CHAPTER

5

Health

5.1	5.2	5.3	5.4	5.5
Context	How Effective Has the Health Sector Been in Meeting Its Goals?	Is the Level of Health Sector Spending Adequate?	How Efficient Is Public Spending in the Health Sector?	Recommendations to Spend More and Spend Better in the Sector

This chapter is part of the World Bank's 2020 Public Expenditure Review for Indonesia.

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Health

139—166

Key Messages

A Indonesia has charted remarkable progress on its path toward universal health coverage (UHC). Health insurance coverage has rapidly expanded to 82 percent of the population and the share of out-of-pocket (OOP) expenditures has decreased by nearly 12 percentage points since the introduction of Jaminan Kesehatan Nasional (JKN) or National Health Insurance in 2014.

B Despite these major achievements, several challenges remain, especially in lowering maternal mortality rates, reducing stunting prevalence, and curtailing widespread tuberculosis. Regional and income-related inequalities in health outcomes also persist, highlighting the importance of good governance and health information systems to better target resources.

C Public health expenditure is well below regional and lower middle-income averages, so frontline providers frequently lack the drugs, equipment, and the training needed to deliver good quality services.

D Improving the performance of the health sector to ensure better value for money requires strengthening of the governance and accountability mechanism, addressing financial and institutional fragmentation, and introducing a better design of performance-orientation service delivery.

E Achieving Indonesia's ambitious goal of UHC will require the GoI to spend more and spend better on health care.

Summary of recommendations

Increase health sector spending to support the achievement of UHC

A Simplify the overall tobacco tax structure and increase tobacco excise taxes at the national level.

B Subsidize premiums for the informal sector to attract a larger pool of healthy members.

C Update JKN premiums based on sound actuarial analysis.

D Monitor and track legally mandated health spending.

Improve the quality (or efficiency) of health spending

A Strengthen governance and accountability:

- *Improve governance and accountability by introducing an annual sector review.*

- *Invest in health information systems to improve monitoring and evaluation of health spending performance.*

- *Strengthen the purchasing role of BPJS Healthcare.*

B Pilot health financing reforms:

- *Address open-ended hospital payments where most spending occurs.*

- *Introduce carefully designed cost-sharing for non-essential services, services prone to over-utilization, and/or to incentivize more cost-effective referral pathways.*

- *Reinforce performance-based financing.*

C Improve the quality of service delivery:

- *Introduce an explicit benefit package commensurate with available resources.*

- *Target resources to populations that would benefit most.*

- *Use JKN claims data to inform and improve service delivery and increase efficiency.*

- *Ensure the health system can address the long-term care needs of older and chronic condition patients.*

Further key reading

World Bank. 2016. Health System Financing Assessment: Spend More, Right, and Better (http://documents.worldbank.org/curated/en/453091479269158106/Indonesia-Health-financing-system-assessment-spend-more-right-and-better)
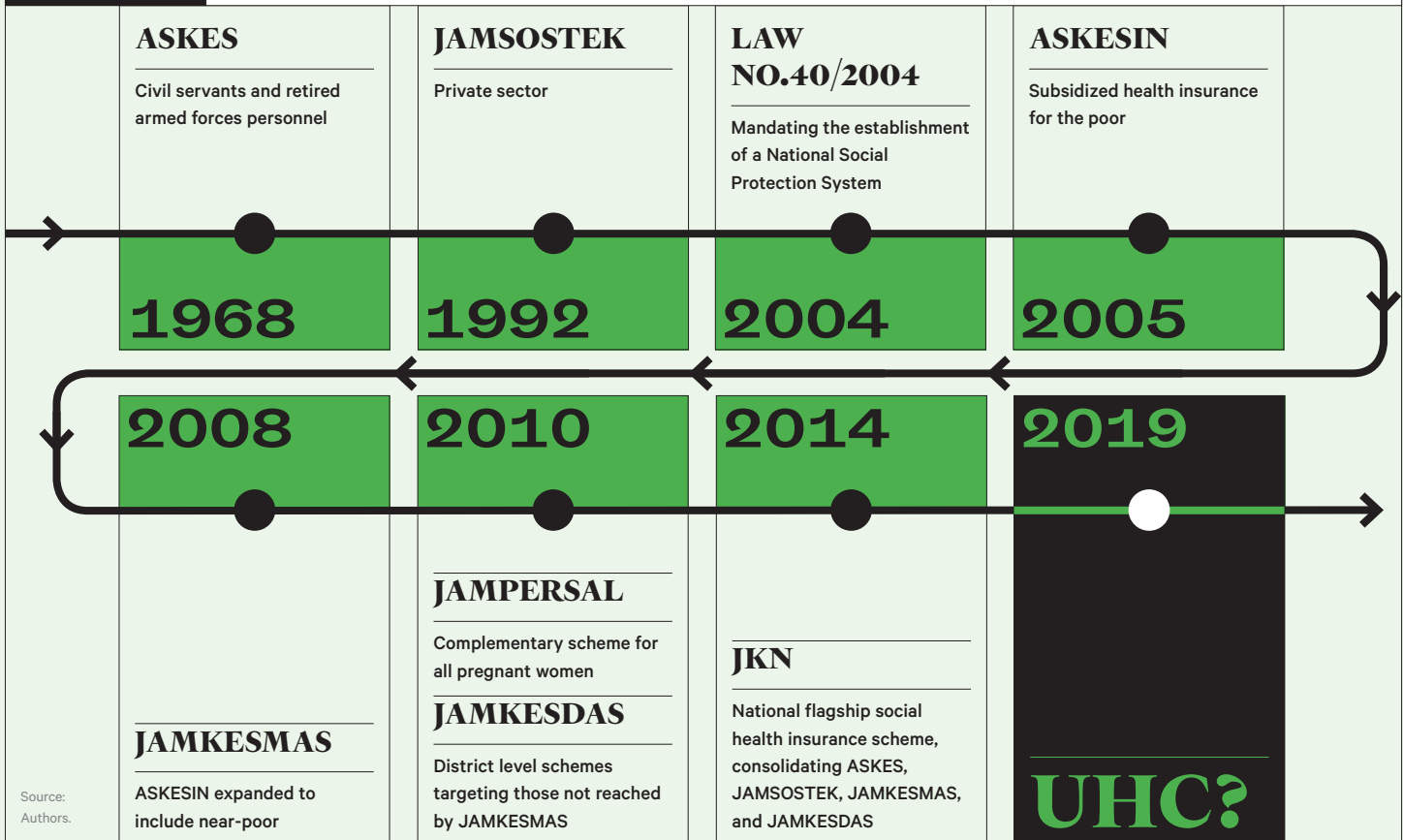
World Bank. 2017. Is Indonesia Ready to Serve? An Analysis of Indonesia's Primary Health Care Supply-Side Readiness (http://documents.worldbank.org/curated/en/484351538653658243/Is-Indonesia-Ready-to-Serve-An-Analysis-of-Indonesia-s-Primary-Health-Care-Supply-Side-Readiness)

World Bank. 2018. Functional and Regulatory Review of Strategic Health Purchasing Under JKN: Executive Summary (http://documents.worldbank.org/curated/en/792001534743821191/Functional-and-Regulatory-Review-of-Strategic-Health-Purchasing-Under-JKN-Executive-Summary)

Context

5.1

FIGURE 5.1.   Indonesia's path to UHC

ASKES

Civil servants and retired armed forces personnel

JAMSOSTEK

Private sector

LAW NO.40/2004

Mandating the establishment of a National Social Protection System

ASKESIN

Subsidized health insurance for the poor

1968   1992   2004   2005

2008   2010   2014   2019

JAMPERSAL

Complementary scheme for all pregnant women

JAMKESDAS

District level schemes targeting those not reached by JAMKESMAS

JKN

National flagship social health insurance scheme, consolidating ASKES, JAMSOSTEK, JAMKESMAS, and JAMKESDAS

UHC?

JAMKESMAS

ASKESIN expanded to include near-poor

*I*ndonesia has achieved remarkable progress on its path toward universal health coverage (UHC). Prior to 2004, only civil servants, retired members of the armed forces and the police, and private sector workers had access to health insurance. Between 2004 and 2014, various schemes were set up, each catering to specific populations and offering different benefits (Figure 5.1). With the introduction of *Jaminan Kesehatan Nasional* (JKN) or National Health Insurance in 2014, Indonesia consolidated its schemes and numerous risk pools into one national risk pool,[141] a uniform benefit package, and a single purchaser of health services that establishes uniform payment methods, reimbursement rates, and rules for quality of care—a massive reform that few multi-payer countries have been able to achieve. While pooling the health risk of the entire country into one national risk pool covered by the same benefits helps to enhance the equity of health care, the strong purchasing power of a single-payer system is expected to improve the efficiency of the entire system.

This chapter is organized as follows: Section 2 focuses on how effective Indonesia has been at meeting its goal of UHC—defined as *affordable* access for all to quality healthcare services**.** Sections 3 and 4 look at health financing for UHC, i.e., whether Indonesia is spending enough on health and whether limited public resources are being used efficiently to maximize value for money. Finally, Section 5 provides recommendations for increasing and improving the quality of public health spending in Indonesia.

141 The four main schemes were: (i) Askes – for civil servants, set up at the state/province level; (ii) Jamsostek – for the private sector, set up at the state/province level; (iii) Jamkesmas – a national scheme for poor and near poor set up by the GoI; and (iv) Jamkesdas – local health insurance schemes for the poor and disadvantaged not covered by Jamkesmas, set up at the local government level (i.e., 300+ district level pools).

"Indonesia has achieved remarkable progress on its path toward universal health coverage (UHC)."
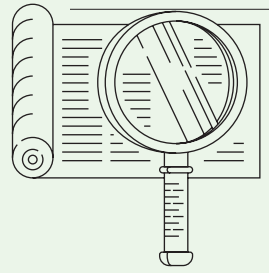
How effective has *the* health sector been in meeting its goals?

5.2

The Government of Indonesia (GoI) has set ambitious targets for the health sector, but progress has been mixed. As outlined in the Ministry of Health's (MoH) five-year National Strategic Plan (Renstra 2015-2019),[142] the sector's main objective is to improve the health status of its population by providing UHC and financial protection. Specifically, the GoI aims to: (i) reduce high maternal mortality and stunting rates; (ii) reverse growth of communicable diseases, especially tuberculosis (TB) and human immunodeficiency virus (HIV); (iii) slow the increasing burden of non-communicable diseases (NCDs); and (iv) expand health insurance coverage. However, only six (out of 18) health sector indicators are on track to achieving their targets (Table 5.1).

Indonesia has achieved considerable gains in health outcomes in recent decades, but several challenges remain, especially in maternal health, nutrition and in tackling persistent communicable diseases such as tuberculosis (TB). Between 1960 and 2016, life expectancy increased from 45 to 69 years. Under-five mortality declined from 222 to 25 per 1,000 live births between 1960 and 2017, and infant mortality declined six-fold to 21 per 1,000 live births over the same period (Figure 5.2).[143] However, Indonesia's maternal mortality ratio (MMR) remains high relative to its income level and regional peers, despite declining to 126 per 100,000 live births in 2015, from 446 in 1990 (Figure 5.3).[144] In addition, one-third of children under five years old, or 9 million children, suffered from stunting in 2018—the fifth-highest prevalence in the world. Indonesia is also now the third-largest contributor to the global TB burden, with 842,000 cases reported in 2017,[145] and TB is the fifth-highest cause of premature death in Indonesia. In addition, new challenges such as Multi-Drug Resistant TB have emerged. Indonesia also continues to face challenges in curbing HIV.

As the Indonesian population undergoes demographic and epidemiological transitions, new challenges are emerging, specifically a rise in non-communicable diseases (NCDs). NCDs already account for the largest share of the disease burden (66 percent), nearly doubling since 1990, and this burden is likely to rise further as the share of the ageing population (>65 years) is expected to double from 5 to 10 percent between 2015 and 2030. Unhealthy lifestyle choices also contribute to the prevalence of NCDs. Indonesia has one of the highest rates of cigarette consumption in the world: half the adult population (i.e., 85 million people) smoked in 2016, including

142 Ministry of Health's five-year National Strategic Plan (Renstra 2015-2019) is a state document operationalizing the vision and mission of the President as stipulated in the Medium-Term Development Plan (RPJMN) 2015-2019. It is available online at www.depkes.go.id/resources/download/info-publik/Renstra-2015.pdf

143 Data from World Development Indicators to compare across countries.

144 Data from other sources such as the census indicate that the MMR may be even higher than this estimate. The MMR accepted by the GoI (Bappenas) is 305 per 100,000 live births (SUPAS, 2015). The figures used in this report are based on the WHO-UNICEF-World Bank estimates (2017).

