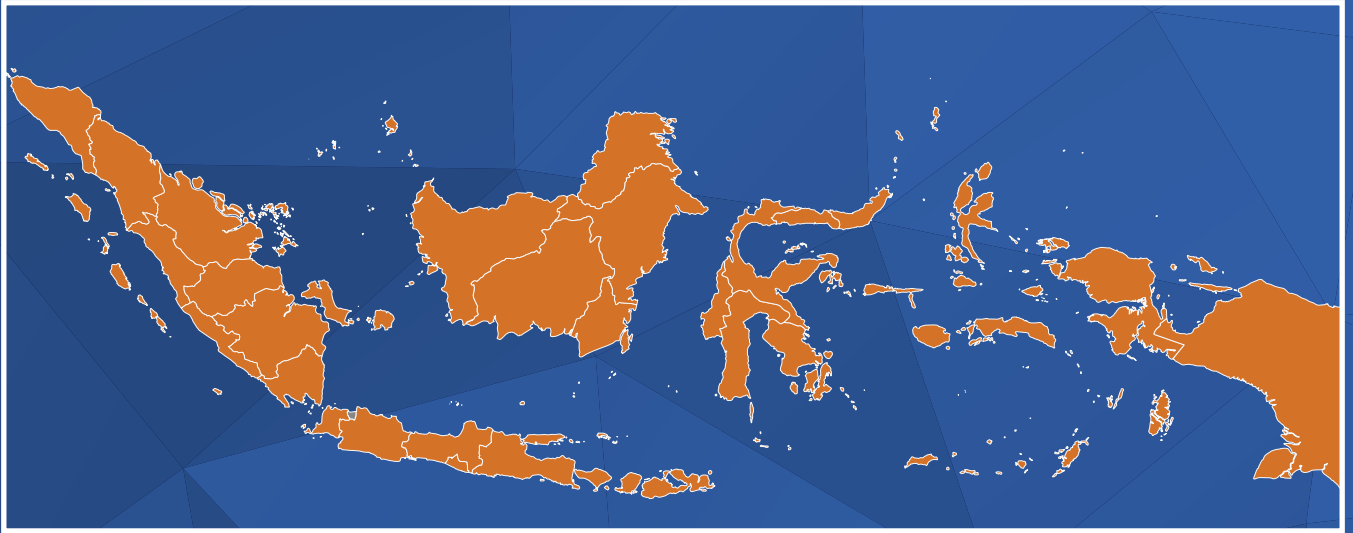


May 2019



# FINANCIAL SUSTAINABILITY OF INDONESIA'S JAMINAN KESEHATAN NASIONAL

Performance, Prospects, and Policy Options



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**MAY 2019**

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## Abbreviations

ART	antiretroviral therapy
BP	unemployed health insurance category ( <i>pukan pekerja</i> )
BPJS-K	Social Health Insurance Agency (Badan Penyelenggara Jaminan Sosial-Kesehatan)
BPS	National Statistical Office (Badan Pusat Statistik)
CMG	case-mix main group
DAK	special allocation fund ( <i>dana alokasi khusus</i> )
DAU	general allocation grant ( <i>dana alokasi umum</i> )
DBH	revenue sharing funds ( <i>dana bagi hasil</i> )
DBH CHT	tobacco excise profit sharing fund ( <i>dana bagi hasil cukai hasil tembakau</i> )
DJSN	National Social Security Council (Dewan Jaminan Sosial Nasional)
DRG	diagnosis-related groups
FKTP	primary health facilities ( <i>fasilitas kesehatan tingkat pertama</i> )
FORNAS	National Formulary
GOI	Government of Indonesia
HIV	human immunodeficiency virus
HP+	Health Policy Plus
IDR	Indonesian rupiah
INA-CBG	Indonesia case-based group
JKN	National Health Insurance (Jaminan Kesehatan Nasional)
PBI	government contribution beneficiaries ( <i>penerima bantuan iuran</i> )
PBI APBD	government contribution beneficiaries, paid for by sub-national government (Anggaran Pendapatan Belanja Daerah)
PBI APBN	government contribution beneficiaries, paid for by central government (Anggaran Pendapatan Belanja Negara)
PBPU	informal sector workers ( <i>peserta bukan penerima upah</i> )
PHC	primary healthcare
PPU	paid workers ( <i>pekerja penerima upah</i> )
PPU BU	paid worker: formal private sector ( <i>pekerja penerima upah badan usaha</i> )

PPU P	paid worker: public sector ( <i>pekerja penerima upah pemerintah</i> )
PT	limited liability for-profit company ( <i>perseroan terbatas</i> )
TB	tuberculosis
TNP2K	National Team for the Acceleration of Poverty Reduction (Tim Nasional Percepatan Penanggulangan Kemiskinan)
USD	U.S. dollar

## Executive Summary

Indonesia's national health insurance scheme, Jaminan Kesehatan Nasional or JKN, is one of the world's most ambitious and largest single-payer programs. Launched in January 2014, JKN has made notable progress in increasing enrollment in just a few short years, covering 221 million people, or 83 percent of the country's population as of May 2019. The government is committed to ensuring JKN's ongoing sustainability and having a positive impact on health outcomes, financial protection, health equity, and on the health market and economy in general. Even as government and partners evaluate the results after more than four years of implementation, the scheme's annual financial deficits have increased, and its stability is receiving more attention. As JKN continues to scale up toward universal insurance coverage, critical policy decisions are required to increase revenue, rationalize healthcare expenditure, and project any future deficits to ensure the scheme is managed sustainably.

This report is part of a comprehensive assessment of JKN conducted by the U.S. Agency for International Development-funded Health Policy Plus project and the National Team for the Acceleration of Poverty Reduction. This report provides an updated account of JKN's current financial status, the antecedents of its design, key arrangements affecting choices for financial sustainability, key trends in revenue and expenditure affecting its future financial position, and potential policy actions to improve its future sustainability. Chapters 1 and 2 provide a detailed background to the scheme, its governance arrangements, the structural factors that influenced the path JKN has taken, and its design features. Chapter 3 describes the approach taken to assessing the financial sustainability of the scheme. Chapters 4 through 7 explore projections for enrollment, contributions, expenditure, and the scheme's financial position in detail. The final chapter presents important considerations for the future of JKN.

Specifically on methods, the financial sustainability analysis in this report used a dynamic mathematical model to project the financial sustainability of the scheme and explore the financial implications of specific policy changes currently under consideration.

Managing a single-payer scheme of the magnitude and scale of JKN, and further scaling it to universal coverage while maintaining sustainability, will require tradeoffs in policy choices, and as there is no single best policy solution. For example, effectively reaching the remaining unenrolled population, roughly a fifth of the total, will mostly be through voluntary enrollment and premium contribution in the informal sector, which may be challenging given the recent issues faced in maintaining active enrollment of such members. Voluntary contribution will not be easily achieved in the informal sector. As another option, more of the unenrolled could be subsidized, as is already occurring. The government already subsidizes enrollment contributions for about half of the population (~131 million people), covering a considerable proportion of the informal sector. Government-sponsored members have a relatively lower contribution per person. At the same time, increases to contribution rates for the formal sector, when they already consume less than they contribute, is going to face much resistance. Therefore, managing contribution revenue for the scheme in future will likely require a mix of policy responses that fall on the government (both national and local), the informal sector, and the formal sector, as no one group can shoulder the entire burden of putting JKN on a path to sustainability.

Similarly, expenditure management should focus on expensive hospital-based care first, as that makes up the majority of JKN expenditure. Options to revise reimbursement rates used for hospital-based care, termed Indonesia case-based groups (INA-CBG), and strengthen referral practices, should be explored. They will be more effective if primary health care is strengthened and supply-side readiness improves such that members are confident they are getting quality care at the preliminary point of care across public and private sectors. The

JKN implementing agency Badan Penyelenggara Jaminan Sosial-Kesehatan (BPJS-K) has a role to play in managing quality and controlling expenditure by strengthening strategic purchasing efforts, and it has made significant strides in this area through the implementation of performance-based capitation and hospital global budget pilots. The Ministry of Health and local governments have a role in ensuring that facilities and human resources maintain minimum standards for licensing and accreditation, promote public health, and deliver benefits (also subject to periodic review) according to clinical guidelines and prescribed technologies and drugs.

The analytical model used inputs from four main sources: aggregate historical and projected scheme enrollment, contribution, caseload and reimbursement rate data from BPJS-K, publicly available macro- and socioeconomic data from the national statistical agency, stakeholder inputs, as well as information on current government proposals on key policy decisions. These inputs were incorporated into and then simulated via the model. With the population projection disaggregated by geography and JKN's enrollment segments, the model projected the enrolled population; contributions; healthcare expenditure separated into hospital-based care, capitation, and non-capitation; and non-health expenditure. A dashboard summarized the scheme's annual financial position and overall claims ratio.

The analysis and stakeholder inputs suggest that JKN can become more financially sustainable when long-term trends are used as a basis to formulate key policy changes. In addition, considering that utilization of subsidized members is continuing to increase as supply-side constraints ease and awareness of JKN benefits increase, our overall recommendations are:

- Increase BPJS-K focus on enforcement strategies to enroll and retain the currently uninsured from informal and small-scale formalized private sector workers.
- Expand and keep refreshed knowledge of JKN benefits and reduce supply-side barriers for subsidized members so that their care-seeking behavior improves, particularly for preventive and primary care services, and out-of-pocket expenditure declines.
- Consider more systematic periodic review and revision of the JKN benefits package to prioritize cost-effective interventions delivered at the appropriate level of the health system as per clinical guidelines, using cost-effective technologies and medicines. This can help drive greater efficiency in expenditure and improved health outcomes.
- Bolster scheme revenue through increased participation of local governments in risk pooling and cross-subsidization at their geographic level, and enhance efforts to strengthen collectability among contributory members from the informal sector.
- Strengthen strategic purchasing, especially with hospitals, including further delineation of provider-payer separation in the context of local government-owned and operated facilities, better design and enforcement of referral and back-referral procedures across levels, and overall decisions on governance of the scheme, especially on how resources are used to improve the volume and quality of care, specifically at primary care levels.
- Strengthen processes to simultaneously improve provider financial health and satisfaction and minimize fraud through more rapid, yet robust, claims management systems and validation checks, plus more active clinical and claims auditing processes.
- Implement specific and context-driven provider payment reforms to drive more efficient and higher value healthcare, for example, through the evaluation and expansion of existing performance-based capitation at primary care facilities. Other options include study of the potential beyond pilot stage to implement global budgets



for hospitals and other cost containment measures that also protect and enhance patient outcomes.

- Prioritize engagement with private sector provider associations and bodies to assess whether JKN reimbursement levels can be more attractive and better stimulate investment to improve access and quality of healthcare at both the primary and hospital levels in eastern Indonesia and rural areas. Higher private investment in quality of care and availability of health workers and medical technologies will require appropriate INA-CBG and capitation rates, along with a role for the Ministry of Health and local governments in evidence generation and monitoring of the impact of the rates on the behavior of owners of private sector facilities.
- Implement a BPJS-K- and Ministry of Health-led model for the generation and use of financial, health outcome, and health equity evidence, based on principles for sharing of scheme data, which will allow more transparent and multi-perspective analysis emanating from domestic government, civil society, and academic institutions. These should be inputs into a continuous process of improvement in the design of the JKN scheme around contribution rates and benefits, especially as enrollment scales up, health seeking behavior evolves with ongoing epidemiological shifts, and supply-side capacity continues to improve across the archipelago.

# 1. Introduction

**Indonesia's national health insurance scheme—Jaminan Kesehatan Nasional or JKN—is one of the most ambitious universal health coverage programs in the world.** The Government of Indonesia (GOI) aims to provide universal healthcare access through this national health insurance scheme and is committed to ensuring its sustainability and success. This is a significant undertaking for the fourth most populous country in the world, with 264 million people spread across approximately 8,000 inhabited islands in 2017. Since the launch of the scheme in January 2014, the GOI has made notable progress on improving access to healthcare for all in just a few short years, reaching 82 percent of the population as of March 2019. Nonetheless, inequalities persist in both access and quality across the country, and the funding situation for JKN has been drawn into focus as annual deficits have continued to increase.

**The GOI is interested in managing the predictability of its expenses, including contribution subsidies and financing annual deficits, to ensure JKN's sustainability.** In 2017, the annual deficit for the scheme increased to IDR 6.23 trillion (US\$436 million), from IDR 4.7 trillion (US\$330 million) in 2016. In 2018, it was expected to reach an estimated IDR 16.58 trillion (US\$1.16 billion), including a portion of the previous year's deficit carried over (*Jakarta Post*, 2018a).<sup>1</sup> These deficits are financed by the GOI and can be difficult to fund without the ability to accurately project the scheme's needs in advance. Containing and managing this expenditure will be critical to the scheme's long-term sustainability, particularly as population coverage increases. The GOI, coordinated by the National Team for the Acceleration of Poverty Reduction (Tim Nasional Percepatan Penanggulangan Kemiskinan or TNP2K) with technical support from the U.S. Agency for International Development-funded Health Policy Plus (HP+) project, has been analyzing the impact of JKN on healthcare access and utilization and its projected financial sustainability. These analyses have supported the GOI to evaluate the value of continued funding for JKN, use evidence to inform revisions to policies, and plan for future funding needs of the scheme as it progresses toward universal coverage of the population.

**As JKN continues to scale up toward universal coverage, critical policy decisions are required to ensure that the scheme is being managed sustainably.** These policy decisions can be grouped into three areas:

- Increase scheme revenue: change contribution rates and classes of enrollment
- Rationalize scheme expenditures: change policies around capitation and hospital care
- Define the deficit ceiling: determine the maximum deficit, if any, the government is willing to fund in the future

These issues formed the basis for this analysis, which began at the end of 2016 and concluded in mid-2018, to understand the scheme's recent performance, project its financial position, and explore the implications of specific policy changes on its overall financial sustainability.

**This report provides a comprehensive account of Indonesia's JKN scheme, its antecedents, its evolving financial position, and policy considerations to drive its sustainability.** Chapter 2 provides a detailed background to the scheme, the structural factors that influenced the path JKN has taken, and its design features. Chapter 3 describes the approach to assessing the financial sustainability of the scheme. Chapters 4 through 7 explore enrollment, contributions, expenditure, and the scheme's financial position in detail. The final chapter presents important considerations for the future of JKN.

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<sup>1</sup> U.S. dollar to Indonesian rupiah exchange rates as of May 2019.

## 2. Background to the JKN scheme

### 2.1 Insurance Coverage Prior to JKN

**Prior to the existence of JKN, Indonesia had already achieved impressive insurance coverage of around 50 percent of the population through a patchwork of different schemes.** The oldest health insurance scheme was Askes, established in 1968 (Thabrany, 2008). The scheme covered all civil servants, military personnel, the police force, retired government workers, and veterans and their families. The premium was 2 percent of the monthly basic salary or pension, deducted automatically through payroll. The comprehensive benefits package was a precursor to the current generous JKN package, as it would have been politically challenging to reduce benefits for other groups under a single-payer scheme. However, there were reimbursement limits, and Askes members were required to share the cost of treatment should it exceed a threshold value. By 2013, Askes covered about 7 percent of the population and reimbursed for most hospital-based services, with members sharing the cost only for selected expensive procedures.

**The second largest health insurance scheme was Jamsostek, a social security scheme set up in 1992 for private sector workers.** The scheme targeted companies with more than 10 employees paying salaries greater than IDR 1 million per month per employee. It was not mandatory; the final design of the scheme contained an opt-out provision (Thabrany, 2008). Consequently, coverage under the scheme was consistently low, reporting coverage of about 2.5 percent of the population in 2013.

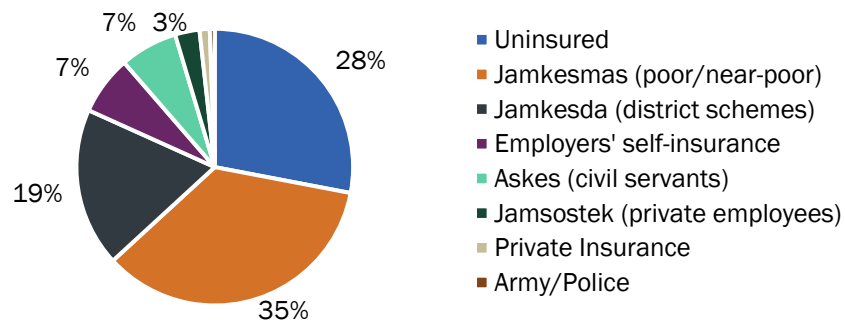
**Government-funded health insurance for the poor and near-poor began almost two decades prior to the formation of JKN and formed the majority of JKN membership at its outset.** Following the 1997 Asian financial crisis, the GOI rolled out health insurance for the poor who had been hit hard economically. This paved the way for social health insurance provision by the government (Pisani et al., 2017). These actions were critical in informing the direction of future laws and policy changes that eventually led to the implementation of JKN. Jamkesmas was established in 2005 as a national scheme to cover the poor and was managed and financed by the Ministry of Health. It covered more than 76 million people at the end of 2013 and was the largest population subsumed into JKN when the scheme was rolled out in 2014. Jamkesmas provided eligible individuals with access to health services at the public primary healthcare facilities (*pusat kesehatan masyarakat* in Bahasa, or *puskesmas*) and at selected public hospitals with no co-payment. Jamkesmas functioned more like a “top-up” program: facilities already received supply-side financing so the reimbursements under Jamkesmas did not reflect the cost of delivering services. Though successful in increasing healthcare utilization and reducing catastrophic expenditure among covered members, Jamkesmas faced several challenges, including high levels of subsidy mistargeting, severe supply-side constraints, and variation in availability of services between geographic or island-group regions (Harimurti et al., 2013). In 2011, it was estimated that one in five Jamkesmas members were actually from the top three socioeconomic deciles (Marzoeki et al., 2014).

**Jamkesmas inspired over 300 complementary subnational iterations of the program run at the district level (Jamkesda schemes).** These schemes were run autonomously and were highly variable in terms of population coverage and benefits package. A study of the district schemes' impact on access to healthcare and financial protection suggested mixed results due to their heterogeneous design features (Sparrow et al., 2017). On average, they increased outpatient utilization, particularly among middle-quintile families who would not qualify for Jamkesmas membership. Their impact on hospital utilization and financial protection was muted, however, highlighting the limitations of local-level schemes with a focus on primary healthcare. With the implementation of JKN,

the ongoing role of these district schemes was not clear. A survey of district health officials in 2015 revealed that 55 percent of respondents thought Jamkesda should cease after 2016, while 45 percent thought Jamkesda schemes had a more specialized role to play, such as membership management (Fossati, 2016).

**Collectively, these schemes achieved significant population coverage.** Figure 1 shows coverage reported by each scheme in 2013. Sixty-five percent of the population was covered through some form of government-managed insurance scheme on the eve of JKN, and that total insurance coverage, including private insurance and employer's self-insurance, was around 73 percent (Hartini, 2017). The poor and near-poor were the largest segment of insured members prior to JKN.

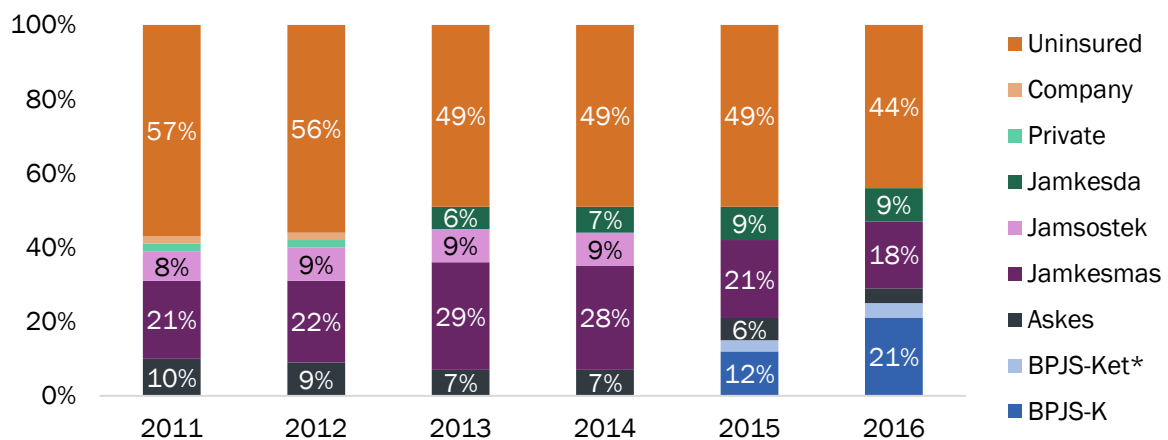
**Figure 1. Insurance Coverage Prior to JKN (2013)**



Source: Hartini, 2017

**Insurance is not accessible if members are unaware of their coverage and the benefits it confers.** Self-reported insurance coverage from an annual national household and socioeconomic survey (Survei Sosial Ekonomi Nasional in Bahasa, or Susenas) varied from the reported enrollment in the respective schemes (Figure 2). This is likely due to the lack of awareness of benefits or lack of sensitization on changes in scheme design and enrollment. In 2014, for example, the government schemes Jamkesmas, Jamsostek, and Jamkesda (see Table 1) were consolidated and replaced by JKN. Respondents, however, still reported coverage under these schemes in 2015 and 2016. The poor and near-poor were the largest segment of insured members prior to JKN.

**Figure 2. Self-Reported Health Insurance Coverage in Indonesia, Susenas Surveys 2011–2016**



\*BPJS-Ket is not health insurance, but employment insurance; therefore, it is assumed respondents who claim to have this type of health insurance are referring to BPJS-K (JKN implementing agency).

Source: HP+/TNP2K analysis using Susenas surveys, 2011–2016 (BPS)

**At both the national and district levels, the GOI quickly recognized a link between the provision of health insurance and political success, and coverage became a key platform issue in the 2014 elections.** District governments realized that having a well-functioning health insurance scheme was critical to local legitimacy. This realization also played a part in the eventual implementation of JKN, as then-governor of Jakarta, Joko Widodo, the current President of Indonesia, issued Healthy Jakarta Cards to poor families in 2012 so that they could use public health facilities in the capital for free (Pisani et al. 2017). Table 1 summarizes the major government health insurance schemes and their primary beneficiaries prior to the establishment of JKN. The informal sector was not targeted during this time but could opt to purchase coverage either from Askes or Jamsostek.

**Table 1. Government Insurance Schemes Prior to the Implementation of JKN**

Scheme	Beneficiaries
Askes	Public sector (civil servants), military, and police force
TNI-Polri	Military and police force
Jamsostek	Formal sector (private)
Jamkesmas	Poor (nationally identified and subsidized)
Jamkesda	Poor (regionally identified and subsidized)

**Prior schemes were financially sustainable as contribution rates were adjusted to reflect health expenditure and through cost-control measures.** As shown in Table 2, Jamkesmas was fully financed by central government revenues and was administered by the Ministry of Health. Contribution rates were set at IDR 6,500 per member per month. The cost of this contribution for all members was equivalent to about 25 percent of the central government's budget for health. Askes and Jamsostek both had mandatory payroll deductions, but public sector employees had to contribute to Askes, while contributions under Jamsostek were solely the responsibility of the employer. Jamsostek covered only 15 percent of formal sector workers, likely because of this employer-funded structure, combined with the higher contribution rates (3 percent for single and 6 percent for married employees) and opt-out provisions (Marzoeki et al., 2014). Jamkesmas was sustained over the years by adjusting contribution rates based on the prior year's expenditures per member. These adjustments fell short of being actuarially calculated rates, and as public facilities continued to receive significant supply-side financing, expenditures to be reimbursed by Jamkesmas were quite limited. If full reimbursements were required, health expenditure was projected to increase three to four times (Marzoeki et al., 2014). Askes and Jamsostek set contribution percentages based on what members were willing and able to pay as a proportion of their salaries. As for-profit entities (*perseroan terbatas* or PT) managing these respective schemes, PT Askes and PT Jamsostek were effective at controlling scheme expenditure, though this was a key criticism by members, academics, and policymakers, as reserves could have been used to provide more and better quality healthcare rather than pay dividends to the government (Pisani et al., 2017). A summary of the characteristics of the three major schemes that preceded JKN is provided in Table 2.

Table 2. Characteristics of the Three Main Schemes that Preceded JKN

Characteristics	Jamkesmas	Askes	Jamsostek	JKN
<b>Populations targeted</b>	Poor and near-poor	Civil servants, retired civil servants, retired military personnel, veterans	Private employers with >10 employees or pay salary per employee >IDR1 million/month	Poor and near-poor Formal public and private sector Informal sector
<b>Number enrolled</b>	76.4 million	16.6 million	5.0 million	218.1 million (March 2019)
<b>Contribution rate</b>	IDR 6,500 (US\$0.67) per member per month	2% of basic + 1% government; no ceiling	3% of salary for single employees 6% of salary for married employees Ceiling IDR 1 million/month (unchanged from 1993 to 2013)	5% of salary for public and private sector Subsidized: IDR 23,000 per member per month Informal sector, by class (per member per month): I - IDR 80,000 II - IDR 51,000 III - IDR 30,000
<b>Contributions</b>	Government 100%	Employees 66%; employer 34%	Employers 100%	Subsidized: government 100% Public sector: employee 2%; employer 3% Private sector: employee 1%; employer 4% Informal sector: member 100%
<b>Benefits</b>	Near-comprehensive Included prescribed medicines if within budget threshold No cost sharing applied	Comprehensive Included medicines if prescribed within the threshold value Cost sharing could be applied	Comprehensive treatment, with some exclusions for cancer, cardiac surgery, hemodialysis, and congenital disease Included prescribed medicines if within budget threshold No cost sharing applied	Comprehensive for all enrollees: Health promotion Preventive, curative, and rehabilitative medicine services Medically indicated lab tests, drugs, and supplies (including blood) Ambulance services for referrals
<b>Coverage for dependents</b>	All family members	Spouse + 2 children who were not married or working and below 21 years old	Spouse + 3 children who were not married or working and below 21 years old	Subsidized: per person basis Formal sector: spouse + children under 21 or under 25 if studying Informal sector: per person basis (household enrollment required)

Characteristics	Jamkesmas	Askes	Jamsostek	JKN
<b>Contracted facilities</b>	All puskesmas, public hospitals, and select private hospitals	Only contracted public health facilities and public hospitals	Public and private hospitals	All puskesmas and public hospitals, and contracted private clinics and hospitals
<b>Provider payment mechanisms</b>	Fee-for-service at puskesmas; diagnostic-related grouping for hospitals	Special fee schedules for civil servants Extra billing depending on negotiated fees	Negotiated fees Extra billing depending on negotiated fees	Capitation and fee-for-service at primary healthcare level INA-CBG (case-based payments) at hospital level
<b>Administering agency</b>	Ministry of Health	PT Askes (for-profit)	PT Jamsostek (for-profit)	BPJS-K (nonprofit)

Source: Marzoeqi et al., 2014

**Passing of the National Social Security System Law 40 of 2004 was a major legislative achievement, but it was another decade before JKN came to fruition.**

A change in leadership after the passing of this law impeded the momentum toward social security reform in the country. The law had put a five-year transition and implementation timeline in place, but by 2009, little progress had been made, as it remained a low priority for the government. A presidential decree issued in 2008 appointed members to the National Social Security Council (Dewan Jaminan Sosial Nasional or DJSN), though operational funds were short and seats were hotly contested, resulting in an institution with a relatively vague mandate (Pisani et al., 2017). Activists, prominent academics, and labor unions were unhappy with the state of health insurance management in Indonesia; one of their primary concerns was the ability of Askes and Jamsostek, as for-profit entities, to retain income and make distributions rather than use those reserves to provide more healthcare for members and beneficiaries. Welfare losses to the insured working population were estimated to be in the trillions of IDR over the decades (Pisani et al., 2017). These activists felt that insurance would be more equitable and better managed as a nonprofit entity and ultimately sued the GOI for breaching the Constitution and the 2004 law by failing to implement the mandated reforms. The courts sided with the activists and ruled that the GOI must act immediately to implement the 2004 law.

## 2.2 Implementation of JKN

**Law 24 of 2011 created the social security agency (Badan Penyelenggara Jaminan Sosial or BPJS), including the health insurance implementing agency (BPJS-Kesehatan or BPJS-K).** The court ruling jumpstarted the process for the development and passing of Law 24 of 2011, despite significant resistance to the single-payer reforms from several entities with vested interests, including existing insurers, employers who argued against the mandatory nature of the scheme, and labor unions who were concerned about the impact of the contributory requirements on their workers (Pisani et al., 2017). The law essentially converted the existing Askes health insurance agency into a not-for-profit trust fund, BPJS-K. This change of profit status, while maintaining requirements to be audited yearly by the government accountability office, was a critical change in the operating model that facilitated the rollout of JKN. Staff, equipment, offices, and all finances were transferred from Askes to BPJS-K. The JKN scheme achieved rapid registration at launch in January 2014 by transferring in employees who belonged to previous schemes, as well as nationally and regionally subsidized poor and near-poor members.

**From launch, JKN became one of the largest health insurance schemes in the world, with over 117 million members.** Pooling members from the various schemes meant JKN covered roughly 46 percent of the total population in its first month. There are

four primary segments of membership within the JKN scheme, defined in various legislative regulations<sup>2</sup>:

- Government contribution beneficiaries (*penerima bantuan iuran* or PBI): Comprised of poor and near-poor individuals targeted by the government to receive the health insurance scheme. It is further divided into PBI APBN, the segment of the population whose contribution to JKN is paid by the central government budget (Anggaran Pendapatan Belanja Negara or APBN) based on the unified database of beneficiaries, and PBI APBD, a segment of the population whose contribution to JKN is paid by the local government budget (Anggaran Pendapatan Belanja Daerah or APBD). These members were previously funded by local Jamkesda schemes, but are being transferred over to JKN as Jamkesda phases out. By November 2017, 93 percent of Jamkesda schemes had been transitioned.
- Paid workers (*pekerja penerima upah* or PPU): Formal sector workers who earn regular income, including government employees (*pekerja penerima upah pemerintah* or PPU P), military personnel, private formal employees (*pekerja penerima upah badan usaha* or PPU BU), and international workers who have already worked for at least six months.
- Nonpaid workers (*pekerja bukan penerima upah* or PBPU) (nonpaid workers): Self-employed, seasonal, and other informal sector workers who do not collect regular salaries.
- Unemployed (*bukan pekerja* or BP): Includes investors, employers, pensioners, veterans, and other unemployed who are still able to pay the monthly contribution.

Table 3. JKN Membership Segments

Membership Segment	Description
PBI APBN (poor–national)	Subsidized segment (premium paid by federal government)
PBI APBD (poor–regional)	Subsidized segment (premium paid by local government)
PPU BU	Formal private sector
PPU P	Formal public sector
PBPU	Informal sector
BP	Various others (pensioners, investors, etc.)

Table 3 summarizes these membership segments within JKN.

**Registration into the JKN scheme is compulsory for all Indonesian workers, but differentiated deadlines were set for actual coverage.** The expansion targets were 50 percent of all large and medium enterprises by 2015 (100 percent by 2017), 100 percent of small enterprises by 2018, and 100 percent of all other enterprises by 2019 (including those considered microenterprises). The deadline of January 1, 2019 also applies to universal enrollment of informal sector workers (PBPU) who have the means to contribute and must pay the contribution. According to these targets, the country would have achieved universal health coverage by 2019, especially if the poor are fully identified. A summary of the roadmap for JKN implementation can be found in Annex A.

