatient services usage by ex-Askes participants was 6 to 10 times higher than among ex-Jamkesmas participants. Askes and Jamsostek members tended to live in urban areas and had far better access to medical facilities than Jamkesmas participants who mostly lived in rural and remote areas and were constrained by longer distances and more costly transport to get to health-care facilities.

Considered from several perspectives, the readiness of public health centres to serve the public is still low and varies between provinces, with lower readiness especially occurring in some eastern provinces such as Papua, Maluku, West Papua, Maluku and West Sulawesi. Access to the referral system through public health centres is still low (either between public health centres or between public health centres and advanced health-care facilities). Only 34 percent of public health centres have a sharps waste disposal system and less than half have an infectious waste storage system. Only half are able to do urine tests for pregnancy, urine dipstick tests for protein or urine dipstick tests for glucose. Also, only about half of the centres can perform diagnostic tests or blood glucose tests for malaria and less than a quarter of them have a ready stock of gentamicin or powdered ampicillin injections.

There are still many challenges related to the availability and readiness of specific health services at public health centres, such as family planning services, antenatal care, basic obstetric care, routine immunisation, malaria, tuberculosis, diabetes, basic operations, blood transfusions and comprehensive operations (for public health centres located far from hospitals). Given that non-communicable disease accounts for 60 percent of the overall disease burden, only 54 percent of public health centres reported that they could test blood glucose levels, which is critical to managing diabetes, and only 47 percent reported they could do urine tests. Out of all the public health centres in the provinces of Papua, West Papua, Sulawesi, Maluku, North Sulawesi, East Nusa Tenggara and West Papua, fewer than 25 percent reported that they could perform blood glucose tests and urine glucose tests.

Indonesia also faces a massive blood shortage. And with regard to tuberculosis (TB), which is the cause of 9.5 percent of deaths (IHME 2014), there is a severe shortage of fixed-dose combination drugs, especially in provinces with high numbers of TB sufferers. While over 90 percent of public health centres in Java and Bali reported they could do hemoglobin tests, less than 60 percent of public health centres in provinces such as North Sulawesi, Maluku and Papua, can use this test to diagnose anemia. The availability of urine testing is even more limited: just 43 percent of the public health centres with basic emergency obstetric-neonatal services (PONED) and 66 percent of public health centres without these services can do urine testing in these provinces. There are many deficiencies in basic obstetric care, for example, basic obstetric equipment is still lacking in the eastern provinces of Indonesia. In provinces with the highest maternal mortality rate, such as Papua, West Papua and North Maluku, equipment for basic obstetric care is not always available at all public health centres, for example with regard to emergency transport (77 percent, 64 percent and 55 percent respectively), manual vacuum extractors (4 percent, 5 percent and 23 percent respectively) and Dopplers (9 percent, 11 percent and 27 percent respectively).

Regarding pediatric care, on average, less than 50 percent of public health centres can perform stool tests (24 percent), measure the weight of babies properly (36 percent) and carry out hemoglobin tests (44 percent). Only 43 percent have at least one staff trained in the integrated management of childhood illness for the first two years. Centres that lack staff trained in managing childhood illness or monitoring growth (57 percent) were found in the least economically developed provinces. The readiness to provide routine immunisation is much lower in public health centres in provinces such as Papua, West Papua and Maluku and these provinces thus have the lowest immunisation rates. Less than 80 percent of public health centres in these three provinces reported that they had vaccines available for measles, DPT, polio and BCG. Antimalarial drugs are available in only 62 percent of public health centres and malaria blood tests are only available in 71 percent of public health centres in the ten provinces with the highest prevalence of malaria. There are big differences in the ability to diagnose malaria in these ten provinces: the highest (90 percent and above) are in the provinces of Bangka Belitung (96 percent) and Central Sulawesi (93 percent), while the lowest is in the province of Papua (51 percent).

ROLE OF THE PRIVATE SECTOR

While the private sector is growing rapidly, there is no clear policy regarding its role and little information is known about it. The government does not monitor the private sector and knows little about the volume, distribution, scope and quality of the services offered. However, the private sector is one option for providing faster and more responsive health care for the country. In this context, the government needs to quickly find ways to harmonise the delivery of health services in the two sectors. The government should also consider ways of focusing more on the demand side while financing and encouraging the private and non-profit sectors to develop the supply side. A radical option would be to stop or freeze capital allocations for new public facilities until a master plan for organising the supply side is developed.

Globally, public and private sector partnerships have been set up whereby the government provides tax credits and subsidies and even appoints private partners to fund the construction of health facilities and sometimes also to operate them. Various types of public and private sector partnerships exist. Private financing initiatives have been favoured in some developed countries, like the United Kingdom, over the past decade or more. In this kind of partnership, the private company finances and builds a hospital that operates for the public sector and is staffed with civil servants. In other arrangements the private sector builds and operates a government hospital by hiring staff themselves, for periods of up to 30 years. In the past the government paid all the costs of both inpatient and outpatient health services in the private sector, based on annual usage. In most of these partnerships, when a hospital was built it belonged to



the government and was called a government hospital. The government would also draw up the contract to ensure all public patients were charged the same tariff and that the private sector outlay was the same as the government would budget to build another general hospital. The government used the private finance initiative to raise money “off-budget” – beyond the balance of public finances and not seen in public sector borrowing requirements.