145 2018 WHO Global TB Report, WHO (2019).

TABLE 5.1.	Mixed progress in achieving health sector development targets		
Indicators	**Baseline (2014)**	**Current Status (latest data available)**	**Target 2019**
Maternal mortality ratio (per 100,000 live births)*	346	305	306 (SDG 2030 target: 70)
Infant mortality rate (per 1,000 live births)*	32	24	24 (SDG 2030 target: 12)
Underweight prevalence, percent of population*	19.6%	17.7%	17.0%
Stunting prevalence, percent of population*	32.9%	30.8%	28.0%
TB prevalence (per 100,000 population)	297	257	245
HIV prevalence, percent of population*	0.33%	0.33%	<0.50%
Number of districts where malaria has been eliminated (# district)	212	266	300
Hypertension prevalence, percent of population	25.8%	32.4%	23.4%
Obesity prevalence, percent of population	15.4%	20.7%	15.4%
Smoking prevalence among <= 18year-olds, percent of all Indonesians aged 18 and below	7.2%	8.8%	5.4%
Number of subdistricts with at least one accredited Puskesmas (# subdistricts)	0	1308	5600
Number of districts with at least one nationally-accredited hospital per city	10	201	481
Districts with >= 80 percent fully immunized infants	71.2%	85.4%	95.0%
National Social Health Insurance coverage/membership, percent of population	51.8%	81%	>95%
Number of Puskesmas with five types of health personnel	1015	1618	5600
Percent of Type C Hospitals with seven specialists	25.0%	45.2%	60.0%
Availability of drugs and vaccines at Puskesmas	75.5%	81.6%	90.0%
Quality drugs at Puskesmas*1/	92.0%	98.7%	94.0%

Note: shaded indicators with * are on track to achieving target.
1/ Refers to the percentage of sampled drugs that met quality standards, e.g., stored appropriately and not close to expiry dates.
Source: MoH (2018); National Strategic Health Plan (Renstra 2015-2019); RPJMN 2015-2019 Mid-Year Evaluation (Bappenas, 2017).

FIGURE 5.2.	Indonesia has achieved impressive gains in health outcomes over decades...

Population health outcomes in Indonesia, 1960-2015
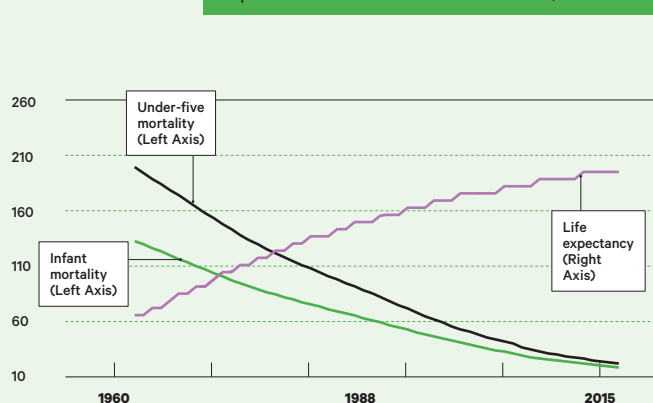
FIGURE 5.3.	...but key challenges remain, especially in maternal health

Y-axis: log of maternal mortality ratio
X-axis: log GNI per capita, 2015
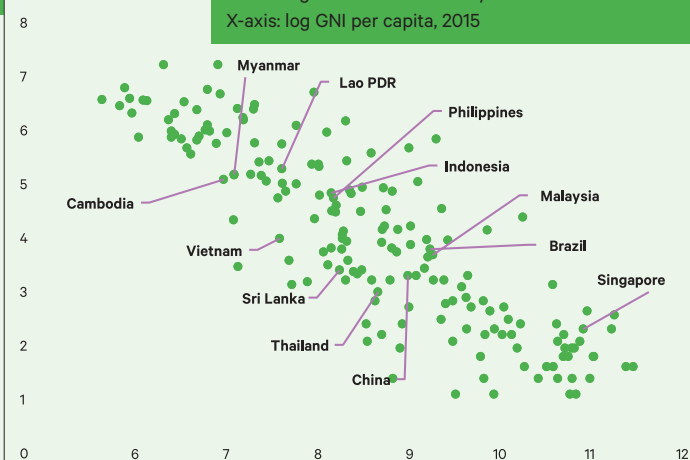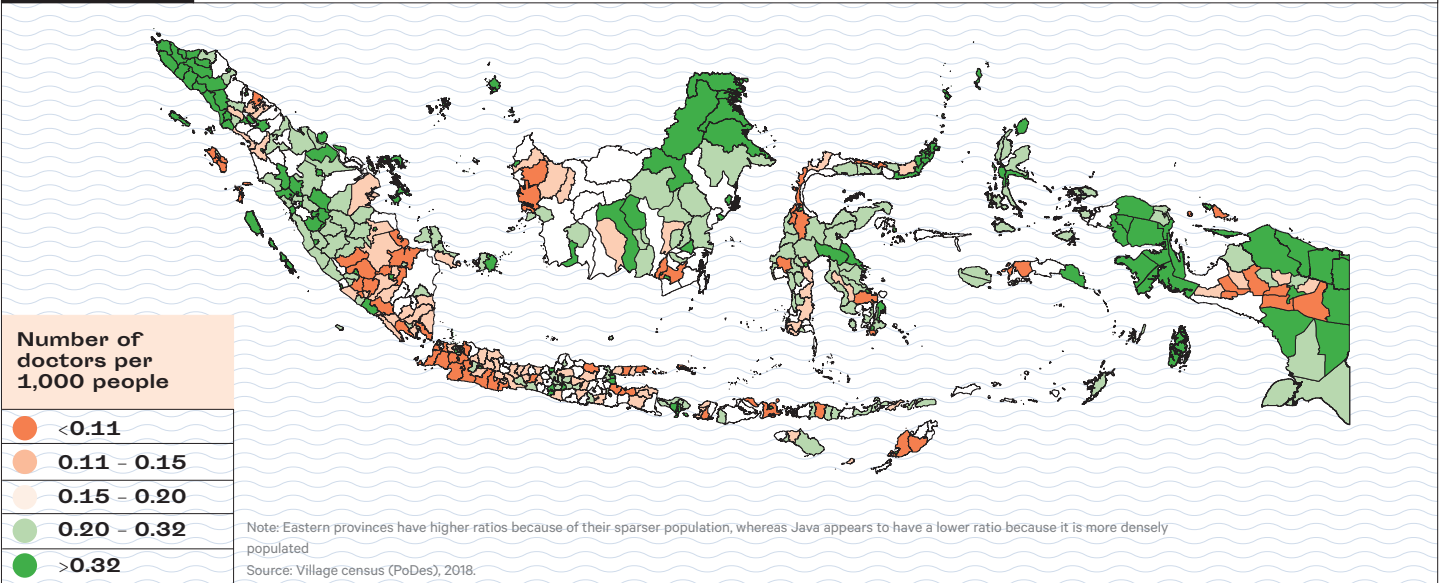

Source: World Development Indicators, 2019.

FIGURE 5.4 | The success of UHC will be highly dependent upon increasing the number, skill mix and distribution of human resources in health...

Number of doctors per 1,000 people

- <0.11
- 0.11 – 0.15
- 0.15 – 0.20
- 0.20 – 0.32
- >0.32

Note: Eastern provinces have higher ratios because of their sparser population, whereas Java appears to have a lower ratio because it is more densely populated

Source: Village census (PoDes), 2018.

68.1 percent of adult males. And tobacco is an important risk factor in the top five leading causes of death in Indonesia—stroke, ischemic heart disease, neonatal disorders, diabetes, and TB.[146]

In addition, regional and income-related inequalities in health outcomes persist. Although the gap in health outcomes between the richest and poorest households has decreased over the past two decades, poor households still have infant and child mortality rates that are double those of richer households.[147] The MMR also varies substantially across the country. In eastern provinces, the MMR is above 200, while central provinces such as DKI Jakarta, West Java, and Bali have MMRs that are below 100. However, these numbers may obscure differences in population density, since eastern provinces are more sparsely populated. The current national strategy to reduce the MMR focuses on absolute numbers of maternal deaths that are naturally higher in densely populated, and more urban areas, and hence may not target these geographic inequalities. Moreover, different strategies may be needed in West Papua—a remote and rural area where the public sector will remain a critical provider—compared with urban areas where private sector plays a vital role.

Despite the large increase in JKN coverage, out-of-pocket (OOP) payments remain high. JKN provides a generous benefit package covering all medically necessary treatment with no caps or co-payments. As of April 2019, JKN covered nearly 220 million people, or around 82 percent of the total population, making it one of the largest single-payer social health insurance schemes in the world. While OOP has started to decrease since the introduction of JKN in 2014, it nonetheless remains high at 37 percent of total national health spending in 2016, compared with the levels observed in most developed and middle-income countries (20 to 30 percent). In addition, about 2.3 million people experience catastrophic health spending[148] and over 4 million people are pushed deeper into poverty due to health-related shocks.[149] The approach in Indonesia has been to prioritize the breadth of coverage over the depth of services, resulting in limited financial protection.

The availability and distribution of human resources for health remains a challenge, despite the extensive network of public health facilities. Facilities at the village and subdistrict levels primarily offer preventive and promotive services, and basic primary health care, with community health centers (Puskesmas) forming the backbone of the country's public health system. Facilities at the district level and above provide secondary and tertiary care. As of December 2018, there were 9,909 Puskesmas nationwide (and likely even more private primary care providers) serving a catchment area of 25,000 to 30,000 individuals, meeting the MoH standard at the national level. However, only six districts (out of 514) had at least one doctor per 1,000 population (Figure 5.4), 247 districts had at least one midwife

"The availability and distribution of human resources for health remains a challenge, despite the extensive network of public health facilities"
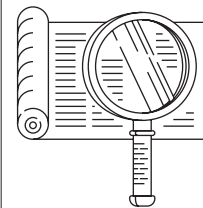
146 Source: Institute of Health Metrics and Evaluation. http://www.healthdata.org/indonesia

147 Source: World Bank staff calculations from Susenas.

148 Defined as households who spend more than a quarter of their total household expenditures on health.

149 Susenas 2016, poverty line is defined at the US$1.9 per day threshold.

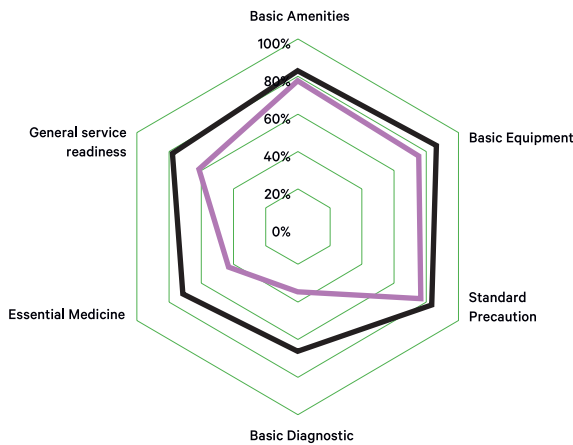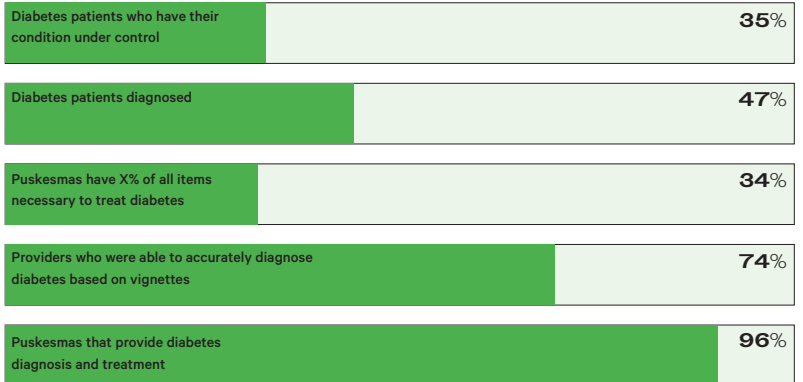| FIGURE 5.5	...the readiness of primary health care to deliver services...