**Given the large number of insured who were transferred from prior schemes, the biggest change in enrollment through the implementation of JKN was the targeting of the informal sector.** While prior schemes targeted and enrolled the formal sector and poor through mandatory payroll tax deductions and government subsidies, respectively, JKN established monthly contribution rates for the informal sector to opt into the scheme, depending on the class of care sought. JKN was implemented as a mandatory scheme, but the lack of a standardized mechanism to enforce contributions from the

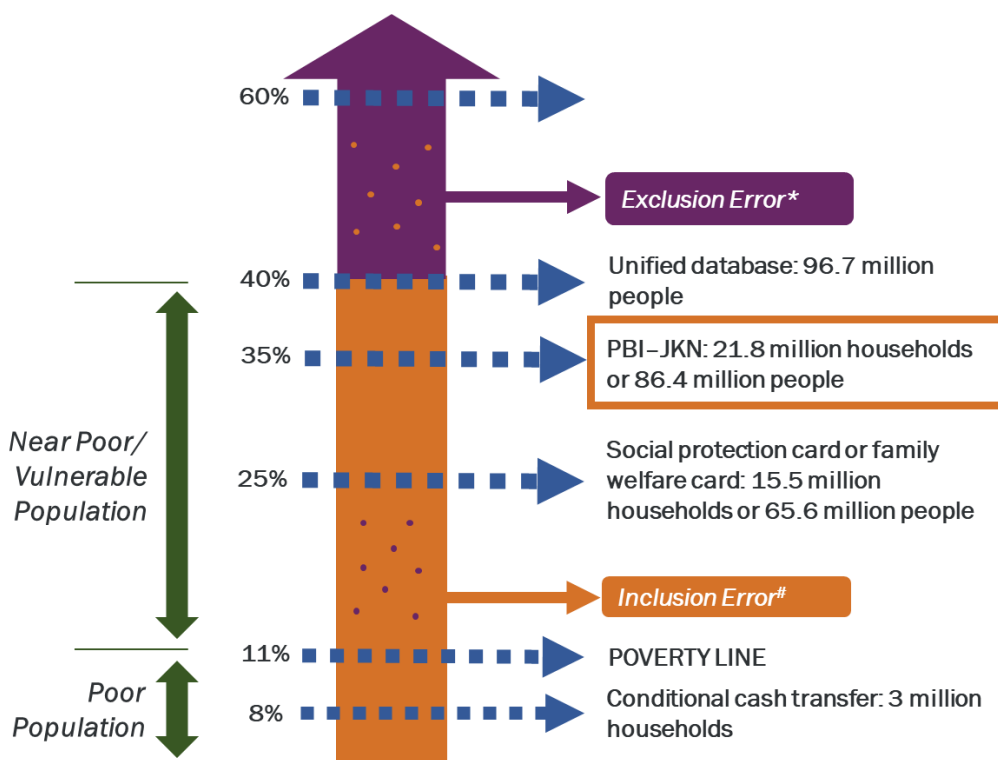
<sup>2</sup> Presidential regulations (Peraturan Presiden or PerPres) 12/2013, PerPres 111/2013, and PerPres 19/2016.



informal sector has been an ongoing challenge. As experienced in other countries, members of the informal sector who were first to enroll and maintain their enrollment were those who needed health services most. While it is desirable that these members were able to access the care needed without incurring any financial hardship, adverse selection (when sicker people buy health insurance while healthier people do not) undermines the insurance principles of risk pooling and cross-subsidization. It limits the mix of healthy and sick members within a scheme. These risks were greatest at the launch of JKN but have gradually subsided as enrollment continues to grow and healthier people join the scheme. The continuation of this trend will have significant implications for the long-term financial sustainability of the scheme.

**Indonesia manages a unified database of beneficiaries for identifying beneficiaries of its various social protection programs, and this is used to identify PBI APBN members.** This task was recently transitioned from TNP2K to the Ministry of Social Affairs. The unified database consists of social, economic, and demographic information on approximately 26.5 million households, or 92.4 million individuals. This database is updated twice yearly and is used by all agencies engaged in social security schemes. The PBI scheme is intended to cover roughly the bottom 40 percent of the Indonesian population, much more than the 9.66 percent who are below the official poverty line (BPS, 2018). It is designed to ensure that illness does not cause catastrophic health expenditure that can push these lower income households into poverty. This scheme is more generous in its definition of eligible beneficiaries than the conditional cash transfer program, which targets the poorest 3 million households, or the recipients of other social programs, who total 65.6 million people. As shown in Figure 3, inclusion and exclusion errors are a concern, but these have been reducing over time as targeting has improved.

**Figure 3. Summary of Social Support Programs Relying on Unified Database of Beneficiaries**



\* Inclusion error: the proportion of those selected for a program who are not eligible for it.

# Exclusion error: the proportion of those eligible for a program who are excluded due to inaccurate targeting.

Recreated from: Soewondo, 2017

**Despite a wealth of analyses conducted prior to implementation, JKN contribution rates were largely based on what was politically feasible.** The focus prior to implementation seemed to be on institutional arrangements (see summary of responsibilities for key institutions in Table 4) (Pisani et al., 2017). As such, contribution rates were set based on experience from the prior schemes, but without much consideration of the costs of the standardized benefits package to be made available to all, and the characteristics of those yet to be covered, in particular in the informal sector. As a result, an actuarial forecast from late 2015, conducted before the new contribution rates were announced in 2016, suggested that the JKN was not on financially sustainable footing (Hidayat et al., 2015).

**The composition and structure of DJSN could be strengthened to improve its capacity to provide effective oversight of JKN scheme implementation.** DJSN is the governing council of all social security programs in Indonesia and consists of 15 members. It is intended to be an independent body reporting directly to the President. However, administratively and budget-wise it is located under the Coordinating Ministry for Human Development and Cultural Affairs. This perceived lack of independence, and resulting lack of authority for DJSN, may undermine the functions of the institution and its ability to govern JKN. DJSN could be empowered in three ways. First, its budget could be enhanced and allocated directly from the Ministry of Finance, rather than through periodic budget requests to the Coordinating Ministry for Human Development and Cultural Affairs. Second, council members should be made full-time so they can devote sufficient effort to the various tasks at hand, including; strategic policy formulation, risk management, and communication and reporting. Third, upon request JKN data could be made available promptly and in its entirety.

**Table 4. Institutional Arrangements for JKN**

Institution	Role
Ministry of Finance	<ul style="list-style-type: none"> <li>• Sets national budget, including for the Ministry of Health</li> <li>• Needs to agree on revisions to premium rates for the subsidized population</li> <li>• Monitors health spending through JKN and other funding channels</li> </ul>
Ministry of Health	<ul style="list-style-type: none"> <li>• Pays premiums for poor and near-poor (PBI)</li> <li>• Oversees development of health financing policy and regulations</li> <li>• Sets and revises JKN hospital-level case-based payment rates (INA-CBGs) and capitation rates</li> <li>• Develops drug lists, clinical guidelines</li> </ul>
National Social Security Council	<ul style="list-style-type: none"> <li>• Appointed board that reports to the president</li> <li>• Formulates social security policies, including health</li> <li>• Oversees and monitors performance of BPJS-K as implementer of JKN scheme</li> <li>• Oversees and monitors implementation of JKN</li> <li>• Makes recommendations to Office of the President</li> </ul>
Health Insurance Agency	<ul style="list-style-type: none"> <li>• Implements the JKN insurance scheme, including enrollment of beneficiaries, collection of premiums, claims management, and processing payments to healthcare providers</li> <li>• Manages single pool of funds for JKN; provides capitation payments and INA-CBG payments</li> <li>• Contracts and credentials health facilities</li> </ul>

Institution	Role
Office of the President	<ul style="list-style-type: none"> <li>• Takes recommendations from DJSN on JKN policies that are developed (National Social Security System Law 24/2011)</li> <li>• Reviews performance of BPJS-K and JKN scheme</li> </ul>
Coordinating Ministry for Human Development and Cultural Affairs	<ul style="list-style-type: none"> <li>• Oversees various government ministries and institutions; reports to the President</li> <li>• Attends to requests by the President in relation to JKN policies</li> </ul>
National Team for the Acceleration of Poverty Reduction	<ul style="list-style-type: none"> <li>• Previously managed the unified database for identification and targeting of PBI beneficiaries; function was transferred to the Ministry of Social Affairs in 2017</li> <li>• Reports to the Vice President's Office on the impact of JKN on equity and access for the poor and near-poor</li> </ul>

## Benefits Package

**The JKN benefits package is in effect a negative list, where any service not explicitly excluded is assumed to be covered, resulting in an expansive package of covered services; although this does not necessarily guarantee access, equity, or quality.** The attempt to provide access to the same medical care regardless of membership type was an important step in the single-payer reform. The only difference in benefits across segments is in the type of ward where members access services, not in the services covered themselves. Interventions covered include promotive, preventive, curative, and rehabilitative care at primary and secondary health facilities. There are 155 diagnoses required to be provided at the primary care level and covered through capitation. BPJS-K does not cover infectious diseases that are covered under other government health programs. This includes some aspects of HIV and, to a lesser extent, malaria and tuberculosis.<sup>3</sup> In addition, JKN does not cover work-related illnesses (covered by BPJS-Ketenagakerjaan (BPJS-Ket), the employment social security agency), traffic accidents (covered by Jasa Raharja insurance), aesthetic treatment, dental care (orthodontia), or contraceptive commodities. In addition, a broad definition of illness is stipulated in the presidential regulation (PerPres) 19/2016, where BPJS-K may exclude specific illnesses deemed to be caused by drug and alcohol abuse or self-harmful or dangerous actions by a member. Table 5 discusses the benefits package in more detail. Presidential regulations are defined and discussed in Chapter 3.

**Table 5. JKN Benefits Package**

<b>Included</b>	<p>Comprehensive benefit package for all enrollees: health promotion; preventive, curative, and rehabilitative medicine services; medically indicated lab tests, drugs, and supplies (including blood); ambulance services for referrals</p> <p>Hospital ward depends on premium paid (Class 1, Class 2, Class 3)</p> <p>No copays or lifetime limits on benefits</p>
<b>Excluded</b>	<p>Types of services: cosmetic surgery, orthodontia; infertility services; health disorders caused by drug or alcohol addiction; health problems resulting from deliberate self-harm, attempted suicide, or dangerous hobbies; complementary and alternative medicine</p> <p>Modes of service delivery: healthcare services performed without going through the procedures as stipulated in the regulations; services in facilities without a BPJS-K contract, except for emergency cases; services provided in foreign countries</p>

<sup>3</sup> Ministry of Health Regulation (PMK) no. 87/2014 on antiretroviral treatment for patients with HIV and Ministry of Health Regulation (PMK) no. 67/2016 on tuberculosis countermeasures.

### Process to Review and Revise JKN's Benefits Package

Given the expansive nature of the JKN benefits package, it is imperative to have a mechanism to manage costs through the specification of appropriate technologies, procedures, medical devices, and drugs, for selection by contracted providers. Without such a process in place, policymakers have limited ability to promote value for money and optimal health outcomes for JKN-covered interventions.

PerPres 12/2013 requires that the use of technology in the benefits package must be adjusted to reflect what is medically necessary according to the results of health technology assessments. These assessments are to ensure quality and cost containment through JKN.

The Ministry of Health has a team that has been performing health technology assessments since 2017 to determine eligibility for “top-up” payments for certain, expensive drugs, and this mechanism will be expanded to the rest of the benefits package. While it is often politically infeasible to reduce benefits, increasing the specificity of what each benefit constitutes promotes more cost-effective provision that drives optimal health outcomes for the covered population.

**As noted, certain infectious diseases financed by specific government health programs are mostly excluded from JKN; however, as the scheme scales up, opportunities for better integration are being considered.** Ministry of Health regulation no. 28/2014 (PMK no. 28/2014) excluded certain communicable diseases such as HIV, malaria, leprosy, and tuberculosis from JKN. However, in practice, there are often comorbidities associated with these types of conditions that fall within interventions covered by JKN. To better manage treatment for these diseases holistically, and to promote access and availability of these interventions, it is preferable to integrate all services associated with these conditions within JKN. Boxes 1 and 2 explore how HIV and tuberculosis have been treated to date and some policy analyses under way.

#### Box 1. HIV Treatment and JKN

HIV prevention, testing, and treatment services are predominantly funded through government financing and also receive some donor support. This includes antiretroviral therapy (ART), HIV tests, condoms, and other laboratory and diagnostic services. However, the cost of the primary providers' time associated with provision of HIV services is assumed to be covered through a combination of JKN (through capitation) and general supply-side financing, as there is no separate payment for these consultations. Further, BPJS-K covers treatment and hospitalization for opportunistic infections and sexually transmitted infections as a patient's HIV status is not relevant to these diagnoses or treatments. All other healthcare needs for patients living with HIV are also covered.

Access to ART was authorized by PMK 87/2014 that targets all individuals who are potentially infected with HIV to be tested and treated accordingly. There are 278 hospitals appointed through Ministry decision letter no. 780/MENKES/SK/IV/2011 to perform this procedure and treat patients living with HIV, and those at risk. Hospitals can claim reimbursements for ART consultations and biochemistry tests provided to JKN members, however antiretroviral drugs, CD4 tests, and viral load tests are funded externally to JKN. Antiretrovirals are mostly procured through the national budget with a small portion paid for by the Global Fund to Fight AIDS, Tuberculosis and Malaria each year. Similarly, viral load tests are paid for through a mix of the nation budget (for tests using Abbott machines, the majority of tests) and the Global Fund (for tests using GeneXpert machines, a small proportion).

Some concerns regarding discrimination toward HIV patients persist. BPJS-K might refuse to cover medical and nonmedical treatment for HIV patients by applying PerPres 19/2016 article 25, which excludes coverage for those who are ill due to self-harm. Injecting drug users who

contract HIV may be denied access to JKN care, as it may be considered self-inflicted (see Table 5 for benefit exclusions).

In collaboration with the Ministry of Health and other development partners, HP+ conducted analyses of sustainable financing options for HIV through JKN (Prabhakaran et al., 2018). Building on prior analyses conducted by the World Bank, these analyses assessed the cost and feasibility of full integration of all HIV services and commodities into the scheme. While there are many areas that will require further investigation, including defining exactly what services will be covered and how they will be paid for, there is opportunity to generate additional resources and advance more strategic purchasing of HIV services through greater integration with the JKN scheme (Prabhakaran et al., 2018).

## Box 2. Tuberculosis and JKN

In general, tuberculosis (TB) diagnostic and treatment services are covered under JKN, as long as cases are managed as per the specified referral system. However, this referral system currently does not work as desired. Uncomplicated TB cases should be managed at the primary healthcare level, where they would be covered under capitation. Patients who are referred to a higher level facility for diagnosis are expected to be down-referred to the originally referring facility after diagnosis is completed. However, a patient pathways analysis suggests that 48 percent of TB treatment nationally actually occurs at hospitals. To the extent that such a preponderance of care at the hospital level holds true for TB patients who are JKN members, this is inefficient, as hospital-based care is significantly more expensive per case. Referrals also impose higher travel costs on the patient and increase the risk of loss to follow-up. A response to unnecessary referrals involves multiple elements, some of which do not require changes in JKN systems.

TB drugs are currently quantified and managed by the National TB Program. First- and second-line TB drugs are purchased by the national or local government, not JKN. Multi-drug resistant TB drugs are still predominantly financed by donors, but there is an aggressive transition plan in place over the next three years.

Bundled payments (a base fee for delivering the treatment and a top up upon achievement of treatment success) for TB at the primary healthcare level are under consideration as a way to better incentivize providers to deliver these services to TB patients over the course of the treatment cycle, as capitation currently provides little incentive to do so and in fact encourages the current referral practices.

**Supply-side constraints continue to be a major factor in limiting access to the benefits package and implicitly controlling costs.** Under Jamkesmas, for example, the full cost may have significantly exceeded revenues if the pent-up demand for services was fully met (Harimurti et al., 2013). These supply-side constraints appear to have persisted with the rollout and scale-up of JKN, as the PBI segment continues to access care at a much lower rate than other membership segments (BPJS-K, 2017). Benefit incidence analysis conducted by HP+ and TNP2K found significant inequities in the distribution of JKN hospital care benefits across geographic and socioeconomic groupings. Kalimantan and Eastern Indonesia comprise 6.0 percent and 6.6 percent of Indonesia's population, respectively, yet accounted for only 4.4 percent and 3.4 percent of expenditure in 2016, respectively (HP+ and TNP2K, 2018). The inequity in expenditure is more pronounced for outpatient than inpatient expenditure, and increased from 2014 to 2016. This highlights that while a comprehensive benefits package is necessary, it is not sufficient to ensure increased access and utilization if it is not available equitably across geographies and to all socioeconomic groups. A 2016 evaluation conducted by the Ministry of Health Center for Health Financing and Health Insurance concluded that about half of those covered did not

use the benefits for outpatient care, and 20 percent did not use entitlements for inpatient care. Nevertheless, by 2017 JKN was facilitating 223.4 million consultations for both primary and hospital-based treatments (Agustina et al., 2019).

**The availability, affordability, and appropriate provision of drugs and medicines through JKN are critical to the successful implementation of the benefits package.** When JKN was launched in 2014, the new reimbursement mechanisms caused many providers to change their prescription policies. JKN pays hospitals according to Indonesia case-based groups (INA-CBG, discussed further under Provider Payment below), which determine payment rates based on type of illness, severity, and the hospital class. Reimbursement rates were set to take into account varying levels of healthcare cost inflation in different parts of the country and resulted in the country being split into five JKN regions for the purposes of INA-CBG rate development (see Figure 11). Beyond these criteria, the payment per admission is the same, regardless of specific drugs or interventions used. This incentivizes provider efficiency, intended as a cost-saving measure, encouraging providers to use the least expensive drugs and services necessary to achieve the desired health outcome (Britton et al., 2018). Reimbursement does not increase if providers disburse more or expensive drugs. With this payment mechanism, providers may have incentives to increase case volume. Under the new INA-CBG arrangement some providers started providing patients with seven-day supplies of drugs where they had previously given a 30-day supply (Britton et al., 2018). All facilities, both public and private, can access “top-up” payments for certain drugs, in addition to INA-CBGs, in accordance with a top-up fee schedule. Drug eligibility for top-up payments are determined and revised in accordance with health technology assessments conducted by relevant departments of the Ministry of Health (Britton et al., 2018). These payments are intended to supplement the INA-CBG reimbursement for the admission and treatment of a patient where the cost of drugs is a significant portion of the total cost. These cases, however, are rare (e.g., for chemotherapy or instable chronic illnesses). Further, providers need clearer guidelines on how to access these additional reimbursements to have confidence that they will be paid appropriately. Without adequate confidence in the scheme and reimbursement system, many providers charged JKN members for drugs or procedures, arguing that the particular drugs or procedures were not covered (Hidayat et al., 2015).

**Indonesia is working to better integrate its national drug formulary, intended to control quality, and its procurement catalogue, which sets prices, to improve the efficiency of drug procurement through JKN.** Before drugs can be included into Indonesia's e-procurement tool (e-catalog) to purchase drugs, the selected pharmaceuticals must be part of the National Formulary (FORNAS). The FORNAS was established in 2013 through ministerial decree, listing medicines that should be available in health facilities to ensure more equal access to medicine for the public. The drugs listed on the FORNAS are automatically subject to reimbursement under JKN. E-catalog prices were updated in 2017 to better reflect the production, marketing, and supply chain costs associated with drugs and medicines. While there are plans for the BPJS-K-contracted private facilities to be able to purchase their supplies through the e-catalog, as of April 2018, they can only see the prices and must negotiate and procure pharmaceuticals directly from suppliers.

**The drug tender process has been criticized for not being sufficiently transparent or effective to ensure availability of appropriate drugs and medicines.** For example, limiting tenders to a sole winner increases the risk of delayed distribution, if the vendor is unable to fulfill increasing order volumes, causing stockouts and a protracted process whereby each facility obtains drugs through individual procurement. Allowing multiple tender winners could facilitate greater availability of drugs.

**There is a need to strengthen the monitoring and feedback process in place on drug procurement and consumption through JKN.** At present, BPJS-K reports on service utilization through volume of INA-CBG claims; however, it does not report on the

quantity or type of drugs dispensed. At the same time, the national public procurement agency (Lembaga Kebijakan Pengadaan Barang Jasa Pemerintah or LKPP) can report on the volume of drugs ordered by various hospitals but cannot report on the treatments the drugs are being dispensed for or in what quantity. This lack of effective monitoring undermines the Ministry of Health's ability to assess burden of disease, epidemiological profile, and changes in consumption patterns across the country's regions (Ursu and Rabovskaja, 2017).

**Health insurance schemes in similar countries in the ASEAN area have had success, but none have been as massive in scale as JKN.** The packages for selected schemes in the ASEAN area are summarized in Table 6. Broad coverage of similar population segments is a feature in these countries, with the poor and near-poor receiving subsidized coverage from the government, while the formal sector contributes via payroll deduction. However, none have reached Indonesia's level of coverage through a single payer, with a universal benefits package, while targeting government subsidies for the poor. In that sense, Indonesia's steadfast commitment to improving healthcare access and quality for all is laudable. The Philippines has high stated coverage (effective coverage is reportedly much lower) and has had to limit provision of the outpatient package to only the subsidized poor. Thailand used a mix of schemes to reach universal coverage and extended government-financed coverage to the informal sector, eliminating the challenges that come with trying to make this segment enroll. Lastly, Vietnam's enrollment progress has stagnated despite extending coverage for certain essential services to the informal sector through government financing.

**Table 6. Comparison of Universal Health Coverage Schemes Across Countries**

	Philippines	Vietnam	Thailand
<b>Scheme</b>	PhilHealth	Social Health Insurance	Universal Coverage Scheme, Social Security Scheme, Civil Servant Medical Benefits Scheme
<b>Coverage</b>	Over 94%	Over 70%	Nearly 100%
<b>Disease coverage</b>	Comprehensive inpatient and, for the poor, an outpatient package, including diagnostics, laboratory, and other medical and surgical services; drugs approved on the National Drug Formulary; and room and board Exclusions exist for non-prescription drugs and devices, alcohol abuse or dependency treatment, cosmetic surgery, optometric services, fourth and subsequent normal obstetrical deliveries, and cost-ineffective procedures as defined by the corporation	Comprehensive package, including examination, treatment, rehabilitation, and maternal health services Exclusions exist for routine health checkups, family planning, infertility, aesthetic services, work-related accidents, self-harm, substance abuse, or services funded by other sources	Comprehensive package, including physical checkups, health promotion, and prevention Excludes private bed, special nurse, eyeglasses, hepatitis C, severe asthma, and implant dentures
<b>Facilities</b>	Public and private hospitals (primary, secondary, and tertiary) and primary health facilities	Public and private hospitals and primary health facilities	Public and private health facilities that have already been registered

	Philippines	Vietnam	Thailand
<b>Cost sharing</b>	Patients can be balance billed by some facilities for certain inpatient services	Insurance covers 80–100% of the service cost depending on the service, with co-pays for more expensive services	No cost sharing applied

**Other countries use copays as a cost-control mechanism, with specific application for expensive services.** Both the Filipino and Vietnamese schemes employ cost-sharing arrangement. These schemes acknowledge that this increases out-of-pocket expenditure and limits their application to certain services and members as a measure to control costs and promote overall sustainability. The Philippines only allows cost-sharing arrangements for non-poor patients accessing acute inpatient services and requires the scheme to evaluate cost-sharing arrangements on a regular basis.<sup>4</sup> Vietnam allows cost sharing for certain high-technology services. The JKN scheme does not currently include any cost-sharing elements, but they are currently under consideration for certain INA-CBGs and certain contributory segments through PerPres 82/2018.

## Provider Participation

**Healthcare services under JKN are provided by all accredited public facilities and certain contracted private facilities.** Facilities are categorized either as primary healthcare (PHC) providers or hospitals. PHC facilities typically only provide outpatient services, including consultations, medications, and some diagnostic testing and screening. More complex and most inpatient services are only available at the hospital level. A referral system is in place such that patients are only covered for specialist care after an appropriate referral from a primary care provider (Agustina et al., 2019). Similarly, hospitals are supposed to refer patients back to the primary care level when their condition or treatment can be dealt with or continued at a primary facility.

## PHC Facilities

**PHC services are provided at a mix of public and private facilities.** Public health centers, known as puskesmas, account for half of the country's estimated 23,019 PHC facilities and the vast majority (~88 percent) of all public PHC facilities. The remainder of public PHC facilities are made up of military and police clinics, and 14 low-level (Type D) hospitals, which also serve as primary care facilities in their respective catchment areas. These hospitals receive capitation payments for their respective catchment populations. Private PHC facilities contracted by BPJS-K are divided roughly equally between general practitioners (individual practice doctors) (54 percent) and *klinik pratama* (private primary clinics offering basic health services) (46 percent) (MOH, 2017a). There is some evidence private PHC providers are more efficient and effective than public PHC providers, despite being more expensive to the scheme, as they have higher contact rates and lower referral rates (Thabrany and Setiawan, 2016).

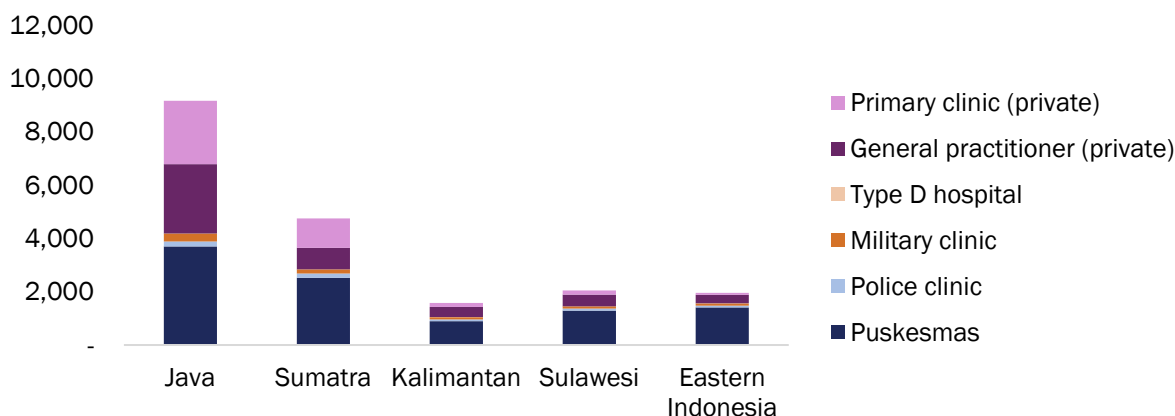
**Nearly half (44 percent) of PHC facilities are located in Java, although the island accounts for a much higher share (57 percent) of Indonesia's population.** The other Indonesian island groups have a share of PHC facilities that are higher than their population share, reflecting their more rural populations. Java also has the greatest share of private facilities (54 percent of all facilities). By comparison, only 40 percent of facilities in Sumatra are private and less than one-third in remaining island groups (Figure 4). Only one in five facilities in eastern Indonesia are private. On the whole, Indonesia's more rural areas

<sup>4</sup> Implementing Rules and Regulations of Republic Act 7875 as Amended; otherwise known as the National Health Insurance Act of 2013.



rely more heavily on puskesmas for the delivery of PHC services. Puskesmas account for 63 percent of PHC facilities in Sulawesi and 72 percent of facilities in eastern Indonesia (MOH, 2017a). The average catchment population per facility is a function of the density of the population and facilities in each region. The catchment population for PHC facilities in Java is 10,241, compared to an average of 6,320 in other parts of Indonesia. Kalimantan has the lowest average catchment population, at just 5,080.

Figure 4. PHC Facility Type Mix and Distribution (2016)



Source: Center for Health Financing and Health Insurance, 2016

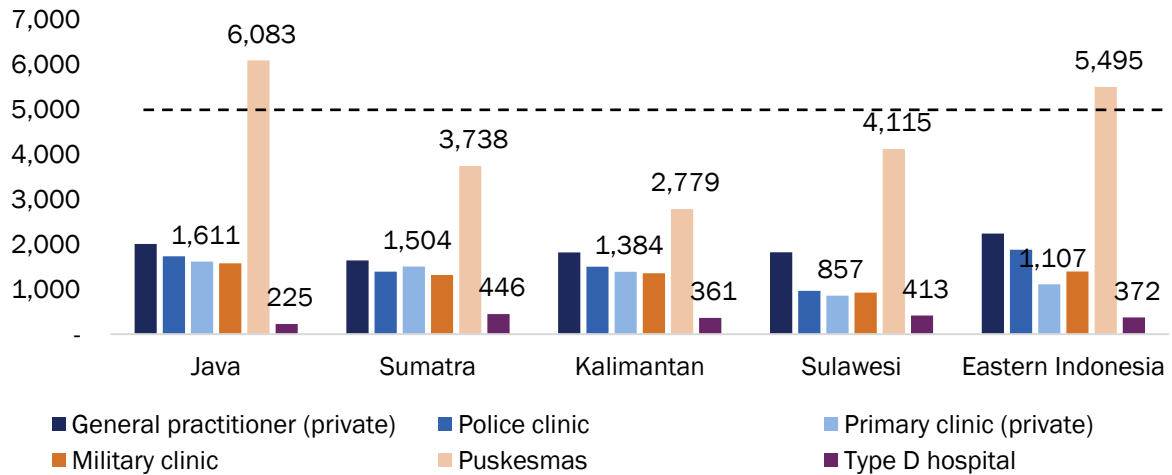
**Puskesmas and pratama clinics tend to be larger than other PHC providers, both in numbers of doctors and of clients.** According to 2016 capitation data, puskesmas and pratama clinics have, on average, 2.7 and 3.1 doctors per facility, respectively. Private practitioners have the fewest, with an average of just 1.1 doctors per facility. Puskesmas have by far the largest catchment areas, on average, with an estimated 13,296 clients per facility nationally, and 19,858 clients per facility in Java. Private primary clinics have an average catchment population of 4,770, while general practitioners (private) and military and policy clinics have average catchment populations of approximately 2,100–2,400.

**On average, puskesmas were better prepared to deliver services than the private sector in 2016.** Across 34 components, which included basic amenities, equipment, diagnostics, and essential medicines, puskesmas had 26 components available, compared to 22 components for private clinics empaneled with BPJS-K and 18.5 components for private clinics not participating in JKN (World Bank, 2018b). In particular, provision of certain key health services such as immunizations, and treatment for HIV, tuberculosis, and malaria, appeared to be more available through the public sector. In general, urban facilities tended to be better able to provide services than rural facilities, and all facilities seem to be improving in service readiness over time (World Bank, 2018b). While there may be better availability of services at puskesmas, their significantly larger catchment populations per doctor across all JKN regions may impact how accessible services are when patients need them. Larger catchment populations may also be a factor in the lack of privacy noted in general at the primary healthcare level, but especially at puskesmas, perhaps due to the greater number of patients they need to serve at any point in time.

**In total, puskesmas receive 81 percent of PHC clients in Indonesia.** Other public facility types account for less than 2 percent, in total, while private facilities account for approximately 18 percent of clients (MOH, 2017a). However, puskesmas also had by far the highest ratio of patients per doctor at 4,907. While this national average is below the maximum ratio of 5,000 patients per doctor set by BPJS-K (Agustina et al., 2019), it is exceeded in both Java and eastern Indonesia, likely due to high population density and scarcity of puskesmas, respectively (Figure 5). General practitioners had the next highest

ratio at 2,916 patients per doctor. There was also significant variation in the number of patients per doctor across JKN regions, from a high of 4,654 in eastern Indonesia due to the lack of doctors to a low of 2,364 in Kalimantan due to a small population and low number of facilities. Despite having relatively more facilities than the other major island groups of Indonesia, Java also has a relatively high number of patients per doctor due to population density, with an average of 3,905.

**Figure 5. Catchment Population per Doctor by Island Group and PHC Facility Type**

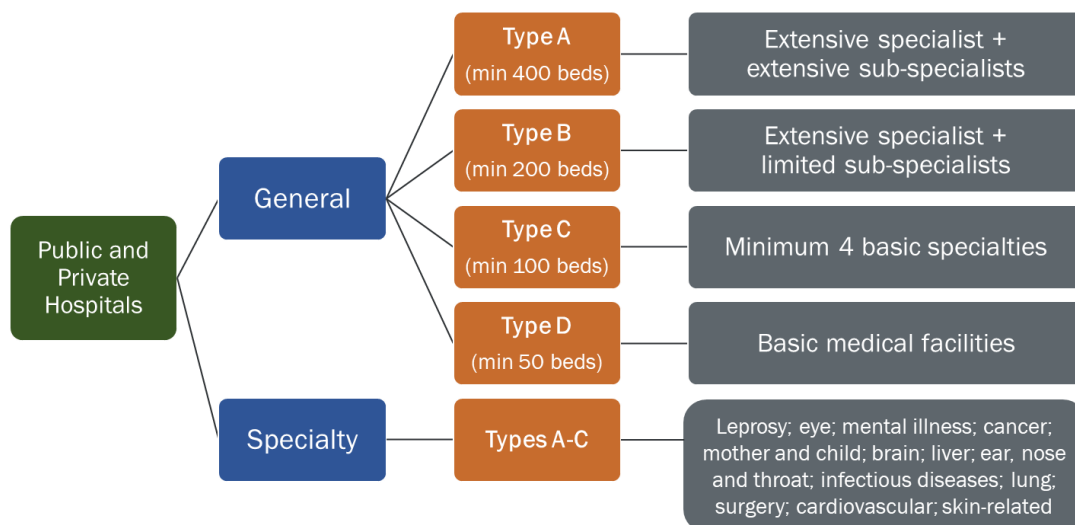


Source: Center for Health Financing and Health Insurance, 2016

### Hospitals

**Both public and private hospitals in Indonesia are classified by level as A, B, C, D, or specialty hospitals.** Hospital levels are determined by the number of beds available, number of specialties and subspecialties offered, and the medical specialists on staff (Figure 6). Type A hospitals are the most comprehensive, providing an extensive range of medical specialties and subspecialties, and have a minimum of 400 beds. Type B hospitals provide extensive specialists but limited subspecialists, with a minimum of 200 beds. Type C hospitals have at least 100 beds and four basic specialties. Type D hospitals have at least 50 beds, and only basic medical facilities to provide general medical services (Frost & Sullivan, 2016).

