Indonesia

Program for Results (PforR)

Indonesia-Supporting Primary Health Care Reform -- I-SPHERE (P164277)

Technical Assessment

May 02, 2018

Abbreviations and Acronyms

CURRENCY EQUIVALENTS

(Exchange Rate Effective May 02, 2018)

Currency Unit =	US$
Rp13,902 =	US$1

FISCAL YEAR
January 1 - December 31

ABBREVIATIONS AND ACRONYMS

ANC	Antenatal Care
APBD	*Anggaran Pendapatan dan Belanja Daerah* (Local Government Budget)
APBN	*Anggaran Pendapatan dan Belanja Negara* (National Budget)
BPJS	*Badan Penyelenggara Jaminan Sosial* (national social insurance agency)
Bapelkes	Health training center
Bappenas	National Development Planning Agency
BOK	Health Operational Assistance
BPKP	*Badan Pengawas Keuangan dan Pembangunan* (Finance and Development Monitoring Agency)
CPF	Country Partnership Framework
DAK	*Dana Alokasi Khusus* (Special Allocation Funds)
DAU	*Dana Alokasi Umum* (General Allocation Funds)
DBH	*Dana Bagi Hasil* (Revenue Sharing)
DFAT	Department of Foreign Affairs and Trade
DHIS2	District Health Information System – 2
DLIs	Disbursement Linked Indicators
DM	Diabetes Mellitus
DTPK	Islands, lagging and border areas
EAP	East Asia Pacific
FY	Fiscal Year
Gavi	Global Alliance for Vaccines and Immunization
GDP	Gross Domestic Product
GERMAS	*Gerakan Masyarakat Hidup Sehat* (Community campaign for healthy living)
GFATM	Global Fund to fight AIDS, TB, Malaria
GOI	Government of Indonesia
HIV	Human Immunodeficiency Virus
HNP	Health, Nutrition and Population
HRH	Human Resources for Health
IDHS	Indonesian Demographic and Health Survey
IDR	Indonesian Rupiah
INA CBGs	Indonesia Case Base Groups
IKS	*Indeks Keluarga Sehat* (healthy family index)
IMR	Infant Mortality Rate
ISQua	International Society for Quality in Healthcare

Jampersal	*Jaminan Persalinan* (Childbirth services guarantee)
JKN	*Jaminan Kesehatan Nasional* (National Health Insurance Program)
KAFKTP	*Komisi Akreditasi Fasilitas Kesehatan Tingkat Primer* (Accreditation Commission for Primary Health Care Facilities)
KARS	*Komisi Akreditasi Rumah Sakit* (Hospital Accreditation Commission)
KBK	*Kapitasi Berbasis Komitmen* (Commitment Based Capitation)
LG	Local Government
MDR-TB	Multi Drug Resistant-TB
MDTF	Multi-Donor Trust Fund
mHealth	Mobile Health
MoH	Ministry of Health
MoHA	Ministry of Home Affairs
MoF	Ministry of Finance
MMR	Maternal Mortality Ratio
NCDs	Non-communicable Diseases
NTT	*Nusa Tenggara Timur*
OOPE	Out of Pocket Public Expenditure
PASA	Programmatic Advisory Services and Analytics
PforR	Program-for-Results
PDO	Program Development Objective
Perda	Local Government Regulation
Perpres	Presidential Regulation
PHE	Public Health Expenditure
PKK	Family Health Wefare
PNC	Post Natal Care
PHC	Public Health Center (*Puskesmas*)
PPH	Post Partum Hemorrhage
PIS-PK	*Program Indonesia Sehat melalui Pendekatan Keluarga* (Healthy Indonesia through the Family Approach Program)
Polindes	*Pondok bersalin desa (*Village level delivery posts)
Poskesdes	Village health posts
Posyandu	Integrated Health Posts
PCU	Program Coordination Unit
Pusdatin	Center of Data and Information
Puskesmas	Public Primary Health Centers
Pustu	Auxiliary Puskesmas
QSDS	Quantitative Service Delivery Survey
RAPBN	Draft National Annual Budget
Rifaskes	Health Facility Survey
Riskesdas	*Riset Kesehatan Dasar* (Basic Health Surveys)
RKA-KL	Budget work plan
RPJMN	Medium-Term National Development Plan
SBA	Skilled Birth Attendance
SIKDA-Generic	Application for health information system at local level
SIMDA	Accounting software developed by BPKP
SIMRS	Hospital Information System
IRIS	Integrated Referral Information System
TB	Tuberculosis
THE	Total Health Expenditure
UCI	Universal Child Immunization
UHC	Universal Health Coverage
USAID	United States Agency for International Development
UNAIDS	The Joint United Nations Program on HIV/AIDS
UNFPA	United Nation Population Funds
UNICEF	United Nations Children Funds
WB	World Bank
WBG	World Bank Group
WHO	World Health Organization
WKDS	*Wajib Kerja Dokter Spesialis* (Compulsory Service of Specialist Doctors)

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Indonesia-Supporting Primary Health Care Reform -- Program for Results (PforR)

I-SPHERE (P164277)

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I. Introduction and Scope of the Technical Assessment

1. **This technical assessment has been carried out as part of the preparation of the Indonesia - Supporting Primary Health Care Reform (I-SPHERE) Program for Results (PforR) supporting the GOI's national development plan (*RPJMN*) and the Healthy Indonesia Program.** The Healthy Indonesia Program aims to achieve improved health and nutritional status through prevention and promotion, improving access to quality health services as well as providing financial protection to all. The proposed operation supports the Healthy Indonesia Program and this technical assessment is primarily focused on those areas of the broader government program that will be supported by the PforR Program. The assessment covers strategic relevance; technical soundness; institutional arrangements and capacity; results framework; monitoring and evaluation systems; technical risk; and implementation support needs. It also covers the expenditure framework and the economic justification for the program. The assessment utilizes data from various sources including: the Indonesia Demographic and Health Survey, 2012; the Health Facility Census (*Rifaskes*), 2011; the Quantitative Service Delivery Survey (QSDS)[1], 2016; the Indonesia Family Life Survey, various years; the National Socioeconomic Survey *(Susenas),* various years, among others. The assessment and design of the Program draws from extensive analytical work on health financing and service delivery (based on the above data sources and others), including: *Indonesia Health Financing System Assessment: Spend More, Right and Better*, 2016; health inputs into the *World Bank Public Expenditure Review*, 2016 and 2017; *Revealing the Missing Link: Private Sector Supply-Side Readiness for Primary Maternal Health Services in Indonesia,* 2017; *Is Indonesia Ready to Serve?: An Analysis of Indonesia's Primary Healthcare Supply-Side Readiness*, forthcoming; *Transitioning from Donor Funded Health Programs in Indonesia: Issues and Priorities* (on HIV/Aids, TB, malaria and immunization), forthcoming, and the Multisectoral Nutrition PASA which includes among others an analysis of the drivers of malnutrition in well performing districts (in terms of stunting reduction) in the Good Nutrition, Better Brains, Brighter Future forthcoming book; as well as assessments prepared by other sectors, particularly around governance and inequality.