General supply side readiness at primary care level, 2016

FIGURE 5.6	...and the knowledge and skills of providers to deliver quality care

Percent of Puskesmas, providers or patients, 2016

Diabetes patients who have their condition under control	**35**%
Diabetes patients diagnosed	**47**%
Puskesmas have X% of all items necessary to treat diabetes	**34**%
Providers who were able to accurately diagnose diabetes based on vignettes	**74**%
Puskesmas that provide diabetes diagnosis and treatment	**96**%

Note: General service readiness index is interpreted as facilities having on average X percent of all tracer items. For example, the average Puskesmas had 66 percent of all tracer items for basic diagnostics, compared with 35 percent for the average private facility.
Sources: QSDS Indonesia (2016) and Rifaskes (2011).

and 303 districts at least one nurse per 1,000 population.[150]

Moving from coverage toward effective coverage will require improvements in the quality of care. The general service readiness index—an index[151] of tracer indicators that is often used as a proxy for quality of care—for public primary health facilities was 78 percent, while private health facilities was 61 percent.[152] Primary health-care facilities lack basic diagnostic tests, essential medicines, and diagnostic and treatment guidelines, especially in the private sector where it is estimated more than 50 percent of health care takes place. This lack of supply-side readiness leads to the implicit rationing of services (Figure 5.5). Provider knowledge is also weak, as measured by the ability of providers to accurately diagnose and treat patients (based on clinical vignettes). For example, while 96 percent of Puskesmas mentioned that they provided services for diagnosis and treatment of diabetes, only 34 percent of providers could accurately diagnose diabetes and only 35 percent of patients had their diabetes under control (Figure 5.6). This may cause patients to seek treatment at higher-level facilities, either out of necessity or preference for better quality care.

Given this context, Indonesia faces significant challenges in meeting its UHC goals, both in terms of improving health outcomes and providing financial protection. This begs the question as to whether the GoI is spending enough on health and whether it is using those resources efficiently.

150 148 According to 2018 village census (PoDes) there were 61,251 doctors, 180,302 midwives, and 236,116 nurses.

151 Service readiness is measured by a set of tracer indicators across five domains: basic amenities, basic equipment, standard precautions for infection prevention, diagnostic capacity, and essential medicines.

152 General service readiness index is interpreted as facilities having on average X percent of all tracer items, e.g., the average private health facility only had 61 percent of all tracer items.

Is the Level *of* Health Sector Spending Adequate?

5.3

*I*ndonesia's total health spending is low relative to comparator countries, and much of this spending is OOP. At 3.3 percent of GDP, Indonesia's total health expenditure (THE) is among the lowest in the world, especially compared with the average lower middle-income country (6.1 percent of GDP) and the average EAP country (7.4 percent of GDP) (Figure 5.7). In 2016, government budgetary spending was 44.7 percent of THE,[153] followed by OOP spending (37.3 percent), external aid (0.4 percent), and other private sources (17.5 percent).

While public health spending is also low, it has been increasing in recent years. Public expenditure on health—at 1.4 percent of GDP, or 7.8 percent of total government

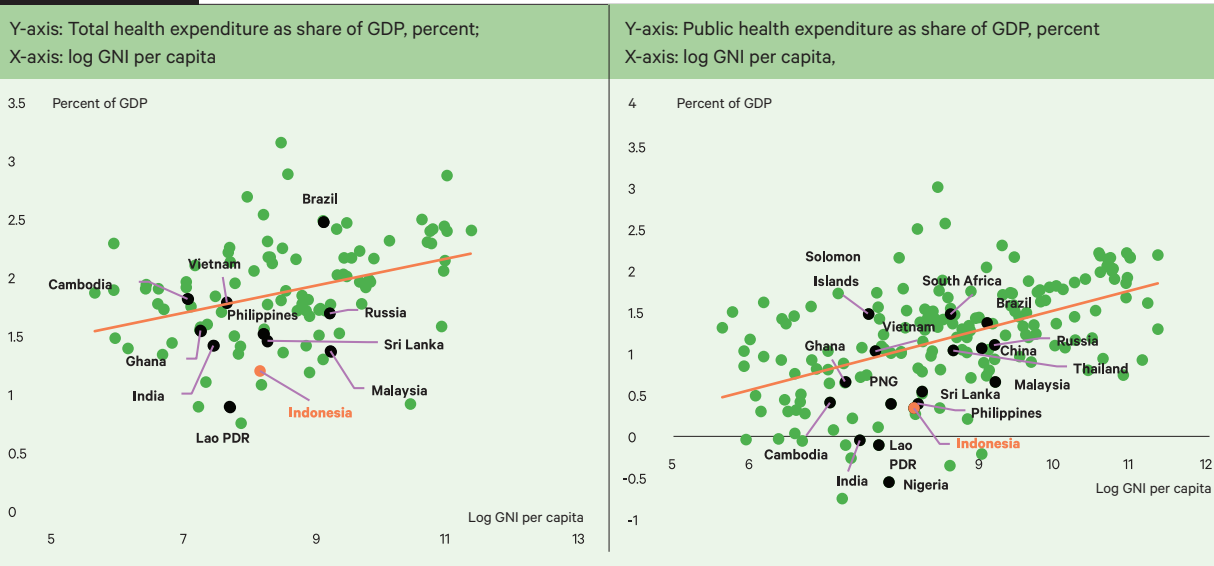[153] This includes 17.3 percent through the national health insurance scheme (JKN).

expenditure, in 2016—is about half of that in countries with a similar level of income (averaging around 2.7 percent of GDP). This amounts to just US$49 per capita, well below regional and lower middle-income averages, as well as the recommended US$110 per capita needed to deliver an essential UHC package. This suggests that current public health spending in Indonesia should more than double.[154] In line with the implementation of JKN and the passage of Law No. 36/2009 requiring a minimum of 5 percent of central government budget and 10 percent of SNG budgets (excluding salary) to be allocated for health, real public health expenditure has increased by 19.5 percent annually on average between 2001 and 2018 (Figure 5.8). Nonetheless, while on average subnational governments have met the legal requirement to allocate a minimum of 10 percent of their budgets for health, this figure masks wide variations across the country, with only 33 percent of districts able to meet the minimum threshold. What is more, this benchmark does not guarantee the adequacy of financing for health, as in some districts salaries for public health personnel were included in meeting the mandated target.

Subnational governments play a dominant role in health sector spending decisions (Figure 5.8 and Figure 5.9). More than two-thirds of total public expenditures on health occurs at the subnational level; central government (i.e., the Ministry of Health) manages only about one-third of total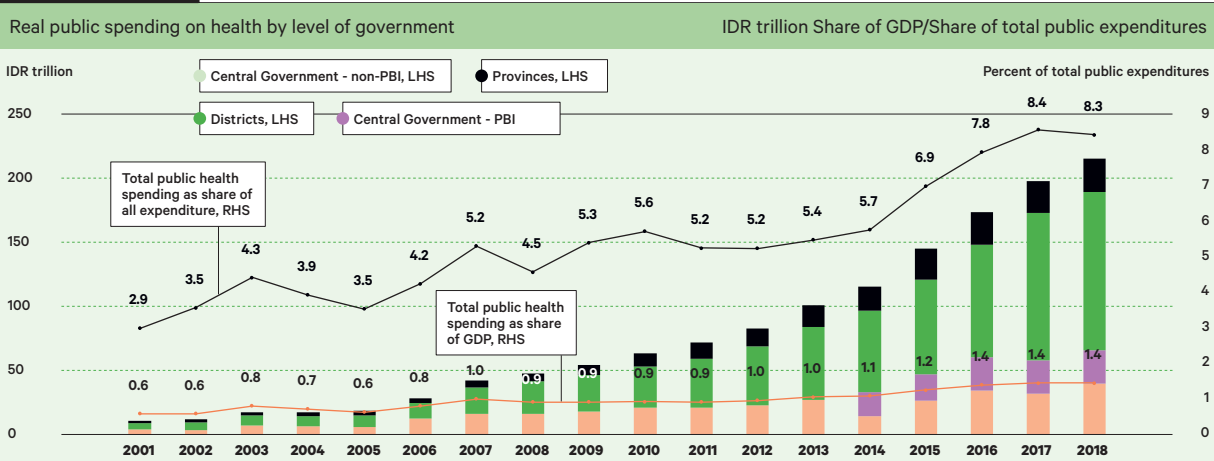 public spending. The bulk of district revenue comes from intergovernmental transfers from central to district level budgets. However, most of these transfers (e.g., *Dana Bagi Hasil* (DBH), *Dana Alokasi Umum* (DAU), and central grants)[155] are unconditional, so allocation to the health sector is at the discretion of district governments. Instead, *Dana Alokasi Khusus* (DAK)—a special allocation fund[156]—is the largest source of supply-side financing that is earmarked for health. And, with the gradual expansion of the JKN, *Penerima Bantuan Iuran* (PBI) subsidies that the GoI pays on behalf of the poor and near poor to enroll in JKN are now the largest source of district and facility health revenue.[157]

FIGURE 5.7.   **Indonesia spends relatively little on health compared with other lower middle-income country peers, 2016**

Y-axis: Total health expenditure as share of GDP, percent;
X-axis: log GNI per capita

Y-axis: Public health expenditure as share of GDP, percent
X-axis: log GNI per capita,

Note: Total health expenditure is the sum of current and capital health expenditure.
Source: World Bank WDI (GDP per capita in PPP) and WHO Global Health Expenditure Database, 2016.

FIGURE 5.8.   **Districts play an increasingly important role in health service delivery**

Real public spending on health by level of government   IDR trillion Share of GDP/Share of total public expenditures

Note: *) The last available year of actual spending data at the subnational level are for 2014; subsequent years use budgeted expenditures. For the central government, all years refer to actual expenditures except 2018, which refers to budgeted amounts. Numbers refer to total health spending as a share of total public expenditures and as a share of GDP.
Source: COFIS (Consolidated Fiscal Database, World Bank) using data from MoF, 2018.

154 A note on the level of health spending: Several health spending targets have been set: 5 percent of GDP (WHO); 15 percent of government spending (Abuja declaration). While these targets can serve as global benchmarks, they are usually not helpful for determining appropriate levels of spending at the country level—especially where THE is driven by OOP spending. Instead, it is more useful to compare against what is fiscally feasible, what the country is trying to achieve, and how much is needed to cover an essential benefit package. Most recently, the third edition of the Disease Control Priorities initiative (DCP3) estimated the total cost per person for sustaining an essential universal health coverage package (EUHC) at 80 percent coverage would be US$110 in lower middle-income countries.

155 They are mostly used for funding the salaries of public health personnel.

156 DAK *Fisik* finances capital investment, medicines, and commodities; DAK Non-*fisik* finances operational expenditures of frontline delivery units; DAK Non-*fisik* is further fragmented into DAK *Akreditasi* that provides funding for the accreditation process of Puskesmas and hospitals, and DAK *Penugasan* that finance priority activities in priority regions, for instance HIV or malaria in remote, border and island areas.