**Figure 6. Summary of Hospital Levels and Services in Indonesia**

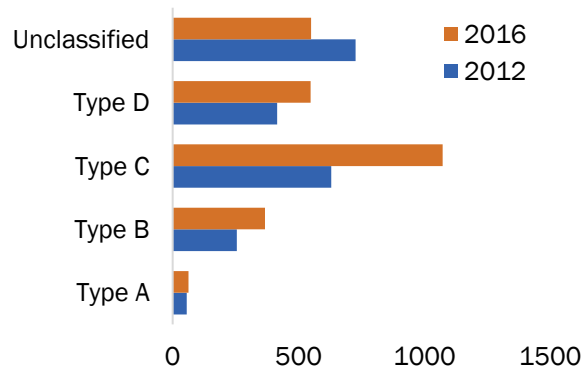


Recreated from: Frost & Sullivan, 2016

**As of March 2019, there were over 2,800 hospitals in Indonesia, of which 2,489 had contracted with JKN.** The total number of hospitals in Indonesia has increased by roughly 6 percent annually since 2012, when there were 2,085 facilities. Most of that growth (2012–2016) has been in Type B and C hospitals, which increased in number by 44 percent and 70 percent, respectively (Figure 7). Type C hospitals are the most common and make up 42 percent of all hospitals in Indonesia, followed by Type D (21 percent). Type A and B hospitals, which provide the most complicated and specialized services, are heavily concentrated in the country's most urban areas, with 49 of 70 (70 percent) Type A and 249 of 389 (64 percent) Type B hospitals located in Java, where 58 percent of the country's population lives (Figure 8). There are no Type A hospitals in eastern Indonesia, which limits the ability of those residents to access specialized services. Nine percent of hospitals in Indonesia are unclassified in the master list of facilities maintained by the Ministry of Health (they have yet to report their status). Unclassified hospitals are primarily found in more rural parts of the country, with only 93 of 250 (37 percent) in Java (MOH, 2017a).

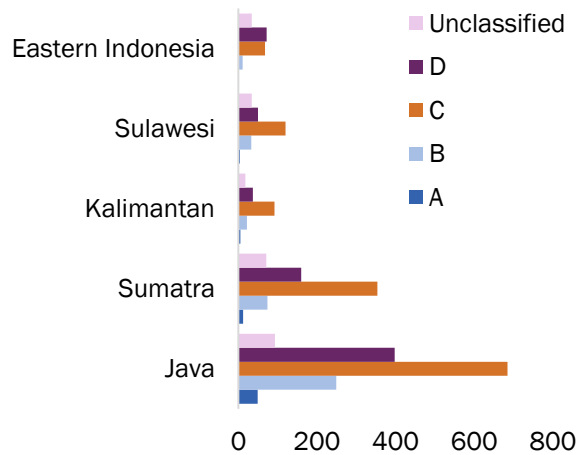
**The ratio of beds to population, as a crude indicator of availability of inpatient services, reveals that there is still a significant need for ongoing investment in hospital infrastructure and capacity across the country.** Indonesia lags several countries in the ASEAN region in bed capacity. Malaysia, Thailand, and Vietnam all have around two beds per 1,000 people. While the majority (52 percent) of hospitals are on the island of Java, it has the lowest ratio of beds per 1,000 people in the country (Figure 9). That suggests that while the government should consider how to incentivize better access to complex care (Type A hospitals) in the more outlying island groups of the country, there is still plenty of investment needed in Java.

Figure 7. Total Number of Hospitals by Type (2012, 2016)



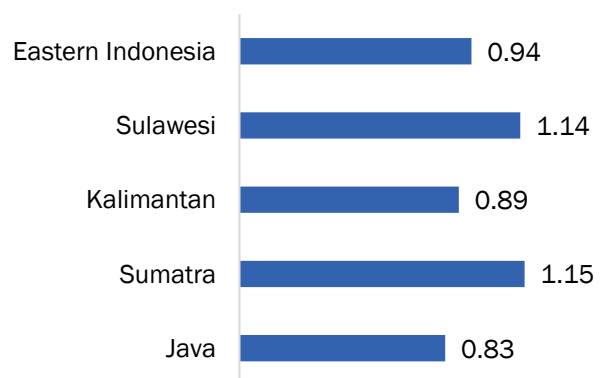
Source: MOH, Master Facility List, 2018

Figure 8. Hospitals by Type and Island Group (September 2017)



Source: MOH, Master Facility List, 2017

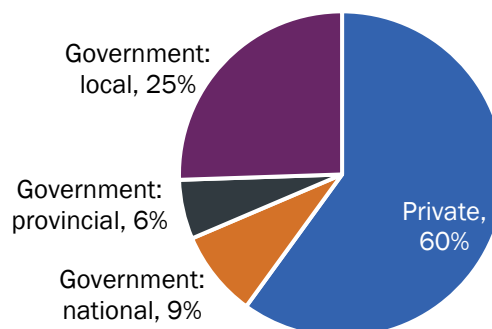
Figure 9. Hospital Beds per 1,000 by Island Group



Source: MOH, 2017b

**In 2017, 60 percent of hospitals contracted by JKN were private (Figure 10).** The remainder were mostly district-level hospitals, with a small proportion of provincial and national hospitals. In recent years, private hospitals have accounted for over 80 percent of all new hospitals, so the mix of hospitals contracted to JKN should continue to skew toward the private sector. This has implications for healthcare costs that should be considered, as private hospitals are reimbursed at a higher rate than public hospitals (explored in more detail in Chapter 5).

**Figure 10. Mix of Ownership of JKN-Contracted Hospitals (Sept 2017)**



Source: MOH, Master Facility List, 2017

## Provider Payment

### **Implementation and consolidation of JKN as a single, national health insurance scheme has improved strategic purchasing of health services in Indonesia.**

Under JKN's fragmented predecessors—Jamsostek, Askes, and Jamkesmas—provider reimbursement was initially largely based on a fee-for-service model, with negotiated rates and a special fee schedule for civil servants (Harimurti et al., 2013). In the latter years of these schemes' operations, payments for basic diagnosis-related groups (DRGs) were trialed as a way to better contain costs.<sup>5</sup>

### Primary Healthcare Payment

**Prior to JKN implementation, Jamkesmas had introduced capitation-based payment of providers at the PHC level.** However, by 2011, payment had been reformed to a fee-for-service model, similar to what had been implemented by Jamsostek and Askes, in response to the low disbursement rates of capitation payments (Harimurti et al., 2013). However, JKN reintroduced capitation as the primary mechanism for payment at the PHC level. Under JKN, PHC providers receive fixed payment per month based on the number of JKN members assigned to their catchment area. The average capitation payment per JKN member per month is IDR 6,158. Puskesmas receive the lowest average capitation per patient—IDR 5,447 per member per month—but tend to have the highest catchment populations. Average capitation payments per client in other facility types range from approximately IDR 8,000 to IDR 10,000. Variation in average per client capitation payments across island groups is driven by the relative mix of facility types, from a high of IDR 6,366 in Java, where there are more private facilities, to a low of IDR 5,163 in eastern Indonesia, where puskesmas make up the majority of PHC clinics.

**PHC providers are expected to provide an approved package of services using the capitation payments received, with no additional cost recovery from the patient.** There are 155 diagnoses that are required to be provided using the capitation amounts received by PHC facilities (Trisnantoro et al., 2016). The capitation payment is supposed to cover the consultation, simple laboratory tests, and drugs for acute care, while chronic care drugs are covered separately (Agustina et al., 2019). This structure is not without challenges in ensuring the availability of services at all PHC providers, consistent quality of services, and appropriate referrals. Clients may have to be referred up for basic services from the primary level to secondary or tertiary facilities, because some services are unavailable at the PHC level. Such referrals may be one source of avoidable cost growth if

<sup>5</sup> DRGs classify patients according to diagnosis, treatment, and length of hospital stay, and standardize payment to hospitals based on the expected costs of care and treatment.

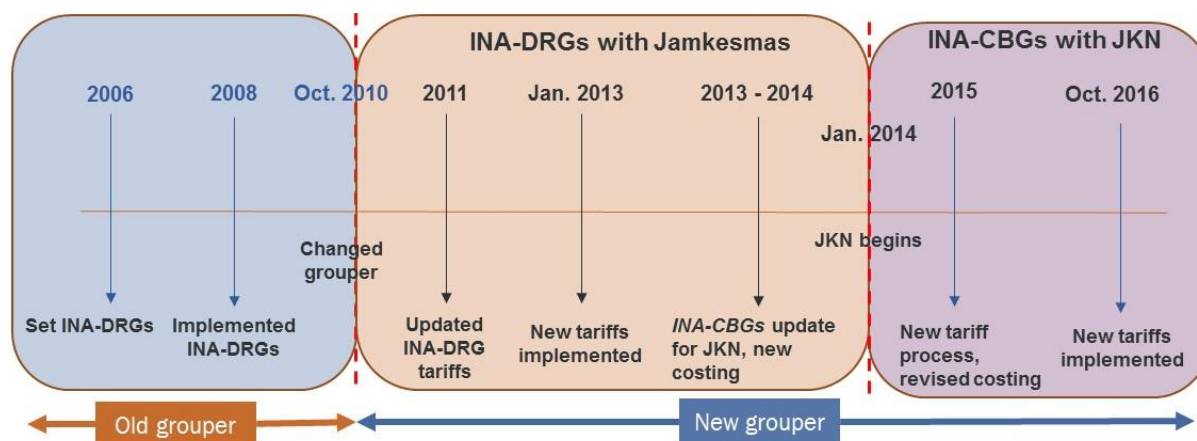
each health facility at the PHC level were appropriately equipped to provide the defined set of services. For certain services that may be provided at PHC facilities but are typically more costly and may be provided at the hospital, such as deliveries, PHC providers are paid on a fee-for-service basis. These are known as non-capitation fees.

**Private PHC providers who receive closer to the maximum capitation amount (IDR 10,000 per member per month) were more ready to deliver childcare, diabetes, and cardiovascular primary care services (World Bank, 2018b).** Forty-six percent of private providers did not receive the maximum capitation amount, the most common reason being insufficient staffing. If human resources for health can be strengthened across the primary healthcare level, it will have a measurable impact on the amount of resources JKN will allocate to primary care and will likely reduce more expensive hospitalizations associated with child health and non-communicable diseases. There was no significant difference noted in supply-side readiness for puskesmas that received the full public sector capitation amount (IDR 6,000 per member per month) compared to those who do not. This points to other non-financial factors driving supply-side readiness at these facilities, and the diminished influence of capitation payments when supply-side financing covers most operating costs.

## Hospital Reimbursement

**Reimbursement of hospital services based on DRGs was introduced under Jamkesmas in 2009 as a cost-control measure in response to an increase in service utilization.** The classification of diagnoses is based on the World Health Organization's 10th International Statistical Classification of Diseases and Related Health Problems (ICD-10) and is similar to the Medicare Severity-Diagnosis Related Group (MS-DRG) system used in the United States. The groupings and corresponding reimbursement rates were updated as the INA-CBGs prior to JKN's rollout in 2014 (Figure 11).

Figure 11. Summary of Events for Diagnosis-Related Groupings in Indonesia



**The current INA-CBG classification establishes tariffs for 262 inpatient and 289 outpatient diagnoses or services (Ministry of Health regulation 59/2014).** Tariff rates further vary for both inpatient and outpatient services based on hospital level and by five JKN regions (Figure 12). These JKN regions were developed specifically for the implementation of the INA-CBG reimbursement system; provinces are grouped based on their cost structure for medical services. Region 1 has the highest INA-CBG reimbursement rates and Region 5 the lowest. For inpatient care, tariffs also vary according to three classes of care (wards) and three levels of severity of the diagnosis, though not all base codes have three levels of severity.

Figure 12. Map of BPJS-K JKN Regions for INA-CBG Reimbursement Rates



**Beginning in November 2015, tariffs were further differentiated between public and private facilities, doubling the number of tariffs to 94,320 for inpatient services and 11,560 for outpatient services (Box 3).** Prior to this date, the lack of differentiation between public and private provider reimbursements may have disincentivized participation, or the provision of some services, by private providers. INA-CBG tariffs are not intended to cover the full cost of delivering services, as public facilities continue to be heavily subsidized by the Ministry of Health, which pays for the infrastructure and maintenance, equipment, and personnel. Therefore prior to differential rates between the public and private providers, the rates would have been very unattractive to the private sector. As of 2016, total JKN expenditures still accounted for only about 15 percent of total health expenditures (Pinto et al., 2016). The differentiation of rates for public and private providers was a step toward improving private sector participation in JKN. These rates were further revised by the GOI in October 2016 in response to feedback from providers regarding their adequacy; some rates increased while others were reduced.

**Box 3. INA-CBG Code Structure**

**Inpatient:**

262 base categories  
 x 3 severities  
 x 4 hospital types (A-D)  
 x 3 ward classes (I-III)  
 x 2 ownership types  
 x 5 JKN regions  
 94,320 codes possible

**Outpatient:**

289 base categories  
 x 4 hospital types (A-D)  
 x 2 ownership types  
 x 5 JKN regions  
 11,560 codes possible

**Current tariffs may not match resources consumed by facilities to deliver specific interventions.** Costing studies for the revision of INA-CBG rates have used a top-down approach modeled on the original costing completed in 2012 by the developers of the INA-CBGs. There is significant variation in the hospital base rates for each hospital type (Table 7). The significant differential in base rates should be periodically evaluated to ensure they reflect the resources needed for efficient and high-quality delivery of JKN-financed health services. At present, it is unclear if the Type A rate for certain conditions merely reflects a more cost-intensive setting to deliver services that could be delivered with the same quality but significantly cheaper at smaller hospitals. In

Table 7. INA-CBG Hospital Base Rates

Hospital Type	Rate
Type A hospitals	IDR 5,787,100
Type B hospitals	IDR 4,279,000
Type C hospitals	IDR 3,463,300
Type D hospitals	IDR 3,048,000

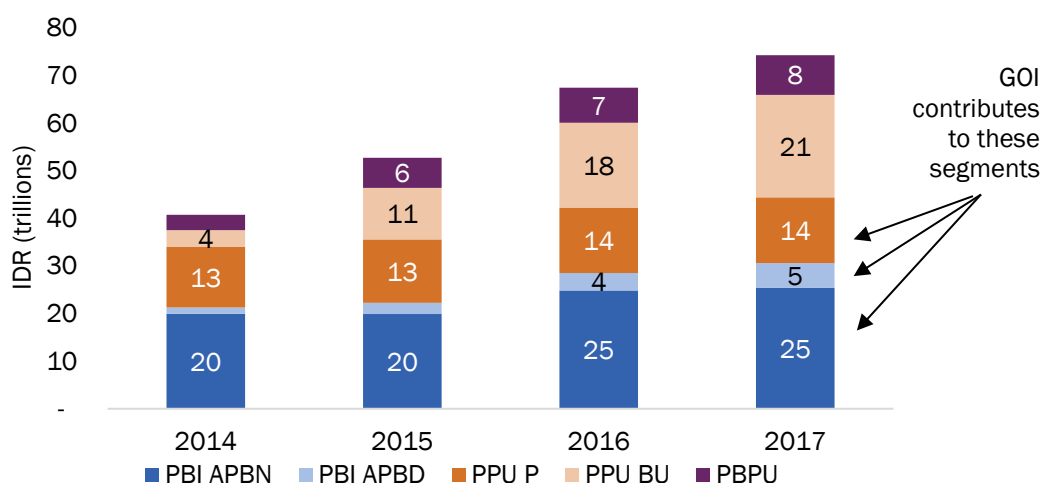
Source: INA-CBGs working paper (unpublished)

addition, the current rate differentials result in some facilities rescoping their service offerings to access more favorable rates and fine-tuning their claims submissions to optimize reimbursements based on how primary and secondary diagnoses are recorded. There should be a transparent and standardized mechanism to collect and review hospital cost data for the purposes of rate revisions.

### 2.3 Financing for JKN and the Health Sector

**The costs of the JKN scheme absorbed by the government are not limited to the subsidies paid for the PBI population.** The government pays a portion (3 percentage points of the total 5 percent assessed) of formal public sector enrollment and also for populations subsidized by regional governments (PBI APBD) (Figure 13). In addition, the government has covered annual deficits since JKN launched. In 2015, the GOI had to allocate IDR 5 trillion (about US\$380 million) above its planned contributions. This is due to the claims ratio consistently exceeding 100 percent, i.e., healthcare expenditures exceed the total contributions and subsidy revenue received. The deficit for 2016 was IDR 4.7 trillion and rose to IDR 6.23 trillion in 2017, a trend that estimates for 2018 indicate is continuing (*Jakarta Post*, 2018a). If these trends continue, the GOI will need to mobilize sufficient revenue to finance these deficits, which may require identifying new sources of funding. One analysis, for example, showed that collections from tobacco excise taxes could sufficiently finance JKN's budget deficit (Thabrany and Laborahima, 2016).

Figure 13. Total Contribution Revenue, 2014–2017

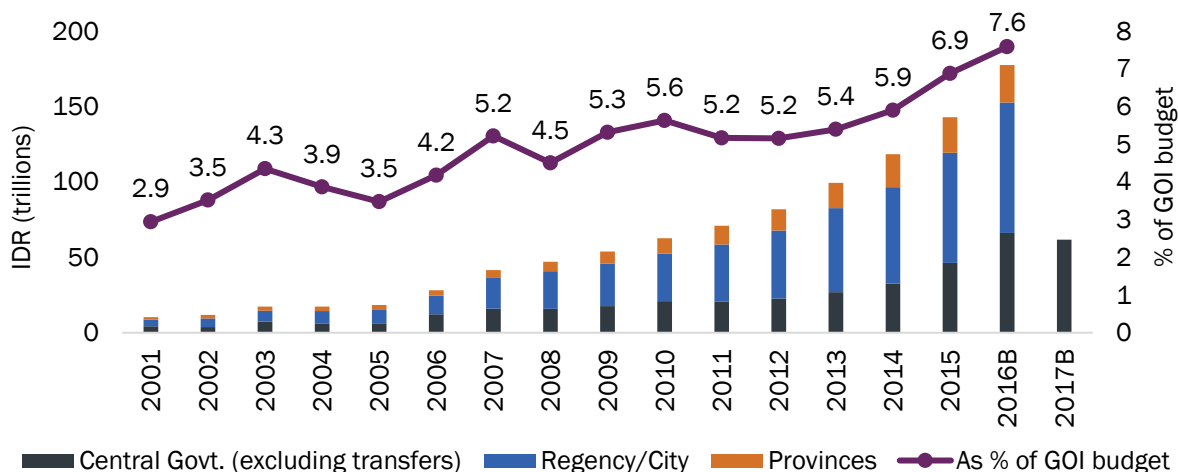


Source: BPJS-K aggregate contribution data, 2018

**Despite all these payments, JKN still accounts for a relatively small share (~15 percent) of total government spending on health** (Pinto et al., 2016). In 2018, contribution payments for the PBI were budgeted at about IDR 25.5 trillion (US\$1.84 billion). In comparison, overall in 2016, the GOI budgeted to spend IDR 177.4 trillion (US\$12.8 billion) on health (Figure 14). The non-JKN costs include a large transfer to the Ministry of Health (83 percent of non-JKN health funding from the central government), with the remainder going to non-line ministries and to specific funds (for example, health assistance funds called *bantuan operasional kesehatan* or BOK) to support primary healthcare programming, planning and other health priorities. Overall, the government's health budget relative to the total budget is in line with the World Health Organization South-East Asia Regional Office average of 6.1 percent (2014), however it is far lower than

the global average of 15.5 percent of total budget going toward health.<sup>6</sup> Advocacy for increased budget allocations to the health sector will require targeted messaging to the Ministry of Finance that explains how increased resources can be channeled efficiently to those who most require services. Coupled with strategic purchasing reforms, increasing the proportion of resources that flows through JKN should encourage greater accountability of the health system to the population, and greater efficiency in service delivery.

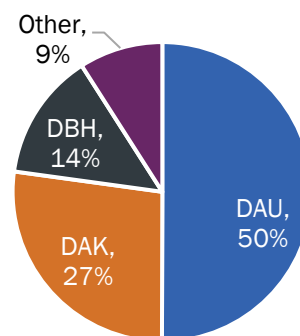
Figure 14. Health Function Spending (2001–2015) and Budget (2016–2017), by Level



Source: Ministry of Finance data, 2016

**A significant share of the GOI’s health spending relates to various intergovernmental transfers (national to provinces and districts) that can be spent on health at the discretion of local governments.** There is the general allocation grant (*dana alokasi umum* in Bahasa, or DAU), which is a discretionary block grant designed to equalize fiscal capacities across local governments. This accounted for 50 percent of fiscal transfers to the subnational level in 2016 (Figure 15). Ten percent of DAU funds are retained at the provincial level, and the remainder is disbursed to districts. These fiscal transfers fund the salaries of government health workers and also help to close any fiscal gaps at the local government level. There is also a special allocation grant (*dana alokasi khusus*, or DAK) intended mostly for capital investments, of which 10 percent was estimated to have been spent on health in 2014 (Pinto et al., 2016). Finally, there is a revenue-sharing fund (*dana bagi hasil* or DBH), which operates as a vertical equalization fund where government revenues from natural resources are redistributed, with a greater proportion going to resource-rich districts where the revenue originated. These types of fiscal transfers to local government are accounting for an increasing share of health spending.

Figure 15. 2016 Transfers to Sub-national Level



**While there are several factors influencing Indonesia’s health system response, JKN plays a critical and increasing role in financing and service delivery.** This relevance of the scheme continues to increase as it approaches universal coverage, and as the

<sup>6</sup> 2014 is the latest year that the World Health Organization has reporting on general government expenditure on health as a percentage of total government expenditure. See: [http://apps.who.int/gho/data/node.imr.WHS7\\_113?lang=en](http://apps.who.int/gho/data/node.imr.WHS7_113?lang=en) (accessed April 2019).



population comes to rely on it as the primary mechanism through which to obtain healthcare. This chapter provided an in-depth background to the schemes that preceded JKN, its first three years of operation, and how JKN fits within the current health financing context in Indonesia. The remaining chapters describe the objectives and approach to the financial sustainability analysis conducted by HP+ and TNP2K to project the potential future states of the JKN scheme. Building on the background provided in this chapter, they cover enrollment (Chapter 4), contributions (Chapter 5), and expenditure in greater depth (Chapter 6).

### 3. Policy Context and Approach to Assessing the Financial Sustainability of JKN

#### 3.1 The JKN Policy Revision Process

**Since implementation in 2014, JKN scheme specifics have undergone a number of revisions intended to improve its operation and sustainability.** These revisions have often been in response to feedback from different stakeholders to the scheme, including BPJS-K, the Ministry of Finance, the Ministry of Health, and healthcare providers.

**Multiple stakeholders are involved in developing and implementing policy revisions to the scheme** (See Table 4 for a summary of JKN's institutional arrangements). DJSN, as the social security regulator, is responsible for overall stewardship of the JKN scheme and for oversight of BPJS-K as the implementing health insurance agency. DJSN makes recommendations to the Secretary of the President. DJSN is also highly involved in the formulation of Presidential Decrees governing JKN through technical input and presentation of evidence (PerPres, see Box 4). As required by the National Social Security System law, DJSN must submit to policymakers and the President's Office any policy change recommendations and updates to the instruments of social security in Indonesia, every two years. These recommendations can be referenced for potential inclusion in a PerPres. Only the Ministry of Health in its ministerial capacity, however, draft proposed PerPres to be enacted by the President. Other stakeholders with a role in the JKN policy process include the Ministry of National Development Planning (Badan Perencanaan Pembangunan Nasional or BAPPENAS), which is interested in understanding the impact of JKN on health outcomes for the poor, as well as TNP2K, which was previously the manager of the unified database for the poor. That role is now performed by the Ministry of Home Affairs, but TNP2K continues to report on the equity and access impacts of JKN for the poor. In addition, the Coordinating Ministry for Human Development and Cultural Affairs, which oversees the Ministry of Health and responds to Presidential requests related to JKN, frequently consults the Ministry of Finance for input on the JKN revisions given they have completed their own analyses as to the performance and projected ongoing funding needs of the JKN scheme.

#### Box 4: PerPres and Inpres

**PerPres** refers to Peraturan Presiden—a Presidential Regulation—and is a type of legislation enacted by the President. PerPres are a relatively recent type of legislation in Indonesia, established since the enactment of Law Number 10/2004 on the Formulation of Laws and Regulations.

**Inpres** refers to Instruksi Presiden—a Presidential Instruction—and is a lower level of regulation issued by the President.

**In 2016, two PerPres made significant revisions to JKN.** First, PerPres 19/2016 (Second amendment of PerPres 12/2013 on JKN) amended the catchment policies to allow for the redistribution of JKN members across primary health facilities within a district. Under this regulation, BPJS-K can redistribute enrollees across primary health facilities (*fasilitas kesehatan tingkat pertama* in Bahasa, or FKTP) within each district based on recommendations from district health offices, Health Facilities Association, and professional organizations. Enrollees can also submit a request to be placed at a facility of their choosing. This process can be completed online.

**PerPres 19/2016 also implemented new fraud prevention measures.** The PerPres 19/2016 reinforced the Ministry of Health regulation (PMK no. 36/2015) on fraud and BPJS-K's efforts to prevent fraud throughout the JKN scheme. It requires a standard operating procedure be implemented for health facilities to provide treatment and submit claims to

BPJS-K. It also proposes improved collaboration between health facilities and the government at the district, provincial, and national levels to monitor and evaluate the implementation of JKN on an ongoing basis. The regulation also requires management at all health facilities to minimize inappropriate provision of JKN services by all health facility staff. Subsequent regulations provided further technical guidance on implementing fraud prevention measures. In 2017, BPJS-K signed a memorandum of understanding with the Corruption Eradication Commission and the Office of Attorney General for prevention and prosecution of fraud.

**JKN contribution rates were also revised under PerPres 19/2016 (Table 8).** First, it increased the PBI contribution rate paid by the government from IDR 19,225 to IDR 23,000. It also increased the informal sector contribution rates. Under JKN, informal sector enrollees can access different ward classes at hospitals depending on the contribution rate they elect (the benefits package does not vary). PerPres 19/2016 increased rates for all three ward classes. For Class III wards (the lowest of three contribution classes), contribution rates were raised from IDR 25,500 to IDR 30,000. A second PerPres, PerPres 28/2016 (Third Amendment of PerPres 12/2013 on JKN) issued the following month, however, returned the Class III contribution rate to its original level. The total private sector worker (PPU BU) contribution as a percent of salary was unchanged at 5 percent, but the distribution of the contribution between the member and their employer shifted from employers contributing 3 percent and employees 2 percent, to 4 and 1 percent respectively. PerPres 19/2016 also increased the maximum salary base for contributions for both PPU P and PPU BU members to IDR 8 million. This increased the effective contribution cap from IDR 236,500 to 400,000. These contribution rates remained unchanged under the most recent PerPres on JKN, PerPres 82/2018. Contribution rates and the impact of potential revisions are discussed further in Chapter 5.

**Table 8. Contribution Rates (per Month), 2014–2016**

Scheme Population Type	2014	2016
PBI APBN	<ul style="list-style-type: none"> <li>IDR 19,225</li> </ul>	<ul style="list-style-type: none"> <li>IDR 23,000</li> </ul>
PPU P	<ul style="list-style-type: none"> <li>3% by employer</li> <li>2% by employee</li> <li>Capped at IDR 236,500</li> </ul>	<ul style="list-style-type: none"> <li>3% by employer</li> <li>2% by employee</li> <li>Capped at IDR 400,000</li> </ul>
PPU BU	<ul style="list-style-type: none"> <li>3% by employer</li> <li>2% by employee</li> <li>Capped at IDR 236,500</li> </ul>	<ul style="list-style-type: none"> <li>4% by employer</li> <li>1% by employee</li> <li>Capped at IDR 400,000</li> </ul>
PBPU	<ul style="list-style-type: none"> <li>IDR 59,500 (Class 1)</li> <li>IDR 42,500 (Class 2)</li> <li>IDR 25,500 (Class 3)</li> </ul>	<ul style="list-style-type: none"> <li>IDR 80,000 (Class 1)</li> <li>IDR 51,000 (Class 2)</li> <li>IDR 25,500* (Class 3)</li> </ul>
BP	<ul style="list-style-type: none"> <li>IDR 59,500 (Class 1)</li> <li>IDR 42,500 (Class 2)</li> <li>IDR 25,500 (Class 3)</li> </ul>	<ul style="list-style-type: none"> <li>IDR 80,000 (Class 1)</li> <li>IDR 51,000 (Class 2)</li> <li>IDR 25,500* (Class 3)</li> </ul>

\* Class III rate was briefly increased to IDR 30,000 under PerPres 19/2016 (Feb. 29) but returned to IDR 25,500 under PerPres 28/2016 (Mar. 31). Source: PerPres 1/2014; PerPres 19/2016; PerPres 28/2016

**PerPres 19/2016 also stipulated an increase to penalties for members who are delinquent on monthly contribution payments.** The length of contribution arrears to be paid on reenrollment increased from 3 to 12 months. During months where contributions are outstanding, a penalty equivalent to 2.5 percent of the cost of services (based on the INA-

CBG reimbursement schedule) is charged to the member, capped at maximum at IDR 30 million. The penalties remained unchanged under the PerPres 82/2018.

**President Instruction (Inpres) No. 8, was issued in 2017 and, aimed to improve coordination among all ministries supporting the implementation of JKN.** It details the key areas of focus for different government institutions based on their purview. These have been translated and captured in Annex C. It contains broad instructions that cover many aspects of JKN; however, it does not provide implementation guidance to comply with the instructions.

**In 2018, under PerPres 82/2018, the Government introduced potential cost-sharing arrangements for services that are prone to misuse.** Cost sharing may apply to services that are influenced by patient preference or behavior in order to curb unnecessary overuse. The specific services that fall under this category are to be defined by BPJS-K or provider associations, and ultimately approved by the Ministry of Health. No final decision has been taken on which services are subject to cost sharing. Patients must agree to these fees in advance of receiving treatment, though fees are not applicable to PBI members. PerPres 82/2018 established that these fees may be set at a certain nominal value for outpatient services and 10 percent (up to a certain value) of inpatient fees. Permenkes 51/2018 has set the patient copay rates based on the level of facility (Table 9). Permenkes 51/2018 also permits patients to pay to upgrade their ward class for inpatient services. The rate is determined by the difference in INA-CBG tariffs for different classes of care for the relevant service. Cost sharing and upgrading options provide an opportunity for facilities to increase their revenue without placing any additional financial burden on BPJS-K. Implementation of cost sharing arrangements should not be taken lightly due to the significant risks they introduce. Even when these are below market prices, copays can be bureaucratically complex, and (if poorly designed) can frustrate universal health coverage objectives (Glassman et al., 2017). Upgrading options provide greater flexibility for patients to seek the ward standard they desire without having to commit to higher monthly premiums.