II. Program Strategic Relevance

A. Country and Sector Context:

2. **Indonesia, the fourth most populous country (~260 million) in the world, has made significant gains in economic growth and poverty reduction**. Relatively strong economic growth (5.5% per year since 2000) has been accompanied by a sustained decline in poverty rates: about 31% and 6.8% of the population lived on USD3.1 a day and USD 1.9 a day, respectively, in 2016, down from 82% and 48% (respectively) in 1998[2]. With a GDP per capita of about USD 3,859 in 2017, Indonesia is currently classified as a lower middle-income country and will transition to an upper middle-income country with continued economic growth. Its human capital indicators are also show impressive gains, with adult literacy at almost 95%, gross enrollment of 100, 83, and 32% in primary, secondary and tertiary education, respectively, and the share of female enrollment exceeding that of males at each level.

3. **Health outcomes and outputs in Indonesia have improved in recent years**. Life expectancy has increased from 67 in 2002 to 69 in 2015 and under-five mortality has declined from 46/1,000 live births in 2002 to 32/1,000 live births in 2017. Pregnant women receiving four or more antenatal care visits have

[1] The Quantitative Service Delivery Survey is assessing service availability and readiness at the primary level based on WHO Service Readiness and Availability Assessment (SARA) conceptual framework.
[2] World Development Indicators, 2017

also increased from 64% in 2002 to 77% in 2017 (IFLS). The percentage of moderately/severely underweight under-five children has decreased from 23% in 2002 to 19.6% in 2013. Landmark legislation in 2004 and 2011 has helped realize a potential pathway to Universal Health Coverage (UHC). Indonesia has one of the largest single-payer social health insurance programs, *Jaminan Kesehatan Nasional* (*JKN*), in the world. Health insurance coverage rates in Indonesia have increased significantly in recent years: from ~27% in 2004 and to ~73% in 2017. By 2019, everyone in Indonesia is supposed to have coverage under the *JKN*.

Table 1. Key Health Indicators

Key Indicator	IDHS 2012	Riskesdas 2013	Eastern Indonesia		
			NTT	Maluku	Papua
IMR (per 1,000 live births)[1]	**32**		**45**	**36**	**54**
***UMR** (per 1,000 live births)[3]**	**40**		**58**	**60**	**115**
Pregnant Women Receiving ANC (%)[2]**	**95.7**		**92.1**	**86.5**	**57.8**
Deliveries by Skilled Provider (%)[3]	**83.1**		**56.8**	**49.9**	**39.9**
Children receiving DPT3 by 12 months of age (%)[4]	**72**		**76.4**	**46.9**	**35.3**
Children under 6 months exclusively Breast Fed (%)[6]	**41.5**		**NA**	**NA**	**NA**
Early Initiation of Breastfeeding		**34.5**	**40.5**	**24.8**	**31.5**
Children Under 5 Stunted (% below 2SD) (%)[3]		**37.2**	**51.7**	**40.6**	**40.1**
CPR (modern methods) among currently married women (%)[5]	**57.9**		**38.3**	**40.4**	**19.1**
TB[3]		**0.4**	**0.3**	**0.3**	**0.6**
Malaria Incidence[3]		**1.9**	**6.8**	**3.8**	**9.8**
DM		**2.1**	**3.3**	**2.1**	**2.3**
Hypertension***		**25.8**	**23.3**	**24.1**	**16.8**

**Percent distribution of women age 15-49 who had a live birth in the five years preceding the survey by antenatal care (ANC) provider during pregnancy for the most recent birth and the percentage receiving antenatal care from a skilled provider for the most recent birth

***based on measurement

1. Levels and trend in Child Mortality: Report 2017. Estimates Developed by the UN Inter-agency Group for Child Mortality Estimation. United Nations Inter-agency Group for Child Mortality Estimation (UN IGME). UNICEF. WHO. World Bank
2. Antenatal care coverage (%): at least one visit. World Health Statistic 2015. WHO
3. World health Statistic 2016. http://www.who.int/gho/publications/world_health_statistics/2016/en/

4. Immunization. http://apps.who.int/immunization_monitoring/globalsummary/countries?countrycriteria%5Bcountry%5D%5B%5D=THA

4. **In terms of gender differentials for basic health services coverage in Indonesia, there is little significant difference (as shown in the table below),** though there are gender specific health issues, such as maternal mortality.

Table 2. Gender Differentials for Selected PHC Services

	2014		2015		2016	
	Male	**Female**	**Male**	**Female**	**Male**	**Female**
Immunization coverage among children 12-23 months						
BCG	94.3%	94.1%	87.6%	85.9%	88.5%	88.2%
DPT3	75.8%	76.2%	75.0%	74.0%	77.2%	76.6%
Polio3	75.3%	76.8%	79.7%	78.9%	80.6%	79.4%
Measles	89.2%	89.7%	80.0%	77.6%	81.4%	80.6%
Completed routine immunization*	70.3%	71.2%	66.9%	65.7%	69.3%	68.5%
Exclusive breastfeeding among children above 6 months						
Coverage	47.3%	49.0%	51.2%	52.3%	55.7%	56.6%
Access to care (all age)						
Outpatient	14.7%	16.1%	16.1%	17.9%	15.2%	16.9%
Inpatient	2.3%	2.8%	3.0%	4.2%	3.1%	4.3%