157 See Social Assistance chapter for more on PBI-JKN.

FIGURE 5.9.   Health-care providers rely more on district and BPJS Healthcare spending; as a result, the MoH has limited influence over frontline service delivery. Health financing flows in Indonesia's decentralized context

| Demand Side Financing	Supply Side Financing
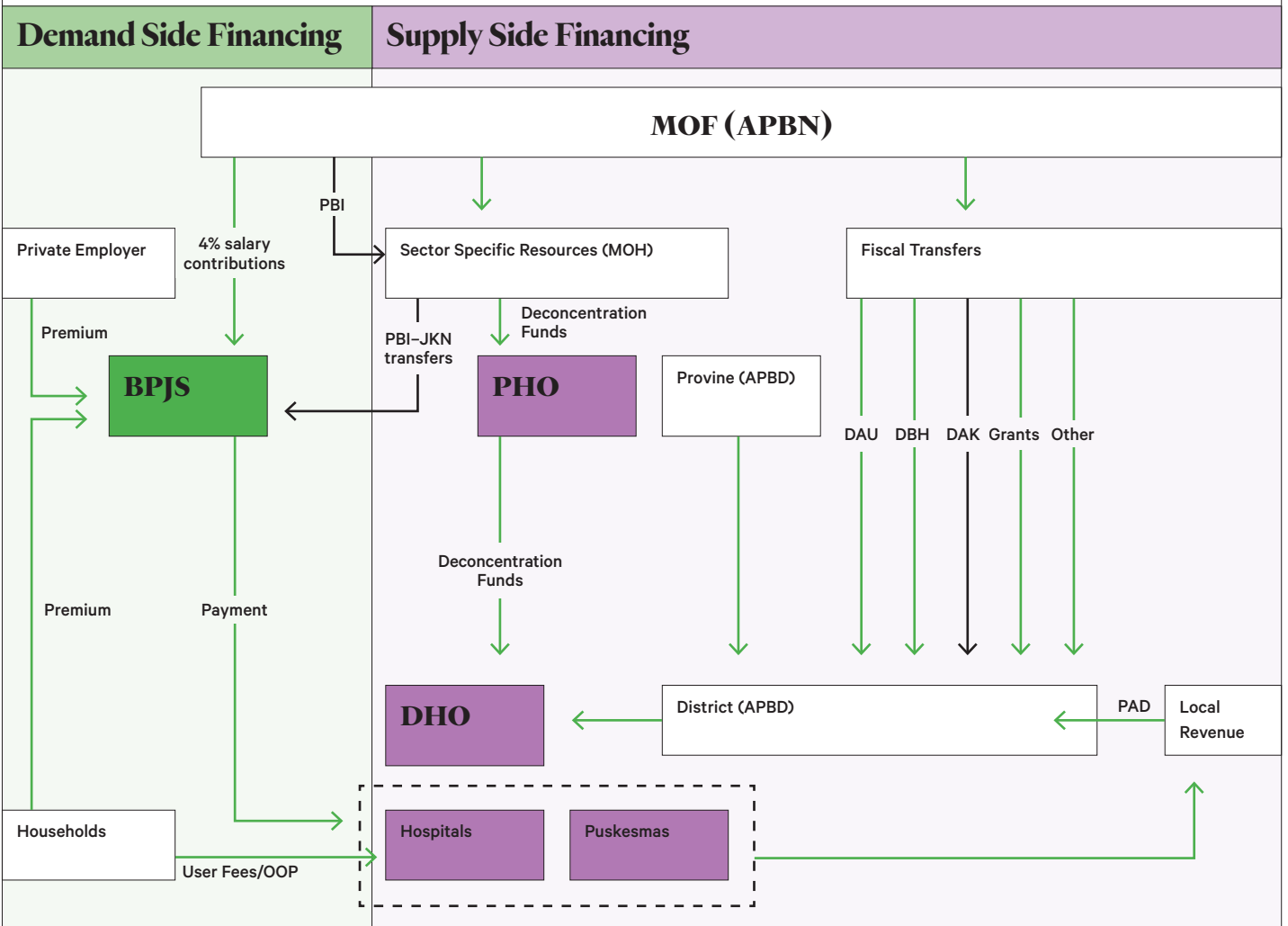
Source: World Bank team.

TABLE 5.2.	JKN premiums	
Membership group	**Previous JKN premiums**	**Premiums as of January 1, 2020**
PBI (poor and vulnerable)	IDR 23,000 per person, per month	**IDR 42,000 per person, per month**
PPU-BU (formal private sector)	5% of salary; ceiling IDR 8 million per month	5% of salary; **ceiling IDR 12 million/month**
PPU-P (civil servants)	5% of basic salary	5% of **total** salary (basic salary + family allowance and benefits)
PBPU (informal sector)	Class 1: IDR 80,000 per person, per month Class 2: IDR 51,000 per person, per month Class 3: IDR 25,500 per person, per month	Class 1: IDR **160,000 per person, per month** Class 2: IDR **110,000 per person, per month** Class 3: IDR **42,500 per person, per month**

Source: Perpres No. 82/2018 and 75/2019

"Overall, while there is scope for the GoI to spend more on health, it should first consider ways to improve the efficiency of existing spending."
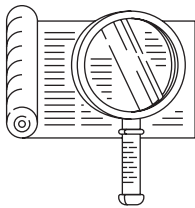
Although overall the JKN scheme accounts for a relatively small share of total health expenditure, at 17.3 percent, this is expected to grow. The social health insurance program is financed by two mechanisms: (i) a contributory scheme for formal sector workers (who pay 5 percent of their salaries shared between employee and employer) and informal sector workers (who are expected to pay a fixed nominal premium of IDR 25,500 per month); and (ii) a non-contributory scheme known as *Penerima Bantuan Iuran* (PBI) for the poor and near poor. *Badan Penyelenggara Jaminan Sosial-Kesehatan* (BPJS Healthcare)—the JKN fund administrator—has incurred large deficits since its inception. As of 2018, BPJS Healthcare incurred a cummulative deficit of IDR 27 trillion (around US$1.9 billion) and this is estimated to increase to US$2.3 billion by end of 2019. In response, a new Presidential Regulation (Perpres, P.R.) No. 75/2019 to ensure JKN sustainability will see premiums increase between 67 to 116 per-

cent depending on coverage class selected starting January 1, 2020 (Table 5.2). The changes will mostly affect the informal sector. To put things in perspective, for an average household of four, JKN membership in the lowest class would now cost about US$12 a month as enrollment is mandatory at the household level. This is roughly 4.3 percent of a household's monthly income assuming the minimum monthly wage of US$280.

Lastly, while development assistance represents only a small share of overall health spending in Indonesia, nonetheless it does make up a significant share of resources for certain health programs that are traditionally donor-funded—mainly TB, HIV, and immunization. In 2016, donor funding accounted for less than 1 percent of total health expenditure. However, the MoH estimated that the donor-funded share was as high as 60 percent for spending on TB and HIV, and between 10 and 15 percent for immunization program spending. Ensuring a smooth transition away from externally-fi-

nanced health programs as Indonesia loses access to donor aid has become a key concern. At the end of 2016, Indonesia 'graduated' from Gavi (the Vaccine Alliance) but remains eligible at least until 2024 to access support from the Global Fund. There will likely be significant gaps in service delivery if activities currently supported by donors are not picked up by the GoI.

Overall, while there is scope for the GoI to spend more on health, it should first consider ways to improve the efficiency of existing spending. As the next section shows, weak governance and accountability, financial and institutional fragmentation, and limited performance orientation for service delivery has made it difficult to link health sector spending with performance and ensure better value for money. Given data constraints, the following section assesses efficiency of health sector spending by looking at two standard measures: budget execution rates (from resources to inputs) and the national insurance claims ratio (from revenues to claims).

How Efficient Is Public Spending in *the* Health Sector?

Ⓐ   *Governance and Accountability Issues*

Ⓑ   *Health Financing Issues*

5.4

A

Governance & Accountability Issues

Fragmented health management and information systems, and poor coordination among key stakeholders have made it difficult to assess the efficiency of public health spending (Box 5.1). Instead, we look at more aggregate measures of health system efficiency, such as budget execution rates (BERs)[158] and the JKN claims ratio,[159] in both of which Indonesia performs poorly:

ter). Second, financing and performance are reviewed by separate institutions, with the MoF reviewing financing data, while SNGs and the MoH each review performance separately. This limits the usefulness of reported achievements in implementation and performance reports (LAKIPs), as they are disconnected from budget and planning documents. Third, the data to track and assess spending efficiency are not readily available (Box 5.1).

A.1

Budget Execution Rates (BERs)

Significant differences between budget estimates and actual expenditure reflect inefficiencies in budget planning and execution (Table 5.3). This is not surprising given that there is no mechanism to consolidate the allocation, use, and performance of all health sector resources based on national strategic priorities. First, there is no demand for a regular assessment of health sector spending. As a result, the quality of MoH annual working plans (Renja) fails to articulate a clear results chain with meaningful indicators and realistic targets linked to the five-year sector plan strategy (Renstra), or the President's national medium-term development plan (RPJMN) (see PFM chap-

TABLE 5.3.
Budget execution rate (audited MoH expenditures compared with the approved MoH budget)

2014	2015	2016
83%	**110%**	**89%**

PEFA SCORE
C

Note: While there are no established benchmarks to assess health sector budget execution rates, public expenditure and financial accountability (PEFA) scoring guidelines can be applied. (Footnote 160)
Source: PEFA Assessment Report (World Bank, 2017).

Fragmented health management and information systems result in a lack of useful information to inform prioritization and resource-allocation decisions

The most basic definition of efficiency is maximizing outcomes relative to inputs. However, the absence of a formal mechanism to coordinate and consolidate information on health resources, the cost and use of health services, and health outcomes across the tiers of government (e.g., central, provincial, district) and the various ministries, departments, and agencies (e.g., Ministries of Health, Home Affairs and Finance, Bappenas and BPJS Healthcare) responsible for the delivery of health services, has weakened the ability to effectively oversee the sector. Typically, human resources, hospitals, and pharmaceuticals are responsible for the biggest sources of inefficiency in healthcare systems.[161] However, on the expenditure side, reliable data on salaries and pharmaceutical spending are not readily available. Actual health spending broken down by economic and functional classification has not been officially published by the MoF at the sectoral level. And while the MoH publishes yearly National Health Accounts (NHAs), there is a three-year time delay. Subnational health accounts have

also been difficult to produce, as no standard classification of activities is applied across districts. Similarly, on the output and outcome side, a lack of standardization in reporting requirements, formats, and definitions across districts makes it difficult to aggregate information at the central level. As a result, the bulk of the effort goes into collecting data rather than analyzing its findings. Annex 1 provides a list of key data needs and suggested analysis to better inform the allocation and use of resources.

Within the MoH, each health program (e.g., HIV, TB, malaria, maternal health) collects its own data, distinct from regular primary-care data (SIKDA-*generik*) and hospital data (SIRS) systems. The data are also housed in separate departments within the MoH: primary healthcare data are managed by the Centre for Data and Information; hospital data are managed by the Directorate for Hospital and Referral Services; maternal-health data are hosted by the Department of Nutrition and Maternal and Child Health; and program data are stored by the Department of Disease Control and Environmental Health. As reporting requirements at the

facility level are burdensome (e.g., 16 different forms for TB) and the format is predominantly paper-based, data quality and reporting compliance is low.

As the need to process claims arose with the introduction of JKN, BPJS Healthcare developed separate systems: PCare at the primary care level and EKlaim (electronic) or VKlaim (virtual claims) for those with internet connections, at the hospital level. As these systems were tied to payment this made compliance universal for all JKN patients. JKN data are a rich potential source of data to analyze performance.

There are also several supply-side information systems tracking the accreditation status of facilities (SIAF), human resources for health (HRHIS), and facility resources more broadly (ASPAK), which could be used more strategically in resource-allocation decisions. However, as these too are housed within different departments in the MoH, access and use of data to manage health sector resources more holistically has been limited.

Source: Authors.

B.1

JKN Claims Ratio

The fact that JKN claims ratios regularly exceed 100 percent over an extended number of years reflects issues on both the revenue and expenditure sides. On the revenue side, actuarial estimates have indicated that the JKN scheme is currently under-resourced for the generous benefits that it provides, with monthly spending per member exceeding monthly revenue per member. This is due to several reasons:

1. Premiums were not set based on sound actuarial estimates considering age, sex, case-mix, and utilization patterns.

2. Premiums were also set under the assumption that everyone would participate. In practice, however, the informal sector and non-workers join on a voluntary basis.

Short activation periods (two weeks for outpatient care; 45 days for inpatient services) for new or returning members and poor verification of contribution compliance further encourages members to only sign up when they fall sick and to stop paying once treatment has been received. This is known as adverse selection (Table 5.4).

However, increasing premiums will not rectify the deficit if flaws in the design and implementation of JKN are not also tackled. On the expenditure side, key cost drivers include:

1. A nearly unlimited benefit package with no caps or co-payments.

2. An open-ended budget for hospitals where the bulk of JKN expenditures occur (about IDR 71 trillion in 2017, or around 84 percent). This removes any incentive that providers may have to manage resources more efficiently (see next section).

3. Poor quality at primary care facilities that leads patients to seek care at higher level, more expensive facilities. This essentially means that JKN is double paying for services, first at the primary care level and then second at the secondary/tertiary care level.

Most importantly, a lack of clarity in the governance and accountability arrangements of JKN has limited the ability of BPJS Healthcare to tackle these issues.

TABLE 5.4.

Adverse selection among non-salaried workers

Claims ratio by membership group, percent of total

	2014	2015	2016	2017
Poor and near poor	69	74	70	82
District government subsidy beneficiaries	208	171	134	132
Civil servants and armed forces	62	73	80	93
Private formal	95	71	60	64
Informal/voluntary	552	328	302	347
Non-workers	342	341	375	424
Total	105	108	100	114

Note: Non-salaried workers are those who work in the informal sector and non-workers.
Source: MoF 2018; BPJS Healthcare 2018.