Whenever a country moves towards universal health coverage that aims to provide quality services to all residents, consumers increasingly demand a service that corresponds with their interests and perceptions. This happens not only in developed countries but also in middle-income countries (Brazil, Chile, Mexico, South Africa, Thailand) and even low income countries (Ghana, Rwanda, Kyrgyzstan).

Successful interventions to modernise health care largely depend on innovative approaches to providing for health needs. However, this also depends on how well hospitals or clinics integrate these innovations, for example, into the functional design

and layout of their rooms used for surgical procedures. Any innovative mechanisms introduced in Indonesia will need to be regulated. The “blended” health system in the country with its well-developed private health sector is ideal for a public and private sector partnership. However, the private health sector has always been organised independently.

In any partnership, the government will need to properly oversee other agencies (apart from the public sector) that provide health services to the general public, to avoid potential problems. The government has an obligation to provide quality medical services for the poor but if it does not monitor, for example, public hospitals managed by the private sector, the poor may not get the health services they are entitled to. For this reason any partnerships will require a balance of well-designed regulatory, monitoring and supervisory processes.

Nevertheless, policy makers in the health sector in Indonesia need to set up some trials, starting with the following steps:

- Identify the geographical area for the trial;
- Decide on the preferred model for the health care organisation to develop;
- Choose the leadership and management models required to run it;
- Specify the terms and conditions and the time period for the trial; and
- Raise relevant problems and issues for discussion.

Ultimately, Indonesia’s health system and its health-care delivery framework will remain vulnerable to all kinds of natural disasters, given the country’s location in the Pacific ‘Ring of Fire’ and due to the increasing frequency and intensity of natural disasters resulting from climate change.

RECOMMENDATIONS: WHAT NEXT?

In starting on the road to universal health coverage, the three main areas that government needs to focus on are:

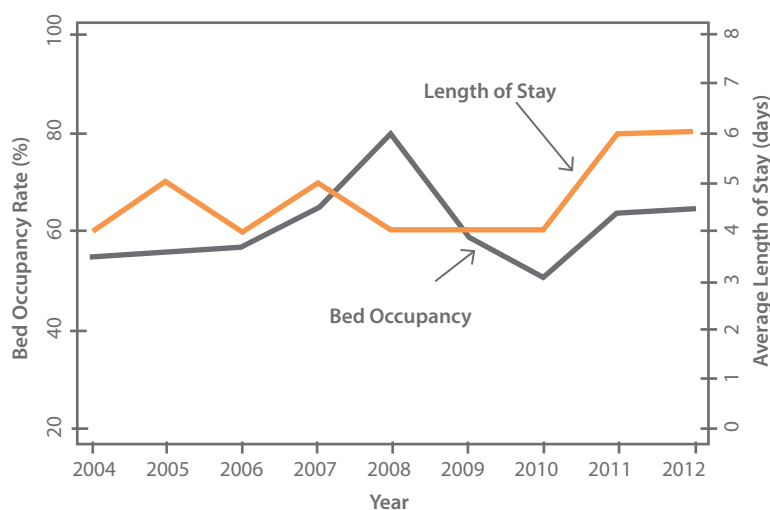
- Production – ensuring that sufficient services are available to meet the demands of universal health coverage;
- Distribution – ensuring that services are available in remote and rural areas; and
- Amelioration – improving the quality and performance of health workers by ensuring schools meet government standards and offer competent training.

Meeting the challenge of making services available in remote and rural areas is essential to achieving key health outcomes and needs to be the main focus. Identifying staff incentives and putting them in place is a key factor. Better salaries would help but other

issues can be just as important, such as helping health workers pursue postgraduate studies and ensuring formal rotations.

Indonesia's bed occupancy rate (BOR) for hospitals amounted to 65 percent in 2012 (**figure 17**). This is lower than for the average OECD country (78 percent) and shows that there is a capacity to absorb the increase in demand. However, the low national average masks the fact that there are many queues at many hospitals in urban areas such as Jakarta. The uneven distribution will create problems in interpreting national indicators meaningfully.

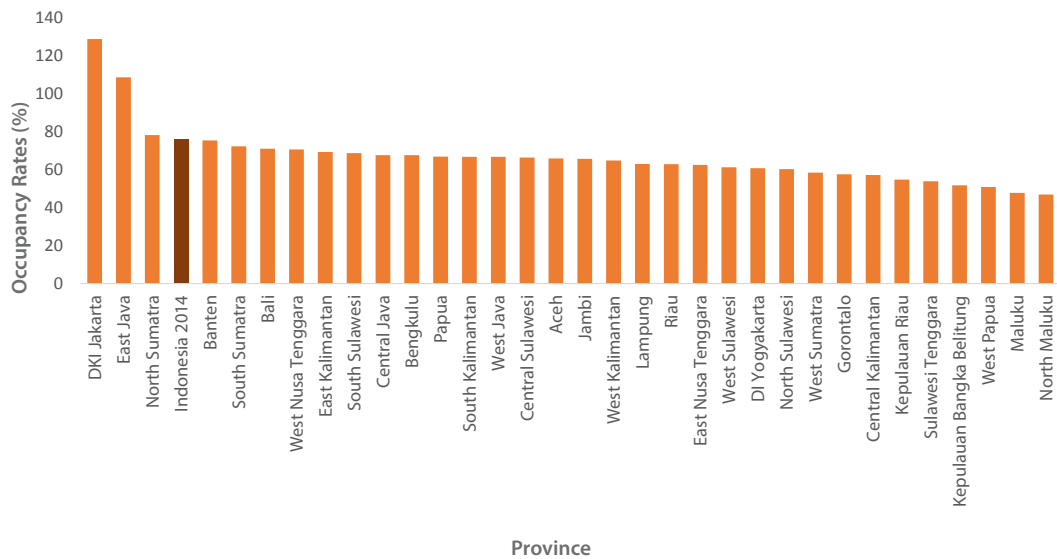
Figure 17: Bed occupancy rates and average length of stay, 2004–2012