*Children received BCG=1, Polio=3, DPT=3 and Measles=1

Source: Susenas various years

5. **However, key challenges remain, including slow progress on addressing inequalities in health outcomes, and access to primary and secondary healthcare, especially in Eastern Indonesia.** The national maternal mortality ratio (MMR) is 126/100,000 live births, closer to the average for low-income countries; and the MMR in provinces in Eastern Indonesia is above 200/100,000 live births.[3] Post-partum hemorrhage (PPH), eclampsia and infection are the key causes of maternal death with underlying factors including young age pregnancies, unsafe abortions, lack of continuum of care, and a stagnating family planning program. Similarly, the infant mortality rate (IMR) in Eastern Indonesia is higher than the national average of 40/1,000 live births; IMR in *NTT* and Maluku province are close to 60/1,000 live births. Large regional and income-related inequalities[4] remain across the country and the IMR in the poorest wealth quintile of households is more than double that in the richest. While overall coverage rates of key maternal health services are high,[5] they vary widely across regions and income: there is a two-fold

[3] Revealing the Missing Link: Private Sector Supply Side Readiness for Maternal Health Services in Indonesia (World Bank report, 2017; Wei Aun, et al)

[4] The consumption Gini Index, a measure of income inequality) grew from 30 (2003) to 40 (2016).

[5] The 2012 IDHS shows the following: 4 antenatal care (ANC) visits - 88%, SBA – 83% and post-natal care (PNC) at 80%; institutional delivery is low at 63% (17% public; 46% private).

difference in skilled birth attendance (SBA) across some provinces and home delivery rates are six times higher in the lowest quintile compared to richest quintile.

6. **Indonesia is facing a double burden of disease,** with new challenges rapidly emerging due to demographic (ageing population) and epidemiological transitions, as persistent communicable diseases are met with a rising prevalence of non-communicable diseases (NCDs). At 66%, NCDs now account for the largest share of the disease burden in Indonesia, almost doubling since 1990. Indonesia has the second highest Tuberculosis (TB) burden in the world. TB is still the second highest cause of premature deaths in Indonesia, with only a third of the cases being detected (2013). In addition, new challenges such as Multi Drug Resistant-TB (MDR-TB) have emerged, with the annual incidence now estimated at 30,000 cases, which poses a significant financial burden and program management challenge[6]. Indonesia is among a few countries in the world that reported an increase in HIV incidence among key affected population groups. Although the epidemic is concentrated in key affected population groups, there is a generalized HIV epidemic in Papua and West Papua. Malaria remains endemic in some regions, including Papua. Indonesia faces a serious challenge of ensuring universal access to quality primary healthcare services nationally, including NCDs, and especially in lagging regions such as Eastern Indonesia.

7. **Climate change amplifies public health risks in Indonesia and presents additional challenges to the health care system and the climate-vulnerable populations it serves.** Climate variability and change are already exacerbating many of the disaster risks that the country faces, including drought, flooding, landslides and sea level rise.[7] These disasters directly affect the health and well-being of millions of people and can cause critical damage to public health infrastructure. Malnutrition, particularly in children, could become more prevalent in some parts where droughts are expected to become more frequent due to climate change; and water- and vector-borne diseases are likely to expand in range as conditions favor mosquitoes, flies, and water-borne pathogens. Among all the country's regions, Eastern Indonesia has a long history of coping with climate risks, particularly floods and droughts.[8] The region is also ranked as "very high risk" to "high-risk" for future climate change-related decreased water availability (Nusa Tenggara), drought (Nusa Tenggara), malaria (Nusa Tenggara, Maluku, Papua), diarrhea (Nusa Tenggara, Maluku, Papua), and dengue fever (Papua)[9], all of which are likely causing further strains on the public health system. To address these challenges, primary health care needs to be strengthened as part of the country's strategy to respond to climate change and related health issues.

8. **Nutrition remains a problem with chronic malnutrition or stunting a widespread and persistent condition in Indonesia - more than one-third, or 9 million, young children are stunted.** The national stunting rate for under five-year-olds increased slightly from 36.8 percent in 2007 to 37.2 percent in 2013[10], based on official data reported by the Ministry of Health. The rates are even higher in Eastern Indonesian provinces. During the same period, the percentage of population in poverty reduced from 16.6 percent to 11.4 percent (World Bank), suggesting that although a smaller share of households was below the poverty-line, their increased purchasing power did not translate to better nutritional outcomes for children. The prevalence of stunting among children from the poorest 40 percent had not only increased

[6] Only 1,848 cases of MDR-TB are currently receiving treatment.
[7] Indonesia's first Nationally Determined Contributions (NDCs)
[8] World Bank 2011. "Climate Risk and Adaptation Country Profile – Indonesia" Global Facility for Disaster Reduction and Recovery (GFDRR) World Bank. Washington DC.
[9] Government of Indonesia (2013), National Action Plan for Climate Change Adaptation (RAN-API)
[10] *Riskesdas 2007 and 2013*

during the period, but the gap between them and their peers from the richest 40 percent had also become larger. Key feeding practices indicators such as exclusive breastfeeding, age-appropriate complementary feeding and diet diversity also show poor results, especially compared to some of its neighboring countries.

9. **A recent World Bank report on rising inequality in Indonesia identifies malnutrition as a key driver of inequality**. Poor children often have an unfair start in life; being malnourished and having lower access to early childhood education services, which undermines their ability to succeed in later life.[11] A recent study using long-term longitudinal data (Indonesia Family Life Survey 1993-2014) demonstrates the benefits of early years' interventions on health outcomes (adult height), cognitive development (numeracy and fluid intelligence), and employment opportunities. It also shows a correlation between poor early childhood nutrition and adult earnings, through its effect on height and lower levels of educational attainment (Giles et al, forthcoming 2017).

10. **Indonesia's commitment to reducing stunting is evidenced by the inclusion of ambitious targets in the current National Mid-Term Development Plan, including a wide variety of "nutrition-specific" interventions.** By 2019, the Government is targeting a reduction in nationwide stunting by 7 percentage points, assuming continued 'high' investment in nutrition programming. Nutrition-specific interventions are in place to address deficiencies at every point in the life-cycle: beginning with folate and calcium supplementation, as well as supplemental feeding for malnourished pregnant mothers; breastfeeding promotion and counseling for lactating mothers; growth monitoring, vitamin A supplementation, iodization, supplemental feeding, fortification and therapeutic zinc supplements for diarrhea management and deworming prevention for children from zero to five years of age; and continuing with immunization and school health programs, supplemental feeding and the promotion of healthy street food for school aged children. However, nutrition-specific interventions alone are not sufficient to reach those who are most vulnerable.