158 Budget execution rates measure the percentage of the approved budget for health in a given fiscal year that was actually executed.

159 Claims ratios are calculated as accrued claims divided by accrued premiums.

160 In the public financial management world, budget execution rates are measured by aggregate expenditure outturn. According to PEFA scoring guidelines: A=aggregate expenditure outturn was between 95 and 105 percent of the approved aggregate budgeted expenditure in at least two of the last three years; B=aggregate expenditure outturn was between 90 and 110 percent of the approved aggregate budgeted expenditure in at least two of the last three years; C=aggregate expenditure outturn was between 85 and 115 percent of the approved aggregate budgeted expenditure in at least two of the last three years; D=performance is less than required for a C score.

161 Chisholm, D. and David B. Evans (2010). Improving health system efficiency as a means of moving towards universal health coverage. WHO: Geneva.

While BPJS Healthcare is tasked with managing the health insurance fund and ensuring the overall financial sustainability of the scheme, it has limited authority to do so. BPJS Healthcare was established as a separate legal public entity with responsibility for the main purchasing functions under JKN. However, in practice, most of the functions (e.g., deciding the benefit package, determining provider payment arrangements, setting reimbursement rates) that make it possible to create incentives for more effective service delivery, efficient provider behavior, and higher quality of care, are housed within the MoH. BPJS Healthcare serves as a passive intermediary, transferring payments to health providers and carrying out largely administrative functions, as it has few effective levers to manage the health social security fund for the benefit of its members. Although the original 2004 Social Security Law allocated most of the key purchasing functions to BPJS Healthcare, the purchaser-provider split[162] remains incomplete in many ways (Figure 5.10).

Decentralization and limited capacity in public financial management further constrains frontline primary-care facilities to plan and manage resources more holistically. Health facilities must apply for funding from different sources (e.g., district budgets, central government budget, JKN) with varied schedules, reporting requirements and restrictions on the use of funds.[163] This places a significant administrative burden on Puskesmas and causes coordination challenges between district health offices (Dinas), service providers and BPJS Healthcare, affecting program implementation and the quality of health services. This may also partly explain why patients are bypassing primary-care facilities or being referred to higher-level facilities.
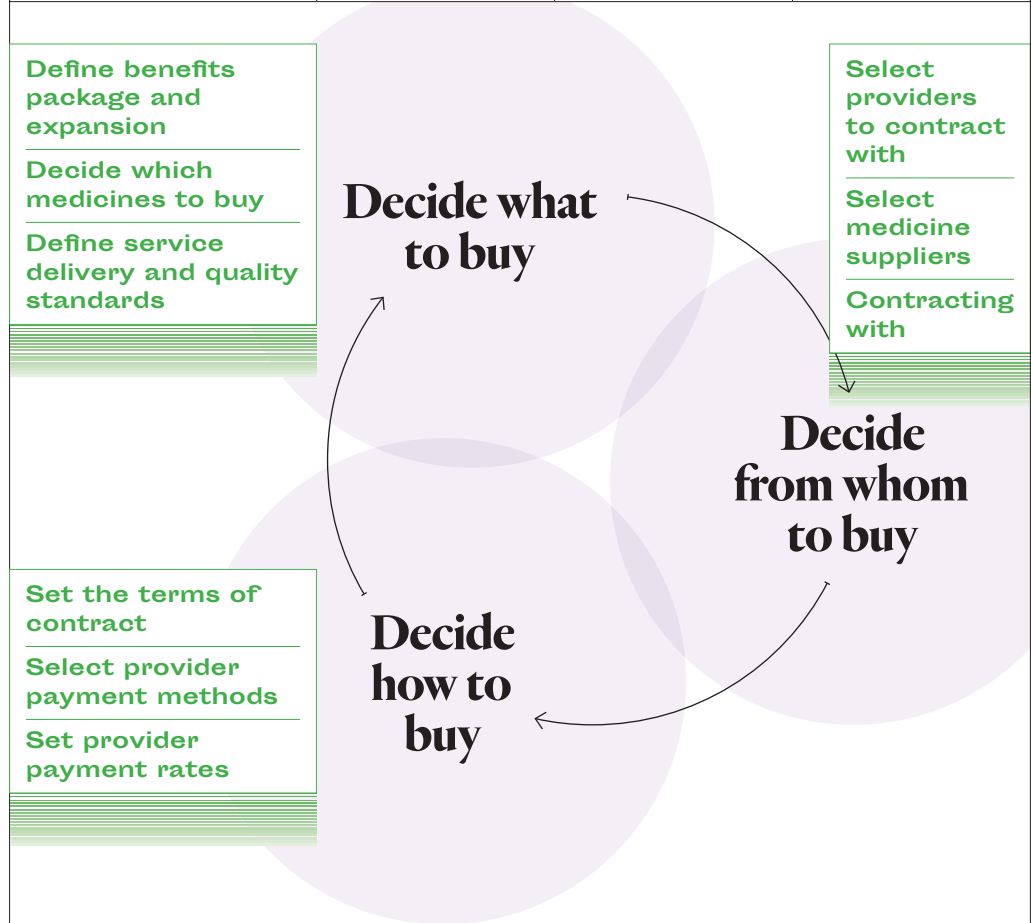
FIGURE 5.10.

Figure 5.10. Finding an institutional home for key purchasing functions to improve JKN's performance

Key purchasing functions			
	By Law	**By Regulation**	**In practice**
Set premium	President with inputs from MoF, BPJS Healthcare, DJSN, MoH	President with inputs from MoF, BPJS Healthcare, DJSN, MoH	President with inputs from MoF, BPJS Healthcare, DJSN, MoH
Determine the benefit package	Unspecified	MoH	MoH
Develop provider payment systems	BPJS Healthcare	BPJS Healthcare/MoH	MoH
Set payment rates	BPJS Healthcare	BPJS Healthcare/MoH	MoH
Contract with providers	BPJS Healthcare	BPJS Healthcare	BPJS Healthcare/MoH
Monitor quality	BPJS Healthcare	BPJS Healthcare/MoH	BPJS Healthcare/MoH

Define benefits package and expansion

Decide which medicines to buy

Define service delivery and quality standards

Select providers to contract with

Select medicine suppliers

Contracting with

Decide what to buy

Decide from whom to buy

Set the terms of contract

Select provider payment methods

Set provider payment rates

Decide how to buy

162 Countries have generally moved toward splitting the purchasing function, i.e., those who buy goods and services (ideally BPJS) from the function of service delivery, i.e., those who provide or supply the goods and services (MoH public sector providers). This is meant to remove conflicts of interest within the MoH and create incentives to reduce cost. In Indonesia, however, the MoH is still deciding what its public facilities/providers should be paid, limiting the tools at BPJS' disposal to act as a more efficient purchaser. By law, BPJS is the 'purchaser' of health-care services, but its powers are limited.

163 There are over 100 regulations on the implementation of JKN penned by the MoF, MoH, MoHA, BPJS Healthcare, presidential decrees, and others; there are 11 regulations alone on capitation payments to Puskesmas.

Source: Functional and Regulatory Review of Strategic Health Purchasing Under JKN (World Bank, USAID, 2018).

B

Health Financing Issues

Health spending and service delivery are geared toward curative episodic care[164] at the central and subnational levels, partly due to inappropriate financial incentives. Indonesia spends two-thirds of total health expenditure on curative care and, in 2017, 84 percent of JKN expenditures were for hospital-based inpatient and outpatient care.[165] Primary care is paid by capitation (a fixed budget) and hospitals are reimbursed based on diagnosis-related groups (DRGs), known as INACBGs (Box 5.2), with no cap on spending (i.e., an open-ended budget). In the absence of a strongly enforced or monitored gatekeeping system, primary-care providers thus have an incentive to refer patients to the hospital sector, while hospitals have little incentive to contain costs. This has important policy implications, not only because the cost of treating simple cases in hospital settings is significantly higher, but also because primary health-care services become underutilized and tertiary hospitals overburdened. This also shifts the financial burden either to BPJS Healthcare or to households in the form of OOPs.

The lack of performance-orientation in health-care financing at district and health-facility levels has also contributed to suboptimal service delivery. On the supply side, DAK—the main earmarked supply-side transfer—is not linked to need or performance, resulting in wide variation in facilities' ability to deliver services. A 2018 report assessing supply-side readiness found that DAK health spending at the district level was not correlated with the level of health infrastructure, medical equipment, drugs and supplies available—items that DAK is meant to finance (Figure 5.11). On the demand side, provider payment arrangements and infrequent supervision provide little incentive to increase the quantity and quality of care.

In 2016, the GoI implemented *Kapitasi Berbasis Komitmen* (KBK)—a capitation payment[167] to primary health facilities that is linked to performance indicators. In its first year of implementa-

tion, payments could be deducted by up to 25 percent if criteria were not met—offering Puskesmas a significant financial incentive. However, the payment reduction has since been scaled back, ranging now from just 2.5 to 10 percent. At the same time, 95 percent of Puskesmas meet all of the targets and receive the full capitation amount. This raises questions on the effectiveness of the KBK scheme to incentivize performance.

BOX 5.2. **The importance of the design of Diagnosis-Related Groups (DRG) on expenditures**

Under a Diagnosis-Related Groups (DRG) payment system:

A. Providers are paid a fixed amount per admission/case based on diseases of similar clinical aspect and resource use;

B. The payment rate is set prospectively based on average cost or cost of best performing hospital; and

C. Provider bears some of the financial risk if the cost of treatment for a given case exceeds the payment rate for that case.

Of critical importance to DRG systems is the presence of a budget and/or volume ceiling.

DRGs are meant to be the best hospital payment method to promote technical efficiency if designed and implemented well. As hospitals are funded on the same basis for the same activity, DRGs are meant to: (i) improve hospital management and promote medical efficiency (e.g., reduce unnecessary care); (ii) promote equity in hospital financing by reducing large variations in the cost of treatment across hospitals; and (iii) enhance transparency in hospital funding by using a payment formula. But a DRG system is complex to administer, requiring substantial coding and costing expertise, strong data systems, and active oversight.

There are two main design features of the DRG system: an exhaustive patient case classification system and the payment formula. First, doctors record information on diagnosis and procedures in medical record and discharge summaries. Next, clinical coders translate that

information based on standard coding rules and guidelines. A specific DRG is assigned to each clinical case based on a classification algorithm—a grouper software. Each DRG is then associated with a specific tariff determined using a top-down costing method and standard national costing template. However, there are several shortcomings in the design:

A. Issues in coding: Poor documentation by providers, a lack of clear coding guidelines, and the low competence of clinical coders, lead to the wrong DRG being assigned.

B. Issues with the algorithm: Countries can either build their own grouper software or buy and modify an existing grouper algorithm. Indonesia chose to do the latter, but a lack of direct access to the algorithm has made it difficult to refine it to the Indonesian country context.

C. Issues in costing: The costing template is not detailed enough to obtain accurate estimates of unit cost. Filling out the costing templates is also based on voluntary submission from about 157 public and 40 private hospitals out of more than 2,600, thus limiting the representativeness of the data. Finally, the DRG tariff is only marginally higher for private hospitals, even though public hospitals still receive significant supply side financing. Issues in costing may incentivize providers to game the system.