Source: MOH

Hospital occupancy rates vary between provinces (**figure 18**). Jakarta has the highest rate at 128 percent, followed by East Java, North Sumatra, Banten and South Sumatra, which each have more than 70 percent. The bed occupancy rate in almost all 30 provinces was lower than the Indonesian average in 2014. Low bed occupancy rates at hospitals (under 60 percent) were observed in the following nine provinces: West Sumatra, Gorontalo, Central Kalimantan, Riau Islands, Sulawesi Tenggara, Bangka Belitung, West Papua, Maluku and North Maluku.

Figure 18: Hospital occupancy rates in Indonesia, 2014



Source: DataRumahSakitOnline (Online Indonesian Hospital Database; http://rsonline/report/proyeksi_bor.php (accessed on 9 Feb 2014))

What can be learned from the level of hospital occupancy rates in Indonesia? Bed occupancy rates at hospitals reflect the popularity of the hospitals' inpatient services and correspond to the facilities available at the hospitals. Generally, the greater the number of beds, the greater the number and types of physicians. Occupancy ratios and hospital usage correspond to the medical facilities available at the hospital. Jakarta has the highest bed occupancy rates and most hospitals in Jakarta are better equipped than hospitals in other provinces. The bed occupancy rates for the provinces of East Java and North Sumatra are also high.

It is also important not to build hospitals with too much bed capacity. Internationally, the practice of medicine has changed significantly in the last two decades with major changes in outpatient services and the use of new technologies. This change has implications for the shape and size of the hospital sector and for possibly encouraging the establishment of adverse budgets for primary health.

The role of BPJS in controlling secondary health care and expenditures is vital and their research in East Java showed that more than 60 percent of hospital admissions could have been treated at the outpatient level (BPJS).

The Ministry of Health or another high-level institution (for example, TNP2K) needs to be involved in planning the supply side. BPJS should work with the Ministry of Health, its Agency for Health Research and Development and other government organisations to agree on the best way to use the data that emerges from the payment mechanism.

This will ensure a better understanding of what is happening in both public and private hospitals.

In the short-term, the government can update the “dynamic supply and demand system” model developed by TNP2K for JKN. This model was proven predictable and precise when universal health coverage was first implemented at the start of 2014. It can now be updated with actual claims data from BPJS, using for example, the data from the first six to nine months of JKN’s inception. Currently TNP2K is developing the model further to estimate the supply side based on the needs at the provincial level.

In the medium term, the government should develop targets for delivering health services over the 2015–2019 period. The indicators will be largely based on WHO recommendations that are contextually appropriate for Indonesia and the proposed targets will be based on improvements in achieving the fundamental steps towards universal health coverage in 2019.

Table 12: Recommended “building block” targets for health services under the national medium-term development plan 2015-2019

INDICATOR	BASELINE	TARGET 2019
Centralised registration of public and private health facilities	0	1
Assess the services of new public and private health facilities	0	1
The usage of inpatient beds per 10,000 people	12.6	25
Inpatient admissions per 100 people	1.9	5.0
Average bed occupancy rate	65 %	80 %
Readiness of public services at public health centres	71 %	100 %
Readiness of specific public health centres to deliver basic midwifery services	62 %	100 %
Readiness of specific services at public health centres for NCDs	77 %	100 %
Readiness of specific services at public hospital for PONEK	86 %	100 %

Source: Bappenas, RJMPN papers, 2014

Note: NCD = Non-communicable diseases; PONEK = Comprehensive Emergency Obstetric and Neonatal Care

Policy recommendations should also be developed on improving services and the supply side to support Indonesia’s aim to improve the population’s health and achieve universal health coverage in 2019. The following actions need to be considered.

SHORT TERM (1–2 YEARS)

1. Compile systematic information about the number and distribution of private health facilities, and conduct independent and regular assessments of these private facilities;
2. Identify supply-side needs in terms of facilities and resources based on the JKN benefits package, including associated governance needs, and disseminate this

- information. Establish a new, independent organisation (outside of the Ministry of Health) to handle accreditation for both public and private facilities;
3. Maintain a clear focus on proactive and preventive efforts, especially regarding interventions concerning public health;
 4. Increase accountability by setting up independent and effective monitoring and evaluation systems, and deploying appropriate incentives and payment mechanisms for service providers (for example, a model for capitation payments) to ensure the readiness of services on the supply side. The monitoring system should focus on the poor in terms of access and quality;

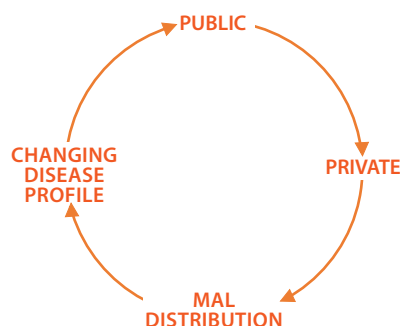


5. Designate the institutions responsible for collecting data from each facility (public or private) and for assessing their efficiency, accessibility by the poor and conformity with national guidelines, and publish the results in a public forum to reveal where and why there are shortcomings;
6. Systematically and regularly assess and improve other dimensions of health services, including assessing the efforts of service providers to ensure their basic resources are not only available but are also used and maintained properly;
7. Adapt existing community empowerment programmes to encourage village governments to invest in the village's major health needs and to act responsibly with health-care spending.