11. **A reversal of the trend and an acceleration of the progress towards reducing stunting in Indonesia requires enlisting sectors beyond health**, such as agriculture, education, social protection, and water, sanitation, and hygiene. Large scale "nutrition-sensitive" interventions in these sectors will have to not only address the key underlying determinants of nutrition effectively, but also intensify the impact of "nutrition-specific" interventions (Lancet 2013). The government has established the "National Movement to Accelerate the Reduction in Undernutrition in Indonesia during the First 1000 Days of Life" (*Gerakan 1000 HPK*), which articulates the broad roles of key sectors and stakeholders in supporting the nationwide effort to improve nutrition. Recent research highlights that a majority of mothers and children lack simultaneous access to priority services. The study found that only 1 percent of 0-36 month-old children had adequate access to basic nutrition-sensitive and nutrition-specific interventions. In 2017, the government launched a Presidential National Action Plan to consolidate "top-to-bottom" political leadership, strengthen execution of existing multi-sectoral policy frameworks, and drive consolidation and convergence of national, regional and community programs ("the National Action Plan"). The GoI and the World Bank are preparing a new operation to support "the National Action Plan", and certain elements of I-SPHERE are expected to contribute to the convergence agenda.

12. **The Government of Indonesia is committed to achieving UHC but to do so will need to address key three key elements: health financing, governance, and access to quality service delivery.** The

[11] Indonesia's Rising Divide, World Bank 2015

Ministry of Finance is keen to see improvements in the quality (efficiency and effectiveness) of health spending as a basis for increased investments in the sector: "spending more; right and better."

13. **Improving the performance of primary healthcare services will improve health outcomes and improve the efficiency of health spending.** Access to good quality primary healthcare increases overall system efficiency by: (i) improving allocative efficiency through investments in cost-effective interventions such as prevention and promotion versus much costlier curative care (e.g. immunization versus treatment of vaccine preventable diseases such as measles); (ii) decreasing the unit cost per episode of treatment (at more inexpensive primary care centers versus hospitals); and (iii) increasing early treatment and reducing expensive referrals by avoiding complications in Indonesia's increasingly common chronic diseases (e.g. controlling blood pressure of hypertensive patients via lifestyle modification and medication versus dealing with stroke and nephropathy).

14. **Strengthening primary health care is also key to increasing adaptive capacity of the health system, as well as the populations it serves, to respond to climate change related health care issues.** These include increased vector-borne and water-borne diseases due to warming temperatures, higher malnutrition incidents from increased water scarcity, and increased injuries and illnesses related to climate change events such as flooding and droughts, which currently make up 80% of disaster occurrences in Indonesia and are projected to increase.[12] A well performing primary health care system is key to addressing these issues in an effective and timely manner as this is the first point of contact for affected populations. An improved primary care health system is particularly important for climate change adaptation in Eastern Indonesia, as the region is ranked as "very high risk" to "high-risk" for climate change-related decreased water availability (Nusa Tenggara), drought (Nusa Tenggara), malaria (Nusa Tenggara, Maluku, Papua), diarrhea (Nusa Tenggara, Maluku, Papua), and dengue fever (Papua).[13]

15. **Addressing the key gender gap of maternal mortality also depends on improving maternal health care through strengthened primary health care, and timely referral of complications.** Key services related to quality maternal and reproductive health services such as family planning as well as ante-natal, intra-natal and post-natal care are delivered through the primary health care system, accompanied with an effective referral system to manage complications that may arise during pregnancy. The key aspects that need to be improved is the quality of maternal health care as well as reducing inequities in access to quality health care in some regions and within poorer income groups.

16. **Some of the key issues that need to be addressed to improve the performance of primary healthcare are related to governance and accountability, service delivery capacity, and low performance orientation of health financing:**

i. *Lack of performance monitoring and accountability in a decentralized setting*. Since 2001, decentralization has been accompanied by increased complexity in fiscal transfers, diffuse governance and accountability mechanisms, and a fragmentation of monitoring systems. Most frontline health workers and local government staff managing subnational health systems are report to local governments – not to the Ministry of Health. All these have led to big variations in subnational capacity and the performance of local governments in delivering health services, especially at the primary care level. It has also made it difficult for the Ministry of Health, or provincial and local leaders and citizens, to know how the system is performing and proactively

[12] Government of Indonesia (2016), Indonesia's First Nationally Determined Contributions, November 2016.
[13] Government of Indonesia (2013), National Action Plan for Climate Change Adaptation (RAN-API)

address problems. Strong performance monitoring and benchmarking would strengthen accountability between facilities, subnational health offices, political leaders, Ministry of Health and facility users, and create non-financial incentives for both districts and facilities to improve.

ii. *Underdeveloped ability to enforce clinical and managerial standards at the facility and district level.* MOH has comprehensive standards and guidelines that both districts and facilities must comply with, to conduct health outreach, manage facilities, provide clinical care and run the subnational system. Standardization and compliance with managerial and health care guidelines and processes is weak at the district and the facility level. The introduction of public sector management capacity building programs at the district level and using continuous quality improvement initiatives under the accreditation program at the facility level would improve the capacity to better implement managerial and clinical standards.

iii. *Weak performance orientation of intergovernmental fiscal transfers and JKN.* The DAK and the JKN are neither well-coordinated nor strongly oriented towards incentivizing performance at the facility level. The *DAK*, the largest conditional transfer to districts, is currently offers an important lever to influence subnational service delivery outcomes. The introduction of strategic purchasing under JKN provides an opportunity to increase efficiency and improve accountability in facility level service delivery. Finally, ensuring both the *DAK* and *JKN* are aligned towards improving service delivery performance would offer districts and facilities a considerable financial incentive to improve.