D. Issues in implementation: Payment to hospitals is essentially open-ended, meaning that instead of operating a DRG system, hospital reimbursement operates closer to a fee-for-service system, which incentivizes volume over quality or efficiency.
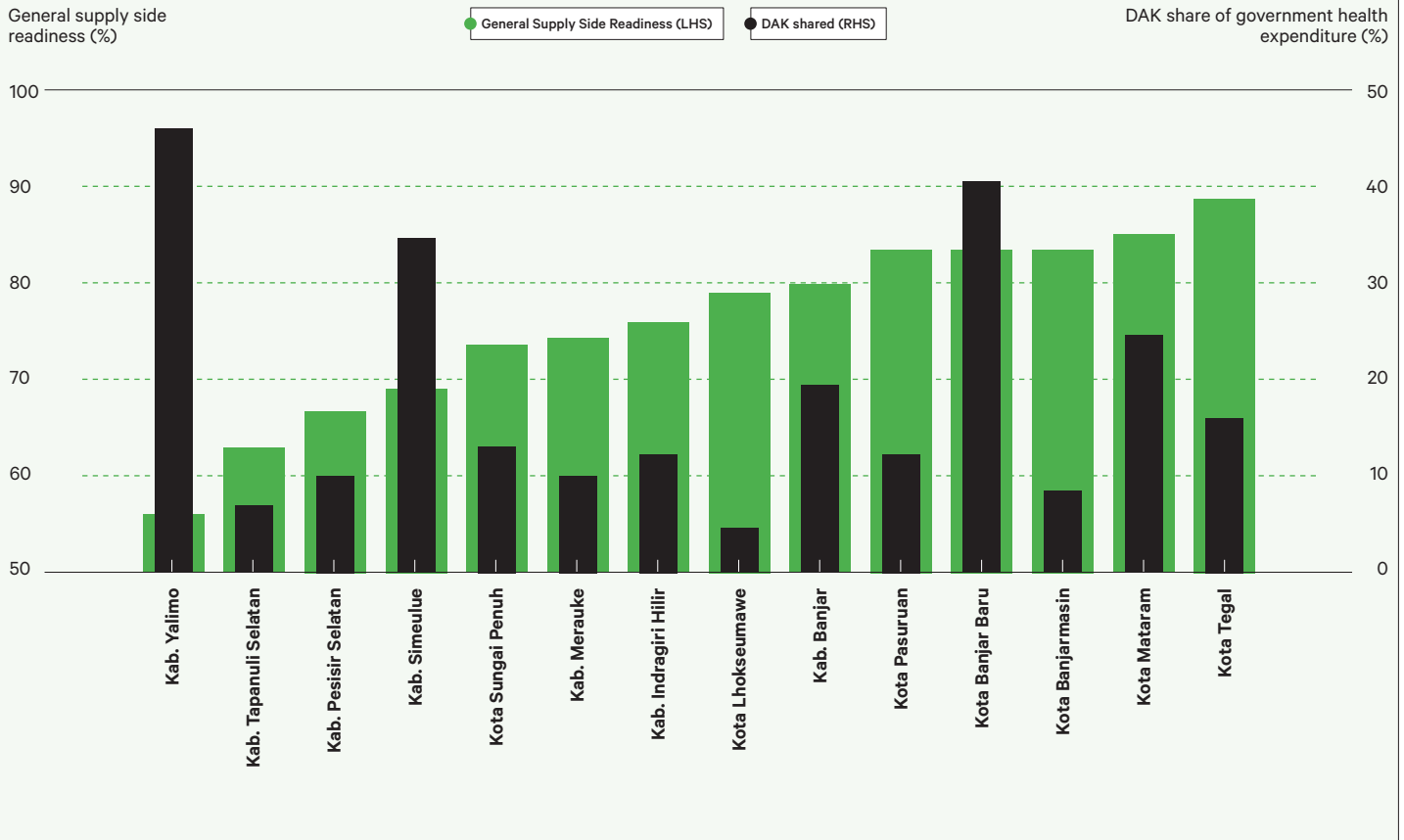
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164 Curative care involves treatment intended to alleviate symptoms or cure of a current medical condition; instead health promotion and preventive care aims at reducing the level of one or more identified risk factors to reduce the probability of a disease or condition occurring in the first place

165 In theory, the GoI's regional referral system provides a pathway for patients to be referred from primary care facilities to district public hospitals, to provincial referral hospitals and finally to national referral (vertical) hospitals providing tertiary care only when necessary. In practice, however, the tiered referral system (*Sistem Rujukan Berjenjang*) that relies on primary care providers as the system's gatekeepers does not function well.

166 http://documents.worldbank.org/curated/en/484351538653658243/Is-Indonesia-Ready-to-Serve-An-Analysis-of-Indonesia-s-Primary-Health-Care-Supply-Side-Readiness

167 Capitation is a payment arrangement for health-care service providers. It pays a set amount for each enrolled person assigned to them, per period of time, whether or not that person seeks care.

FIGURE 5.11.   DAK transfers and supply-side readiness appear to be uncorrelated

General supply side readiness (%)

DAK share of government health expenditure (%)

- ● General Supply Side Readiness (LHS)
- ● DAK shared (RHS)

Source: QSDS 2016 and MoH DAK data 2013-2015, World Bank staff calculations.

"On the supply side, DAK—the main earmarked supply-side transfer—is not linked to need or performance, resulting in wide variation in facilities' ability to deliver services."
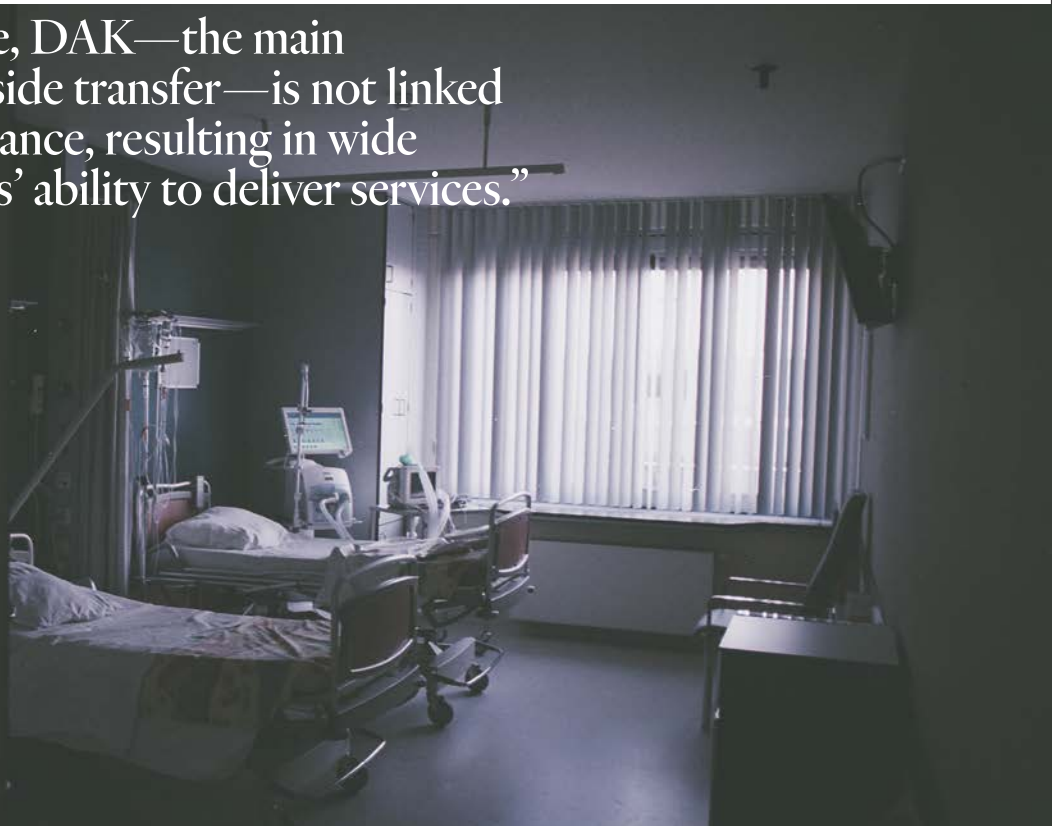
Recommendations *to* Spend More & Spend Better in the Sector

A · *Increase Health Sector Spending to Support the Achievement of UHC*

B · *Improve the Quality and Efficiency of Health Spending*

5.5

Indonesia's public spending on health is lower than in comparable countries and, consequently, frontline providers frequently lack the drugs, equipment, and training needed to deliver quality services. This, in turn, leads to the implicit rationing of services, foregone care, and limited financial protection, despite JKN's generous benefit package. Many countries face similar challenges as they strive toward UHC, often having to choose between increasing revenues, limiting coverage (either through limited benefit packages or cost-sharing arrangements), and/or improving efficiency in the use of funds. But increasing revenue is limited by the fiscal capacity of the government—a relevant constraint in Indonesia.[168] And, in countries where benefit levels remain relatively shallow or where the breadth of coverage is prioritized over the depth of services (as in Indonesia), access and financial protection have been limited. This highlights the importance of both spending more and spending better in Indonesia.

[168] Indonesia has one of the lowest revenue-to-GDP ratios in the world, at just 14 percent in 2017. It also has a fiscal rule that requires the deficit be kept at, or below, 3 percent of GDP. See Overview chapter on Indonesia's overall macro-fiscal environment.

A

Increase Health Sector Spending to Support the Achievement of UHC

The GoI needs to raise more revenue for the health sector if it is to meet its ambitious goal of UHC by 2019. This will allow the GoI to increase government health expenditures to be on a par with regional and lower middle-income averages. Options to consider include the following:

A

Simplify the overall tobacco tax structure and increase tobacco excise taxes at the national level.

A simulation suggests that an increase of tobacco tax by 12 percent will increase cigarette prices by an average 5 percent, cut demand for cigarettes by nearly 2 percent, and raise government revenue by 6.4 percent (about IDR 11 trillion), with only a minimal impact on employment in the tobacco indus-

try.[169] However, these reforms have been put on hold by the GoI following strong pushback from tobacco lobbies (Box 5.3).

B

Extend the PBI subsidy to the informal sector.

This would bring in healthier informal sector workers currently not enrolled, lowering the cost per member per month for all informal workers. These new members would be healthier and likely have lower utilization rates and claims on the system. At the same time, they would provide a more predictable source of additional revenue for BPJS Healthcare. From the MoF perspective, the public relations story changes from paying off the deficit, to investing in human capital as the MoF is already paying for this group by funding the deficit. Back of the envelope calculations suggest that, had the GoI extended the old premium subsidy to the informal sector, they could have achieved 100 percent JKN coverage at a cost of IDR 59 tril-

lion (US$4.2 billion). Instead, the new premiums will cost the GoI IDR 68 trillion (US$4.8 billion) and likely see the JKN coverage rate go down given the increased financial burden placed on informal sector households. Even under the old premium, 46 percent of informal sector enrollees were inactive suggesting the unwillingness or inability to pay premiums. Globally, evidence shows that few countries with persistent large informal sectors have been able to achieve UHC without significant subsidies from the government. With the new premiums, this would now cost the GoI about IDR 108 trillion (US$7.7 billion) for a full subsidy extension.

C

Update JKN premiums based on sound actuarial analysis.

Using individual claims data to conduct a robust actuarial assessment based on age, sex, geographic variation, membership group, and case-mix rather than a simple projection based on average growth patterns (i.e., mechanically rolling forward trends seen over the past three years) would allow for premiums to more accurately reflect expanding coverage and growing utilization patterns. The current method implicitly assumes all these variables remain constant over time, but there is no reason to believe that trends over the past three years will continue into the future, particularly because the system is still immature and evolving. For example, the trend rates for the informal sector should decrease as currently only the sickest members of this group participate. As membership is expanded, the group will become healthier and have lower average claim costs than the current covered group. The case-mix is also likely to change as NCDs become more predominant or different provider-payment arrangements are introduced. Assumptions around these parameters will help to better calculate fair premium rates across membership groups. At that point, a separate and transparent discussion should take place regarding cross-subsidization across groups.

D

Monitor and track the legally mandated health spending

(a minimum of 5 percent for central government budget and 10 percent for SNG budgets, excluding salaries) to ensure that allocations translate to actual spending, especially at the district level.

169 Under this scenario, the average excise tax burden on cigarettes would be just 49 percent of retail price, still below the 57 percent legal limit and well below the 70 percent World Health Organization (WHO) recommendation.

While the GoI has recently proposed new policies to increase revenue for the sector by earmarking a share of the local tobacco tax for BPJS Healthcare, these efforts are unlikely to cover BPJS Healthcare's deficit. Tobacco products in Indonesia are subject to excise of 44.7 percent of the retail price collected at the national level. In 2018, total tobacco excise revenue amounted to IDR 153 trillion.

Of that revenue, 2.0 percent is transferred to tobacco producing regions as shared revenue (*Dana Bagi Hasil*, or DBH) and, since 2014, an additional 10 percent is distributed to SNGs based on population size—known as the local cigarette tax (Figure 5.12).