MEDIUM-TERM (3–4 YEARS)

1. Develop and complete a “master plan” of health services that combines and harmonises the public and private sectors, and establish a new health-care organisation that reflects the epidemiological transition to non-communicable diseases as well as the growth of the private sector (**figure 19**). The government's budget allocation for the construction of the new facilities should be tied to the master plan. Local governments and provinces should avoid constructing new facilities outside the master plan, and make better use of local funds for patient services and community health activities.

Figure 19: Elements of the health services master plan



Source: TNP2K, 2014

2. Improve public sector financing for health care and combine this with better investment targets, to improve health services and ensure supply-side readiness. In addition, assess the budget process and deployment of funds to verify consistency with the government's priorities and commitments in the health sector. These efforts will require changes in the relationships between different levels of government.



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Pharmaceutical
Policy in the Social
Health Insurance
System



There are striking differences between provinces and regencies in terms of access to medicines and other essential items which are due to insufficient supplies in some areas and overstocking and wastage in others. At the same time, at least 35 percent of the health budget is spent on pharmaceuticals and pharmaceutical technology and this is likely to increase. This is high compared to other OECD countries that spend below 20 percent. It shows that the pharmaceutical market is inefficient and that there are misuses, such as prescribing more than is required.

A policy framework has yet to be developed to ensure that the management of medicine and medical technology fits the context of universal health coverage. This will create many challenges in accessing pharmaceuticals and related technology, and result in more spending without improved health outcomes. These issues need to be discussed and resolved.

To achieve health priorities, such as meeting the Millennium Development Goal targets, there must be cohesion between the pharmaceutical sector and the health system. All aspects of the pharmaceutical sector need to function effectively and be managed according to the same targets.

A good pharmaceutical model for social health insurance already exists in Indonesia and was used by PT Askes. The Askes system:

- Uses a formulary based on independent scientific advice;
- Develops priorities based on budgetary considerations;
- Uses a protocol for prescribing high-priced drugs;
- Competes for discounted prices for drugs in the list of annual reimbursements;
- Uses a published price list; and
- Ensures payments to pharmacists are based on fixed costs and that margins are regressive rather than a percentage mark-up.

However, at the outset of JKN, the potential risk relating to pharmaceutical expenditure (and usage) during the transition to universal health coverage emerged, especially when scaling up to the PT Askes approach to managing expenses and pharmaceutical access.

There were several important steps for the pharmaceutical industry to take in implementing JKN.

FIRST, the National Formulary of Drugs was compiled and enacted in 2013 through a ministerial decree. The formulary contains a full list of the drugs that must be provided at a health facility and is the basis for the use of drugs in the national health-care

system that started in 2014. This is a list of products with a generic name, usage and drug formulation but no mention of price or brand.

SECOND, the List of Essential Medications, a new electronic catalogue of medicine and technology, was developed. This is a web-based list of products, specifying the brand, and including the price, making it possible to order drugs. The website can be seen at <http://inaproc.lkpp.go.id/v3/public/ekatalog/ekatalog.htm>).

This list is based on the national formulary but it was up to suppliers to bid for their products to be included (or not). So, not all products in the national formulary are entered in the electronic catalogue. It is not clear how the selection of devices or technologies is conducted for a product to be placed on the list, although the bidding process is still in effect.

WAY FORWARD AND RECOMMENDATIONS

A number of areas need to be focused on in the coming year. These include:

1. Choice of medicines and technologies in the JKN package of benefits

Managing JKN's package of benefits requires transparency and fairness in deciding what products will be covered. Currently, the National Formulary of Drugs and the List of Essential Medications provide guides for public sector procurement. However, these lists are not harmonised so contain different items which creates confusion, undermines the quality of the benefits package and wastes resources. The lists need to be harmonised and provide standard treatment guidelines. The drug selection process needs to be more evidence-based and the lists must be supported by a comprehensive pricing policy for the procurement process.

Many institutions in Indonesia have suggested that the most appropriate approach to this problem is to develop a health technology assessment (HTA). However, a policy framework for this needs to be developed and the system's capacity to carry out the assessment will need to be strengthened.

2. Financing and the price of medicine and technology

Government spending on drugs has risen over the past few years in some last year to at least more than US\$ 2 per capita per year and based on global experience is expected to increase further with the implementation of JKN.

However, no cost studies have been done yet to anticipate the funding needed to procure medications and there is insufficient data to estimate the budget.

Therefore, a national system to monitor the procurement, distribution and consumption of medicine and medical technology and expenditure on it is a priority so that a budget can be drawn up. Annual growth in the pharmaceuticals industry in Indonesia is estimated at 10–14 percent. Prescribed medications constitute about 56.3 percent of the total drug market, consisting of branded generic drugs (67 percent), patented drugs (25 percent) and unbranded generic drugs (8 percent). Current JKN data from the information management system for the private sector indicates that providers are aware of pricing and procure unbranded generic drugs more than branded generic drugs. This indicates greater understanding of prices.