Service Delivery

17. **Indonesia has a mixed model of public-private provision of health care services.[14]** The public sector is more dominant in inpatient services, especially in rural areas. Two-thirds of outpatient care (for the poor and general population), about half of inpatient care for general population and one-third of inpatient care for the poor are provided by the private sector. There are about 2,400 hospitals in Indonesia and about two-thirds of them are private. The public health care system is decentralized to the district level with about 9,767 *puskesmas*[15] forming the backbone of Indonesia's health system. About a similar number of private primary care clinics have been empaneled by the national social health insurance agency or *Badan Penyelenggara Jaminan Sosial* (*BPJS*) Health. There is no systematic information on the entire private sector health system. The public primary care system also includes 23,000 auxiliary *puskesmas* (*pustu*) for outreach activities in remote regions, village-level delivery posts (*polindes*, often the home of the village midwife) and village health posts (*poskesdes*). Frontline service delivery in the more than 75,000 villages is also undertaken through *posyandu*[16] and by village midwives (who are formally part of the health system). *Kader*[17] - who work on a voluntary basis - are not part of the formal health system and do not get paid (other than being provided a minimum transport allowance in some circumstances).

[14] Please refer to annex 3 for further information on the organization of service delivery in Indonesia.

[15] *Puskesmas* are primary health centers that cover a population of about 25,000-30,000, with almost a third having inpatient beds.

[16] *Posyandu* is a monthly event manned by at least five types of community health workers that cater to the five essential services: registration, weighing and monitoring children's growth, recording of child growth in health cards, counselling and education; immunization and ANC as part of outreach services of primary health care centers (*puskesmas*).

[17] *Kader* is a volunteer health worker organized under *PKK* (Family Welfare Program) that is administered by Ministry of Home Afffairs (MoHA). *PKK* is responsible for supporting *kader* technical training and on-going capacity building.

18. **Many Indonesians face significant physical and time barriers to accessing health care across over 6,000 inhabited islands, especially in Eastern Indonesia.** This likely contributes to higher morbidity and mortality rates, and inefficient use of potentially productive time by beneficiaries as well as accompanying family members and friends.[18] In general, *puskesmas* are more accessible than hospitals in terms of time taken to reach these facilities but this varies widely across districts.[19] Although the median distance to a health facility in Indonesia is only 5 km, the median distance in provinces such as West Papua, Papua, and Maluku is over 30 km. Widely divergent geographic accessibility is correlated with the time ranges that Indonesians experience to reach public health facilities. According to *Riskesdas* 2013, whereas over 18% of Indonesians took more than one hour to reach a public hospital (using any travel means), over 40% of people in West Sulawesi, Maluku, and West Kalimantan faced this barrier to access. Measured in time, *puskesmas* were more accessible, as only 2% of the national population took more than one hour to reach a *puskesmas*, but the proportion of population facing this travel time was much higher in Papua (28%) and *NTT* (11%).[20] According to QSDS 2016, the average time to reach a *puskesmas* was 15 minutes. At the aggregate level, this is a good average "time to care", as many medical emergencies can be handled within this time frame. However, there were some *puskesmas*, where the average time taken by a person to reach the facility was five times higher. When measuring the time taken to reach the facility from the farthest village, the national average time doubled to about 32 minutes. Furthermore, it took about double the time to reach a rural *puskesmas* (41 minutes) compared to an urban *puskesmas* (23 minutes).

19. **Quality of service is a major challenge and there are wide variations in district-level performance on health facility service readiness to provide good quality health care services.** Both Rifaskes 2011 and QSDS 2016[21] revealed that not even one *puskesmas* had met all of the 38 tracer indicators. While there has been overall improvement in service readiness between 2011 and 2016, there are several areas that still need to be addressed. These include availability of privacy for patients, healthcare waste management, availability of all basic equipment, drugs and diagnostic stock outs, and staff training. *Puskesmas* were more service ready than private sector clinics, and those private clinics empaneled by *BPJS-Health* under the *JKN* program were more service ready than those that were not. *Puskesmas* were less service ready for NCDs than for maternal or child health services. There is significant variation across districts - while districts in central Java had almost all *puskesmas* fulfill at least 80% of the readiness indicators, districts such as Papua and Maluku had only half of the *puskesmas* fulfill 80% of these

[18] Schoeps, A, Gabrysch, S, Niamba, L, Sié, A & Becher, H 2011, 'The effect of distance to health-care facilities on childhood mortality in rural Burkina Faso', American Journal of Epidemiology, vol.173, issue.5, pp.492-98. See also: Abhimanyu, N, Zodpey, SP, Ughade, S & Bangdiwala, SI 2011, 'Neonatal morbidity and mortality in tribal and rural communities in central India', Indian Journal of Community Medicine, vol.36, no.2, pp.150-158; Mulholland, EK, Smith, L, Carneiro, I, Becher, H & Lehmann, D 2008, 'Equity and child-survival strategies', Bulletin of the World Health Organization, vol.86, no.5.

[19] Only 39% of public hospitals and 3% of the 30 private hospitals surveyed, maintained all 23 basic obstetric care tracer items. Twenty percent of all public hospitals and none of the 30 private hospitals surveyed, maintained all six blood transfusion tracer items and there was a four-fold variation between some districts. A large majority of provinces (25 out of 33) had less than 30% of public hospitals with all tracer items, including eight provinces with zero hospitals reaching this target.

[20] It is noted that the time to walk to a private health facility or drug outlet to access affordable essential drugs on a sustainable basis is a key indicator used for MDG tracking, with one hour identified as the benchmark. See: UN. Indicators for Monitoring the Millennium Development Goals. Definitions, Rationale, Concepts and Sources. (2003).

[21] The readiness to provide basic services was measured by a set of 38 tracer indicators that were collected as part of the 2011 Health Facility Census (*Rifaskes*) across five domains: basic amenities, basic equipment, standard precautions for infection prevention, diagnostic capacity, and essential medicines.

indicators. QSDS 2016 suggests overall improvements in service availability and readiness at *puskesmas*. Although the QSDS is not representative at the subnational level, sampled districts show wide variation. Yalimo District, in Papua Province, showed a basic obstetric care readiness index of 56, compared to the average national index of 72. For communicable disease, such as TB, overall primary care facility readiness index has not changed over the years.[22] Discrepancies between urban and rural facilities persist, with higher level of availability and readiness among urban health facilities.[23] Hospitals in Eastern Indonesian provinces also lag on facility accreditation; for example, only 4 out of 18 and 4 out of 17 public hospitals are accredited in Papua and *NTT*, respectively.