**Table 9. Cost Sharing Rates**

Facility Type	Rate
Type A and Type B hospitals	IDR 20,000 per visit*
Type C and Type D hospitals and major clinics	IDR 10,000 per visit*

\* Capped at IDR 350,000 for 20 visits in a three-month period.

Source: Permenkes 51/2018

**JKN policy revision is a multi-stakeholder process that requires coordination, collaboration, and agreement across several entities, each with differing priorities.** Overlapping mandates and unclear roles and responsibilities exist among several institutions. As the regulatory environment for implementing JKN has evolved, it has contributed to this lack of clarity. The volume of regulations and associated revisions have contributed to overlapping regulations, unclear regulations, and discrepancies between the rules for the central and regional governments (World Bank, 2018a). A primary concern is the conflicting roles of BPJS-K and the Ministry of Health; BPJS-K has the responsibility to manage the single pool of funds in JKN, but many decisions related to JKN, and its purchasing functions in particular, continue to be housed within the Ministry of Health.

**Clear opportunities exist for improved operations and alignment of incentives in purchasing under JKN.** At present, the Ministry of Health leads the process to set INA-CBG and capitation tariff policies and rates, while BPJS-K handles claims processing and provider payments. This inherently raises issues of Ministry of Health setting rates and policies for its own institutions, undermining a provider-payer split that would help to increase efficiency, foster competition, and ensure rates reflect the different cost structures evident in the public and private sectors. There are also issues with duplication of responsibilities for provider monitoring and quality assurance, with ultimate authority over

the function residing with the Ministry of Health, while BPJS-K is responsible for claims related to quality control processes, credentialing, and renewal of facility contracts. Different sets of data required for adequate provider monitoring are collected and maintained by both institutions without established mechanisms for sharing and collaboration.

## 3.2 Assessing the JKN Scheme's Financial Sustainability

**Despite several external analyses having been conducted, few of the design decisions and subsequent policy updates for JKN have been based on a rigorous evaluation of service use or of the financial impact on the GOI (Pisani et al., 2017).** The use of technical analysis has remained limited and, as in many other countries, political priorities often trump technical considerations in the design and ongoing implementation of health financing models (Pisani et al., 2017). The GOI acknowledges that a more rigorous analytical approach is needed to assess JKN's financial sustainability and appropriately plan for increased government expenditure on the scheme as enrollment scales up to universal coverage. The GOI has indicated that the country is committed to JKN at the highest levels, but that more robust quantification of government resources required is needed to inform policy decisions. Policymakers continue to consider the following three key areas with regards to the scheme's financial sustainability:

- **Contribution rates and classes:** The largest segment of JKN members are the poor and near-poor (PBI) whose contributions are paid for by the GOI. Since the scheme was implemented, the contribution rates for the poor have been updated once in 2016, and there have been calls by BPJS-K to raise the PBI contribution rate again. Changes to the informal sector contribution rates, coupled with potentially merging the three classes of care currently offered are also under consideration.
- **Capitation and hospital level expenditure:** The GOI is considering how it can strengthen primary healthcare and the implementation of referral and gatekeeping policies to reduce the current rate of utilization of more expensive hospital care. Some strategies include increasing capitation rates to reduce unnecessary referrals to hospital care and to facilitate back-referrals from hospitals once patients have stabilized; reallocating patients more equitably among different facility types to reduce over-crowding at puskesmas and increase quality and access; and implementing performance-based measures to capitated facilities with a focus on increasing patient contact rates with primary healthcare facilities and reducing unnecessary referrals.
- **Annual deficit funding:** The JKN scheme has incurred an increasing deficit each year since inception. The GOI has stipulated that future potential deficits be calculated robustly so that they can plan for these amounts, rather than BPJS-K's current approach of submitting a request for extraordinary funding after the close of the fiscal year.

**The projection model used in this report is an example of an analytical approach for JKN, and it will be beneficial to have other models to support robust consideration of assumptions and policy considerations.** During stakeholder engagements for the comprehensive assessment of JKN conducted by HP+/TNP2K, the GOI and other stakeholders considered the projection model alongside previous models and other current analyses performed by the government to inform various decisions. This form of engagement strengthens the policy dialogue and should lead to a continued process of development and iteration to support evidence-based policy development, as JKN continues to expand coverage.

**The remainder of the report considers the financial sustainability of the JKN scheme across these three areas and offers insights into how potential future policy directions will impact the scheme.** This analysis and modeling generated

evidence and provides alternative perspectives to inform decision-making on JKN contribution rates, expenditures, and deficits as progress continues toward universal health coverage.

### 3.3 Model Methodology

**HP+ and TNP2K collaborated to develop a financial sustainability model (the “projection model”) to project JKN’s financial position for the five years 2017–2021.** The model was based on inputs from three sources:

1. BPJS-K aggregate-level scheme data
2. Publicly available macro- and socioeconomic survey and census data from the National Statistical Office (Badan Pusat Statistik or BPS)
3. Input from stakeholders on key policy decisions that should be incorporated into the model as variables to be adjusted in developing different scenarios

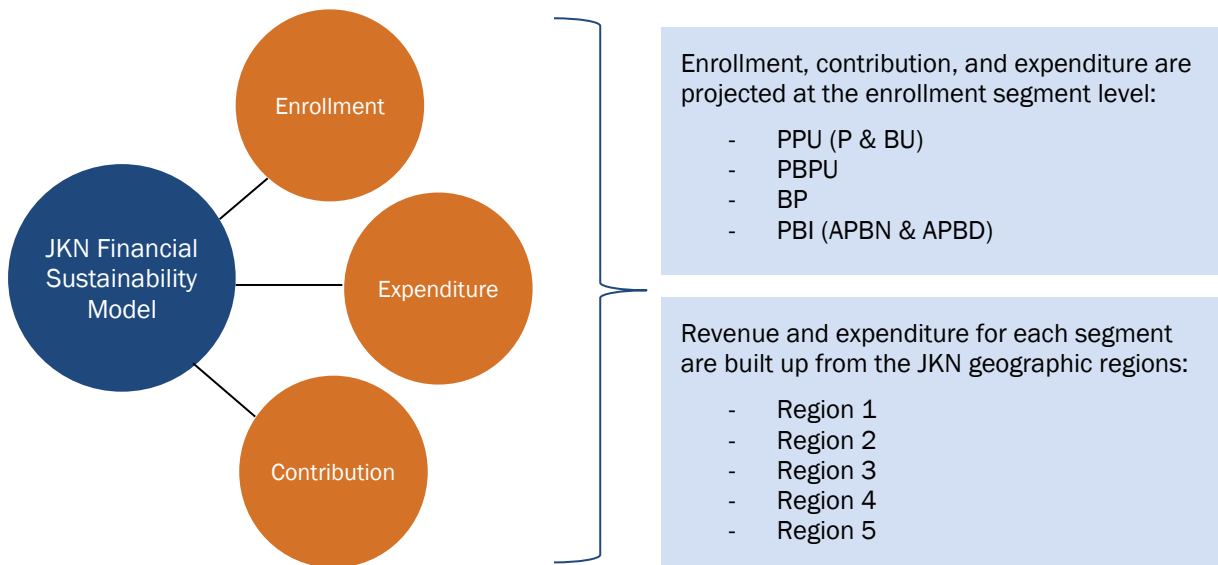
**A summary of the data available from BPJS-K for this analysis, along with data accessed from BPS is provided in Annex B.** BPJS-K provided both historical data for the first three years of operation (2014–2016) and summary projections by segment for 2017–2019. While an actuarial analysis may have been beneficial to more accurately inform contribution rate adjustments for each segment, this would require individualized claims data to accurately forecast utilization rates based on age and sex disaggregation; this was not available at the time of this work.

**This model provides an independent, comprehensive calculation of the likely financial position of the JKN scheme annually and quantifies the potential impact of policy measures under consideration.** The model considers how key policy decisions as well as potential underlying population characteristics that may affect the scheme in the future. It provides an alternative, more nuanced, perspective to current projections based on historical data.

**Model parameters were based on actual data from BPS or BPJS-K that were interpolated or extrapolated where necessary to complete projections through to December 2021.** Only aggregate-level enrollment, contributions and utilization data (by segment and/or geography) was made available for the development of this model. We first created a baseline projection based on BPJS-K enrollment projections and extrapolation from historical income and expenditure data. Key inputs that required assumptions to be made were left as variables for the model user to adjust based on discussion and recommendations by decision-makers. In February 2019, BPJS-K released a 1 percent sample of all claims data for 2015 and 2016 that is intended to be representative of the entire claims database. This data should be mined for future financial sustainability calculations and modeling exercises.

**The model structure builds from population projections by region and by enrollment segment, before projecting three key scheme components: 1) enrollment; 2) contribution income; and 3) health and non-health expenditures (Figure 16).** The variables impacting each of these components can be adjusted from baseline in the model (i.e., to reflect different population trends or potential policy options), quantifying the impact of the adjustment on the individual component. The projections for these three components are combined on a summary tab showing the scheme’s overall financial standing compared to baseline, including amount of surplus or deficit as well as the claims ratio (healthcare expenditures divided by contribution income). On this tab, the user can also select different scenarios that combine likely potential changes to underlying variables. The model can be updated as new data becomes available, allowing it to inform ongoing policy discussions.

**Figure 16. Financial Sustainability Model Structure**



## 4. Enrollment: Progress to Date and Projections

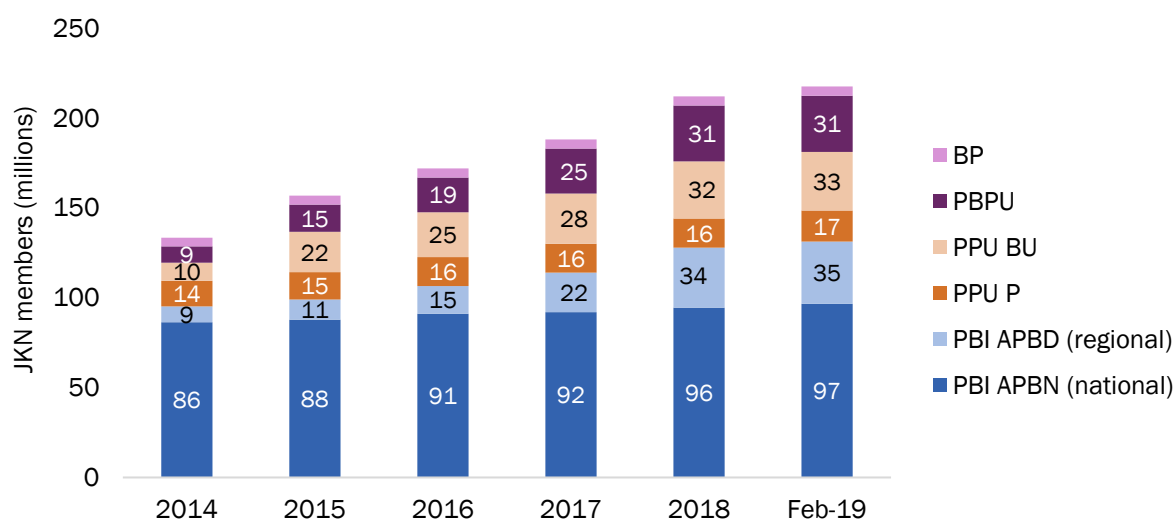
**Current membership characteristics and how they may differ from those of the population yet to be enrolled underpin the structure of the projection model.**

Assumptions in this area can have a significant impact on future utilization and expenditure projections, as well as contributions and collectability rates. Below we explore the membership growth seen from 2014 to 2018 before exploring the factors that will influence future enrollment growth and projections.

### 4.1 Progress to Date

**During the first year of JKN implementation, BPJS-K enrolled 16.4 million members, to bring the total number of members at the end of 2014 to 133.4 million.** Of these, 95.2 million members were subsidized (86.4 million by the central government and the remainder by local governments). The remaining 38.3 million individuals were contributing on a monthly basis. In 2014, the contributory enrollees were from formal and informal segments accounting for 24 million and 9 million individuals respectively (Figure 17).

Figure 17. Total Enrollment by Segment



**As of May 2019, JKN had surpassed 221 million members, equating to coverage for over 83 percent of the population.** This is an impressive achievement, although it falls short of BPJS-K's target to provide a comprehensive package of healthcare services to all Indonesians through JKN by the beginning of 2019. In 2017 and 2018, enrollment increased on average at a rate of 1.3 million members per month. The majority of that growth came from the informal sector, followed by the integration of existing Jamkesda members into the JKN scheme and lastly an increase in enrollment from the private sector as more companies joined the scheme. As expected, the public sector is nearing saturation in enrollment three years on, and PBI enrollment is dependent on the government updating the criteria for eligibility.

**Several factors have limited BPJS-K's ability to achieve universal enrollment coverage by January 1, 2019.** Initially, ID number incompatibility and proof of residence obstructed several thousand individuals from enrolling. BPJS-K regulation no. 1/2014 and circular letter no. 17/2016 clearly stipulated that ID numbers (which in turn require declaration of residence) were an essential requirement for enrollment. However, these regulations were annulled in 2016 by PerPres 19/2016 and PerPres 28/2016, which stated ID



numbers were not a necessity to join the JKN program. Other factors include a lack of knowledge of the importance of insurance to mitigate future catastrophic health costs, a lack of information regarding JKN and what it covers, few mechanisms for BPJS-K to enforce enrollment, a perception of poor quality and availability of healthcare through JKN, and low willingness to pay monthly contributions.

**Due to challenges in enforcing enrollment, those who enrolled tended to be individuals who required healthcare services, particularly in 2014 and 2015.**

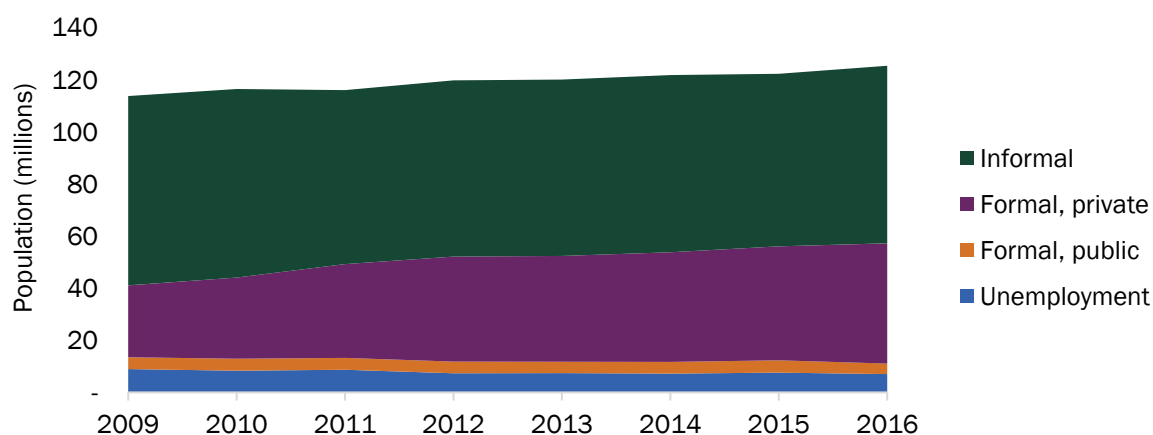
This was particularly the case for the informal sector, where enrollment enforcement and ongoing compliance is most challenging to manage. In 2014, informal sector utilization was several times higher than that of other membership segments, highlighting some adverse selection and the high healthcare needs of those who had essentially voluntarily elected to enroll (Dartanto, 2017). The informal sector who are yet to enroll often have not done so due to lack of understanding or awareness of insurance, lack of knowledge on how to register, and premiums being unaffordable (Dartanto et al., 2015). This highlights the importance of considering the characteristics and healthcare needs of those yet to be enrolled in future projections of utilization and expenditure, rather than basing projections solely on historical data.

## 4.2 Assumptions and Scenarios for Population Projections and Enrollment

**An assessment of the population and workforce dynamics demonstrated the relative coverage of each enrollment segment.** This revealed where the major enrollment gaps were and permitted analysis of how the characteristics of the remaining unenrolled population could impact the financial trajectory of the scheme. The early impacts of adverse selection on informal sector members' healthcare utilization will likely diminish as the scheme approaches universal coverage.

**Population projections were derived by province from publicly available historical data and projections from BPS.** Total workforce statistics were obtained from the same source and combined with formal sector and informal sector estimates to form the baseline total PPU P, PPU BU, and PBPU total populations (Allen, 2016). As such, it was necessary to make assumptions as to the rate of formalization of the economy based on historical trends from 2009 to 2016 (Figure 18), by region, with Java having a relatively higher rate of formalization than eastern regions due to the presence of greater levels of formal economic activity. These rates of formalization were estimated to continue through to 2021.

Figure 18. Workforce Evolution in Indonesia, 2009–2016

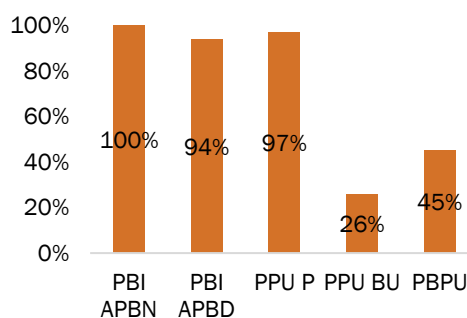


Source: BPS, n.d.

**The formal private sector (PPU BU) is expected to constitute an increasing proportion of the formal sector each year as total public sector workers (PPU P) by province had been relatively stagnant over the last several years to 2015.** This is in line with expectations, as population growth would not necessarily result in a larger government workforce, so the majority of the population would seek employment in the private or informal sectors as they age into the workforce. Family size estimates, based on BPJS-K historical data, were applied to the formal sector primary members, by JKN region, to arrive at the total PPU P and PPU BU populations (including both primary members and beneficiaries) by JKN region. Understanding family sizes for PBPU and PBI populations was not necessary, as those populations are enrolled on a per member basis.

**Starting from population and workforce size estimates was important, because it allowed analyses of the relative coverage of the population by province and by segment.** This will permit more targeted efforts to reach national enrollment goals by highlighting the population segments that are lagging and in which provinces. As of April 2018, it appeared the key gaps in enrollment coverage lay in the formal private sector and the informal sector. Given the size of the informal sector, there are many more members to enroll within that segment to reach universal health coverage; however, the private sector was starting from a lower enrollment proportion (Figure 19).

**Figure 19. Estimated JKN Enrollment by Segment (April 2018)**



**Several enrollment options are put forth in the model for each enrollment segment.** These are shown in Table 10, with a brief explanation of why different options were generated for each enrollment segment. The model has a baseline enrollment projection in line with the BPJS-K strategic plan, which nears universal coverage by January 1, 2019. The other enrollment options for each segment were created based on inputs from government counterparts and recent trends evident from aggregate level data received from BPJS-K. They can be combined to generate various overall enrollment scale-up paths for JKN.

**Table 10. Financial Sustainability Model Enrollment Options by Segment**

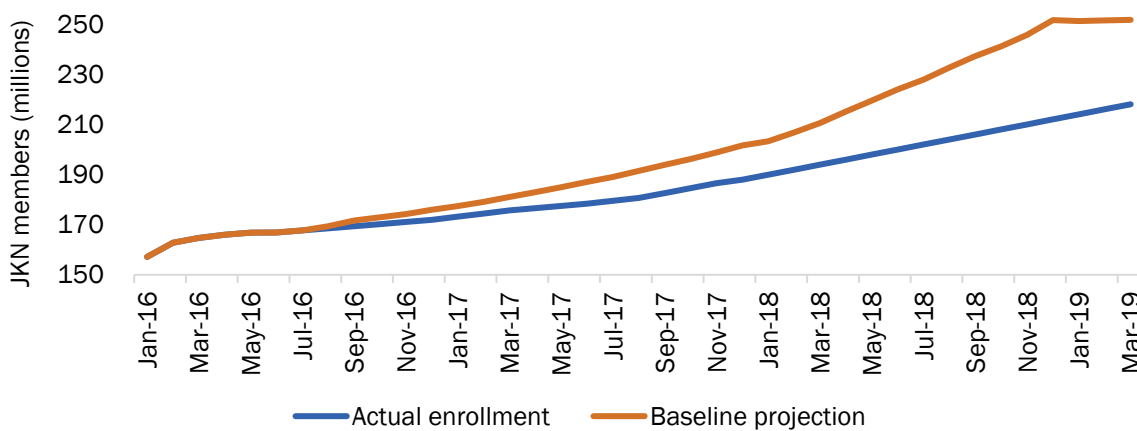
Enrollment Segment	Enrollment Options Considered	Rationale for Enrollment Options
PPU P and PPU BU	<p>Baseline projection: PPU P and PPU BU enrollment are in line with BPJS-K projections assuming universal coverage by January 2019.</p> <p>Alternative option: Update PPU P and PPU BU projections based on estimated population projections.</p>	<p>Factors that impact the size of the formal public and private sectors are unrelated to past enrollment growth within these sectors. These factors include population growth, workforce size and growth, formalization of the economy, and size of the government. Considering these factors allows for an approximation of insurance coverage for each of these enrollment segments and projections of when natural limits for each segment may be reached.</p>

Enrollment Segment	Enrollment Options Considered	Rationale for Enrollment Options
PBPU	<p>Baseline projection: PBPU enrollment in line with BPJS-K projections assuming universal coverage by January 2019. Conservative scale-up assuming universal coverage by January 1, 2021.</p> <p>Alternative options:</p> <ol style="list-style-type: none"> <li>1) In line with recent actual scale-up rate (from June 2016 to March 2017)</li> <li>2) Assuming enrollment becomes progressively more difficult (growth slows from current scale-up rate)</li> </ol>	<p>As the second largest segment of the population (behind those designated as PBI beneficiaries), the informal sector is key to achieving high insurance coverage. However, enforcement of initial enrollment and continued enrollment within this sector is challenging, even when insurance coverage is mandatory. This is often due to a lack of systematic ways to collect premiums on a regular basis, and the high administrative burden associated with enrollment agents and reenrollment.</p> <p>Given these concerns, it is necessary to consider alternative scenarios based on historical enrollment scale-up rates and decreasing rates of growth as the last informal sector members become increasingly difficult to enroll.</p>
PBI APBN	<p>Baseline projection: In line with BPJS-K's 2017 targets of 93.6 million members in Jan 2018, increasing to 107.2m members by Jan 2019</p> <p>Alternative options:</p> <ol style="list-style-type: none"> <li>1) 92.4 million PBI members in 2017, 96.7 million in 2018, 107.2 million from 2019</li> <li>2) Linear scale-up from 92.4 million members in 2017, assuming 107.2 million by Jan 2019</li> <li>3) Linear scale-up from 92.4 million members in 2017, assuming 96.7 million by Jan 2018</li> <li>4) A constant 92.4 million PBI members from 2017 onward</li> </ol>	<p>PBI APBN members are an automatically enrolled group of beneficiaries, based on their definition and inclusion in the unified database managed by TNP2K and the Ministry of Social Affairs. On this basis, PBI members receive JKN membership cards. Changes to the inclusion criteria for the unified database is a political decision and various options are available between 2017 and the end of 2021.</p> <p>The financial sustainability model allows for these various options to be considered.</p>
PBI APBD	Not applicable	<p>PBI APBD members are beneficiaries who are designated by district governments as being eligible for subsidized enrollment to the JKN scheme. These members are transferred into the national JKN scheme from the regional Jamkesda schemes. No variation in enrollment scenarios was considered for this population segment given they were transferred from an existing scheme, so enrollment strategies are not relevant.</p>
BP	Not applicable	<p>Pensioners, investors, and others fall within the BP segment, as they do not fit within an employment or subsidized segment. No scenarios were considered for this population segment given its small size (&lt;5%) relative to total enrollment.</p>

**Modeling the enrollment options presented above impacts the relative mix of members by segment and the total enrollment numbers attained.** The relative proportion of members from each segment covered by the scheme is critically important, as

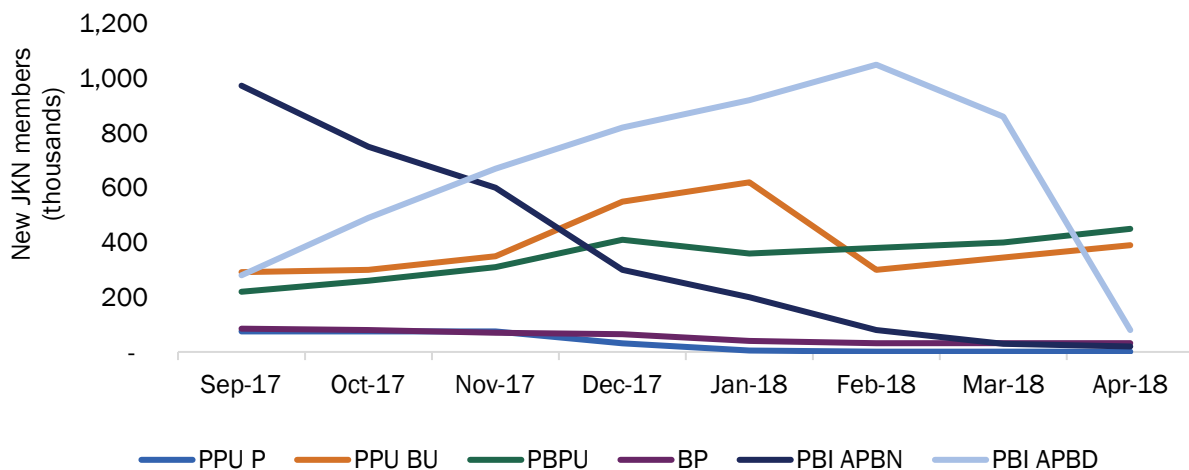
their rate of utilization of services has varied historically; this will impact the future financial sustainability of the scheme. For example, PBPU initially had very high rates of utilization due to adverse selection (i.e., those who were sicker enrolled), and while this rate has decreased over time, it still remains high. We will explore the impact of different enrollment assumptions on healthcare expenditure projections in Chapter 6. Without taking into account different potential or likely enrollment scenarios for each segment, the projections for the financial position of the scheme become increasingly inaccurate. Baseline projections, mostly driven by original BPJS-K assumptions for total scheme enrollment, ended up being significantly greater than actual enrollment achieved through March 2019 (Figure 20). A model with the lack of flexibility to consider different enrollment scenarios (and that does not take into account some of the rationales for different scenarios explained in Table 10) can increasingly deviate from actual enrollment achieved and result in financial position projections significantly different from what will likely be realized.

Figure 20. Baseline Enrollment Projection vs. Actual Enrollment



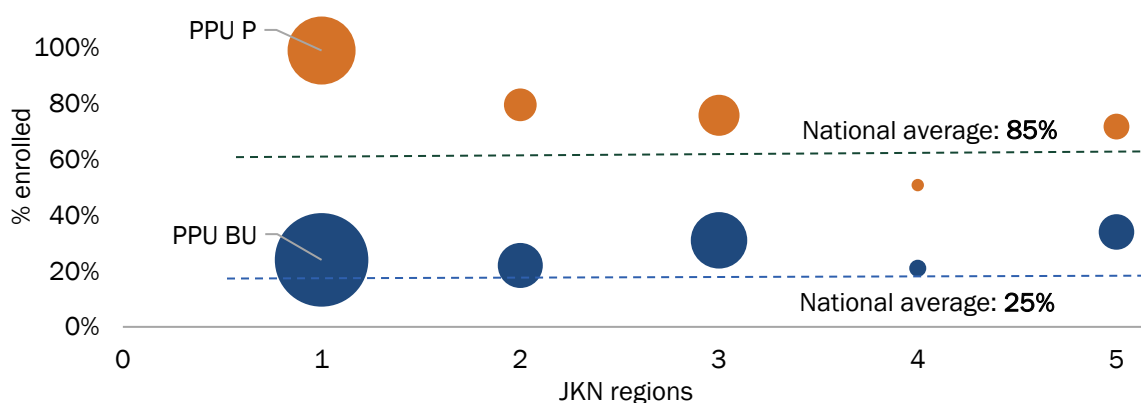
**Enrollment trends have shifted based on the remaining unenrolled in each segment.** The only segments experiencing growth in enrollment as of April 2018 were the formal private sector and the informal sector (Figure 21). This aligned with estimates (Figure 19), which reveal those segments contain most of the remaining unenrolled. In 2016, Jamkesda members were mandated to be integrated into the JKN scheme with a transition of district schemes toward health promotive and preventive activities (Agustina et al., 2019).

Figure 21. Percentage of Monthly Growth (Smoothed) in Enrollment by Segment



**In terms of the formal public sector (PPU P), our analysis of trends in public sector workforce by JKN region, married with expected population growth, demonstrated that the formal public sector was relatively saturated, leaving little room for growth in membership.** This was particularly the case in Java, where almost 100 percent of the formal public sector is estimated to be enrolled after four years of JKN (Figure 22). This is an expected result, as the formal public sector is easily identifiable to the government and can be rolled in from previous schemes and enrolled via automated payroll deductions. Lapses in enrollment would be a negligible issue and the main challenge is to ensure all subnational government employees are enrolled. While on average 85 percent of the public sector had been enrolled, the majority of those were based in Java. More work is needed in outlying regions to enroll provincial and local government employees. Enrollment has steadily increased, and as of May 2019 there were 17.3 million public sector employees who were JKN members, with limited scope for further growth in enrollment.

**Figure 22. Percentage Enrollment of PPU P and PPU BU Segments by Region (December 2016)**



**The formal private sector has significant room for growth in Indonesia, especially if the economic growth of this decade persists and is accompanied by a continuing trend of formalization of the economy.** Figure 19 shows that on average only 25 percent coverage nationally had been achieved by the end of 2016, with all regions below 40 percent. The rate of growth to March 2019 has been substantial; however, to reach universal health coverage even greater enrollment of this segment is necessary through specific targeting. The challenge in promoting JKN enrollment in the formal private sector is twofold. First, small- and medium-size enterprises suffer from similar concerns as the informal sector as these enterprises become administratively more difficult to enroll and prevent lapses in enrollment. Second, there is evidence that many private enterprises only enroll their junior and mid-level employees, while providing private or other alternative insurance options for their top-level employees. This limits JKN enrollment from the private sector and also dilutes the revenue contributed per member from this segment. Targeting smaller entities will be critical in both the short and medium term, while in 2018 a focus on ensuring JKN-registered entities are enrolling all their employees in the scheme should result in significant improvement in formal private sector membership and revenue.

**The informal sector is expected to expand to over 72 million people by the end of 2021.** Even with ongoing formalization of the workforce, it is likely to still be larger than the formal private sector. In many countries it poses the greatest challenge in reaching universal health coverage through a contributory scheme, due to a lack of understanding or awareness of insurance, lack of knowledge on how to register, premiums being unaffordable, and the administrative burden of enforcing enrollment and preventing dropout. The baseline projection is in line with the aspirations of the original scheme design that this population segment would reach near universal coverage by the beginning of 2019. However, this was an

ambitious target, and the associated policies and allocated resources seem to have been insufficient to overcome the challenges. The number of new enrollees needed per month to reach that coverage target increased significantly as 2019 approached, and this projection outpaced actual performance. BPJS-K managed to achieve a 24 percent increase in informal sector members in the 14 months to the end of February 2019, the fastest growing contributory segment (formal private workers and formal public sector workers increased 17 percent and 3 percent respectively). Enrollment efforts will need to be amplified to successfully enroll and retain members from this sector.

**BPJS-K has implemented several strategies to improve enrollment and retention of informal sector members.** Household enrollment, rather than individual enrollment, was implemented primarily to reduce adverse selection by those in need of healthcare services, but it also has the benefit of increasing enrollment through a requirement that all members of a household join (with contribution rates per member). Household enrollment may also reduce dropout rates, as there is more likely to be someone in the household that needs coverage at any given time, especially when children and older household members are considered. Increased supervision and enrollment compliance checks have also improved enrollment and revenue collection. The implementation of waiting periods has also incentivized members to maintain coverage for unexpected illnesses rather than opting in and out of the scheme only when sick. Fines and payments of membership arrears are also levied against those who reenroll. In late 2017, the phased implementation of electronic ID cards that could be read by facility-based e-readers commenced and should help to better manage the enrolled population and reduce duplication in the registration process. The implementation of a mobile-based application in 2018 (Box 5) also supports enrollment efforts and builds awareness around JKN, the benefits on offer, and ways to access them.