Based on studies by the National Development Planning Agency, the current policy for controlling pharmaceutical prices may need review which could lead to a new medium-term national development plan. The current policy caters for only a fraction of generic products and only controls prices at the ex-manufacturer stage. For these products, the price may be too low, creating a disincentive for manufacturers to produce quality products, as well as limiting prescribers in how they can use the product.

A policy decision has to be made on whether or not to control the pharmaceutical market. If the decision to control the market is taken, a comprehensive approach should be used. Several studies of branded generic drugs have found them relatively expensive in the international context but the comparison did not take into account the various components of the price, including for example, value added tax or sales tax on medicines. It is important to avoid a simplistic policy that fails to take into account the entire supply chain.

At the same time, the use of generic drugs should continue to be promoted among prescribers and consumers, as one option in lowering the cost of medications. The prices, availability and performance of the suppliers associated with generic drugs should continue to be monitored. Furthermore, BPJS is likely to initiate policies as well as take some from PT. Askes. These include:

- Establishing protocols for prescribing high-priced medicines;
- Encouraging national competition to get discounted prices for medicines that are on the reimbursement list; and
- Developing a management information tracking system to monitor efficiency and quality.

Surprisingly BPJS has not followed up some of the best policies. It is not clear why but one reason may be the lack of information technology infrastructure throughout Indonesia.

3. Stronger management and regular monitoring of the supply chain

Data from health-care facilities show substantial variations in access to drugs but other data suggest that drugs and medical technology are available. This disparity is due to a problem of supply chain management. Developing online procurement through an online catalogue is an important step forward but will not be enough to solve the problems of access. Several partners helped develop national strategies to manage public medicine but building the human resources capacity to manage drugs is vital, especially at the regency level and at public health centres. The government can cooperate with the association of professional pharmacists to build the skills base to address supply chain issues. The role of pharmacists in improving the use of medicines in the community needs to be evaluated.

4. An efficient information management system

A national drugs and medical technology information management system is necessary to ensure that the purchase, provision and use of drugs can be monitored and analysed on a regular basis. The system should also:

- Ensure the quality of products listed in the formulary. Products (and suppliers) should satisfy pre-qualification requirements before being listed in the catalogue;
- Describe and revise pricing mechanisms to ensure that:
 - they are not vulnerable to collusion among bidders;
 - that a price reference is introduced; and
 - that the interrelated mechanism for determining prices and selecting products is based on evidence from a health technology assessment which needs to be developed;
- Develop collective procurement for JKN and/or between provinces and regencies;
- Monitor the performance of suppliers providing products specified in the bidding process. In a large country like Indonesia it is risky to appoint a single supplier.

BPJS is the appropriate organisation to press for these changes through their standards and practices and by communicating the policies.

Table 13: Post-partum bleeding – assessing oxytocin

COMPONENT	ISSUE	RESPONSE/RATING	SOURCE	ISSUE	RESPONSE/RATING	SOURCE
Regulation	Is it registered?	Yes	BADAN POM	Is it registered?	Yes	POM Agency
Factory	Availability of product quality	Unclear	USAID/USP Report	Availability of product quality	Yes	POM Agency
Clinical queries/policy directions	Recommended for use	Unclear – why is there also ergometrine?	PPH WHO and WHO EML guidelines 2013	Recommended for use	Yes	Medical Guidelines
Selection	Is it in the national formulary?	Yes	2013	Is it in the national formulation?	Yes	2013
Selection	Is it in EML?	Yes	2013	Is it in EML?	Yes	2008
Price setting	What is the price? (How does it compare?)	e-catalogue: not found in MIMs 6500 - 250000R / ampoule- 2409,767		What is the price? (How does it compare?)	0.53 – 0.63 international median price (MSH)	
Financing	Is financing from central allocation for purchasing? (Regency)	No	Expenditure data, 2012	Is financing from central allocation for purchasing? (Regency)	No	2012
Financing	Other funding sources?	Variable	Interviews and consumer data from regencies	Other funding sources?	Yes	Regency data 2013
Supply	Warehoused at the regency level?	Variable	Regency consumption data	Warehoused at the regency level?	Yes	Regency data 2013
Availability/accessibility	Shelving facilities?	30% from public health centres	World Bank; WHO MH-SARA	Shelving facilities?	70 % from public health centres	World Bank NCD
Clinical demand	Are special skills needed to use it?	Probably not?	Conclusion taking into consideration it is an injection; also based on WB assessment	Are special skills needed to use it?	Possibly-oral product-but no glucometers	
Health outcome	Failed to reduce maternal mortality			Exacerbates complications due to diabetes		

Note: BADAN POM = National Drug and Food Monitoring Agency; PPH = postpartum haemorrhage; EML = Essential Medicines List; MH-SARA = Maternal Health – Service Availability and Readiness Assessment

Source: Hill and Santoso (2014)

Note: BADAN POM = National Drug and Food Monitoring Agency; PPH = postpartum haemorrhage; EML = Essential Medicines List; MH-SARA = Maternal Health – Service Availability and Readiness Assessment

5. Ensuring the quality of drugs

The infrastructure and regulations to govern the quality of drugs are in place but the regulations need to be better enforced with regard to selling and distributing medical products. A cohesive strategy is needed to handle the problem of substandard (and fake) products, for example. While collaboration with the provincial and regency governments is crucial in enforcing regulations and quality assurance, public advocacy regarding product safety is also necessary. The Food and Drug Monitoring Agency is undertaking institutional and human resource capacity building using a risk-based approach that complies with international requirements.