In 2018, P.R. No. 82/2018 specified that 37.5 percent of the local tobacco tax should be earmarked for BPJS Healthcare. The size of the local government tobacco tax for 2018 was estimated around IDR 15.3 trillion,

of which IDR 5.44 trillion could be channeled to BPJS Healthcare. However, following resistance from subnational governments, it was decided to channel these funds through local governments rather than directly to BPJS Healthcare (Figure 5.13). In the absence of a mechanism to monitor these transfers, the use of these funds remains unclear and it is likely that BPJS Healthcare receives significantly less.
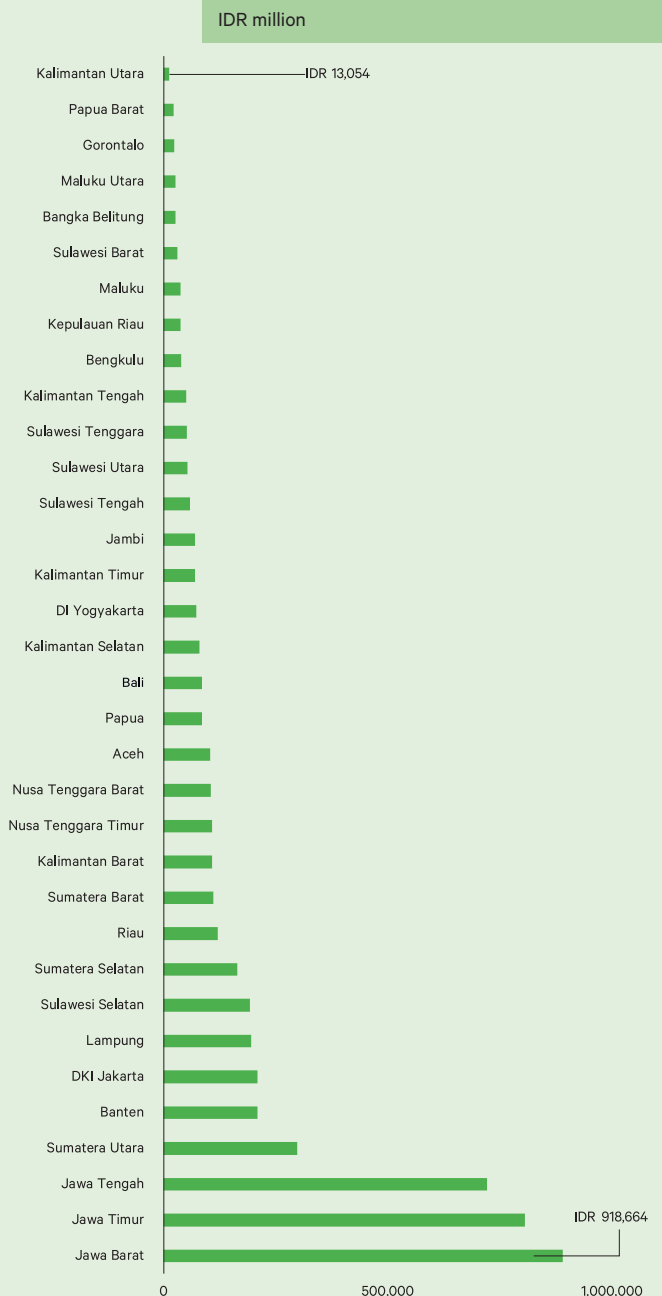
FIGURE 5.12. Distribution of the total revenue from tobacco excise of 44.7 percent (IDR 153 trillion)
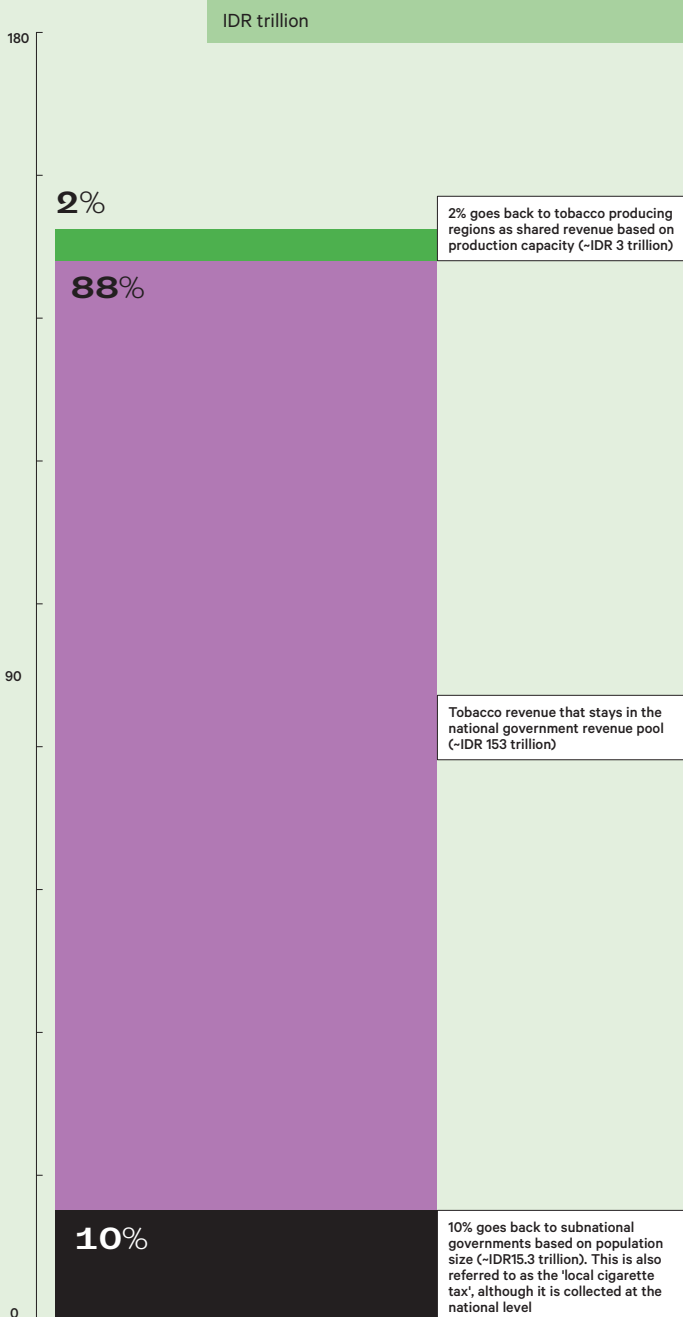
FIGURE 5.13. 37.5 percent of local tobacco tax should be earmarked for BPJS Healthcare, but instead is distributed to the provinces

Source: MoF, 2019.

Note: The distribution of the local tobacco tax is based on the DJPK Circular 47/2018 on the Distribution of the Local Tobacco Tax, 2019. Source: MoF, 2019.

B

Improve the Quality & Efficiency of Health Spending

T here has been little progress in improving health spending efficiency, mainly due to the lack of systemic improvements in health sector governance and low level of investment in information systems. Focusing on these priority reforms will significantly impact the quality of health spending in Indonesia, but high-level political commitment is needed if the current status quo is to experience fundamental change.

B.1   Strengthening Governance & Accountability

A

Improve governance and accountability by introducing an annual sector review.

Fragmentation in responsibilities for budgeting, planning, and performance monitoring across line ministries (Bappenas, the MoH, BPJS Healthcare, and the MoHA) and levels of government means that the health sector is ultimately not held accountable. What is needed is an annual assessment of budget performance for the health sector as a whole (including JKN performance), based on annual plans that have clear results chains, meaningful indicators, and realistic targets. The annual health sector review should also be couched within a broader medium-term approach to help to prioritize longer-term supply-side investments. Requiring an annual sector review will also create the need for better quality data/information systems and help to increase the institutional collaboration that is crucial for measuring spending efficiency.

B

Invest in health information systems to improve monitoring and evaluation (M&E) of health spending performance.

 Fundamental to improving the quality of health spending are health management and information systems that can produce timely and useful information for budget and planning, provider performance monitoring, and overall benchmarking. Strong performance M&E, and benchmarking would strengthen accountability between facilities, subnational health offices, political leaders, the MoH and facility users, and create non-financial incentives for both districts and facilities to improve performance. The first important action would be to ensure that all agencies (especially the MoH and BPJS Healthcare) share performance, quality, and claims data covering public and private providers. The second action would be to increase inter-operability of systems and reduce the number of systems that contribute to fragmentation of data and information, among the various stakeholders. Third would be the development of a common "performance dashboard", available to all stakeholders across levels of government, to benchmark performance among districts and facilities. (See Annex 5.1 on data needs and suggested analysis.)

C

Strengthen the purchasing role of BPJS Healthcare.

Although the original 2004 Social Security Law allocated most of the key purchasing functions to BPJS Healthcare, a series of regulations brought these functions back at least partially under the control of the MoH and, in practice, BPJS Healthcare has few effective levers to manage costs or to influence access to quality services. There needs to be clarity on who is responsible for selecting the benefit package, setting contribution rates and provider payment arrangements, and monitoring service delivery and quality standards. While there is no single blueprint on where purchasing functions should sit, global evidence suggests that the MoH and BPJS Healthcare cannot work in isolation (Table 5.5). This will likely entail re-allocating or sharing key purchasing functions to/with BPJS Healthcare, which collects and analyzes much of the underlying data on JKN implementation—data that are crucial to inform JKN policy. Most health insurance agencies have independence for many operational aspects of scheme implementation, such as tariff-setting, contracting, provider payment methods and, to a lesser extent, benefit package definition. However, provider accreditation and quality assurance are more commonly managed by the MoH.

FIGURE 5.5.	Where do key purchasing functions sit in other countries?							
	Estonia (Estonia Health Insurance Fund)	**Philippines (PhilHealth)**	**Thailand (Universal Coverage Scheme)**	**Vietnam (Vietnam Social Security)**	**India (PMJAY)**	**Republic of Korea (National Health Insurance Scheme)**	**China (National Health-care Security Administration)**	**Indonesia**
Budget allocation for health insurance agency/Premium setting	Parliament/MoF	Ministry of Budget and Management and Congress (with inputs from HIA and MoH)	Parliament/MoF	MoH in consultation with other ministries	By market if States decide to contract insurance companies as purchasers	MoH	MoF in consultation with other ministries. Needs to be approved by Congress (Revenue is collected at the prefecture level)	President with inputs from MoF, BPJS Healthcare, DJSN, MoH
Determine the benefit package	HIA and Ministry of Social Affairs	HIA	External agency subject to a Health Technology Assessment either by MoH or an autonomous state agency	MoH	MoH, going forward might shift to HIA	Health Insurance Policy Deliberation Committee (different ministries + HIA)	HIA (prefecture level)	Unspecified by law; MoH by regulation and in practice
Develop provider payment systems	HIA/MoH	HIA	HIA	HIA/MoH	Will most likely be done by HIA but states can adapt to needs	External agency (HIRA)	HIA (prefecture level)	BPJS Healthcare by law, but MoH in practice
Set payment rates	HIA/MoH	HIA	HIA (subject to budget cap)	MoH		HIA	HIA (prefecture level)	BPJS Healthcare by law, but MoH in practice
Contract with providers	HIA	HIA	HIA	HIA	State HIAs	HIA	HIA (Prefecture level)	BPJS Healthcare by law, but together with MoH in practice
Monitor quality	HIA/ Health Board (licensing, adherence to health-specific regulations)	MoH (licensing)/ HIA (accreditation)	MoH	MoH	Uncertain, likely combination of State HIAs and State departments of health	External agency (HIRA)	MoH	BPJS Healthcare by law, but together with MoH in practice

Note: HIA=health insurance agency.

Source: World Bank (2018). Who does what? Autonomy and Social Health Insurance agencies around the world" – internal World Bank review.

B.2   Piloting Health Financing Reforms

A

Address open-ended hospital payments, where most spending occurs.

Of critical importance to containing hospital expenditures is the presence of a budget and/or volume ceiling. Otherwise, if hospital debts are forgiven, or if more money is given, there is no incentive for hospitals to become more efficient. Options could include introducing global budgeting,[170] base-rate adjusted DRG payments,[171] or spending caps that would transfer some of the financial risk to hospitals (or district health offices, depending on design), which would allow hospitals to focus on value for money rather than volume. A new P.R. (No. 82/2019) has allowed BPJS Healthcare to propose alternative provider-payment designs for implementation, subject to MoH approval. BPJS Healthcare is in the process of designing two alternative schemes—a global budget scheme that puts a cap on spending at the hospital level and a value-based scheme that ties payment to performance. It will be important to pilot and refine these schemes as needed. However, the most difficult part may lie in convincing related stakeholders (central and district governments, health-care providers, doctors) to cooperate with the initiative.

B

Introduce carefully designed cost-sharing for non-essential services, services prone to over-utilization, and/or to incentivize more cost-effective referral pathways.