#### **Box 5. Mobile-Based Application Supports JKN Enrollment and Access to Benefits**

The use of digital technology is one of the newer innovations for JKN through the app named “Mobile JKN.” Almost all JKN member’s interactions with the scheme can be addressed through the application, minimizing the need to physically visit BPJS-K offices. According to BPJS-K, more than 3 million members have registered with the mobile platform.

The service is supported by 24-hour customer services by phone and linked to care centers, a drop box, and online registration, as well as the development of a customer integrated management system to ensure the wellbeing of members. Users can also use the app to locate the nearest BPJS-K-contracted health facility, easing their access to health services.

The app also facilitates payments for membership contributions. Other options for contributions, including mini-markets and e-commerce platforms are being considered.

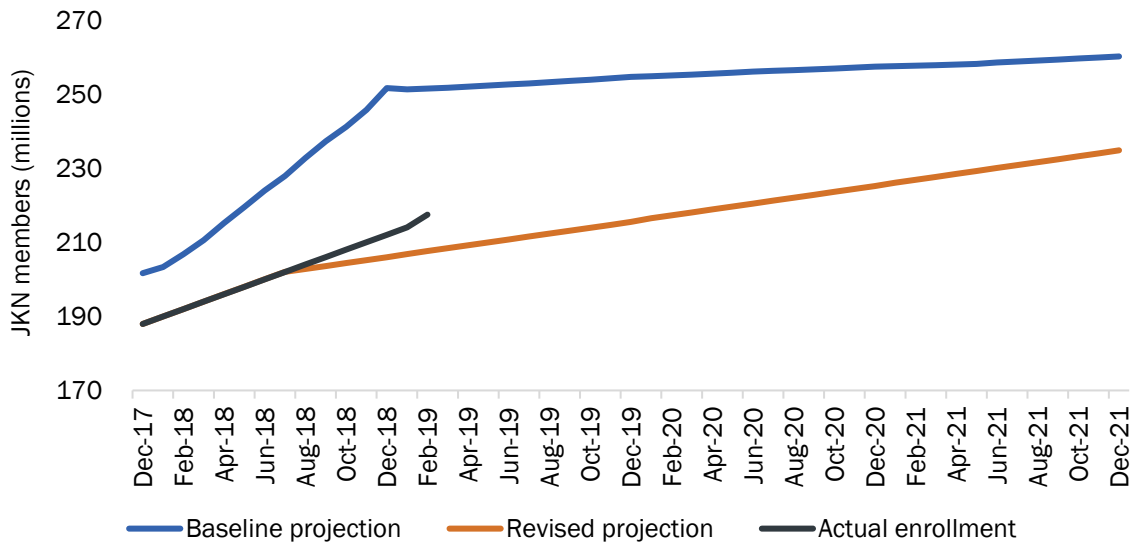
**Enrollment projections for the informal sector based on actual monthly enrollment statistics suggested that universal coverage would not be reached by January 2019.** This goal would be difficult without efforts to increase the size of the subsidized population, either by providing subsidies directly to the informal sector or expanding the definition of those who qualify for PBI enrollment. The revised projection suggests some improvements in enrollment due to more targeted initiatives. As higher levels of coverage are reached, it may become increasingly difficult to attract and enroll informal sector members and, more importantly, keep them from lapsing. There are frequent reports from BPJS-K that informal sector participants enroll in the scheme only when they require care, then they lapse, reenrolling as and when they need care again (*Jakarta Post*, 2018b). This undermines the principles of risk pooling that allows insurance to be sustainable. After five years of JKN implementation, the likelihood that members of the informal population are unaware of the scheme is decreasing, and their non-participation is reflective of their

unwillingness to participate or challenges in joining the scheme. More needs to be done to make the registration process as intuitive and accessible as possible, while also ramping up efforts to enforce the mandatory nature of the scheme.

**Another factor is the future definition of PBI members and the impact that will have on eligibility for subsidies.** Nationally subsidized PBI members were set at 92.4 million beneficiaries in 2018. Previous iterations of the JKN scale-up strategy assumed PBI-subsidized populations would increase to 107.2 million people. Reaching this level of enrollment, however, would have accrued considerable associated expenses. The strategy also assumes increasingly enrolling the informal sector as subsidized, rather than contributing, members. As the economy in Indonesia grows, it is expected that the numbers of poor and near-poor will continue to decline as a proportion of the total population, as has occurred over the last several years. Thus, a lower proportion of the population should be classified as poor or near-poor. This would support a PBI projection that stays constant at 92.4 million beneficiaries, or eventually contracts as more people develop the ability to pay into the JKN scheme, either as formal or informal members. However, recent enrollment statistics suggest the PBI classification has expanded, with over 96.5 million national government-subsidized PBI members and a large increase in PBI members subsidized by regional governments, from 15 million members at the end of 2016 to over 35.3 million members by March 2019. As enrollment has continued to increase, the proportion of non-contributory members has remained relatively constant, around 60 percent.

**Combining the projected scale-up paths for each enrollment segment, the projection model paints a more conservative picture of total enrollment numbers in the coming years relative to baseline.** While the total population enrolled was projected to reach over 260 million people by the end of 2021, the likely scenario based on the analysis is total enrollment around 235 million people, barring any major change in subsidized segments or enrollment strategies (Figure 23). This projection assumes that the PBI population is maintained at its current level of 96.6 million members. The projection model therefore assumes the level of subsidized population will reduce the scheme's reliance on government subsidies as the PBI population shrinks as a proportion of the total enrolled population. This would be a positive in terms of increasing the sustainability of the scheme by reducing its reliance on government funding. However, recent enrollment patterns indicate this shift toward a greater proportion of contributory members is not happening, and the subsidized population has remained around 60 percent of total membership since 2016. Nevertheless, by 2021, the major gap in coverage will remain in the informal sector, assuming JKN employs effective strategies to promote better compliance by the formal private sector. Enrollment projections are the heart of any projections of future solvency of the JKN scheme as membership volume and mix drives healthcare expenditure and contributions income. Therefore, applying rigor to future projections by considering: 1) the underlying demographic changes underway, 2) planned strategies to improve enrollment compliance, 3) remaining challenges in enforcing enrollment, and 4) policy decisions regarding subsidized populations, is critical to ensuring that the financial implications for the scheme can be appropriately calculated.

Figure 23. Overall Enrollment Projection to December 2021



Source: Baseline projection as per assumptions in Table 10. Other scenarios as developed by authors.

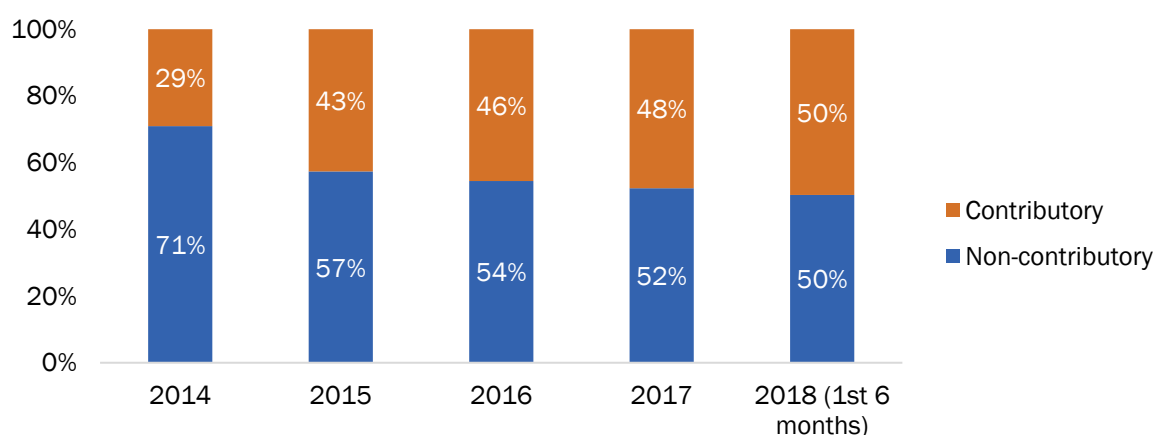


## 5. Contributions: Trends to Date and Projections

### 5.1 Trends to Date

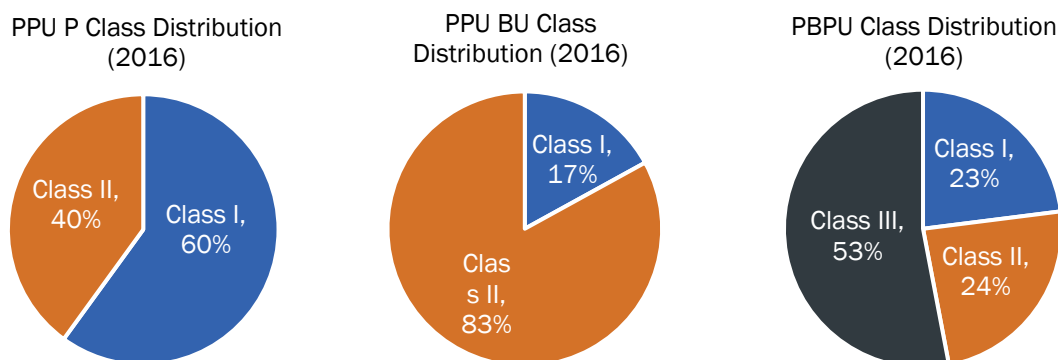
**As enrollment has scaled up, JKN's revenue mix (contributory vs. non-contributory) has become more sustainable.** In 2014, revenue from all segments totaled IDR 40.7 trillion, just over half of which came from subsidized segments (PBI APBN and PBI APBD). Including the government-funded portion of public sector workers' contributions (60 percent) brought the total government financing of JKN revenue to 71 percent in 2014. As enrollment of the formal private sector and informal sector, the revenue mix for the first six months of 2018 was split evenly (Figure 24). Apart from a big shift from 2014 to 2015, the evolution of revenue mix toward being more contributory has been steady, despite the number of non-contributory members holding steady around 60 percent since 2016 (see Section 4.2). Increases in enrollment in the second half of 2018 and into the first quarter of 2019 portend a shift back to non-contributory growth, as more PBI APBD members are brought into the scheme and the unofficial revenue mix shifts back to that of 2017 (e.g., 52 percent non-contributory). This development should be monitored, as efforts to enroll and retain contributory members may need to be strengthened.

Figure 24. JKN Overall Revenue Mix



**JKN members can avail themselves of three classes of care, depending on their membership category and contribution levels.** Contribution classes determine the type of inpatient ward members can access, but do not impact medical services available. All PBI members are only eligible to access class III beds at hospitals, while formal-sector members (both public and private sector) are assigned to Classes I or II, depending on their contribution level. The informal sector can elect which class of ward they would like through the contribution rate selected. Class elections have remained relatively consistent over the first three years of implementation of JKN, with roughly half of PBPU members electing for Class III, and the rest approximately evenly split between Class I and II (Figure 25). The differences in formal sector distribution between Class I and Class II warrants further investigation. Sixty percent of public sector workers (PPU P) are assigned to Class I, compared to 17 percent of private sector formal workers (PPU BU). Wage data, however, does not suggest that the public sector is earning more and therefore contributing more each month to explain the difference in class distribution.

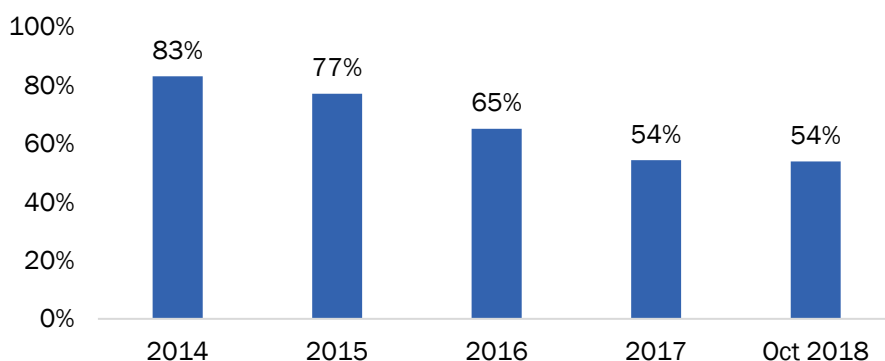
**Figure 25. Ward Class Distributions for Contributory Membership Segments**



Source: BPJS-K aggregate contribution data by ward class, 2016

**Collectability rates vary across population segments, with the informal sector presenting the greatest challenge.**<sup>7</sup> Mandatory payroll deductions make it easier for JKN to ensure formal sector workers pay monthly contributions from the time of enrollment. Similarly, for subsidized workers, contributions are paid collectively to BPJS-K by the government. The budget for these payments is set aside annually, requiring relatively little effort on the part of the scheme to collect. Collection is more difficult among voluntary enrollees from the informal sector. These members are required to pay contributions each month on their own volition for the covered members in their households. Collectability has dropped over time (Figure 26). Over time, informal sector workers who do not need to access care may not see value in paying premiums for services they are not currently using. It is possible this trend will increase as healthier informal workers, with fewer immediate health needs that original enrollees, enroll. BPJS-K, however, is working to improve collectability by implementing policies like mandatory household enrollment as well as online banking payment options. While informal sector (PBPU) collectability rates declined to 54 percent by 2018, aggregate collectability is over 90 percent.

**Figure 26. PBPU (Informal Sector) Collectability Rate 2014–2018**



Source: BPJS-K data, 2018

**Currently the maximum salary assessable for contributions from the formal sector is IDR 8 million per month, for a maximum contribution of IDR 400,000 per month.** In 2016, less than 5 percent of JKN members eligible for Class I benefits had

<sup>7</sup> Collectability rate refers to the scheme's success in continuing to collect monthly premiums from enrolled members. It can be defined as actual contributions collected by BPJS-K divided by the total potential contributions if no members were in arrears. Schemes can improve collectability rates by reducing dropout and reenrollment by members who pay premiums only when they require services.

salaries that exceeded the ceiling. Of all private-sector members, the proportion exceeding the ceiling was less than 1 percent. In 2018, BPJS-Ket announced it would be raising salary ceilings for pension contributions annually. As of March 2019, the rate went up by 5.17% based on GDP growth, to a maximum salary of IDR 8,512,400 (Bizindo, 2019). This change in regulation is yet to be implemented for JKN by BPJS-K. However, it would have negligible impact until more members are beyond the current contribution limit.

**The salary amounts on which JKN contributions are assessed do not appear to reflect the full compensation earned in the private sector.** In 2016, the average contribution per member per month from public-sector workers exceeded that of private-sector workers by 6 percent (Table 11). This is a counterintuitive finding, given salaries are generally higher in the private sector than the public sector. More analysis is needed on the different components of private-sector salaries and whether the current portions on which the JKN contribution is assessed are appropriate. This issue has been previously highlighted as part of deliberations on JKN at inter-ministerial levels.

**Table 11. Current JKN Contribution Rates and Effective Rates by Segment**

Segment	Contribution Rate (per member per month)	Average Effective Rate (per member per month)
PBI APBN & APBD	IDR 23,000	IDR 23,000
PBPU	Class I: IDR 80,000 Class II: IDR 51,000 Class III: IDR 25,500	IDR 44,876
PPU P	5% of salary (3% employer/2% employee); salary capped at IDR 8 million	IDR 62,838
PPU BU	5% of salary (4% employer/1% employee); salary capped at IDR 8 million	IDR 59,407

Source: BPJS-K data, 2016

## 5.2 Contribution Projections

### **JKN contribution rates to date have not been based on an actuarial assessment.**

This would require a risk-adjusted analysis of the cost of providing a specific list of services, based on the past claims behavior of current members disaggregated by age, sex, and geography. Individualized claims data and beneficiary information would be necessary to perform such an analysis. Actuarial analysis would provide JKN with more precise estimations of future claims costs as new members with specific profiles join the scheme. This would allow for actuarially determined contribution rates to be implemented for each new member and help ensure contribution revenue is sufficient to cover the costs of services. Given that this level of data was not available, the projection model allows policymakers to consider potential, feasible changes in contributions at the membership segment level, and model their impact on contribution income and the scheme's overall financial position.

**Contribution projections from the model account for regional differences in wages and allow for adjustments to enrollment patterns, contribution rates, and collectability.** Previous contribution income projections were based on current contribution rates, universal enrollment coverage targets, and 100 percent collectability. We used these assumptions to establish a baseline contribution projection. Unlike previous projections on the topic of JKN revenue, however, this baseline scenario accounted for regional differences in income levels. Public formal sector contributions were projected based on BPS statistics on public-sector wages by province, aggregated to JKN administrative regions and adjusted by salary inflation rates. Private-sector wages were

based on BPJS-K historical data, also adjusted for salary inflation rates; regional variation in private-sector income was also used to generate more accurate projections for formal private-sector contribution income based on current enrollment coverage by region.

**From a baseline scenario, we adjusted key inputs to reflect historical trends and ongoing policy discussions to create a more robust projection of scheme income through 2021.** As a particularly significant adjustment, the contribution projections were based on the revised enrollment scale-up paths presented in Section 4.2 and illustrated in Figure 22. As discussed, these revised projections present a more conservative picture of total enrollment and accompanying mix of membership segments, reflective of ongoing and predicted enrollment trends.

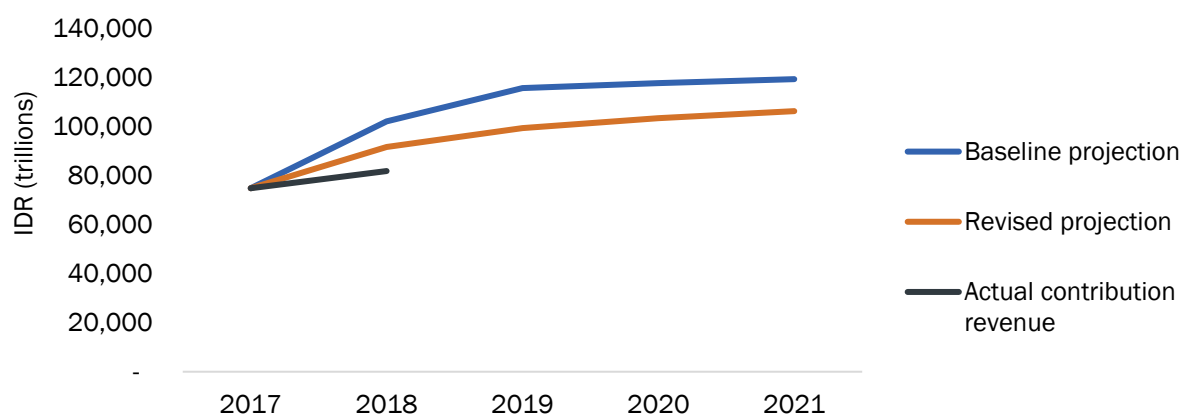
**The revised projections applied current contribution rates, but the model also allows for variation in rates across segments in order to inform future policy discussions.** For the formal sector, the contribution rate was set at the current 5 percent of income (split between employer and employee), but the model allows for changes to this rate. In the current political context, it is unlikely that policymakers will consider increases to formal-sector contribution rates. It is useful, however, to be able to quantify the potential impact of increases or decreases in contribution rates, particularly if these are explored as policy options.

**Informal sector contribution income was also projected based on the rates from PerPres 19/2016 (unchanged in PerPres 82/2018), but several possible rate adjustments are included as model options to consider the impacts of alternative contribution rates.** The model also adjusts for the impact of revised rates on ward class elections on an annual basis. For example, if the Class 3 rate is raised while Classes 1 and 2 are kept the same, we would expect more informal sector members to move up a class, as the differential between Classes 2 and 3 would have diminished.

**The model also allows for variation in collectability rates, and the revised projections reflect current informal sector collectability and trends.** Historically, BPJS-K data suggests that collectability has been declining each year (Figure 26). However, several policy measures are being considered or implemented to improve collectability rates. These include collecting membership arrears and levying fines for members who allow enrollment lapses, instituting mandatory waiting periods, mandating household enrollment as opposed to individual enrollment, and linking JKN membership to other public services such as driver's license renewal or electricity connection. The revised projections were based on the current collectability rate and assume steady improvement each year as a result of these policy efforts.

**The major differences in contribution income projections from the baseline scenario come from changes to projected enrollment progress and membership segment mix.** Baseline projections suggest that contribution revenue growth will be driven by growth in informal sector (PBPU) enrollment and by increases in the subsidized population. PPU BU enrollment was also expected to drive contribution income, predicted to be the largest source of income for the scheme from 2018 onwards, overtaking revenue from GOI subsidies for the PBI segment. The revised enrollment projections, however, result in substantially different total enrollment and segment mix than baseline, and consequently significantly lower revenue projections (Figure 27). However, results from 2018 (first six months actual, second six months estimated) suggest contribution revenue is even lower than the revised projection. Given actual enrollment has exceeded projections, lower total contributions are a result of recent enrollments being at lower monthly rates and collectability, driven by subsidized members or PBPU members electing to contribute at the Class III rate.

Figure 27. Contribution Projections to Dec 2021



Source: Baseline projection and other scenarios as determined by authors

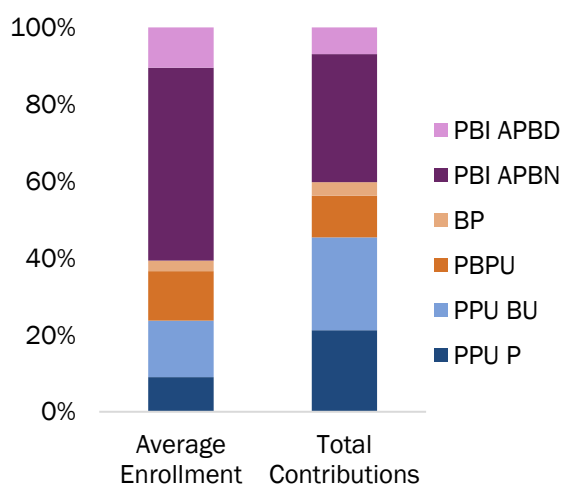
**In the analysis we also considered the impact of potential increases to contribution rates.** Specifically, two types of increases were considered:

- Increase in the PBI contribution rate from IDR 23,000 to IDR 25,500 (equal to the current PBPU Class III rate)
- Increase in the PBPU Class III contribution rate from IDR 25,500 to IDR 30,000 (in line with the increase in PerPres 19/2016, reversed under the subsequent PerPres 28/2016)

**While not currently proposed, increases in contribution rates would have significant impacts on JKN's contribution income and the scheme's overall financial position.** Collectively, these increases could yield up to IDR 4 trillion in additional revenue each year, an amount that would significantly reduce annual deficits. However, any increase for subsidized populations requires careful consideration as it may result in greater implicit subsidies for contributory segments, if the subsidized poor are not able to access and utilize sufficient healthcare. At the same time, increases to the Class III rate may further slow enrollment of the informal sector.

**The variation in contribution rates between segments result in contributions not being proportional to share of segments.** In 2017, the subsidized segments (PBI APBN and APBD) represented 61 percent of enrollment but 40 percent of JKN revenue, while the formal sector (PPU P and PPU BU) were 24 percent of enrollment but 45 percent of revenue (Figure 28). This is an encouraging outcome, as wealthier quintiles are contributing more than the poor and near-poor. However, the efficacy of risk pooling can only be assessed when relative utilization of each segment is taken into account. If the poor are underutilizing care relative to their contributions, the government may be implicitly subsidizing care provision to contributory membership segments.

Figure 28. 2017 JKN Enrollment and Contribution Mix



Source: BPJS-K data, 2017

**While access for and utilization by poor and near-poor JKN members increases to equalize with other groups, current contributions on behalf of the PBI implicitly subsidize other scheme segments.**

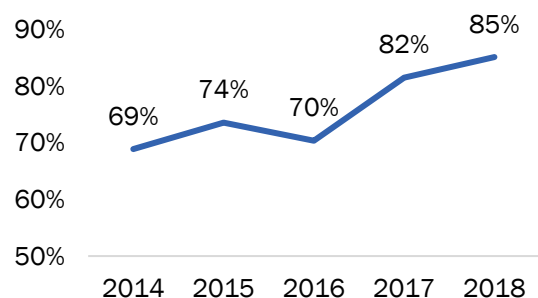
Premium contributions for the PBI segment are fully paid, with both levels of government involved. Despite an improving trend, the claims ratio for the subsidized population remains below 100 percent (Figure 29). Therefore, government funding for the PBI segment does subsidize care for other segments. Any increases to the PBI contribution rate essentially reflect the

government's decision on timing for funding scheme deficits, either through planned,

advance payments on the contribution front, or through one-off annual payments after deficits have been incurred. Some stakeholders consider increases to the PBI rate as an expedient step to improving JKN's financial position, considering that the PBI contribution rate is the lowest in absolute value terms of all segments, and is fully within the government's control to change and finance. This could be contrasted with measures having to enforce higher contribution rates on informal sector members, for example, which may or may not yield a large increase if it causes poor collectability or enrollment growth. There are other factors to consider in potentially increasing the PBI contribution rate. First, any increase would be complicated to reduce in the future, even if JKN's financial health improves, as it may be interpreted as a signal of lower government commitment to JKN's revenues. Second, as PBI members are currently limited to Class III inpatient accommodation, it is unlikely contributions would be raised above the rate PBPU members pay to access this level of care. Third, unless the government invests even further in access to care in rural areas and eastern Indonesia, increased contributions for the subsidized poor will do little to address current inequities in service availability.

**The primary areas for policymakers to address regarding JKN revenue are setting the contribution rates appropriately and improving collectability.** The projection model allows a variety of changes in contribution rates and collectability to be considered as policy actions distinct from as well as in tandem with other policy changes on an annual basis so policymakers can assess the potential impact on the scheme's annual financial position. Increasing scheme revenue to match increasing expenditure may reduce the JKN primary deficit but would not be sustainable as a stand-alone solution in the long-term without better management and efficient targeting of expenditures, which we consider in the next chapter. Any decisions to change contribution rates will need to be cognizant of the broad economic climate and labor market in the country, especially considering the effect on enrollment and collectability in the formal and informal sectors. A change to the contribution rate for PBI is more specifically in the domain of government control, and primarily subject to the availability of fiscal space. Yet this is also a decision that would be difficult to roll back and has evoked equity concerns. As utilization in the PBI segment improves, the ongoing critique that PBI-based revenues cross-subsidize care for other, better-off segments will diminish in significance. Overall, BPJS-K's administrative capacity to implement and enforce updated guidelines on contribution management should also be considered as part of comprehensive reforms.

Figure 29. PBI Claims Ratio



Source: Ministry of Finance data, 2018

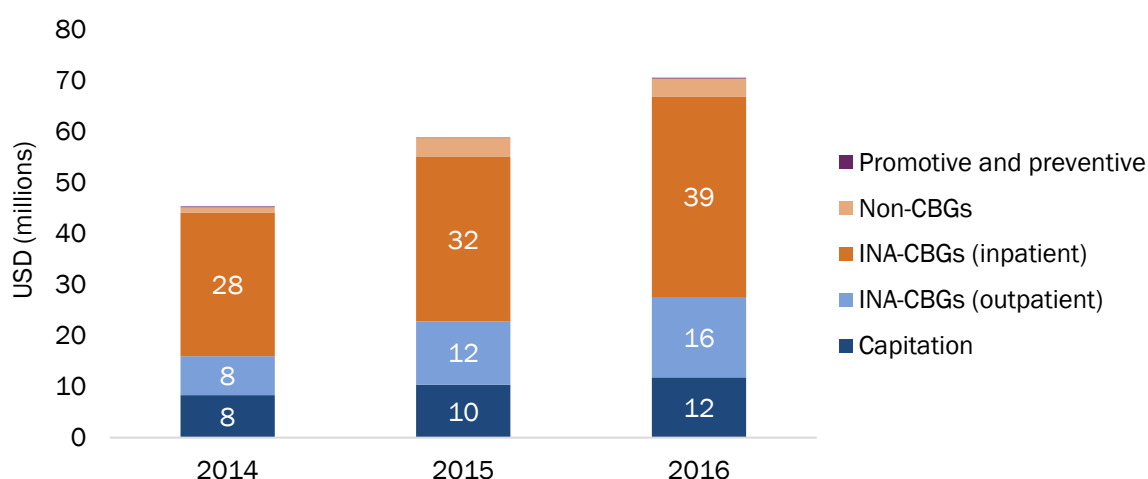
## 6. Healthcare Expenditure: Trends to Date and Future Projections

**Projecting future scheme expenditures based on enrollment and service utilization is critical for assessing JKN's potential for long-term financial sustainability, particularly given the growing annual deficits.** JKN's expenditures have been steadily increasing at a rate faster than contributions, reflected in its large and annually growing deficits. Previous projections of JKN expenditures have been based on historical trends, but there is need for more nuanced projections that better consider how underlying changes in reimbursement policies and the mix of enrolled segments, as well as related changes in epidemiology and utilization, will drive future expenditures. These factors are included in the projection model we apply and adjusted to model their potential impact on JKN expenditures and the scheme's overall financial position. This chapter describes recent expenditure trends, discusses methods for projecting future outlays, and presents results.

### 6.1 Trends to Date

**Our analysis focused on the two largest components of JKN expenditures: INA-CBG payments for hospital-based care and capitation payments for primary healthcare services.** All categories of expenditures have been increasing annually since the implementation of JKN in 2014, but INA-CBGs and capitation payments have consistently accounted for approximately 95 percent of expenditures collectively. Between 2014 and 2016, nearly 80 percent of annual expenditures were for CBGs; capitation payments have accounted for approximately 17 percent (Figure 30).

Figure 30. Total JKN Healthcare Expenditure

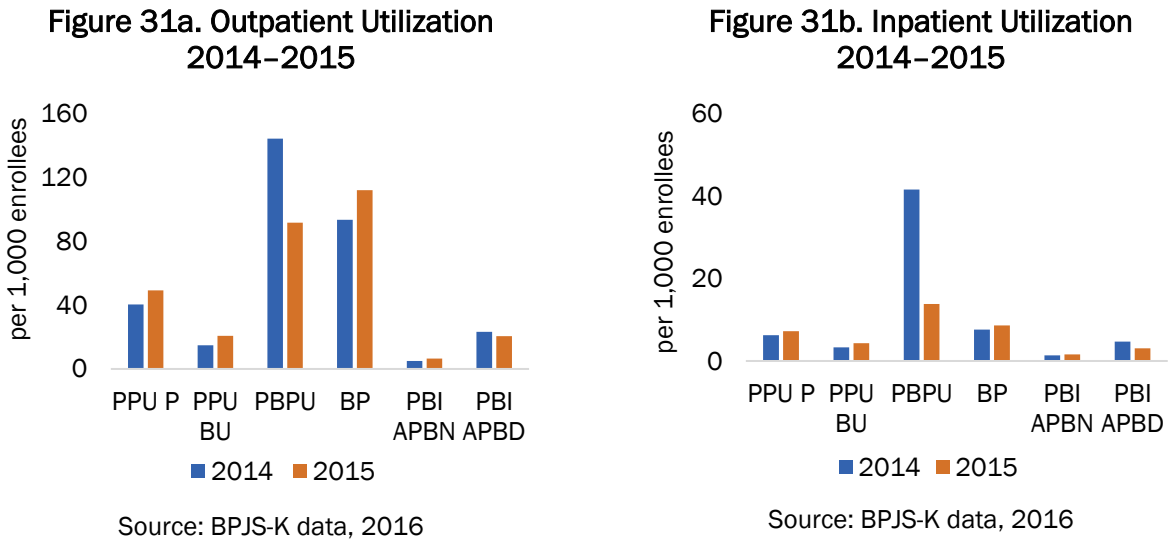


Source: BPJS-K expenditure data, 2016

### Healthcare Utilization Rates

**Following the implementation of JKN, PBPU members had higher utilization rates relative to other segments.** This indicated that early voluntary enrollees were likely sicker than average and more acutely in need of healthcare, a phenomenon usually termed adverse selection. Outpatient utilization among PBPU was approximately 145 visits per 1,000 enrollees in 2014, compared to 93 and 40 visits among the next two highest segments BP and PPU P (Figure 31a). Similar trends were seen in inpatient utilization rates

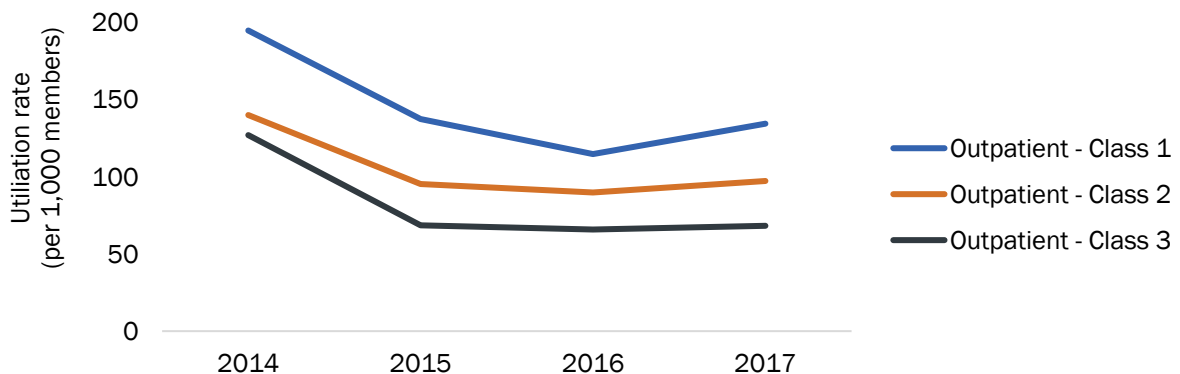
(Figure 31b). The inpatient PBPB utilization rate was nearly seven times that of formal public sector (PPU P) workers.