6. The demand side perspective – providers and consumers

Over the past five years the proper control of drug prescription and use in health facilities has been identified as a significant problem. The challenges include, among others:

- Hospitals choosing inappropriate drugs in response to pressure from health professionals;
- The National Committee on Drugs and Therapies not adequately managing drugs used in facilities;
- Insufficient use of the standard treatment guidelines to ensure consistency; and
- Inadequate management of the cost of drugs.

Handling this issue will be key to implementing sustainable universal health coverage. New incentives under JKN capitation at the primary care and case-based group level in hospitals raise questions about accessing and managing the quality of prescription writing.

For JKN implementation, two payment strategies have been adopted. For hospitals, the Indonesian diagnosis-related groups will be used as the basis for payment and for level I health-care facilities, capitation-based payments have been introduced. The cost of drugs and related commodities should be included in the payment.

Recognising that JKN is still in the early stages of its implementation, major concerns arise about how medicines and commodities will be paid for, especially by primary health-care facilities and public health centres. Capitation in primary care is estimated to be around Rp10,000 per patient per month, including the costs of drugs and commodities. Medicines prescribed by a doctor at a facility will be provided directly by the facility (with the cost included in the capitation) or if



the patient goes to a private pharmacy to buy the prescribed drugs, pharmacists would then claim the drug cost plus a return fee of 20 percent from the doctor.

This tends to increase out-of-pocket costs and reduce access to medicines as well as promote improper prescription writing. Health-care facilities should be responsible for ensuring the supply of the necessary medicines. A weak supply chain can reduce the availability of cheaper generic drugs. This may cause the doctor to prescribe alternative and possibly undesirable products or replace them with more expensive generic drugs that impose a cost on patients (plus a fee for doctors). There will be an incentive for doctors and facilities to do this because of the low ceiling and lack of data to show that the actual amount paid is enough to cover the costs.

Although the laws prohibit doctors in hospitals from giving drugs directly to patients, these laws are widely ignored and are not enforced. Alternative strategies seen in other settings where drug costs are not adequate include

doctors prescribing enough drugs for two or three days and asking the patient to come back to receive further prescriptions.

Drug switching can also occur at pharmacies due to legislation allowing generic drug substitution. Again, if the price of the “favoured product” in procurement is lower than other available generic drugs, the proportional markup for pharmacists can encourage them to substitute with a more expensive alternative. This negative incentive to prescribe expensive products occurs because the drug price control system in Indonesia does not currently oversee all drug prices, only a part of them.

It is unclear whether the funds available in hospitals will be enough to cover drugs. Current funding cannot cover the cost because:

- The national formulary includes a number of expensive products that do not seem to have a set price in the electronic-catalogue (for example, dabigatran, rivaroxaban, telmisartan, clopidogrel, exemestane, gefinitib, nilotinib and rituximab);
- Pooled procurement by BPJS in hospitals has not occurred;
- Successfully managing drugs and expenditure on them in hospitals using diagnosis-related groups requires, among other strategies, a National Committee for Drugs and Therapies to ensure proper prescription writing. However, this committee does not function effectively in Indonesia;
- Managing medicines and the hospital equipment budget requires managerial skills and effective administration by the pharmacist which may not always be the case;
- When hospitals were under PT. Askes, they were required to submit claims using an electronic system but currently it is estimated that only 20 percent of hospitals have information technology systems and, furthermore, they are often different.



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Conclusion



When JKN was implemented at the beginning of 2014, many changes were made with regard to, for example, health services, regulations, membership and benefits. There were new refined calculations for PBIs dues, the information management system was strengthened, funds in health centres were managed more rigorously, as were the capitation payments to hospitals. The Secretariat of the Vice President, responding to the results from TNP2K's analysis, was instrumental in these changes. Moving forward, to optimise JKN implementation, many issues still need to be addressed to achieve universal health coverage by 2019.

Additionally there are challenges and problems that need to be resolved.

1. A strategy for sustainability

The JKN programme started at the beginning of 2014 and, as of July 2014, BPJS *Kesehatan* had managed about 125 million participants. This “single payer” health care programme is in its infancy and needs close monitoring as many challenges lie ahead. The biggest challenge is uniting different stakeholders in support of one goal for JKN, namely, improving access to effective, efficient and equitable health-care services. This is not easy because, prior to 2014, financing and organising the health-care system was done in a highly fragmented way. The many health facilities offered different levels of quality, the range of health coverage programmes offered different benefit packages, various payment arrangements were used, from fee-for-services to prospective payments, and patients’ out-of-pocket expenses could be considerable. In reforming payment methods, many health-care facilities, especially hospitals, had difficulty accepting the concept of payment packages and tended to stick with their more familiar approaches. Involving the hospitals’ association, professionals and academics became essential in sustaining JKN. Other countries that have implemented universal health coverage, such as South Korea and Thailand, used long-term strategic planning. For JKN to be sustainable in Indonesia, a planning strategy needs to be developed that can transform institutions.

2. New sources of revenue: creating fiscal capacity

Globally, Indonesia is an “outlier” in terms of its public spending for health care which is less than 2 percent of gross domestic product. Public and private health expenditures together amount to less than 3 percent. Low health expenditure globally correlates with high out-of-pocket costs. Indonesia is no exception as out-of-pocket costs are above the average compared to other countries. While the increasing number of people with health insurance has seen a decline in out-of-pocket expenses, these costs remain a burden for the poor.