20. **Frontline service delivery of preventive and promotive services for maternal and child health (MCH) and nutrition is especially low and ineffective.** In many areas, the monthly *posyandu* has ceased to be a focus for community participation, the quality of services provided is very variable, and depends on the leadership at district level, as well as supportive supervision and monitoring by the *puskesmas*. Inadequate support is reflected by low availability and capacity of health workers (nutritionist, sanitarian, midwife) to provide supportive supervision to *posyandu*, inadequate resources (transport, materials), unclear mandates and an almost complete absence of incentives and accountability. There are unclear service standards for the health workforce for outreach services at the community level. As the *posyandus* do not report to the health sector, new ways of accountability to strengthen community outreach for preventive and promotive health services needs to be identified. Recent programs such as the *Program Nasional Pemberdayaan Masyarakat (PNPM) Generasi* are making attempts to revitalize *posyandu* activities and provide clear opportunities for coordination and convergence of support.

21. **Referral systems are weak and primary care providers do not play a role as "gate-keepers" to integrate health care, despite *JKN* capitation**. In theory, GOI's regional referral system provides a pathway for patients to be referred from primary care facilities to district public hospitals and 110 regional referral hospitals for secondary care, with 20 provincial referral hospitals and 14 national referral hospitals providing tertiary care. In practice, the referral system in Indonesia is hampered by weak coordination and poor follow-up, a shortage of specialists and ill-equipped referral facilities, resulting in patients being turned away from referral hospitals or patients being referred to facilities unable to handle complicated cases. Also, despite *JKN*, referral systems are easily by-passed, creating inefficiencies and leading to large *JKN* hospital claims for higher-end procedures. For more efficient and improved quality of case management, especially with the rise of NCDs, a strong patient-centric referral system is essential. The MoH is introducing an integrated referral information system (IRIS) to support more effective referral between different provider care levels, and this provides an opportunity to further build effective integrated service delivery.

22. **Despite having attained the minimum WHO norm, Human Resources for Health (HRH) remains a key challenge for Indonesia's health sector that further impedes the ability to provide high quality services.** Key issues include unequal distribution, a shortage of specialists, and poor quality of HRH workers. In 2016, the percentage of *puskesmas* without key personnel were as follows: doctors – 20%,

[22] For communicable disease such as TB, overall primary care facility readiness index has not changed over the years. While the availability of first line TB drugs has reached 95% from 48%, and diagnosis using sputum smear has also increased to 95% from 77%, but the availability of functioning microscopes actually declined from around 85% to 77%, including amongst *puskesmas* that are supposed to be a diagnostic referral facility (79%)

[23] Data from *Rifaskes* 2011, indicates poor TB diagnostic capacity in provinces such as Papua and West Papua (<40%)

dentists – 50%, laboratory technicians – 65%, and nutrition staff – 42%.[24] Human resource coverage differs geographically, with the unequal geographic distribution of specialists even worse than for general physicians. The shortage of nurses is especially acute in public facilities. Financial resources are often not the only factor to attract HRH in remote areas: good management and better facilities were viewed as equally important.[25] Competency of HRH workers is generally low and variable: evidence from vignette responses indicates poor clinical knowledge and awareness in several parts of the country.

23. **An opportunity to improve the quality of primary care has recently emerged with the establishment of a primary care accreditation commission, based on the two decades of experience in hospital accreditation.** The hospital accreditation commission (*KARS*), established in 1995 and fully independent since 2011, has accredited over 1,277 public and private hospitals (out of 2,200). Accreditation of primary health care facilities began in 2015, with the enactment of Minister of Health regulation no. 46/2015, which includes accreditation standards for public and private facilities. In the same year, MoH established an Accreditation Commission for Primary Health Care Facilities *(Komisi Akreditasi Fasilitas Kesehatan Tingkat Primer – KAFKTP)* under a Minister of Health decree. While the capacity of *KAFKTP* is not yet strong owing to it being in its incipient stages, its vision is to expand capacity, become fully independent, cover both the public and private sector and eventually get accredited by ISQua.[26] For the public sector, plans for accreditation of *puskesmas* include a staggered approach, where at least one *puskesmas* in 5,600 sub-districts is to be accredited by 2019. There are three broad areas of focus for accreditation of primary health care facilities: management services, community health services, and individual care, and four levels of accreditation, namely: *dasar*, *madya*, *utama*, and *paripurna*. The process followed for accreditation is: selection of *puskesmas* by the district; self-assessment; six-month facilitation for process improvements; pre-accreditation survey; independent assessment by surveyors, and finally a decision on accreditation by the commission. Once accredited, the facility is expected to conduct continuous quality improvement. The accreditation status is retained for three years. As per MoH reports, approximately 2,400 *puskesmas* have been accredited as of August 2017, of which 30.2% are *dasar* (or basic level accreditation), 58.5% *madya* (medium) and 10.6% *utama* (main) and 0.6% *paripurna* (comprehensive). Only a limited number of *puskesmas* have been accredited in provinces of Eastern Indonesia.

24. **Resources to support *puskesmas* accreditation include financing from *DAK – Akreditasi* to meet a part of operational costs related to the accreditation process itself, but not the inputs needed to bring facilities up to standard.** *DAK – Fisik* is one financing source for inputs (infrastructure, equipment and medicines) needed for facilities to achieve accreditation, though it appears not always synchronized well with the accreditation cycle. Private facilities are required to cover the facilitation costs and the accreditation survey by themselves.

25. **There is a planned expansion of the national capacity of the *KAFKTP* in terms of surveyors and local government capacity** to have district level facilitators to assist with the accreditation process. Each province has at least one team to train district accreditation facilitators, and at least one accreditation

[24] January 2017; specialists are - pediatrician, obstetrics and gynecology, internal medicine, surgeon and anesthesiology.
[25] Efendi, F., et al 2015. "How to attract health students to remote areas in Indonesia: a discrete choice experiment." *International Journal of Health Planning and Management.* DOI: 10.1002/hpm.2289.
[26] International Society for Quality in Healthcare – an accreditor of accreditation agencies.

surveyor team. By the end of 2016, there were 114 surveyor teams (three surveyors per team) in place. Unlike *KARS*, the *KAFKTP* is still financially dependent on MOH.