P.R. No. 82/2019 has opened the door for the MoH to introduce cost-sharing for health services prone to moral hazard and abuse. However, it is unclear what the potential budgetary impact might be, as the services have not yet been defined and supporting analyses conducted. It is strongly suggested that the implementation of this policy be evidence-based. International evidence suggests that, while modest cost-sharing

may be appropriate for high-cost/low-effectiveness services and to enforce the gatekeeping system, it is likely to reduce both necessary and unnecessary utilization, particularly for the poor and vulnerable. At the same time, it is unlikely to contribute significantly to revenue. The introduction of any new cost-sharing arrangements requires the development of clear clinical protocols and referral pathways, provider training, and enhanced monitoring to ensure that cost-sharing is not adversely reducing necessary care.

C

Reinforce performance-based financing.

In parallel to improving accountability processes, the GoI should consider refining existing performance-based indicators at the primary-care level and introducing additional measures to assess the performance of DAK. The two sources of funding that offer the most scope for performance-based financing are DAK and JKN payments, as they are earmarked for health, have the potential to be tied to outcomes, and make up a significant share of district health revenues.

1. On the demand side, the GoI could start by refining and strengthening the KBK performance indicators[172] to incentivize improvements in the quantity and quality of service delivery interventions linked with national priority areas (e.g., maternal health, nutrition, TB).

2. On the supply side, in 2018, the MoH proposed adding a performance element to determine how DAK resources are allocated to districts, presenting a unique opportunity to better coordinate supply-side investments and ensure even capacity to deliver health services. Facility accreditation could provide a useful framework/tool for district government to better coordinate supply-side planning and resource allocation, and to incentivize health facilities to achieve accreditation status by making DAK transfers more needs-based and/or performance-oriented.

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170 Global budgeting is a fixed payment for all services and for the entire enrolled (or eligible) population for a given period.

171 In base-rate adjusted INACBG, the INA-CBG payment is made up of a base rate X case group weight; if the volume goes up too much, the base rate is reduced to keep total hospital expenditure within the BPJS projected budget.

172 Currently there are only three 'performance-based' indicators: contact rate (150 contacts per 1,000 people per month); referral rate for services that could have been treated at Puskesmas based on agreed set of services (below 5 percent); and rate of visit of chronic disease patients (at least 50 percent of those enrolled in PROLANIS [at risk chronic disease tagged patients] program visit regularly).

B.3   Improving the Quality of Service Delivery

A

Introduce an explicit benefit package commensurate with available resources.

So far, attempts to rationalize the benefit package have been met with strong resistance. In the absence of an explicit and transparent process[173] to decide what is included/excluded from the benefit package, it has been politically difficult to scale back benefits. The media and public opinion have often helped to reverse recommendations from health technology assessments and cost-effectiveness studies.[174] A key factor to manage the political economy of these sensitive decisions is to make use of the richness of the JKN claims, budget impact analyses, and economic evaluations to support policy-makers with strong evidence.[175] These data are already available, but not currently used to inform policy. While it is unlikely that shrinking the benefit package will be politically feasible, there are several steps that the MOH can take to better align benefits with available resources:

1. Limit the enrollment period to 2-3 month once a year or lengthen the activation period to discourage adverse selection;

2. Limit treatment coverage to lowest class of hospital rooms (class 3) as per original law;

3. Cost the 144 services covered under JKN capitation to inform future premium and reimbursement rates; and

4. Develop diagnostic and clinical protocols for each intervention at each level of care included under the benefit package to incentivize more cost-effective referral pathways.

B

Target resources toward populations that would benefit most.

There are huge variations across the country and the need for a more nuanced approach is necessary. This will require investing in health management and information systems to ensure services reach their intended target audience. Linking the various targeting and benefit schemes at the subnational level using unique electronic identifiers would allow easier membership and benefit eligibility verification. One remaining informational gap that could help to better inform policy-makers concerns human resources for health (HRH). Findings from the supply-side readiness assessment highlighted that private providers do not seem to be operating in areas with low public density where they can fill a gap in provision, but rather operate in the same areas as dual practice providers, hinting at low income. There is also anecdotal evidence of difficulties in deploying and retaining providers in rural and remote areas. Approaching HRH from a labor market perspective would provide a deeper understanding of whether health-worker shortages are due to insufficient numbers, unattractive wages, or a poor work environment—enabling more targeted policy action.

C

Use JKN claims data to inform and improve service delivery and increase efficiency.

Globally, potential efficiency savings at hospitals in middle-income countries have been estimated at between 5 and 11 percent of total spending. Applying these percentages to JKN hospital-based expenditures yield potential efficiency savings of between IDR 3.6 trillion and IDR 7.9 trillion in the hospital sector alone. While BPJS Healthcare is conducting basic claims checks and verification, increased claims analysis can inform additional areas for improved service delivery and fund management. For example, JKN claims data can help monitor adherence to guidelines and protocol-based care, helping to improve the quality of service delivery (e.g., detecting adverse events or inappropriate or low-value care). Claims data could also help to identify high cost and frequency items, which could be used to inform policies tackling the open-ended payments to hospitals by running simulation and budget impact analyses based on current utilization patterns. However, currently, the quality of data is a key limiting factor in carrying out these types of analyses, necessitating improvements in the quality of medical reporting and the competence of clinical coders in the first instance.

D

Transform the health-care system to deal with the long-term care needs of older and chronic condition patients.

An ageing population and the rising prevalence of chronic diseases will place even more pressure on public budgets. Coordinated care across provider levels, as well as throughout the continuum of care, is needed to facilitate integrated clinical pathways and two-way referral systems. Key elements in creating the supporting enabling environment for more people-centered integrated care include investing in: (i) the quality of preventive and primary care for early diagnosis and treatment; (ii) electronic health records and networked data systems to monitor patient referrals and follow-up care; and (iii) a payment regime that incentivizes the provision of integrated care.

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173 Commonly used criteria for prioritizing interventions include burden of disease, equity, cost, effectiveness, cost-effectiveness (based on an economic evaluation or health technology assessment), and budget impact among others.

174 E.g., recent civil case over the chemotherapy drug trastuzumab ended in settlement, https://www.thejakartapost.com/news/2018/10/04/civil-case-over-chemo-drug-officially-ends-in-settlement.html

175 Economic evaluations should especially be conducted when considering the inclusion of new expensive equipment, drugs, and treatment protocols as these are often rolled out without an assessment of budget impact or comparison to alternative options.

Annex 5–1

Data Needs and Suggested Analysis

A   MoH data

To better assess allocative and technical efficiency of health sector spending the following information is needed:

1. Master facility list (with unique facility identifiers): Number and distribution of all facilities by type, ownership, and accreditation status.

2. Master human resources list (with unique provider identifiers: Number and distribution of all health-care providers by cadre, rank, and salary scale.

3. Pharmaceutical and medical supply inventory (with unique drug and equipment ids): Number and distributions of drugs and equipment by facility, expiration date, and unit cost.

4. At a minimum, budgeted and realized health spending data overall and by level of government (central, provincial, district); by facility type (e.g., hospitals; primary health-care facilities; ancillary services; etc.); and budgeted and realized spending data by economic classification (salary, capital, goods and services) overall, by level of government, and facility type. Realized health spending by function would also be highly informative (e.g., curative outpatient, curative inpatient, pharmaceutical, public health or prevention, primary health care, administrative).

5. A selection of prioritized process, output, and outcome indicators at national and district levels. In addition to aggregate level data to be provided by BPJS Healthcare (see below), the MoH should monitor things such as: (i) provider density, caseload, and absenteeism; (ii) bed density, bed occupancy rate, average length of stay, bed turnover rate; (iii) budget execution rates; (iv) number of training events at provincial and district health offices, number of outreach visits, number of fully vaccinated children, number of maternal deaths, proportion of hospital deliveries that are c-sections, number of TB notifications; and (v) immunization rate, rate of stunting among children under 5, maternal mortality ratio, c-section rate, TB notification rate, TB treatment success rate, TB prevalence—among others, depending on national strategic health priorities.

6. For a deeper-dive assessment of efficiency in pharmaceutical and hospital spending the most common indicators are:

Drugs	Hospitals
Pharmaceutical spending as percent of Total Health Expenditure (THE)	Pharmaceutical spending as percent of Total Health Expenditure (THE)
Antibiotics spending as percent of total pharmaceutical spending	Antibiotics spending as percent of total pharmaceutical spending
Unit price of drugs/medical consumables	Unit price of drugs/medical consumables
Unit price compared with international reference prices (especially for high-cost/use items)	Unit price compared with international reference prices (especially for high-cost/use items)
Cost of freight/distribution to facilities	Cost of freight/distribution to facilities
Order/use of high-cost items	Order/use of high-cost items
High use items	High use items
Number or percent of expired items	Number or percent of expired items
Value of expired items	Value of expired items
Stock-outs	Stock-outs
Antibiotic prescription rates	Antibiotic prescription rates
Percent of encounters that end up in antibiotics being prescribed	Percent of encounters that end up in antibiotics being prescribed
Time to process orders	Time to process orders
Time to pay suppliers	Time to pay suppliers
Drug availability	Drug availability
Rate of anti-microbial resistance	Spending by function (e.g., outpatient, inpatient, pharmaceutical, primary health care, public health or prevention, curative care) as a percentage of General Government Health Expenditure
	Hospitals per 100,000 population, hospital bed density, bed occupancy rate
	General service readiness
	Number of visits/admissions per day/month/year/per capita
	Share of outpatient/inpatient
	Diagnostic accuracy for tracer condition
	Adherence to clinical guidelines
	Number of incidents per 1,000 patient days (e.g., center line-associated bloodstream infections, standardized infection ratio)
	Avoidable admissions for chronic obstructive pulmonary disease, asthma, hypertension, diabetes
	Referral rate
	Average length of stay
	Readmission rate
	C-section rates
	To track:
	Most frequent DRG code
	Most costly DRG
	Most frequent diagnosis
	Most frequent procedure codes
	Discharge status
	For top 10 diagnosis, discharge status

B   BPJS Healthcare data

At the aggregate level, it would be helpful for BPJS Healthcare to share with the MoH basic statistics on JKN implementation to inform general management and oversight, disease surveillance, and targeting of resources:

1. Membership data overall and by type of membership; by region, province, and district; and then cross-referenced by type of membership (e.g., poor and near poor; civil servants; private formal sector; informal sector; non-workers; and district government beneficiaries) and region, province, and district, by month, year

2. Expenditure data overall and by facility type; by type of visit (e.g., inpatient/outpatient); by ownership type (e.g., public/private); by region, province, and district and then cross-referenced by facility type across region/province/district and by type of visit across region/province/district and by ownership across region/province/district, by month, year

3. Utilization data overall and by facility type; by type of visit; by ownership; by membership group; and by primary diagnosis, and then utilization by facility type, type of visit, ownership, membership, and primary diagnosis across region/province/district, by day, month, year, per capita

4. Top 10 primary diagnosis overall and by region, province, and district, by day, month, year

At the individual claim level, depending on the policy question of interest, BPJS Healthcare could look at purposeful samples to identify potential sources of inefficiency in service delivery:

1. Member-centric analysis looks at all the claims for a single member. It asks: do the diagnoses and services/procedures for a patient make sense over time, and have they been referred and followed up appropriately (including at the right level of care)? This would require linking eKlaim and pCare databases through unique patient identifiers. It would also be helpful for claims data to include an entry field to start tracking prescribed drugs.

2. Provider-centric analysis looks at all the claims for a physician or hospital. It asks: does the distribution of disease and services/procedures fit the known disease and utilization patterns of that geographic area? It enables the identification of outliers for further enquiry and relies on a master list of unique provider and facility identifiers.

3. Network analysis uses a combination of member-centric and provider-centric analysis. It asks: do the diagnoses and services provided for common pools of patients shared across providers make sense?

4. Finally, if claims data can be linked to other databases, then other policy questions become possible. For example, links to electronic medical records (where available) support adherence to guidelines and protocol-based care and help verify claims against fraud and abuse; links to surveillance systems for TB, HIV, etc. can facilitate notification rates/reporting compliance and improve disease surveillance; links to the tax collection database allow the verification of premium compliance; links to the membership/premium databases allow eligibility and class verification, and of course actuarial type analysis and simulations and budget impact analysis of various health reforms (e.g., benefit package, cost-sharing, provider payment arrangements).