The increasing demand for health care means there is a greater need for funding. The Ministry of Finance demonstrated its commitment in 2014 by increasing PBLs' dues to three times the 2013 figure. This is a good first step.

A fiscal capacity analysis shows that new sources of revenue to finance health may be found, for example by:

- Applying a tobacco excise allocated to health which can be increased every year for the next five years. Whether allocated or not, the tobacco tax would increase revenue, decrease the prevalence of smoking, cut health-care costs and increase worker productivity;
- Increasing value-added tax (VAT) slightly, for example, by 1 percent;
- Moving away from energy and electricity subsidies as well as the fuel subsidy. The fuel subsidy alone was equivalent to USD32 billion in early 2013 and USD20 billion at the beginning of 2014;
- Eliminating the ceiling on income tax for civil servants, private employees and private companies. The government can generate new revenue while enhancing both equity and progressiveness by setting the tax for the upper middle income community groups;
- Doubling income tax for civil servants as this will not jeopardise macroeconomic growth. However, private workers should be excluded and any impact on small and medium enterprises should be minimised as they are the engine of future economic growth;
- Encouraging greater cooperation between the government and the private sector in health-care financing;
- Increasing efficiency in the current system by tackling corruption, reducing the number of inaccurate diagnoses, lowering the rate of unnecessary hospital admissions (strengthening the referral system in level I health-care facilities), regulating pharmaceutical spending and eradicating bribery and corruption in the procurement of facilities and health equipment.

Allocating government health expenditure more effectively in BPJS's overall budget is also important to ensure that public financing for health care is pro-poor. For example, the allocation base for primary care is only 15 percent of the total budget. Could this figure be increased to 20–30 percent next year, in line with the upward adjustment for poor and under-served regions? This would encourage more effective treatments in terms of costs for non-communicable diseases and for other types of care management. It is not just how much money is available but where and how the funds are spent that becomes significant.

3. Expanding membership

Global experience shows that most reforms towards universal health coverage are done in stages, starting with the civil service, the formal sector and the poor. The informal sector is more difficult to reach and it takes longer to reach population groups in the low to medium income bracket.

Indonesia's economy and labour force are dominated by the informal sector, creating additional challenges in achieving universal health coverage. Practical issues need to be overcome, for example, how to collect dues from workers who have unstable or irregular incomes, like farmers. Furthermore, collecting dues from informal workers can be difficult and costly and the cost could reach or even exceed the income from the dues collected.

There are two basic approaches to mobilising the resources to provide health coverage for workers in the informal sector. Firstly, a country can expand the use of public taxes to fund contributions on behalf of the poor, the informal sector and for any other segment of the population. Secondly, it can extend formal sector contribution schemes to the informal sector wherever all residents must pay dues (Tangcharoensathien *et al.* 2011). A third approach is for health-care financing to come from a mix of tax-based subsidies and dues and this is increasingly being adopted in other countries.

Indonesia needs to implement a trial run to see which mechanisms best suit the country. Other countries have offered various incentives and tried different ways of collecting dues from informal workers, including making it easy to register and offering flexible timeframes. However, in the Philippines and Vietnam, these interventions were not particularly successful.

In the short term, BPJS may lose due to adverse selection, whereby only sick people register and pay their dues. However, people can be asked to register other healthy family members to expand the membership and reduce the pool risk. In the medium term, an experiment could be done to identify the proper incorporation of subsidies and contributions.

Finally the Jamkesda programmes need to be integrated into JKN. Coverage would increase to 87 percent nationally if the 400 or more regional programmes were under the umbrella of BPJS. This process will require topping up dues and standardising the benefits package as well as collaborating at the central and provincial levels. The central government would top up the dues while provincial governments would expand the package of benefits but retain local programming. All levels of government benefit from this approach: central government increases

its coverage and local governments maintain their control over the programme. In the short-term, Jamkesda needs to be coupled with BPJS but the process of merging the information technology and other systems may take up to five years. Local management and control can continue until the long-term transition is achieved.

4. Readiness of the supply side

Making services available in remote and rural areas is essential to achieving key health outcomes and needs to be given priority. While theoretically the number of health workers in Indonesia was considered sufficient, their distribution country-wide was uneven. The surge in demand for medical services after JKN was launched exacerbated the situation and many health-care facilities are understaffed.

Outpatient queues even in better-served areas like Jakarta have become long and slow. The number, availability and distribution of doctors (general and specialist) as well as other health workers is an important issue that must be resolved. The referral scheme has not worked well, and trials to improve the procedure need to be implemented soon. Government needs to concentrate on increasing, expanding and improving health services throughout the country.

Health facilities indicators can also be misleading. The bed occupancy rate for hospitals in Indonesia was found to be relatively low compared to other OECD countries (78 percent), giving the impression that the country had the capacity to absorb the increase in demand. However, as with the staffing statistics, these figures do not reflect the uneven distribution of the facilities. Indonesia will need a strategy to provide the best possible network of health facilities, reflecting the new approaches to the practice of medicine and the use of new technologies.