Health Financing

26. **Health financing in Indonesia is marked by low public health expenditures (PHE), high out of pocket expenditures (OOPE), and a complex and fragmented intergovernmental fiscal transfer system.**[27] PHE at 1.5% of the GDP (IDR 118 trillion or USD 9.1 billion)[28] is amongst the lowest in the world and forms only 41% of the total health expenditures (THE is 3.6% of GDP, USD126 per capita in 2014). Government revenue as a share of GDP is also low at 17% and PHE is only 5.3% of the national government expenditure. In 2009, the parliament enacted Law No. 36/2009 stipulating that at least 5 percent of the central budget (*APBN*) and 10 percent of the district budget (*APBD*), excluding salaries, be allocated for health. In addition, the law states that at least two-thirds of the health budget from the central and district budgets should be prioritized for public services. In the 2016 budget and 2017 budget plan, the health share of the central budget reached and stabilized at 5 percent, the legally mandated amount for the sectoral health share of central government expenditures. At least in aggregate across districts, health meets the legally mandated minimum requirements for health expenditures, but a rapid assessment across 44 districts showed health's share of the district budget varies from 3 % to 18%, with an average of 10% in 2013. OOPE is very high at 46% of THE and is 1.2% of GDP. Both supply-side financing of public sector provision and demand-side financing through the *JKN* exists. On the supply-side financing, several intergovernmental fiscal transfer mechanisms (from Ministry of Finance to LGs) exist: the main ones are general allocation funds (*Dana Alokasi Umum*, *DAU*), revenue sharing (*Dana Bagi Hasil*, *DBH*), and special allocation funds (*Dana Alokasi Khusus*, *DAK*). About 75% of *DAU* is allocated to spending on personnel, limiting the districts flexibility on their annual budgets. Indonesia's health sector has low dependency on external financing, except for some health programs.[29]

27. ***DAK* is the largest conditional transfer and an important lever for the national government to influence subnational service delivery outcomes.** There are two forms of *DAK*: *DAK Fisik* which in health is focused mainly on infrastructure, equipment and medicines; and *DAK Non-Fisik* which in health finances largely operational expenditures (largely for outreach, facility deliveries and accreditation). *DAK Fisik* increased by over four times between 2014 to 2018 to IDR 17.45 trillion (USD 1.29 billion).[30] It forms close to 9.4% of the district health budget, and is an important source of capital spending. There are three types of *DAK-fisik*: (i) *DAK* Regular: which in 2018 finances basic health services at the district/city-level (*puskesmas* infrastructure, medical devices, equipment and information systems); referral health services (primarily districts/city and provincial hospital infrastructure and equipment); pharmacy and health supplies (infrastructure, medicines and medical expendables) and family planning (infrastructure and equipment);[31] (ii) *DAK* Assignment (*DAK-Penugasan*): which in 2018 finances district/province referral

[27] Indonesia: Health Financing Systems Assessment (HFSA), 2016, World Bank report, Ajay Tandon, et al.

[28] US$ 1 = IDR 13,000 approximately.

[29] HIV, TB, malaria and immunization program budgets are significantly donor financed and sustainability is a key issue as Indonesia transitions out of donor financing.

[30] Not including *DAK-Fisik* for family planning, managed by National Population and Family Planning Agency (*BKKBN*), IDR5.3bn in 2018. There is also a clear shift in favor of primary health care - the *DAK* physical allocation to primary health care increased 300% between 2015 and 2016, and the allocation to pharmaceuticals has increased by more than 350%.

[31] See Annex for more details.

hospitals and blood transfusion units; training centers (*Bapelkes*) in five provinces (including Papua and Maluku); and two schistosomiasis laboratories in two districts in Central Sulawesi; and (iii) *DAK Afirmasi*: which in 2018 finances *puskesmas* health service infrastructure in border, islands, and lagging districts (*DTPK*). The majority of *DAK-fisik* is for *DAK* Regular, with the largest allocations to district-level basic health care and district pharmacy. *DAK* does not require co-financing by local governments. In 2018, the total *DAK Non-Fisik* allocation is IDR 8.55 trillion. There are four types of health *DAK non-fisik*: health operational assistance (*BOK*) (for preventive and promotive services); childbirth services guarantee (*Jampersal*); *puskesmas* accreditation; and hospital accreditation (*DAK akreditasi*).[32]

28. **Neither *DAK-Fisik* nor *Non-Fisik* have been strongly linked to results.** Both are allocated based on formulas that ascertain need, with *DAK-Fisik* also based on proposals from provinces and districts. More importantly, *DAK* forms a pivotal source of resources for the health sector in under-developed districts, such as those in Eastern Indonesia. *DAK-Fisik* transfers have been shown to crowd-in spending on capital by district governments.[33] In addition, issues are widely reported at the subnational level with the disbursement timetable for *DAK*. Many facilities don't have access to funds until half way through the year, significantly limiting the types of activities that can be implemented (particularly for *DAK-Fisik* in which procurement can add additional delays). Facilities also report constraints imposed by the three-tranche disbursement of *DAK-Fisik* in 2017, and the requirement to show physical completion before tranches are disbursed.

29. **The *JKN*, at ~IDR 53 trillion (~USD 4.1 billion) or 42 percent of the district health budget in 2015, has been underused to improve health outcomes and supply side readiness.** Other challenges include clarifying institutional roles, covering the informal non-poor, a non-explicit benefits package, and weak strategic purchasing of services. *JKN* implementation is done through *BPJS Health*, which is not well integrated with other health authorities across all levels. The *JKN* is also poorly integrated with supply side financing to improve public sector supply side readiness, and is also being underused to harness private sector provision. *JKN* needs to ensure the poorest 40% of the population are targeted better, and that contribution collection among non-poor informal workers increases.[34] The overall claims ratio[35] was 104% in 2014, with wide variations between different types of members, leading to concerns about sustainability. About 65% of the expenditure claims were hospital-based and another 20% were used for non-capitated fee-for-service payments to facilities. Claims for NCDs dominate, with cardiovascular diseases, kidney failures and stroke among the top five diseases accounting for most of *JKN* expenditures. Even though *JKN* capitation forms a large source of revenue for *puskesmas*, its use for supply-side readiness continues to be problematic due to a lack of clarity on capitation spending at the *puskesmas* level.