**In the two years after implementation, there was some convergence in utilization rates as PBPB rates fell and most other segments’ utilization rates increased.** Between 2014 and 2015, outpatient and inpatient PBPB utilization rates fell by 36.5 percent and 66.7 percent, respectively. As scheme coverage increased and more, healthier PBPB members enrolled, the impacts of adverse selection declined. At the same time, use of health services among most other segments increased. Inpatient utilization rates increased less drastically, but all segments (with the exception of PBI APBD, members subsidized by the district government, who reduced their inpatient and outpatient use) saw an increase in use of inpatient services one year after JKN implementation.

**The downward trend in inpatient care utilization for PBPB members continued over 2016 and 2017, though outpatient utilization increased in 2017 due to changes in Ministry of Health clinical guidelines for maternity care.** The result was an increase in outpatient claims (Figure 32). These changes impacted all membership segments; however, given the other segments already had increasing utilization trends, these guideline changes were less impactful on the accuracy of projections. Policy changes can be difficult to predict, and their impact on financial projections can be substantial. Understanding drivers and trends in utilization of services is critical to projecting JKN’s future overall financial sustainability, but also for understanding whether the scheme is sufficiently advancing equity in access to health services across different membership segments.

**Figure 32. Informal Sector (PBPB) Utilization Rate for Hospital Outpatient Care**



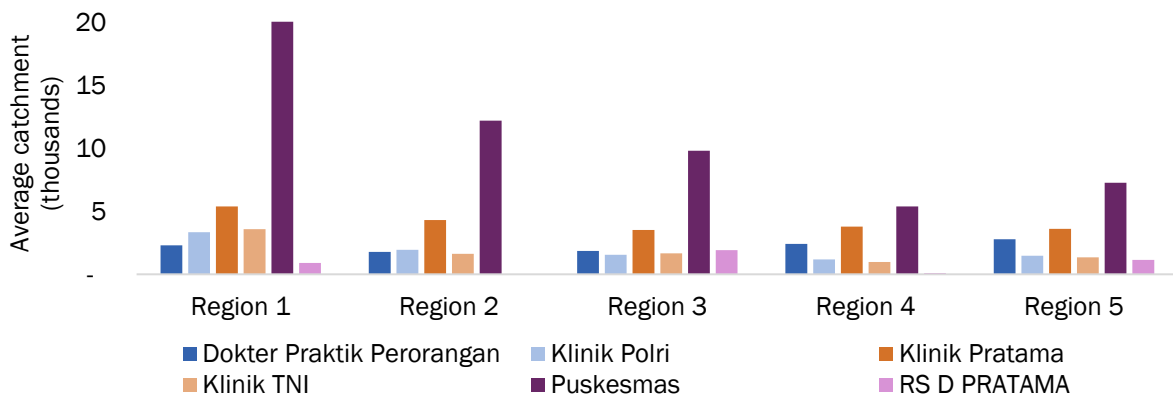


### Expenditure at the Primary Healthcare Level

**Total capitation expenditures are driven by total capitated membership and the types of contracted facilities they are assigned to, since capitation rates vary by type.** Capitation rates are set per member per month based on the type of facility where the patient is capitated. Using capitation to fund primary healthcare facilities has the benefit of having more predictable costs to cover first-level care, especially as enrollment scales up. However, as per the global experience, it may incentivize providers to underprovide care or over-refer patients, which can drive an increase in more expensive hospital level care.

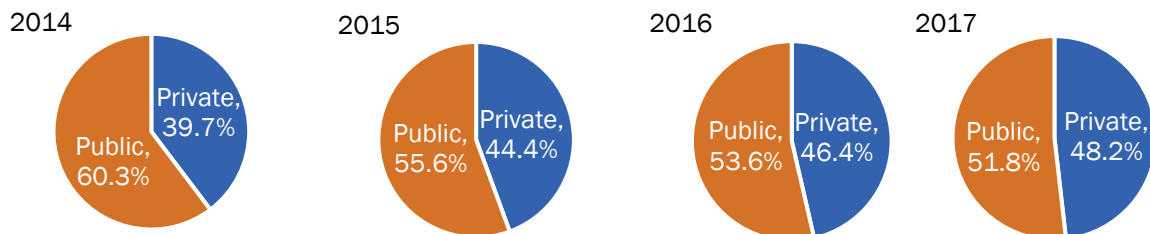
**Roughly half of capitated facilities are puskesmas, and the majority of JKN members are assigned to them.** Over 130 million JKN members, almost 81 percent of all members, are assigned to puskesmas, public primary health facilities. As a result, puskesmas also have the highest average catchment populations of all facility types, across all regions (Figure 33). In Java, (Region 1), puskesmas have an average catchment population of 20,062, at least four times more than other facilities in the region. As a result, puskesmas also have the highest member-to-doctor ratios. On Java, there are over 6,300 capitated patients per puskesmas doctor. In all other types of facilities on Java, the average ratio is less than 2,200 patients per doctor. The doctor-patient ratio is highest in puskesmas located on Java, but similar patterns exist across all regions.

Figure 33. Catchment Population per Facility



**Private facilities are growing as a proportion of primary facilities under JKN.** BPJS-K is contracting with an increasing number of private providers (Dokter Praktik Perorangan and Klinik Pratama) to provide primary healthcare services. Approximately 40 percent of capitated facilities were private in 2014. By 2017, over 48 percent of contracted primary care facilities were private (Figure 34).

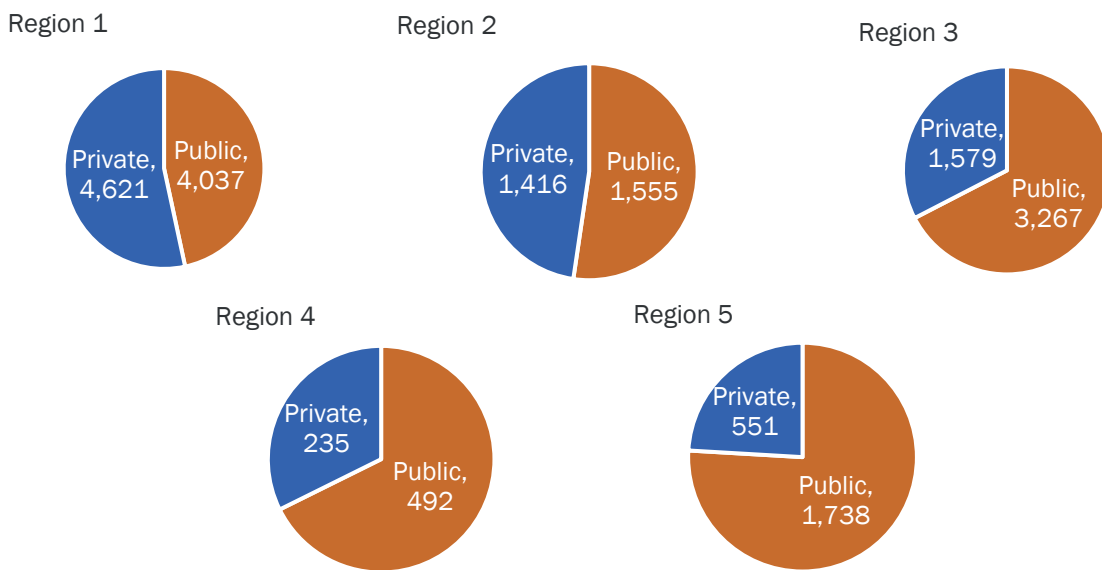
Figure 34. JKN Contracted Facility Mix, 2014–2017



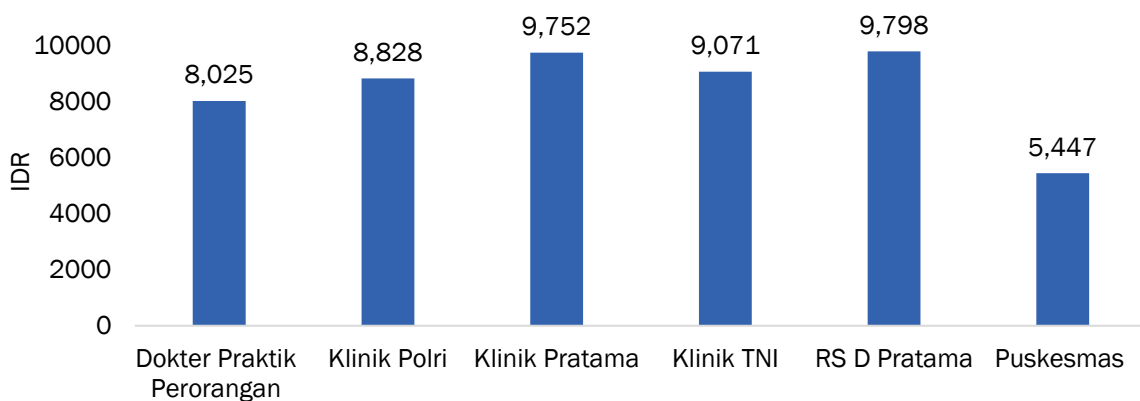
**Contracting with more private clinics can help absorb growing enrollment, but it would have financial implications for the scheme, as private providers receive higher capitation rates.** Contracting more private clinics may help reduce high patient-

doctor ratios at puskesmas to be more in line with BPJS-K's recommended maximum of 5,000 patients per doctor. Private clinics are most heavily concentrated in Region 1, while outer regions are more reliant on public facilities (Figure 35). Contracting more private facilities in outer regions in particular may improve access to potentially higher quality health services in these areas. Private clinics, however, come with higher costs. JKN pays most puskesmas between IDR 3,000 and IDR 6,000 per member per month. General practitioners and private clinics, on the other hand are paid between IDR 8,000 and IDR 10,000. The average puskesmas capitation rate is about 56 percent the rate for private Klinik Pratama (Figure 36). Puskesmas receive general budget support from the government, and therefore their cost to JKN is lower. The greater the proportion of private primary care facilities engaged, the more JKN has to bear the cost of healthcare service delivery through capitation payments.

**Figure 35. Mix of Public Private Facilities by JKN Region**



**Figure 36. Average Capitation Rate per Member per Month by Provider Type, 2016**

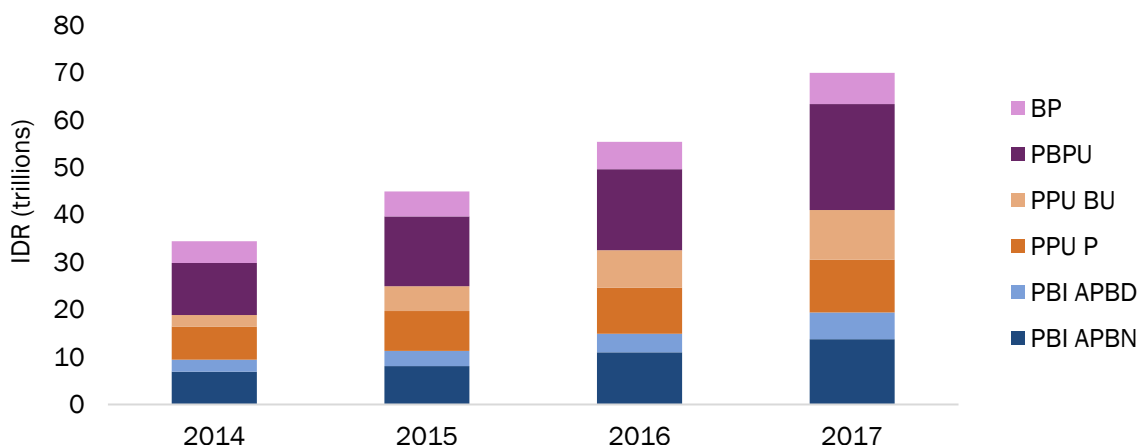


### Hospital-Based or INA-CBG Expenditure

**Inpatient and outpatient INA-CBG-based expenditure has outpaced growth in JKN's revenue from contributions and government transfers.** The increase is being driven by hospital care utilization rates increasing year on year. As noted, utilization rates have increased each year across enrollment segments (with the exception of PBPU and PBI APBD, which decreased in 2015 and 2016, but rose again in 2017). Despite a 7 percent increase in enrollment in the nationally subsidized population (PBI APBN) from 2014 to

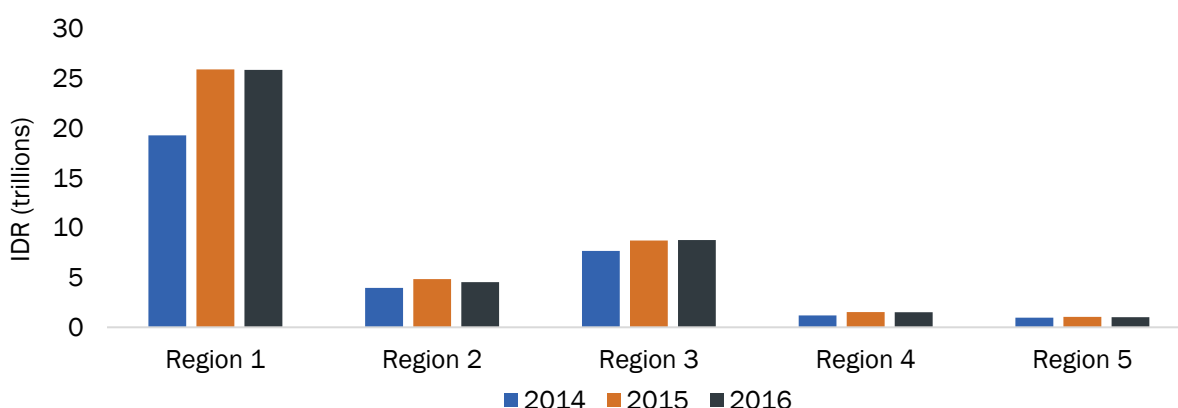
2017, INA-CBG expenditure for the segment has doubled (Figure 37). Nevertheless, it still lags far behind other segments. In particular, the formal private sector tripled enrollment in three years, but INA-CBG increased 4.3 times. Similarly, the informal sector increased 68 percent in the same timeframe, while their INA-CBG expenditure doubled. More efforts to drive utilization by the nationally subsidized population are needed if the government wants to reduce the implicit subsidy for other segments going forward.

Figure 37. Total INA-CBG Claims by Segment



**There is significant inequity in INA-CBG claims expenditure across regions, which increased from 2014 to 2016.** Region 1, covering Java, accounted for 58 percent of expenditure in 2014, while Region 5 accounted for only 3 percent. This gap has continued to widen. Claims expenditure in Region 5 increased by 3.4 percent between 2014 and 2016; Region 1 expenditure, however, increased by 34 percent over the same period (Figure 38). Hospitals in Java account for a much greater share of JKN reimbursements than hospitals elsewhere in the country. Previous HP+/TNP2K analyses found that much of the observed geographic variation in expenditures was driven by differences in utilization of health services, particularly outpatient hospital care. In 2016, for example, outpatient utilization in Java was 346 visits per 1,000 enrollees. In Eastern Indonesia, it was less than one-third of that (109 per 1,000 enrollees) (HP+ and TNP2K, 2018).

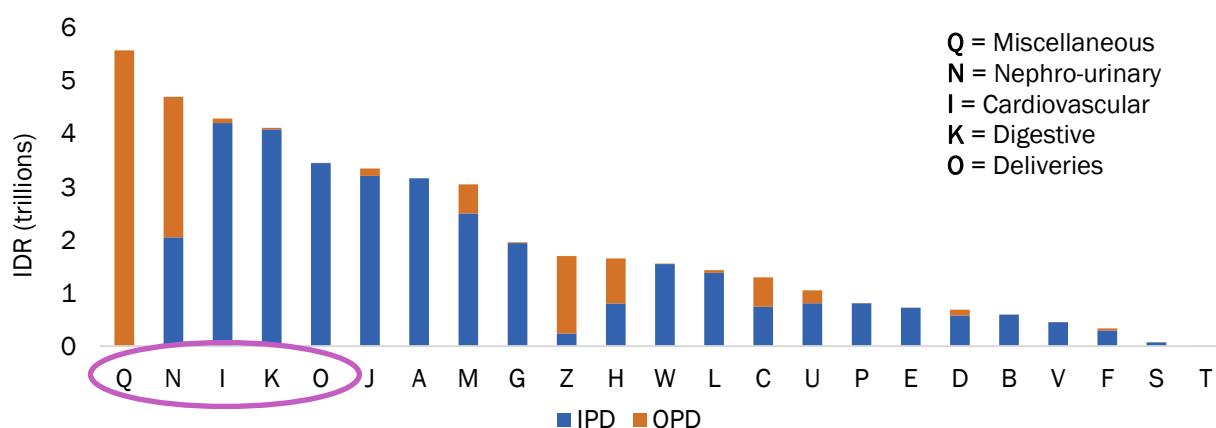
Figure 38. INA-CBG Expenditure by Region



**A small number of inpatient and outpatient case-mix main groups (CMGs) account for a large portion of INA-CBG expenditures.** Nearly half of expenditures come from the five highest groups (Figure 39). Forty-five percent of outpatient costs fall under miscellaneous, under which most services (83 percent) are for chronic diseases not specified under other groups. Nephro-urinary services, cardiovascular services, digestive

care, and obstetric deliveries account for the majority of inpatient expenditures, 41 percent collectively. These high total expenditure groups should be priorities for cost-containment efforts, such as strengthened referral practices to reduce hospital care. The government has also considered prioritizing these types of services (among other high-cost services) for cost-sharing arrangements with provincial and local governments; however, this proposal is not fully developed.

**Figure 39. Total INA-CBG Cost by Major CMGs, Inpatient (IPD), and Outpatient (OPD) (2016)**



## 6.2 Healthcare Expenditure Projections

**Projecting the two largest scheme expenditures—capitation and INA-CBG payments—is critical for both resource planning and policy decisions.** INA-CBG payments have dominated JKN expenditures since implementation and look likely to continue to do so in the future. Capitation has been slowly growing as a share of expenditure. Therefore, the projection model and subsequent analysis focused key potential drivers of these two expenditure categories, including both population and policy changes. For other expenditure categories, the model includes annual growth rates. They currently account for only about 5 percent of expenditure, and changes to these expenditures are unlikely to drive any significant changes in schemes costs, so this analysis assumes linear growth based on historical trends. The model does, however, allow for flexibility in these growth rates if they become more relevant to future policy discussions. Table 12 summarizes possible model variations, and this chapter presents projected capitation and INA-CBG expenditures in detail. These potential variations upon the revised enrollment projections were identified in Chapter 4.

**Table 12. Possible Variations Used When Conducting the Future Projection**

Expenditure Category	% of Total Expenditure (2016)	Possible Model Variations
INA-CBGs	78%	<ul style="list-style-type: none"> <li>Epidemiological transitions</li> <li>Changes in utilization rates (PBPU only)</li> <li>Introduction of co-payment policies</li> <li>Change in claim submission deadlines</li> </ul>
Capitation	16.8%	<ul style="list-style-type: none"> <li>Reallocation of patients across facilities</li> <li>Revised capitation rates</li> <li>Change in provider mix (public vs. private)</li> </ul>

Expenditure Category	% of Total Expenditure (2016)	Possible Model Variations
Preventive and promotive health	0.2%	<ul style="list-style-type: none"> <li>Varying growth (analysis assumes linear growth, but model allows for modification)</li> </ul>
Non-CBGs	5%	<ul style="list-style-type: none"> <li>Varying growth (analysis assumes linear growth, but model allows for modification)</li> </ul>

## Capitation Expenditure Projections

**The projection model allows for three adjustments, based on ongoing policy discussions and current trends, that influence capitation expenditures.** The model considers the potential financial impacts of 1) policies reallocating patients more equitably across facilities, 2) potential revisions to capitation rates, and 3) adjustments to reflect the evolving public-private mix of capitated facilities. The impact on expenditures of continued nationwide implementation performance-based capitation (*kapitasi berbasis komitmen* or KBK, literally commitment-based capitation), implemented at increasingly large scale since 2016, was not modeled. One of the four indicators is the rate of non-specialist referrals from FKTP facilities (puskesmas, klinik pratama, basic D-level hospital outpatient clinics, etc.). Performance-based capitation could make for complex effects on expenditure, both through the channel of reduced hospital-based care expenditures due to reduced referral, as well as the changes in the capitation payments.<sup>8</sup>

**Reallocation of capitated members more equitably across facilities within a district is likely to increase capitation expenditures.** As discussed, over 80 percent of patients are currently capitated at puskesmas, even though puskesmas account for approximately half of contracted facilities, resulting in much higher patient-to-doctor ratios relative to other primary care facilities. This allocation mix can result in greater wait times, increased referrals, and shorter consultations at puskesmas. Enrolling more providers can help alleviate some of this overcrowding, but as enrollment continues to scale up, there is also a strong rationale to more equitably allocate patients across facilities. While not yet implemented at the time of this analysis, the regulation BPJS-K 17/2017 (Equity of Number of Enrollees at the Primary Health Facilities) articulates a process and prerequisites for redistribution of enrollees. Redistribution is to be conducted in stages prioritized by doctor-patient ratios. Any redistribution efforts should be secondary to patient preferences, subject to minimum registration periods with any given provider.

**The model allows for an adjustment factor to be applied to patient distribution across facilities between 0 percent (current allocation) and 100 percent (perfect equity).** While a perfectly equitable allocation is unrealistic, incremental progress is possible. As a result, in consultation with GOI stakeholders, we applied a 50 percent adjustment rate in our analysis, reflecting a moderate shift toward a more equitable allocation of patients. With this moderate reallocation of members, the weighted average capitation rate increases as members shift from puskesmas toward private facilities at higher capitation rates (Figure 40 and Table 13). The increase in average rates depends on the level of inequity in allocation that exists at present. Region 1 has the highest current inequity, and this results in a 9 percent increase in weighted average capitation rates with a reallocation, while Region 4 it would result in only a 3 percent increase.

<sup>8</sup> Initially, under KBK capitation, payments could be reduced by 25 percent if targets under the four indicators were not met. This deduction was later modified to be more modest, ranging from 2.5 to 10 percent. Most FKTP facilities (puskesmas, *klinik pratama*, basic D-level hospital outpatient clinics, etc.) meet their targets and receive the full capitation amount. Therefore, the ability to incentivize improved performance and impact costs may require a redesign of the KBK program. KBK is currently not implemented in remote or low population density districts.

Figure 40. Impact of Reallocation of Capitated Members per Doctor

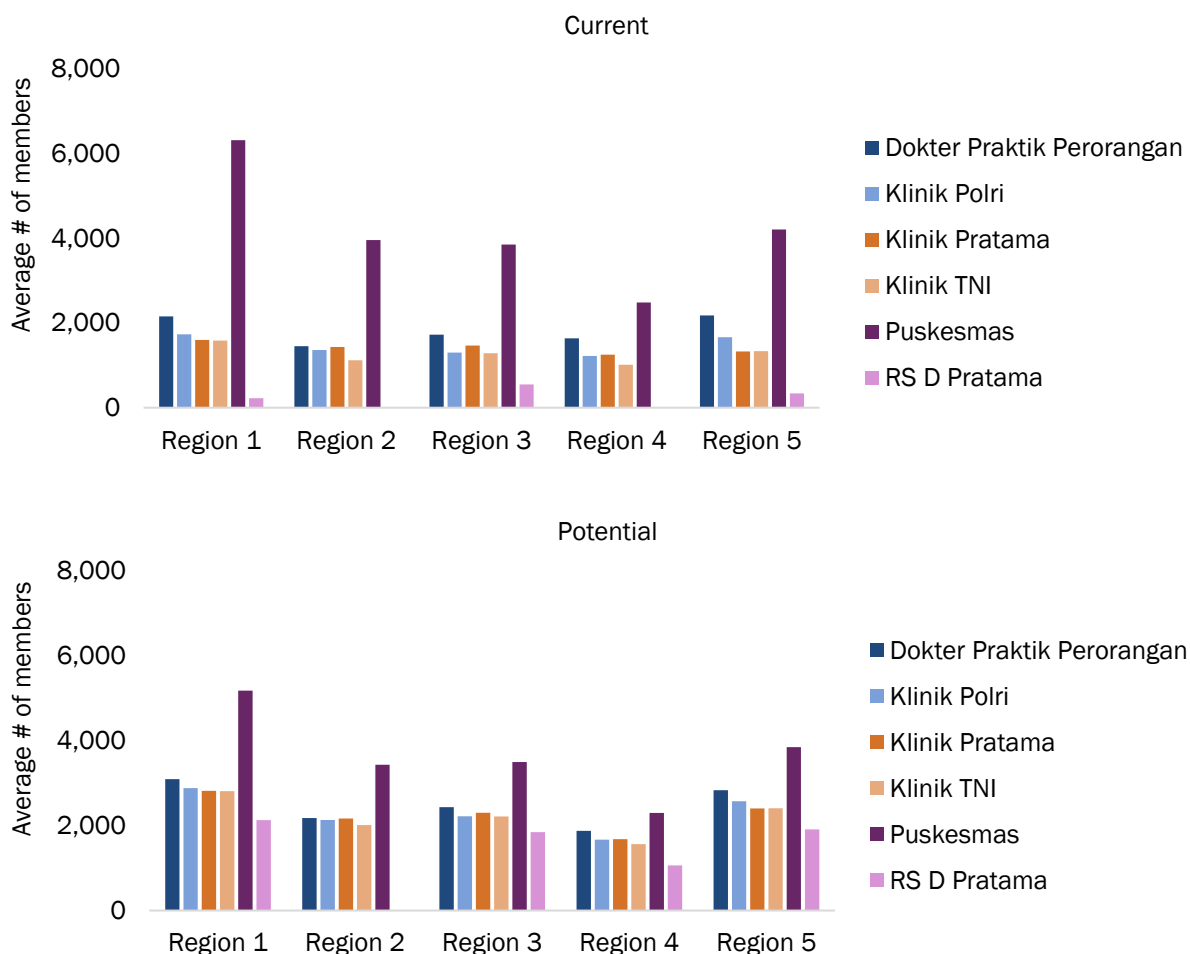


Table 13. Weighted Average Capitation per Member per Month (IDR)

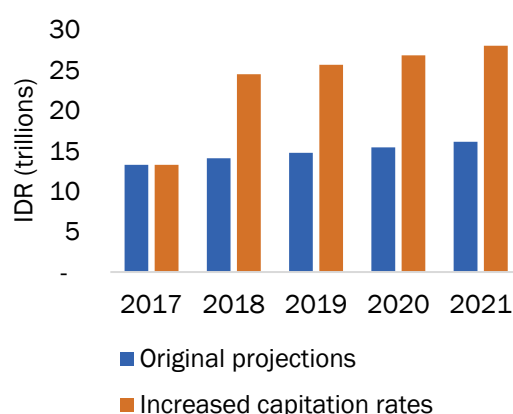
	Region 1	Region 2	Region 3	Region 4	Region 5
Current	6,345	6,260	5,917	6,000	5,344
Potential	6,899	6,636	6,205	6,191	5,647

**Through stakeholder consultation, we developed scenarios for blanket increase in capitation rates, though the policy case for this is subject to caveats.** According to a recent review, current capitation rates are considered too low for the required facility-level competency and service standards (Agustina et al., 2019). Over the course of JKN implementation, BPJS-K has increased the number of services clinics are responsible for. For example, BPJS-K expanded the provision of non-communicable disease-related prescriptions, extended facility hours, and increased utilization. However, providers do not feel this has been accompanied by sufficient increases in capitation rates (*Jakarta Post*, 2019). Over three years, there was no increase in capitation rates, while underlying medical inflation was almost 15 percent (Thabrany, Unpublished). It is possible that insufficient capitation rates can contribute to over-referral to more expensive, higher level facilities. Increased rates could improve the financial position of some providers, and hence could potentially incentivize better standards of care, including reducing over-referral and improving patient retention, other things being equal (Figure 41). JKN’s capitation rules suggest that capitation revenue at the public facility level should be used for health staff incentives (60 percent) and for operational costs (40 percent). Private facilities do not face any mandated uses of capitation funds. Any impact from increases in the base rates on

provider behavior overall would have to be evaluated empirically. However, any increases are guaranteed to significantly increase scheme expenditures overall, particularly as JKN contracts more private providers. Evidence collected in 2015–16 suggested that puskesmas in some districts struggled to fully spend their capitation income or have this income released from appropriate accounts, with the unspent value ranging from 17 to 36 percent of the total during the period (Eichler et al., 2018). Therefore, any increase in rates may not fully incentivize improvements in quality of care, though it may improve availability of staff and services (Eichler et al., 2018).

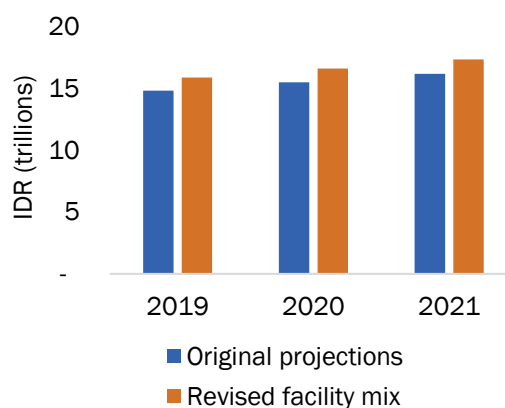
**We modeled the expenditure impact of increased capitation rates.** Holding other potential adjustments constant, revised capitation rates would increase capitation expenditure by 74 percent each year (Figure 41). It is important to note these revised rates were not based on facility costs or performance levels, but through a general consensus among stakeholders that rates needed to rise across the board, and an assessment of appropriate rate differentials between public and private providers based on INA-CBG rate differentials. The projection model allows for these rates to be adjusted as a manual input should more accurate cost or performance data become available to revise capitation rates in future.

Figure 41. Capitation Expenditure Projections with Increased Capitation Rates



**Capitation expenditure is also likely to continue increasing due to growth in the number of private providers contracting with BPJS-K.** As discussed, the proportion of capitated private facilities is increasing and is likely to continue as public providers have almost all been contracted at this point of JKN implementation, and new public facilities are being built at a slower rate than private providers are contracting with BPJS-K. Given the higher rates paid to private facilities, this increases the overall average capitation rate per facility, independently of increased enrollment or rate revisions. We take this trend into account to develop more accurate expenditure projections. Based on the historic growth rates of capitated private facilities relative to facilities overall, we projected the future growth rate of private facilities as a proportion of overall facility mix and the resultant impact on expenditure (Figure 42).

Figure 42. Expenditure Projections with Increasing Proportion of Private Providers



### Hospital-based Care or INA-CBG Expenditure Projections

**The projection model was used to simulate future INA-CBG expenditure based on utilization trends and current reimbursement rates by region, hospital class, class of care, and severity for inpatient services.** Total INA-CBG expenditures will increase mechanically as enrollment grows. Whether this increase is more complex will be driven by changes in utilization rates for hospital-based care among the enrolled segments. Thus, the projection model accounts for two key potential drivers of utilization patterns and considers how these drivers might change: changing utilization rates for the PBPU segment, and epidemiological transitions that would impact all segments. Further, we consider two

policies with financial implications for scheme expenditures: 1) the introduction of co-payments as a means of cost-sharing with JKN members to reduce net expenditure for the scheme; and 2) imposing time limits on provider claims unsubmitted for reimbursement, so the scheme can better predict and manage expenditures. These were calculated in the form of “loss triangles” as used in actuarial calculations. Other options for controlling hospital-based healthcare expenditures, such as global budgets, have been piloted, but were not modeled.