BPJS has a vital role to play in controlling secondary health care and expenditures, for example in ensuring appropriate treatments and minimising unnecessary hospital admissions. First-level health facilities also need to be strictly monitored in accordance with the policy of strengthening public health centres and private clinic services. A significant increase in capitation payments will require first-level health facilities to manage its participants effectively and efficiently as regards adopting more healthy lifestyles. Preventive and proactive efforts at the level of the individual should be emphasised and doctors at this level must endeavour to increase awareness about healthy living. BPJS *Kesehatan* should create a mechanism to encourage health centres and clinics to supervise the health levels of its participants.

The Ministry of Health or a higher level institution (for example, TNP2K) needs to be involved in planning the supply side. BPJS should work with the Ministry of Health, its Agency for Health Research and Development and other government

organisations to agree on the best way to use the data that emerges from the payment mechanism. This will ensure better understanding of what is happening in both public and private hospitals.

In the short-term, the government can update the “dynamic supply and demand system” model developed by TNP2K for the JKN programme. This model was useful at the start of the programme and it can be updated with actual claims data from BPJS from the first six to nine months of the programme. TNP2K is currently developing the model to estimate the supply side based on the needs at the provincial level. In the mid-term, the government should consider targets for delivering health services between 2015 and 2019. The indicators will largely be based on WHO recommendations that are appropriate for Indonesia and the proposed targets will be based on achieving the fundamental steps towards universal health coverage in 2019.

The recommendations regarding the main policy for upgrading services and the supply side to support the aim to improve the health of the population in Indonesia and achieve universal health coverage by 2019 are summarised as follows:

Short term (1-2 years)

1. Compile systematic information about private health facilities and monitor these facilities regularly;
2. Forecast and disseminate supply side needs in terms of facilities, resources and governance and establish an independent organisation to handle accreditation for both public and private facilities.
3. Focus on proactive and preventive efforts for public health;
4. Increase accountability through independent and effective monitoring and evaluation systems to ensure the readiness of services and the supply side, particularly for the poor and vulnerable;
5. Designate the institutions responsible for collecting data from and assessing each facility (public or private) and publish the results to track shortcomings;
6. Systematically and regularly assess and improve other dimensions of health services, including availability and maintenance of basic resources;
7. Adapt existing community empowerment programmes so village governments invest in their villages’ major health needs and manage health-care spending accordingly.

Medium-term (3-4 years)

1. Create a “master plan” to combine and harmonise the public and private health sectors and establish a health-care organisation to reflect the shift

to non-communicable diseases and the growth of the private sector. Any new facilities should be tied to this master plan;

2. Improve public sector financing, budget processes and investment targeting for health care, as well as liaison between the various levels of government, to ensure supply-side readiness.

5. Pharmaceutical policy in the social health insurance system

There are striking disparities between provinces and regencies in terms of access to medicines and other essential items, due to insufficient supply in some areas and overstocking and wastage in others. Indonesia spends at least 35 percent of its health budget on pharmaceuticals and pharmaceutical technology and this is likely to increase. Yet other OECD countries spend less than 20 percent which suggests misuses, for example, prescribing more than is required, and inefficiencies in the pharmaceutical market.

A new policy framework is needed to manage medicine and medical technology in the context of universal health coverage. To achieve health priorities, the





pharmaceutical sector needs to integrate with the health system and must function effectively according to the same targets. While PT Askes offers a good pharmaceutical model for social health insurance in Indonesia, scaling up to this approach could result in high pharmaceutical expenditure (and usage) during the transition to universal health coverage.

The National Formulary of Drugs, containing the full list of drugs that must be provided in a health facility, was compiled and enacted in 2013 through a ministerial decree. This provides the basis for the use of drugs in the national health-care system as from 2014. Also, the List of Essential Medications, a new electronic catalogue of medicine and technology was developed. While it was based on the formulary, due to the bidding process involved, not all the medicines are included but it does include brands and prices, making it possible to order the drugs online. Priority issues for pharmaceuticals in the coming year include:

1. The choice of medicines and technologies to be included in the JKN package of benefits

The two lists of drugs need to be harmonised and include standard treatment guidelines. Drug selection should be more evidence-based and supported by a pricing and procurement policy. A health technology assessment needs to be developed as well as the policy framework and the capacity to carry it out.

2. Financing and the price of medicine and technology

A national system to monitor the procurement, distribution and consumption of medicine and medical technology as well as expenditure on them must be developed so that budget needs can be planned. The current pricing policy may need to be reviewed which could lead to a new medium-term national plan.

3. Stronger management and regular monitoring of the supply chain

Data about access to and availability of drugs from health-care facilities vary substantially due to weak supply chain management. The online catalogue is one solution but government also needs to build the capacity to manage drugs, especially at regency level and at public health centres.

4. Information management system requirements

The purchase, provision and use of drugs needs to be monitored and analysed on a regular basis through a national drugs and medical technology information management system. The system must be able to monitor the quality of drugs supplied, pricing of drugs, collective procurement arrangements and the efficiency of the suppliers.

5. Drugs and quality assurance

Indonesia has the infrastructure and regulations to control the quality of drugs but the regulations need to be enforced with regard to selling and distributing medical products. Collaboration between provincial and regency governments, and creating public awareness are crucial in assuring and maintaining quality.

6. The demand side perspective: providers and consumers

The lack of proper control over prescriptions and the use of drugs in health facilities has led to problems, for example, inappropriate drugs chosen under pressure, inadequate management by the National Committee on Drugs and Therapies of drugs used, insufficient use of the standard treatment guidelines and inadequate management of the cost of drugs. The handling of this issue will be key to implementing sustainable universal health coverage.



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