**We first calculated INA-CBG expenditures by region and segment population, based on current utilization patterns.** The analysis used BPJS-K INA-CBG caseload data from 2014 to 2016, which included the number of cases by geographic areas, which we re-aggregated by JKN regions. Using this data, we calculated the number of inpatient and outpatient cases per 1,000 members by JKN region. Sequentially, we applied the tariff rates by region for each CBG code classification. Multiplied by the associated tariffs and then the projected enrollment, these steps produced the total monthly cost per CBG group in each region. The available caseload data did not allow for disaggregation by population segment for the projections. Instead, relative utilization rates of each segment were taken from a separate dataset from 2015 on aggregate segment utilization, which was the most recent year such data was available to the modelers. These relative segment weights in hospital care utilization (outpatient separate from inpatient) were applied as weights in future years. These segment weights can be adjusted to reflect changing or predicted trends in relative segment-wise utilization to fit different hypothesized patterns of healthcare use. Accurate expenditure projections would consider the healthcare utilization characteristics of each population segment and how they are likely to evolve, as well as the expected characteristics of the remaining unenrolled population.

**The modeled future expenditure accounts for declining utilization rates among PBPU members, continuing trends seen over 2015–2016, as adverse selection within the segment subsides.** As in Figures 30a and 30b, in the first year after JKN implementation, PBPU members used health services at a far greater rate than the other sectors, but this difference declined in the second year. The projection model made an underlying assumption that as enrollment expands in the informal sector, healthier members are likely to join, and this trend will continue. In fact, 2017 was an aberration, with an increase in informal sector utilization rates due to a revision to policy guidelines by the Ministry of Health (Figure 31). However, consultations with GOI stakeholders reaffirmed that the remaining unenrolled informal sector are likely to be healthier. This is also evidenced by the vast number of inactive members (i.e., those who joined but did not keep up on their monthly contributions). As of late 2018, 14 million informal sector members, approximately 46 percent of all who had ever signed up to JKN, were classified as inactive. These members stopped paying monthly contributions because they were not accessing services. If they were to seek care, they would be required to get up-to-date on all outstanding payments, and potentially pay a 2.5 percent surcharge for any inpatient care sought. Therefore, we can assume half of current PBPU members are healthy and not seeking care, and this is expected to extend to the remaining unenrolled informal sector. Based on such expectations, the projections adjust the PBPU segment utilization incrementally each year to reach that of the formal private sector by 2021, a segment with more modest utilization rates and that has been maintaining a claims ratio below 100 percent each year from 2014 to 2018.

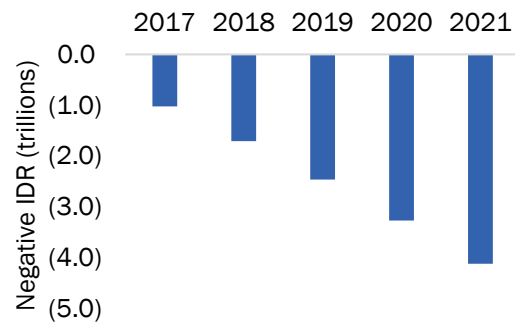
**If PBPU utilization rates stabilize as projected, we project slower growth in INA-CBG expenditures than other projections based on current utilization rates.** Expenditures will still continue to increase as enrollment scales up, but not to the same level as they would if informal sector members continued using services at the same rate. The projected difference in INA-CBG expenditures if PBPU utilization gradually declines equates to IDR 4 trillion in savings in 2021 (Figure 43). This is significant when considering 2018 is expected to yield a deficit of almost IDR 19 trillion for the informal



sector, up from IDR 16.6 trillion in 2017. Efforts to reduce the number of inactive members and increase enrollment of the remaining informal sector workers should be two of the biggest priorities for BPJS-K in its efforts to put the scheme on a path toward financial sustainability.

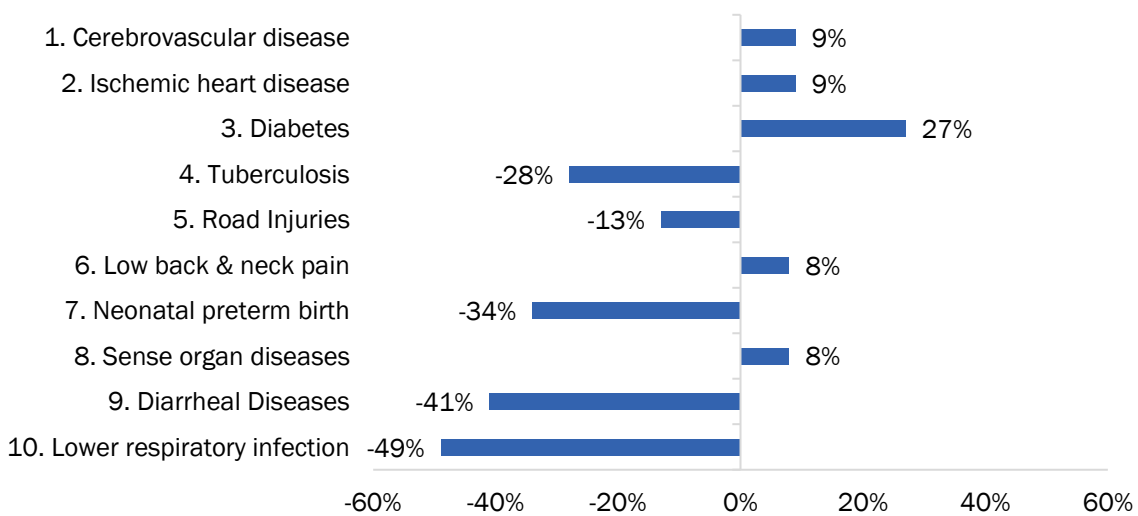
**The projection model allows for changes to the underlying epidemiology to be reflected in utilization of services within specific disease areas, classified by CMGs.** The disease burden in Indonesia is evolving. Non-communicable diseases, including chronic conditions, have gone through a significant growth period during the past decade and may plateau (Figure 44). Such shifting epidemiology will change utilization rates for specific disease areas. Of course, further worsening of dietary and sedentary habits, as well as other contributory factors, may continue to worsen the non-communicable disease trend, which may drive opposite conclusions. A detailed epidemiological forecasting exercise was not within the scope of this report; the projections in Figure 45 present an optimistic future out of a spectrum of possibilities. As developed, the projection model allowed for changes in utilization rates by CMGs and groupings of CBGs by disease area (e.g., cardiovascular, nephro-urinary, digestive, deliveries). It is critical to consider how underlying trends in epidemiology will impact the scheme's expenditures and its overall financial sustainability. As a baseline, the model uses annualized historical rates of change in causes of death and disability by disease, based on the Global Burden of Disease statistics for Indonesia between 2005 and 2015. The model applies these annual changes in burden of disease to applicable CMGs as proportionate change in the utilization rate (e.g., a 5 percent change in burden of disease corresponds to 5 percent decrease in utilization). Based on consultation with GOI stakeholders, these reductions were applied every two years, and can be adjusted in the projection model should more accurate or up-to-date data become available. The combination of these changes to different CMG utilization rates resulted in a projected lower increase in expenditures than based on current utilization rates (Figure 45).

**Figure 43. Projected Reduction in Scheme Expenditures from Normalized PBPU Utilization**



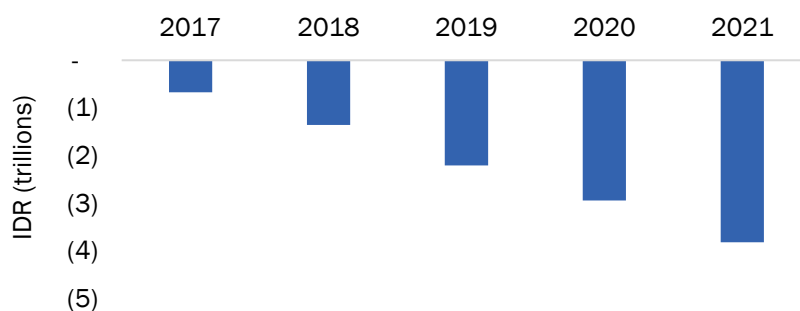
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**Figure 44. Leading Causes of Death and Disability in Indonesia Combined, % Change (2005–2015)**



Source: Institute for Health Metrics and Evaluation, n.d.

Figure 45. Projected Reduction in Cost with Adjusted Epidemiology

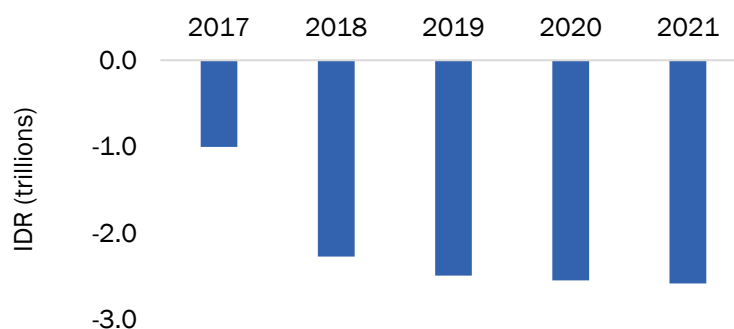


**Based on PerPres 82/2018, we considered the potential for co-payment for some hospital-based services, with the disease areas based on options being debated by stakeholders.** Some countries have implemented co-payments (co-pays) as a means of cost sharing with patients in national or social health insurance schemes. In Vietnam, for example, the social health insurance scheme has a 20 percent co-pay for members, subsidized or waived for poor and vulnerable groups. Co-payment policies could reduce the financial burden of growing INA-CBG expenditures on the JKN scheme, but they need to be carefully considered in terms of the population and diagnoses to which they would apply. User fees at the point of care can have significant negative impact on utilization of necessary healthcare services. They can also open the door for an expansion of informal payments to providers, so appropriate controls and sensitization around newly introduced co-pay policies are critical. There is significant information asymmetry between providers and patients, and the introduction of co-pays can present an avenue for that asymmetry to be exploited by providers to the detriment of patients' health and financial wellbeing. PerPres 82/2018 puts forth that cost-sharing arrangements will be developed but does not specify how or when. Discussions with government stakeholders suggests that professional medical associations will be consulted to determine a short list of diagnoses for which co-pays should apply, and the specific circumstances in which they can be applied and how. In none of the scenarios will co-pays apply to the subsidized poor JKN members. Co-pays are unlikely to be implemented before the second half of 2019.

**We modeled co-pays applied as a percentage of tariff rates by key CMG groups, and tailored to specific member segments.** This modeled the financial impact of applying co-pays to certain diagnoses and members on scheme expenditures. However, due to insufficient data from the Indonesian experience, the model does not include the potential reduction in utilization from co-pays, as a function of a deterrence effect on health seeking behavior. This would be a critical issue for any future policy discussion on introducing what amount to user fees, from financial, public health, and health equity perspectives.

**We applied a hypothetical 20 percent co-payment requirement for public and private formal sector and informal sector members across CMGs incurring the most costs to the scheme.** Co-pays were only applied to contributory segments, given that subsidized poor members would be exempted from such a policy. In terms of services, we applied co-pays to CMG groups with the highest per case costs for both inpatient and outpatient services, targeting cost sharing to the services that are most expensive to the scheme. The projected reduction in scheme expenditures from this co-pay arrangement exceed IDR 2.5 trillion in 2021 (Figure 46). This does not represent a reduction in the cost of providing services, but rather costs that are shared by patients and not borne by BPJS-K in implementing the JKN scheme.

**Figure 46. Projected Reduction in Net JKN Expenditures with the Implementation of Co-pay Arrangements**



**Amending cutoff policies for claims incurred but not submitted may reduce BPJS-K payable amounts in the short term, with a larger impact on provider processes.** The model builds from historical data on when claims are incurred compared to when they are submitted to BPJS-K for payment. The parameters adjustable in the model allows the user to impose cut-off points at six months, 12 months, or never (i.e., unsubmitted claims do not expire). Based on current aging of JKN claims pending, cutting off unsubmitted claims as non-reimbursable at six months after the services are delivered would have a measurable impact on annual incurred expenditure for the scheme of 4 percent reduction per year. A twelve-month cut-off would have a more modest impact (1 percent). Hospital care providers, especially in the public sector where delayed submission is more rife, could react to such policies by increasing the timeliness of their submissions, in which case actual impact on expenditures would be lower. This policy change was not considered further for modeling in the final scenarios of expenditure, as should not be intended as a cost saving measure. It may still be considered as a means of improving administrative processes and financial management.

**Since the implementation of PerPres 82/2018, delays in BPJS-K processing claims and reimbursing providers now results in the scheme owing interest to providers.** BPJS-K has 25 days to pay claims submitted by providers each month: 10 days to issue a notification of completeness and 15 days to verify and pay the claim. If that deadline is not met, BPJS-K is instructed to pay 1 percent interest per month of delay. Currently, the amount carried over from prior years is estimated at approximately IDR 9 trillion. This amount sits in the books of several providers as receivables outstanding. Providers often seek alternative temporary financing to manage their cash flow while these receivables remain outstanding, and there is evidence that it has resulted in some providers curtailing service availability for JKN members and/or reducing quality (Britton et al., 2018). Since 1 percent of IDR 9 trillion is IDR 90 billion per month, this interest payment is significant for the scheme at a time when cost containment is a major priority. As stewards of the scheme, BPJS-K and GOI should ensure the veracity of claims. However, BPJS-K should prioritize clearing a significant portion of outstanding claims while undertaking checks and audits. The results of checks can always be used to adjust the final or next payments made to facilities. Timely payment would mean the majority of monthly interest charges would be avoided.

**Considering the trends in utilization and possible policy options, we worked with key stakeholders to identify selected adjustments to consider for projections of future INA-CBG expenditures.** The assumptions for the scenarios were developed through consultative workshops with a range of key government stakeholders across agencies involved in the implementation and regulation of JKN. Two potential policy adjustments—a cutoff for unsubmitted claims and the introduction of co-payments—were ultimately excluded from further modeling. Cutoffs for unsubmitted claims were not considered a policy priority, and the introduction of co-pays are potentially inequitable

unless they can be targeted—which would be complex—and were judged to have limited sociopolitical viability. The impact of monthly interest due to outstanding reimbursements to providers was not considered, as the policy was introduced after the completion of the analysis.

**The revised INA-CBG projections include a gradual normalization of PBP utilization and optimistic epidemiological shifts.** The results of the collective impact of these two changes on inpatient INA-CBG expenditures are shown in Figures 47 and 48. They are compared to previous projected expenditures as applied to the revised enrollment projections from Chapter 4. A baseline scenario with utilization patterns unchanged was analyzed for comparison to help isolate the impact of changes to utilization on expenditure given the same enrollment scale-up path. Regardless of scenario, inpatient expenditures are projected to continue increasing through 2021. The revised projections, however, increase at a slower rate than those based on unchanged utilization patterns. Further, under the revised projections, expenditure per capita actually decreases slightly each year from approximately IDR 237,000 in 2017 to IDR 233,000 in 2021 (Figure 48). These analyses suggest the continuing importance of understanding the healthcare utilization characteristics of each membership segment and the future evolution of these patterns, as well as the expected health-seeking characteristics of the remaining unenrolled population.

**The revised total outpatient INA-CBG expenditures show a similar trend to inpatient expenditures, increasing annually, but more slowly than projections based on current utilization (Figure 49).** Per member, outpatient INA-CBG expenditures are projected to remain fairly constant, fluctuating within IDR 1,000 range over the five years, between IDR 89,600 and IDR 90,700 (Figure 50).

**Outpatient INA-CBG expenditures were previously around a third of inpatient expenditures, and model projections suggest this pattern will**

Figure 47. Total INA-CBG Inpatient Expenditure (Baseline vs. Revised)

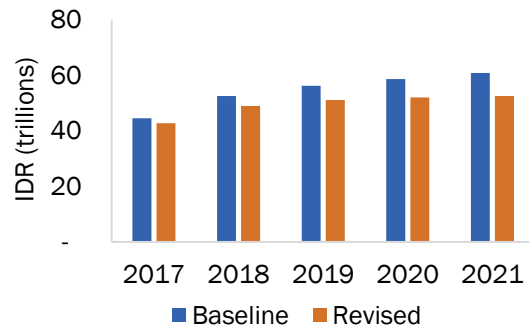


Figure 48. Inpatient INA-CBG Expenditure per Member (Baseline vs. Revised)

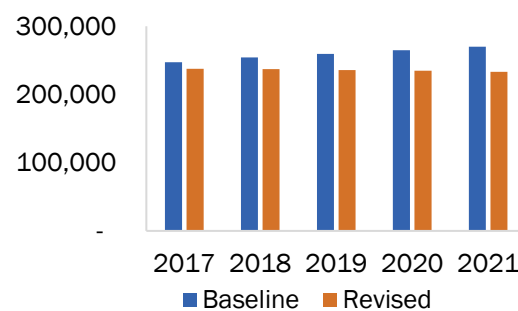


Figure 49. Total Outpatient INA-CBG Expenditure (Baseline vs. Revised)

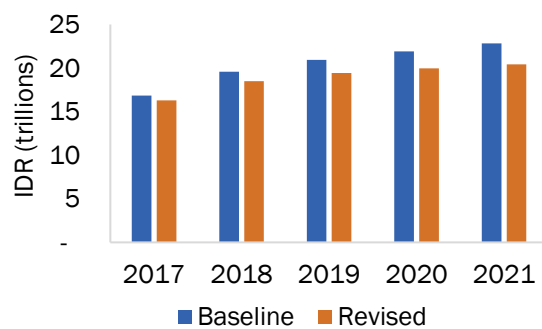
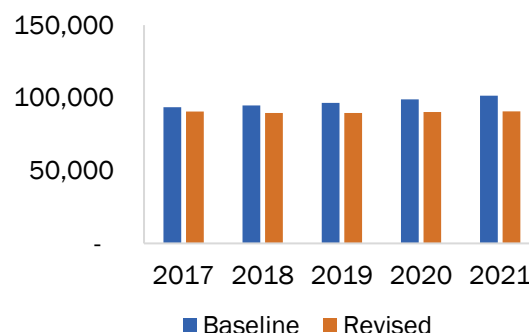


Figure 50. Outpatient INA-CBG Expenditure per Member (Baseline vs. Revised)



**continue, though they may be reduced further.** Inpatient expenditures should remain a focus for cost-containment efforts, given their significance to the overall expenditures of the scheme. However, outpatient expenditure for hospital-based care may still present some efficiency opportunities. In particular, the opportunity to change guidelines to shift appropriate non-specialist outpatient services to be seen at the primary-care level could yield significant savings, assuming that these services can be covered under capitation or under fee-for-service (non-kapitasi). This is in addition to the regular process of down-referral for inappropriately referred cases. The potential of such a guideline shift was not modeled, though it has been recently explored for vertical programs such as HIV under JKN (Prabhakaran et al., 2018).

**JKN expenditure management is a critical policy imperative. Future expenditures will be impacted by changes outside policy control as well as by changes that decision-makers can make to shape provider and patient behavior.**

Our modeled results suggest that normalization of utilization patterns at high population coverage to reverse initial adverse selection in the informal voluntary membership sector as well as possible epidemiological shifts may ease pressure for rapid future expenditure increases. To confirm whether these changes materialize will require more evidence. Increase in expenditure with coverage is expected, and the growing scale of services rendered could lead to avoidable spending, such as for interest owed to providers for unreimbursed claims as backlog as BPJS-K grows. Reducing this form of expenditure is within the control of stakeholders. BPJS-K and other stewards of JKN do have certain other policy levers to control spending, beyond politically difficult changes to benefits or more plausibly continuing to remove low-cost-effectiveness medical devices and treatments. These shifts through health technology assessments are necessary, though they may not be sufficient to impact overall spending. The impact of policies to control hospital-based healthcare spending, such as global budgets, are being evaluated, but more information is needed on widespread application in Indonesia (Ross and Dutta, 2018).

**Alongside changes to contribution policy considered in the previous chapter, some structural changes around JKN expenditure will be required to achieve sustainability.** Primary in these is to reduce expenditure for hospital-based care while maintaining patient choice and improving outcomes. Principles of value-based, specialized healthcare used in more developed insurance systems may be applicable. In the immediate term, strengthened primary care and reduced need for referral, which will require several shifts to clinical guidelines and better designed incentives for first-level providers, are necessary in this context. Further scale-up of performance-based capitation, where one of the measures is the referral rate, are useful, though should be carefully monitored against adverse consequence for the quality of care. Policy changes will require effective communication and governance so that they can be appropriately planned and implemented, and to avoid unintended consequences on provider and patient behavior. BPJS-K has made several efforts to implement policies to contain costs and manage revenue. However, as will be seen in the next chapter, JKN's financial position will continue to be subject to fluctuation without major changes.

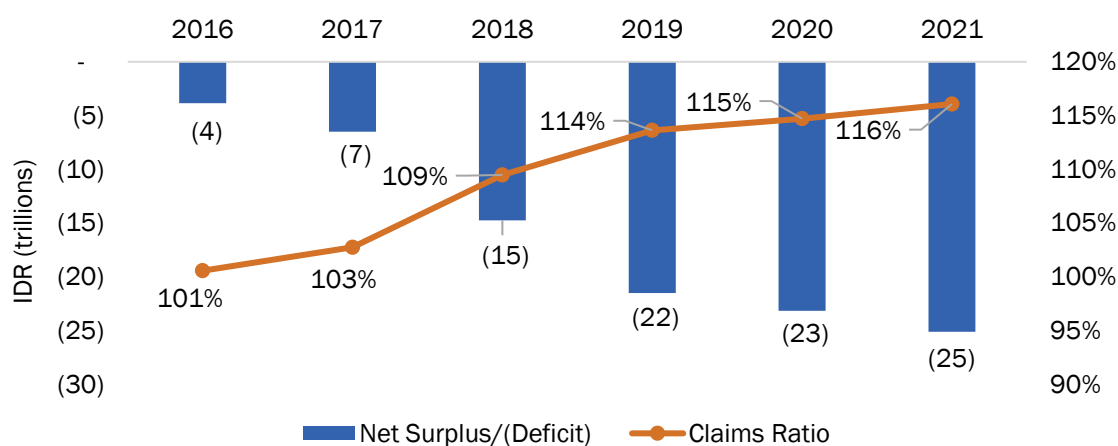
## 7. Overall Financial Position of JKN

**Projections of JKN's overall financial position bring together revenue (contributions) and expenditure projections from prior chapters while considering underlying changes in enrollment.** The scenarios presented below were developed based on consultations with GOI stakeholders and include selected policy options from previous chapters, with an intention to drive toward an overall revised scenario for JKN's financial position. This revised scenario was compared against the baseline case, as an indication of how the scheme's financial position could shift if certain trends continued and key policy decisions discussed in previous chapters were taken together.

### 7.1 JKN Financial Performance to Date

Since its launch in 2014, JKN has incurred increasing deficits each year. This is due to healthcare expenditure rising faster than contribution income, and aggregate claims ratios consistently being above 100 percent and rising (Figure 51). The baseline projection for the scheme, which was based on several BPJS-K analyses from early 2018, predicted that the deficit would continue to rise as enrollment scales up. This led to a tradeoff presented in previous policy discussions: JKN administrators have to choose between financial sustainability or scaling up to universal coverage. This argument assumes that continued scale-up will inevitably increase the deficit. However, we provide modeled evidence that this may not necessarily occur. As discussed in Chapters 4–6, a critical factor will be the characteristics of the remaining unenrolled, in terms of which segment they will belong to, as this will influence their contribution rates, as well as their health-seeking behavior in terms of utilization rates.

Figure 51. Baseline JKN Financial Projection



Source: BPJS-K data, 2018

**Adverse selection in the informal voluntarily contributing sector has declined over time.** In 2017 these members were on average still incurring more healthcare expenditure than their contributions. In 2014 outpatient utilization rates for the informal sector were roughly eight times that of the scheme as a whole, and inpatient utilization rates were roughly 12 times greater than the scheme average. These utilization rates have fallen precipitously in the following years as healthier members of the informal sector have been enrolled. Scrutiny of average consumption rates by elected class of care reveals some interesting details. While those who have elected Class III of care have the highest claims ratios, Class I contributes the most to the deficit, given they incur significantly more healthcare expenses than the other two classes (Table 14). Collectability rates are also a

factor in the deficit for this segment, as this is the only segment where contributions require active effort on the part of the member to pay into the scheme on a monthly basis. Given the informal sector will be a significant source of enrollment over the coming years, it is important to ensure collectability is improved, and that class premium rates are adjusted to reflect expected future utilization of health services.

**Table 14. Informal Voluntarily Contributing Segment (PBPU) as Part of JKN: Financial Summary in 2017**

Type of Hospital Ward Accommodation	Contribution Rate (IDR)	Average Healthcare Expenditure (IDR)	Claims Ratio (%)	Average Deficit per Member per Month
Class I	80,000	145,048	181	65,048
Class II	51,000	96,424	189	45,424
Class III	25,500	68,608	269	43,108

Source: BPJS-K data, 2018

**Continuing from the previous chapter, the final projection scenario for JKN's overall financial position assumes that the informal voluntary segment (PBPU) utilization rates will normalize to be comparable with the formal private sector.**

This assumption proves critical to the stabilization of the deficit in future years and would be defensible from deeper analysis of the characteristics of the most recent PBPU enrollees into the scheme. As discussed in chapter 6, the growing number of inactive members in the PBPU segment indicate that there are many who have stopped paying their monthly contributions and are not accessing healthcare services. These are the healthy members that could support the scheme to improve its risk pool. Within the formal private sector there is a vast variation in utilization and claims between those workers who belong to large enterprises down to those working in microenterprises.

**Many stakeholders have focused on increasing contributions paid by the government for the subsidized poor as a potential mechanism to address the growing deficit.** This has been on the basis that contribution rates for the subsidized segment are the lowest of all membership segments, and significantly lower than the average formal sector per member contribution rates. It may seem expedient policy for the national government and local governments, which both subsidize members, to increase the rate than to sensitize employers, employees, and others to adopt increases with the payroll contributions for other segments. Based on stakeholder input, increasing contribution rates for the formal private sector could be met with resistance from employers and employees since in 2017, Class 1 and Class 2 PPU BU workers had claims ratios of 39 and 76 percent respectively—suggesting they consume less than they contribute on average. Increasing premiums for the informal voluntarily contributing segment will likely face some reactions with increasing inactive members, given the issues already faced with collectability and the requirement for implementing related mechanisms.

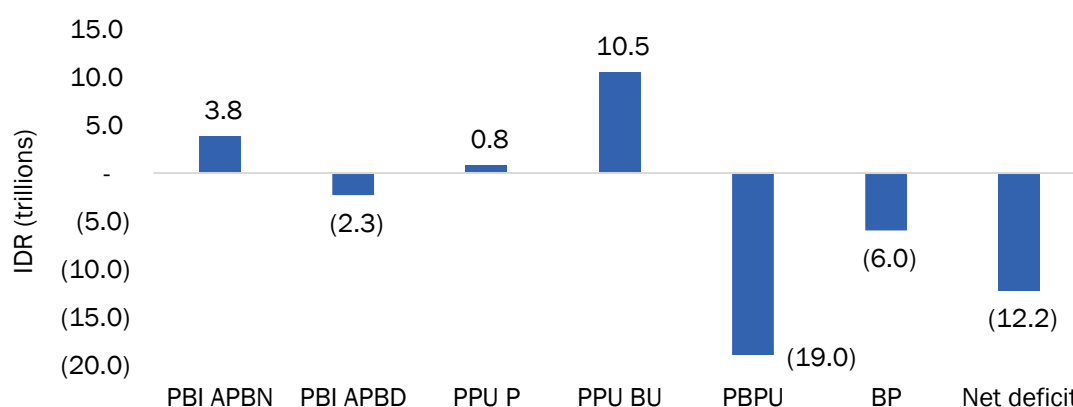
**Despite calls to increase contribution rates for the nationally subsidized poor (i.e., PBI APBN), their current utilization patterns result in net surplus for the segment.** In 2017, the average cost incurred per PBI APBN member per month was IDR 19,193, resulting in a claims ratio of 83 percent. This indicates that government contributions for this segment are in fact subsidizing care for other segments. Given the utilization patterns borne by lower socioeconomic groups who are self-paying into the scheme, (PBPU Class III members and PPU BU members from micro-enterprises) it is likely that this average PBI APBN utilization rate is not reflective of the actual or necessary utilization rate per person. This could be due to a lack of awareness of the benefits conferred through subsidized coverage, lack of access to care due to PBI members' location, or insufficient awareness of healthcare needs due to low health literacy.

**The formal public sector (PPU P) consumes more healthcare than the formal private sector (PPU BU) and has lower contribution rates per member per month.** In 2017, public and private sector members with Class I ward access had claims ratios of 132 percent and 39 percent respectively. For public and private sector members with Class II ward access, claims ratios were 115 percent and 76 percent respectively. This suggests, while the formal private sector members are paying higher contribution rates on average, they are consuming less healthcare than their public sector counterparts. There may be several possible hypotheses for this significant difference between segments. First, it is possible the private sector also provides for their employees alternative supplementary or complementary insurance and/or access to care through their own infirmary or via agreement with specific providers. This may reduce the need for accessing care through JKN. This would be particularly relevant at larger employers with more resources at their disposal. The public sector on the other hand does not provide any insurance coverage or benefits outside JKN. Second, civil servants pay 2 percent of their salaries toward JKN, while private sector employees only pay 1 percent. Therefore, civil servants may see more value in the healthcare and have more reason to rely on it. Third, JKN is also more likely to be historically better socialized among civil servants particularly when the shift was made from Askes, so their knowledge of benefits continues to be superior. Fourth, most civil servants are located in national or provincial capitals, where care is most accessible. As access and quality improves through JKN, there may be an increase in care sought through the scheme from the private sector. This may erode the trend of cross-subsidy to other segments which are overconsuming care relative to their contributions to the scheme.

## 7.2 Projected Sustainability of JKN

**JKN did not reach universal coverage by January 2019, and the annual deficit in 2018 was expected to reach IDR 12.2 trillion**—which is in addition to IDR 4.4 trillion carried over from prior years. By membership segment, the deficit is being driven by the informal sector (PBPU), pensioners and others who do not work (BP), and the locally subsidized population who have been transferred in from Jamkesda or newly enrolled in 2018 (PBI APBD) (Figure 52). Scaling up informal sector enrollment, and more specifically addressing inactive members, will be critical to reducing future deficits, as it will shore up contribution revenue for the scheme. While the decision to substantially scale up PBI APBD in 2018 has contributed slightly to the deficit, it is easily overcome by surpluses in other segments. Similarly, the deficits incurred by pensioners is expected and understandable from a policy perspective, as most are in older age groups and expected to consume greater amounts of healthcare at this stage, and benefit from cross-subsidization from the younger working population. The attention of the government has to be focused on addressing the IDR 19 trillion deficit incurred by the informal sector.

Figure 52. Deficit by Membership Segment in 2018



Source: BPJS-K data, 2018

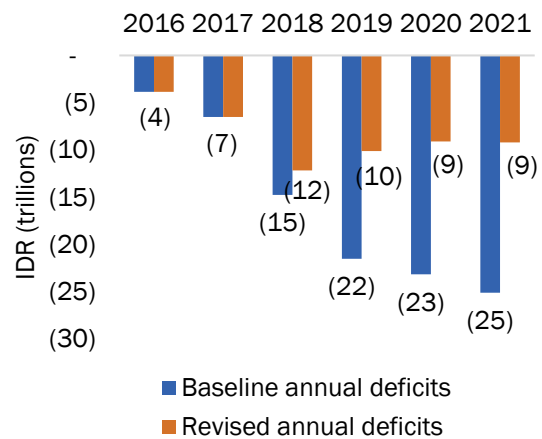


**BPJS-K has implemented several measures in an attempt to increase contribution collectability and limit adverse selection.** The implementation of a 14-day waiting period for benefits to become active was significant, but GOI stakeholders are now calling for 2–3 month waiting periods and 45-day exclusions, along with fines after a contributions lapse, to more aggressively handle the number of inactive members, which continued to increase in 2018. Prior to implementation of waiting periods, members enrolled into JKN only when they were sick, thus increasing utilization rates for the scheme overall. Waiting periods may encourage people to continue membership while healthy against the probability of getting sick, resulting in improved enrollment and collectability. BPJS-K measures to reduce costs include fraud prevention initiatives. Improved validation and error checks in claims systems can reduce erroneous claims submissions, while clinical and claims auditing procedures can verify whether claims are appropriate and adhere to clinical guidelines. Revisions to payment mechanisms and rates to be more strategic, and the implementation of performance measures systems, including referral monitoring, are also being implemented, though not yet at scale.

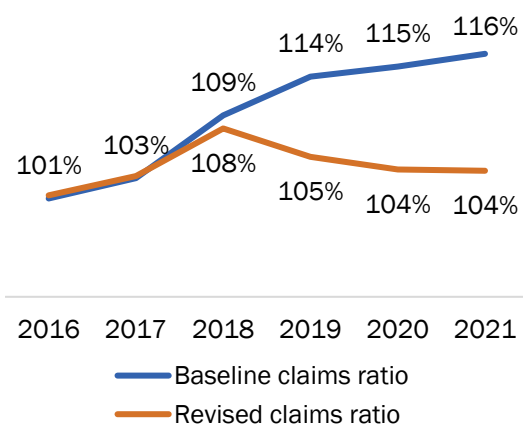
**Average contribution rates per member dropped, as growth in 2018 was driven by increases in subsidized members.** BPJS-K has made concerted efforts since 2014 to transfer Jamkesda participants to the JKN scheme as poor and near-poor members subsidized by local government budgets (PBI APBD). Transfers of these members were thought to be mostly complete by late 2017, though in 2018 15 million PBI APBD members were added to the JKN scheme. This channel accounted for 50 percent of enrollment growth in the 14 months ending February 2019. From contributions collection standpoint, this raises the overall collectability rate, however, from an average contribution per member standpoint. Further expanding the number of subsidized members lowers the overall average contribution rate. Therefore, in 2017 and 2018, contributions have not grown at the same pace as enrollment. Local government engagement with constituents may be on the rise due to the 2019 election, but the scale-up in PBI APBD enrollment is putting further pressure on the scheme due to their excessive 134 percent claims ratio in 2018.

**Overall, ameliorating options mean deficits do not need to continue to rise as JKN continues enrollment growth toward universal insurance coverage.** The projection model suggests the deficit can be reduced in 2019 and beyond (Figures 53a and 53b). The potential for impact of various adjustments across revenue and expenditure is indicative to policymakers that after the 2019 elections, significant efforts could be made to put JKN on a sustainable track, beyond expected implementation of PerPres No. 82/2018 provisions in 2019, through yet-to-be designed reforms. As efforts continue to scale up enrollment and improve collectability, we project the deficit will diminish slightly as healthier people enter

**Figure 53a. Baseline and Revised Annual Deficits**



**Figure 53b. Baseline and Revised Claims Ratios**



the scheme and average contributions per member improve. In terms of expenditures, the model accounts for increases in capitation expenditure as part of revisions that should improve primary healthcare access and quality. At the same time, it accounts for reductions in INA-CBG expenditure due to shifts in epidemiology and normalization of informal sector utilization as the remaining unenrolled join the scheme, and inactive members reengage.

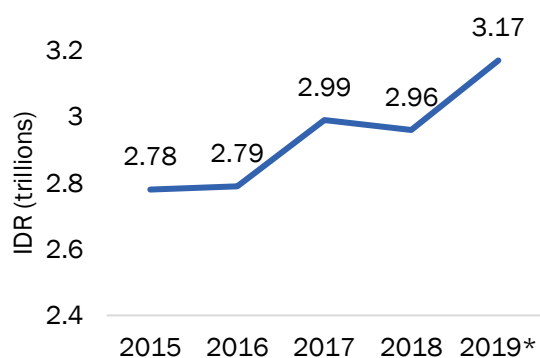
**Given limited options to increase contribution rates, the government is designing new methods to pool funds from local governments to support JKN.**

Considering its per capita health expenditure vs. other countries in the ASEAN region, Indonesia can explore other options to increase funding to health. National government revenues (considering the public debt burden is currently low—less than 30 percent of GDP) may allow for absorption of the JKN deficit through extraordinary fiscal allocations for some time. However, there may come a ceiling to such absorption as fiscal space in the national budget is limited by a plateau in tax revenue generation at a relatively low share of GDP. Indeed, at this time any additional fiscal capacity is recommended to support gradual fiscal adjustment (increasing revenues, reducing expenditures and building buffers) (Lundback, 2018). Therefore options to generate additional health-related funding, for example, by increasing base rates for tobacco taxation and allocating those funds to JKN has been recommended to support the scheme (Thabrany and Laborahima, 2016). However, there is also an opportunity to leverage the increasing levels of fiscal transfers to local levels in Indonesia. Previously, a concept of provincial or other geographically determined pools for JKN was advanced (Trisnantoro, 2017). Hypothetically, districts may be given the responsibility to manage JKN surpluses and deficits at their geographic level or do more, for example, through intra-district transfers calibrated to the relative wealth of the districts in question. Districts with lower fiscal space can continue to have their deficits financed by the national government, while richer districts can finance their own, or if no deficits exist, they may contribute to neighboring districts to support deficits should they be incurred there. While such a system does not yet exist, other options for a local role have been put forward.

**A new government regulation requires use of tobacco taxes at the local level for JKN, yet it has limited implications for the deficit.**

Two percent of total tobacco excise taxes are annually allocated to the tobacco excise profit sharing fund (*dana bagi hasil cukai hasil tembakau* or DBH CHT)—with the trend shown in Figure 54. This fund primarily distributes across excise-producing provinces and districts (70 percent), with a smaller share for other districts (30 percent). Since 2017, 50 percent of the DBH CHT is available for use by local governments for their own priorities, which in the past has included health. PerPres No. 82/2018 now requires that 75 percent of such locally determined-use of DBH CHT be for JKN. In 2019, total DBH CHT was estimated at IDR 3.17 trillion, of which the share for JKN would be 37.5 percent if such rules were followed maximally ( $0.75 \times 0.5 = 0.375$ ) or about IDR 1.19 trillion (CNN Indonesia, 2018). The DBH-CHT sharing is weighted toward tobacco excise tax-generating areas, estimated to cover 340 districts within 29 provinces, primarily in Java, with East Java receiving nearly 50 percent of the total sharing amount. Therefore, its impact overall and more specifically for health in Indonesia continues to be weighted toward Java. In the absence of applicability toward any pooling of JKN expenditure and hence deficits at the local level, early indications are that districts have interpreted the PerPres 82/2018 rule broadly, and continue to allocate to various

**Figure 54. Tobacco Excise Tax Profit Sharing (DBH CHT) with Local Governments**



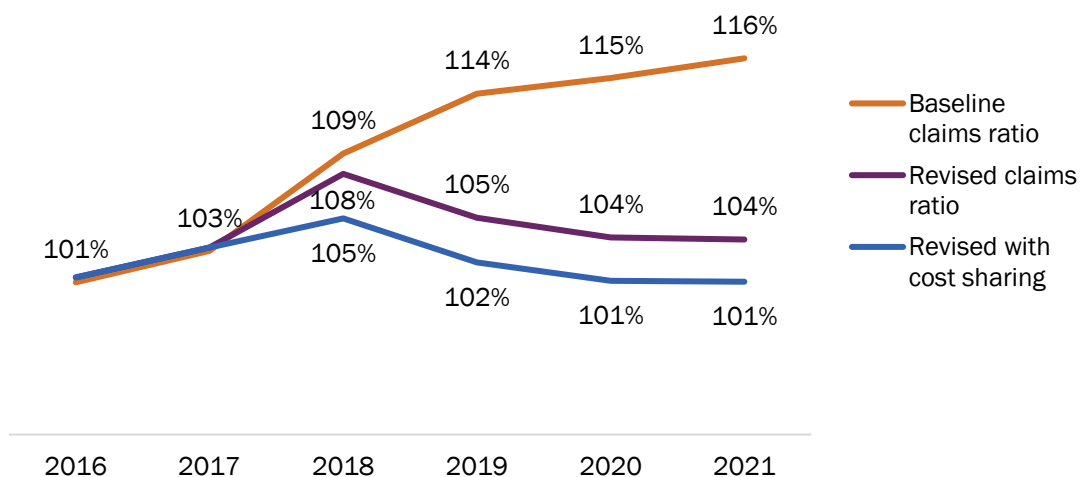
Source: Bisnis.com (accessed April 29, 2019)

infrastructure, promotive, or service delivery health needs aligned with the aims of expanding JKN-financed care.

**Cost-sharing arrangements with patients, as in other countries, is a sensitive policy shift for JKN, and would need to be carefully designed and implemented.**

PerPres 82/2018 also puts forward cost sharing arrangements to be applied to specific disease conditions. This is a major update to the scheme design. The selection of disease conditions is not confirmed. Early discussions suggest they may be those with highest caseload and/or total cost to scheme. The projection model allows the implementation of cost-sharing arrangements specifically for contributory membership segments and to certain specified CMGs. This allows the impact of different cost-sharing arrangements to be carefully considered before rollout. The model suggests that some types of cost-sharing arrangements could reduce claims ratios to 101 percent by 2020 (Figure 55). However, careful analysis of the impact on utilization and health equity is required to ensure the policy does not reduce access to care for those in need.

**Figure 55. Potential Impact of JKN Cost Sharing Arrangements**



**Though JKN deficits seem likely to persist in the near term, the goal should still be to eliminate deficits in the long term, whether through shifts to contribution and revenue, or through changes to expenditure.** The long-term goal should be to bring the claims ratio below 100 percent, such that the scheme can generate an operating surplus. This would allow the buildup of reserves for any unexpected spikes in expenditure due to outbreaks, natural disasters, or other such catastrophic events. This would allow the scheme to be sustainable and allow BPJS-K to invest in providing better access to quality healthcare for all members.

**Future analytical efforts to understand the drivers of the current and future financial position of the scheme should consider two types of drivers.** First, changes in the underlying operating environment that are outside of BPJS-K's control, can significantly impact the JKN scheme. These include formalization of the economy, level of tax effort, wage growth, and epidemiological transitions. Second, policy revisions and implementation arrangements can be affected by BPJS-K or other government bodies. These include revisions to the benefits package, efforts to improve the claims monitoring process, the application of cost sharing arrangements, and revisions to payment mechanisms and rates.

## 8. Considerations for the Future of JKN

**The revised financial projections for JKN demonstrate that deficits could stabilize once the scheme approaches universal coverage.** At this time the GOI continues to affirm its commitment to JKN and to continuing to fund its deficits from the national budget. However, the Ministry of Finance has requested more certainty around the expected amount of the deficit, suggesting there are upper limits to what can and will be paid. The steadily increasing deficits from the first five years of operation have been cause for concern, but as our revised projections demonstrate, when long-term trends are taken into account, along with potential policy changes on both revenue and expenditure fronts, the deficit can be brought within control and stabilized. The potential impact of cost control measures such as global budgets for hospitals or for geographic areas have not been sufficiently modeled nor their impact on quality and volume of care evaluated. The role of local and provincial governments in managing the deficit also needs to be further investigated. With significant and increasing fiscal transfers to the local level, and the new implication of PerPres 82/2018 regarding tobacco taxes for JKN, the main opportunity for locally determined risk pooling should be explored. In the long term, more structural shifts may involve JKN-surplus districts subsidizing JKN-deficit districts from their fiscal transfer revenue sources. There may also be mixed models of deficit sharing, i.e., richer districts paying for part or all of their incurred deficits so that central funds can be targeted to poor districts.

**Policymakers should be interested in the financial sustainability of JKN in the broader context of its impact on society as a whole, including health and economic impacts.** While it is critically important to ensure to the scheme is financially sustainable, it is equally, if not more, important that policymakers continually assess the performance of JKN in terms of achieving its universal health coverage objectives: increasing access to quality healthcare and reducing unnecessary out-of-pocket spending. Access to healthcare should be for the whole population, regardless of socioeconomic status or geography, such that JKN members do not experience financial hardship. This philosophy should underpin policy priorities and tweaks to the scheme as it continues to evolve, and govern how policy options like cost sharing through co-pays are designed and implemented if they are indeed seen as necessary.

**While JKN enrollment growth has been steady, especially with recent increases in total subsidized membership, reaching the remaining unenrolled may become increasingly challenging.** Middle-income countries with significant informal-sector workforces have long faced the challenge of scaling up insurance coverage in the segment through voluntary contribution. Effective enforcement of consistent enrollment and increased collectability is complex, and the administrative burden to BPJS-K of new measures to be taken can become significant. Indonesia has made remarkable progress in enrolling 31 million voluntary members from the informal sector. In addition, the government already subsidizes 50 percent of the entire population (PBI APBN and PBI APBD) suggesting a significant portion of the rest of the informal sector already receives subsidized access to JKN. There may be limited capacity to further expand the subsidized membership or raise the contribution rate for these members. Therefore, other strategies may be needed to increase coverage of the remaining informal sector if universal insurance coverage is to be achieved.

**Strategies to increase contribution revenues not deriving from government budgets require consideration, though not at the expense of efforts to spend more efficiently.** The government, through either central or local budgets, pays the contributions for over 130 million JKN members in early 2019. Any revenue generation focused on contributory segments faces challenges. Premium increases for the formal private sector may be viewed as unfair given the segment's claims ratios indicate they already pay

more than they consume (Figure 51). There is also evidence from several other countries that increases in mandatory payroll deductions can drive increases in informality at the margin, i.e., small firms avoiding or evading formal payments, which would be especially damaging in a country like Indonesia where direct taxation effort focused on the private sector is already low. At the same time, premium increases targeted to the informal voluntarily contributing sector, who currently drive much of the deficit, may have a boomerang effect if it further reduces premium collectability.

**Strengthening strategic purchasing under the JKN scheme should be a key area of focus.** Development partners and donors are supporting the GOI to ensure BPJS-K acts as a more strategic purchaser of healthcare. Before specific technical changes to payment models, this also requires addressing some fundamental governance and structural issues. These include assigning roles appropriately across the Ministry of Health, DJSN, and BPJS-K so that decisions are made to critically assess and decide on what to purchase, where to purchase, how to purchase, and what measures of system-level accountability to implement. Embedded in this approach is the underlying need for the GOI to support the implementation of a true provider-payer split, such that BPJS-K has autonomy in designing purchasing mechanisms and setting reimbursement rates, with an appropriate stewardship role for the Ministry of Health, which currently owns and operates specialized care facilities as well as sets the rates they receive as reimbursement. Better management and enforcement of referral policies, including back-referrals is also required, as BPJS-K currently has limited visibility into, and ability to enforce, its tiered referral policy directive. In addition, more comprehensive credentialing and accreditation of contracted providers will allow BPJS-K to better ensure access to services and enforce quality of care. Lastly, claims verification and clinical auditing procedures need to be integral to the success of strategic purchasing reforms. While BPJS-K has a large administrative setup in this context, improved implementation requires more sophisticated use of available technology, including a mix of automated validation checks, random sampling techniques, and targeted facility inquiries. Routine indicators should be built in and monitored through claims management systems. South Korea's insurance payment certification agency monitors a list of 18 routine indicators (13 quality, four behavior change, and one on clinical documentation), which it uses to assess providers, adjust claims, and impose sanctions where needed. BPJS-K should have a similar level of visibility and confidence in the claims it ultimately pays, and providers should have certainty that they will get paid fully if they follow guidelines and protocols.

**Implementation of value-based healthcare principles would be a desirable future direction for the JKN scheme to jointly promote cost-efficiency and quality.** This would involve defining and tracking indicators to measure provider behavior and performance, and could be modeled on those developed by Centers for Medicare and Medicaid Services (US). Some of the measures may include unnecessary admissions, discharge and readmission, upcoding of INA-CBGs (to higher severity), excessive codes submitted per patient, and average length of stay (compared to established clinical norms per diagnosis). Withholding a portion of provider payments (e.g., 2 percent of total INA-CBG payments), only released after satisfactory performance against specific quality indicators, will reduce the incidence of the specified undesirable behaviors. This approach to cost containment should be fully explored before undertaking more drastic measures such as the introduction of copays that do not address underlying inefficient provider behavior but do shift the burden to patients. Value-based healthcare through the implementation of case managers may also be an effective approach for disease areas of interest, for example, tuberculosis. A case manager could receive a fixed sum for managing the entire patient pathway with payment for achievement of successful treatment completion. This approach may not address immediate concerns around the deficit but would shift risk to providers and allow BPJS-K to better plan and allocate resources, while providing comfort that they are paying for desired health outcomes.

**The focus on JKN's financial sustainability by the GOI ensures the scheme will continue to function well into the future, but the GOI must also motivate providers to deliver high-quality care for all members.** As a single-payer model, there should be increased efficiency for BPJS-K acting as the dominant purchaser of care for the majority of the population. Some structural bias exists in the current system, with a provider-payer split undermined by the Ministry of Health, as an owner of facilities, also being responsible for INA-CBG rate setting. Regardless of this dynamic, BPJS-K, or more broadly JKN, increasingly acts as a monopsonistic buyer in the system, with providers as "price takers" without a say in the market rules. This drives competition among private-sector providers to survive in the market and engage in cost-cutting to ensure their facilities are optimally utilized (Ross et al., 2018). This can have a detrimental impact on quality and access to healthcare through JKN. Policymakers must consider various ways to ensure providers are appropriately compensated and incentivized to deliver quality healthcare to JKN members.

**Rethinking capitation is needed, not just around the rates offered, to motivate provision of better services at the primary care level.** The performance-based capitation (KBK) program was originally meant to address findings that puskesmas have lower than ideal patient contact rates and high referral rates for non-specialist care. A comprehensive assessment of the experience from KBK is needed, especially on the referral and contact rates. Small-sample studies suggest that impact on capitation spending is minimal, as FKTP facilities are broadly meeting the KBK indicators. There has not been a major drop in hospital-based healthcare costs as a result of reduced referral for non-specialist care. Further investigation is needed on root causes and how to incentivize more complex care provision at lower levels of the health system. Greater investment in quality and availability of primary and promotive healthcare services will reduce more expensive hospital-based care and improve population health. Reforms in primary care service provision will likely require some combination of increased capitation rates, improved spending on public and primary health by districts, more rational catchment populations for capitating per facility, improved implementation of referral policies (including back-referral), national rollout of related accountability measures, a review of contracting and accreditation processes for primary care, and more optimal allocation of human resources across public health facilities.

**INA-CBGs account for almost 80 percent of total expenditure under JKN and hence represent a significant opportunity for efficiency gains and aligning provider incentives.** A pilot of global budgets set at the facility level was implemented at two hospitals in 2018 (Cilegon District General Hospital [Type B hospital] at Cilegon and Prof. DR. MA. Hanafiah SM General Hospital [Type C hospital] at Tanah Datar). This aimed to increase hospital autonomy and incentivize more efficient healthcare provision. The global budget is set per negotiations with the facility based on projected caseload and case mix. A lower and upper limit is set around a global budget base rate, and the facility is required to manage any deficit or surplus that occurs based on that range as it sees fit. If health expenditure exceeds the upper or lower limits, BPJS-K will conduct an evaluation of budget allocation, hospital utilization rates, and quality of care. Implementation of the global budget pilot will be gradual, with the first phase focused on sensitization, data collection, and strengthening monitoring and evaluation practices. The second phase uses soft caps with the risk of overruns shared between the hospital and BPJS-K. The last phase will implement hard caps, with the full risk of overruns borne by the hospitals. In the long run, expanded implementation of global budgets may increase predictability of expenditure for BPJS-K while driving greater efficiency in facility-level operations. The onus to conduct detailed review and auditing of claims will also diminish as the global budget-setting process is refined, and facilities own more of the risk of exceeding their budget range.

**Motivating the continued engagement of a broad mix of private-sector facilities in the scheme will support JKN's ability to improve access and quality as**

**membership numbers increase.** As noted in the main report, over 80 percent of new health facilities being built are privately owned. Most choose to participate in JKN, even though JKN acts as a monopsonistic buyer. However, some do not. JKN needs to find ways to effectively engage with private-sector facilities across the country to prevent expansion of supply-side constraints that could limit the impact of the scheme. Results from the private-sector hospital survey conducted by HP+ and TNP2K revealed several concerns from private facilities, including inadequate INA-CBG reimbursement rates, untimely reimbursement processes, insufficient coordination between GOI and private facilities on the national drug formulary, lack of access to the e-Katalog procurement list, and lack of clarity on healthcare input prices and on other JKN procedures.

**Review of the currently generous JKN benefits package is occurring incrementally through a process related to health technology assessments; a more comprehensive review will help to ensure that what JKN provides matches the evolving health financing landscape.** The Ministry of Health has started to use health technology assessments to rationalize the type and use of pharmaceuticals and certain diagnostic technologies covered under JKN, to ensure the most cost-effective interventions are used. In future, expanding the scope of these assessments may ensure that constantly emerging scientific and medical breakthroughs are appropriately considered for inclusion in terms of cost, safety, and efficacy. At the same time, there is a need to fundamentally reconsider what is appropriately covered by JKN as a benefits package, including considering the role of private voluntary insurance in providing complementary or supplementary coverage, as is the case in other countries with a single-payer model. This may allow JKN to focus more on conditions of relevance to the broad population and shed high-cost, low-frequency services that are mostly used by the upper classes who may also hold other insurance. A structural rethink is needed for how the coordination of benefits policy with private insurance schemes currently operates. Such rethinking on benefits and the role of private insurance may free up JKN spending to cover services that currently require further support, for example, antiretroviral therapy for HIV, where Indonesia achieves extremely low coverage. HP+ has begun to analyze effective integration of vertical programs into JKN, especially as the role development partners in financing HIV and tuberculosis care diminishes for Indonesia. Periodic review of the burden of disease and major disease conditions driving JKN expenditures should also inform BPJS-K's approach to long-term population health management. Addressing lifestyle factors and health literacy through promotive and preventive efforts can support more efficient use of medical care, particularly at the hospital level.

**Several pilots of various types are underway at BPJS-K as part of efforts to continually improve the efficiency and quality of JKN, which suggests the organization is learning and adapting.** These pilots include global budgets for hospitals. Using pilots is an established approach for a large insurance agency to test new mechanisms, monitor provider and patient responses, and iterate changes before national rollout. BPJS-K has many pilots underway, and it is necessary to rationalize which fit an overall strategic vision, and pick with broad stakeholder guidance those results from that can inform development of future reforms in expenditure management and maximizing health outcomes. The Ministry of Health and DJSN should prioritize the provision of flexible funding to BPJS-K to design, implement, and evaluate its pilots. These pilots suggest there is potential for BPJS-K to drive a culture of innovation and continuous improvement that will underpin efficient and effective delivery of health services and thus promote the eventual financial sustainability of JKN.

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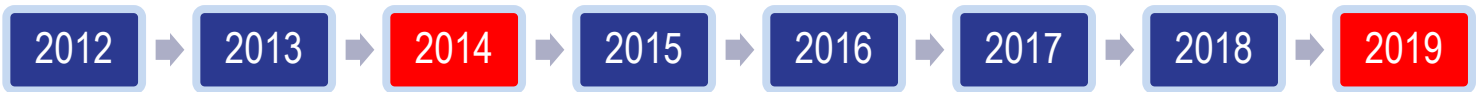
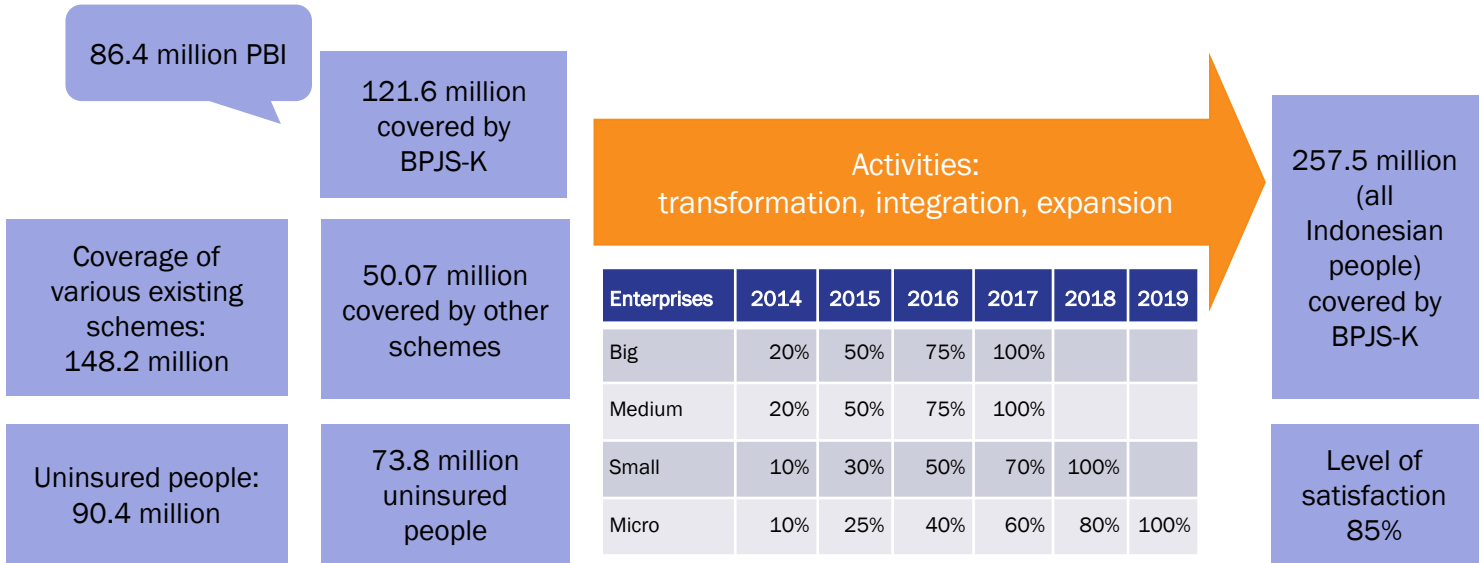
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# Annex A. Government of Indonesia Roadmap to Universal Health Coverage



Transformation from four existing schemes to BPJS-K (JPK Jamsostek, Jamkesmas, Askes PNS, TNI Polri)

Integration of Jamkesda into BPJS-K and regulation of commercial insurance industry

Presidential decree on operational support for army/police

Transfer membership from TNI/POLRI to BPJS-K

Procedure setting on membership and contribution

Company mapping and socialization

**Membership expansion to big, medium, small, and micro enterprises**

Enterprises	2014	2015	2016	2017	2018	2019
Big	20%	50%	75%	100%		
Small	20%	50%	75%	100%		
Micro	10%	30%	50%	70%	100%	100%

**Consumer satisfaction measurement every 6 months**

**Benefit package and service reviews annually**

Synchronization of membership data: JPK Jamsostek, Jamkesmas, and Askes PNS/Sosial – single identity number

Adapted from: Ministry of Health, n.d.

## Annex B. Data Used in JKN Financial Sustainability Analysis

Population Segments		Enrollment	Revenue	Expenditure			
			Contributions	INA-CBGs	Non-CBGs	Capitation	
PBI	APBD	A, AR, G	A	D	A, R, C	A	AS
	APBN	A, AR, G	A		A, R, C	A	
PPU	P	A,G	A		A, R, C	A	
	BU	A, AR, G	A		A, R, C	A	
PBPU		A, AR, G	A		A, R, C	A	
BP		A, AR, G	A		A, R, C	A	

Legend:

A = Aggregate monthly data, by segment (2014–16 actuals and 2017–19 projections)

C = Case volume by INA-CBG code by province and district (2014–16 actuals) (no segments)

AR = Aggregate data by region (Dec 2015)

G = gender breakdown by segment (Dec 2016)

D = New INA-CBG tariffs disaggregated by region/hospital type/ownership/class/severity (however, no segments)

R = Gross yearly utilization rate only (non-disaggregated by code), and total cost (2014–16 actuals and 2017–19 projections)

AS = Aggregate monthly data by segment (2015 only), yearly capitation by 13 divisions for three years (2014–2016)

## Annex C. Areas of Focus for Government Bodies under Inpres No. 8/2017

Government Body/ Ministry	Areas of Focus
Ministry of Health	<ul style="list-style-type: none"> <li>• To evaluate and revise the JKN regulations</li> <li>• To improve the INA-CBGs tariff system</li> <li>• To revise return referral system</li> <li>• To ensure the provision of drugs (mainly essential drugs) and medical devices</li> <li>• Evaluate and revise the catastrophic disease payment system</li> <li>• To ensure the availability of infrastructure and human resources in healthcare facilities</li> </ul>
Ministry of Domestic Affairs	<ul style="list-style-type: none"> <li>• Improve supervision to the governors, mayors, regents in implementing JKN</li> <li>• To ensure the governors, mayors, regents to:               <ul style="list-style-type: none"> <li>○ Allocate funding to support JKN</li> <li>○ Enroll all their residents to JKN</li> <li>○ Provide health infrastructures and human resources</li> <li>○ Provide residents ID numbers data base for JKN</li> </ul> </li> </ul>
Ministry of Social Affairs	<ul style="list-style-type: none"> <li>• To accelerate the verification and validation in affirming and revising the PBI data base</li> </ul>
Ministry of Government Enterprises	<ul style="list-style-type: none"> <li>• To ensure the formal sector to:               <ul style="list-style-type: none"> <li>○ Enroll and provide accurate data of the workers' family members in JKN</li> <li>○ Pay the contribution for their workers</li> </ul> </li> </ul>
Ministry of Work Force	<ul style="list-style-type: none"> <li>• To improve supervision upon the formal sector compliance to JKN</li> </ul>
Ministry of Communication and Informatics	<ul style="list-style-type: none"> <li>• Perform public education (campaign) to raise awareness about JKN enrollment</li> <li>• To facilitate data communication network for the success of JKN IT</li> </ul>
Attorney General's Office	<ul style="list-style-type: none"> <li>• Compliance and law enforcement to the formal sector, government enterprises, local government enterprises and local government to optimize JKN implementation</li> </ul>
BPJS-K Management	<ul style="list-style-type: none"> <li>• To ensure BPJS members receive quality healthcare by providing ID members and expansion of qualified providers</li> <li>• To improve cooperation with relevant JKN stakeholders to improve compliance for optimized JKN implementation</li> <li>• To improve cooperation with relevant JKN stakeholders to perform public education of JKN</li> <li>• To evaluate JKN regulations to ensure the JKN quality</li> <li>• To improve the JKN implementation and provide inputs to the regulation to ensure the JKN quality</li> <li>• To improve cooperation with qualified pharmacies to ensure the provision of return referral drugs</li> <li>• To provide the JKN data to Ministry of Health regularly for quality improvement</li> </ul>

Government Body/ Ministry	Areas of Focus
Governors	<ul style="list-style-type: none"> <li>• Improve supervision to regents and mayors for JKN implementation</li> <li>• Allocate funding for JKN implementation</li> <li>• To ensure the regents and mayors:                             <ul style="list-style-type: none"> <li>○ Allocate funding for JKN implementation</li> <li>○ Enroll their residents to JKN</li> <li>○ Provide health infrastructure and human resources for JKN</li> </ul> </li> <li>• To ensure local government enterprises to enroll JKN and provide complete data of the workers and family in JKN</li> <li>• To ensure local government enterprises to pay contributions for their workers</li> <li>• To impose administrative penalty to formal sectors who do not comply in enrolling their workers and contribution payment</li> </ul>
Regents and mayors	<ul style="list-style-type: none"> <li>• Allocate funding for JKN implementation</li> <li>• To enroll their residents to JKN</li> <li>• To provide health infrastructure and human resources for JKN</li> <li>• To ensure local government enterprises to enroll JKN and provide complete data of the workers and family in JKN</li> <li>• To ensure local government enterprises to pay contributions for their workers</li> <li>• To impose administrative penalty to formal sectors who do not comply in enrolling their workers and contribution payment</li> </ul>

Source: Inpres No. 8, 2017

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