[32] Not including *DAK Non-Fisik* for family planning managed by *BKKBN*.

[33] An additional IDR per capita of *DAK* financing leads to an additional 1.21 IDR per capita increase in capital spending. B. Lewis (2013), "Local Government Capital Spending in Indonesia, Impact of Intergovernmental Fiscal Transfers." Public Budgeting and Finance, Spring 2013

[34] Few non-poor informal have enrolled to date and those that have are adversely selected.

[35] The ratio of expenditures to revenue.

30. **Strategic purchasing[36] under *JKN* provides an opportunity for increased efficiency and accountability in service delivery.** Currently, primary care is paid by capitation and hospitals are reimbursed based on diagnosis-related groups known as INA-CBGs. In 2016, the GOI implemented *Kapitasi Berbasis Komitmen* (*KBK*) – a capitation payment to primary health facilities that is linked to agreed performance indicators[37]. In its first year of implementation, capitation payments could be deducted up to 25% if targets or criteria were not met – offering *puskesmas* a significant financial incentive. However, the payment reduction has since been scaled back, ranging from 2.5 to 10%. The majority of *puskesmas* (95%) meet all targets and receive the full capitation amount. This hampers the ability of *KBK* to incentivize performance in its current design. The choice of indicators is also reflective of the current needs of *BPJS Health*, which is more focused on cost containment, and general oversight, rather than overall system performance and health outcomes. The scheme presents an opportunity to develop an additional set of indicators that would meet both *BPJS Health* and MoH performance monitoring objectives.

31. **Decentralization has increased the complexity of fiscal transfers, blurred governance and accountability and strained subnational capacity to achieve improved health outcomes.** In 2001, responsibility for the delivery of most health services was shifted to the district level, with fund transfers being made directly to the district level, bypassing the provincial level. In principle, decentralized health sector decision-making, coupled with large fiscal transfers from the center levels, was intended to empower local governments (LGs)[38] to efficiently and effectively design and implement health programs, especially by adapting to local contexts.[39] Data shows that on at least one health indicator (skilled birth attendance) access has improved markedly under decentralization, and the gap between the highest and lowest performing districts has narrowed since 2011.[40] However, as with other basic services, improvements in and the equity of health outcomes among districts is harder to find – in part because of poor quality data. Complex health financing flows are difficult to manage, marked by seven vertical intergovernmental financing channels, each with different rules and procedures. The introduction of demand-side financing through the *JKN* in 2015 has further fragmented the fund flows. This splintered model strains LG capacities to plan, manage, and allocate funds efficiently to maximize results, and hinders strong governance and accountability.[41] Central government has limited levers through which to direct service delivery improvement at the local level. The majority of intergovernmental transfers are unconditional, and those transfers that are conditional are neither oriented to achieving results nor used to drive implementation of policy guidance from center to local levels. There is multifaceted and competing mix of central and sub-national regulation governing key decisions which complicates health service delivery, and is one reason behind the disparity of human resources for health (HRH) distribution

[36] Which services to be included and how best to buy the right quantity and quality of services. This will typically involve some form of contracting between purchasers of health care (e.g. *BPJS Health*) and providers (e.g. public and empaneled private facilities) to clarify each party's obligations.

[37] Currently there are only three 'performance-based' indicators: contact rate (150 contacts per 1,000 people per month); referral rate for services that could have been treated at *puskesmas* based on agreed set of services; and rate of visit of chronic disease patients.

[38] Local governments (LGs) refer to provincial and district governments

[39] Rokx, C., et al. 2009. "Health financing in Indonesia: a reform roadmap". Washington DC: World Bank.

[40] Decentralization that Delivers, Indonesia Economic Quarterly, World Bank, December 2017.

[41] World Bank. 2008. "Investing in Indonesia's health: challenges and opportunities for future public spending-health expenditure review 2008". Public Expenditure Review (PER). Washington DC: World Bank.

in the country.[42] Finally, another challenge of decentralization in the health sector has been the disruption to and varying quality of monitoring, reporting, and data systems.[43]

Health Information

32. **Health information management in Indonesia is characterized by high fragmentation, poor compliance, little data verification and underutilization of data.** MoH's Center of Data and Information (*Pusdatin*) has developed a standard application for *puskesmas* (*SIKDA*-Generic) that incorporates or can link to other applications, but which is currently used in only about 10% of facilities. Around 20-30% of *puskesmas* use other electronic systems, with the remaining using paper-based systems. The main hospital information system, *SIMRS* is used in only a portion of all facilities. *BPJS-Health* collects data through two systems distinct from MoH (p-Care and e-Klaim), which are much more widely used (upwards of 90% coverage, both public and private providers) but only for *JKN* patients. There is a lack of consistency in data terms, for instance facility and patient identifiers and treatments.

33. **The fragmentation of systems is driven by a lack of coordination among different MoH Directorates-General, between MoH and *BPJS-Health*, and between line ministries and MoF, as well as development partner demands**. It is also driven by innovation from local governments seeking to fill gaps left by the central level and meet local needs. Fragmentation increases the reporting burden for facilities (reducing time for service delivery), reduces compliance, heightens the chances of error and confusion (i.e. when the same information shows up in different systems as different data) and reduces the availability of comparable data for policy making and programming. There is very little done to verify the quality (including completeness) of data, which will become even more problematic as performance elements are introduced into financing, and thus incentives for gaming increase. Among the many online, offline and paper-based information systems used by MoH, local governments and *BPJS–Health* there is no system of comprehensively benchmarking performance of districts and facilities. The lack of complete, timely and credible data makes it difficult to properly assess the performance of facilities and local governments, nor truly understand the kinds of capacity, resourcing and incentives needed to improve service delivery and health outcomes.

34. **There is also an opportunity to introduce disruptive technology that would enable improved accountability of, and better service delivery from, frontline workers.** Mobile health or mHealth has been used in several countries to support frontline primary care service delivery through a range of options. These include beneficiary enrollment and tracking, creating worklists for frontline workers, enabling real time reporting and better supervision of teleconsultations and telediagnostics, for a range of disease conditions, from immunization, to TB and NCDs. There are many examples of such pilots in Indonesia, and given the high penetration of mobile phones, mHealth can be key to strengthening frontline delivery. The Healthy Indonesia through the Family Approach Program (*PIS-PK*) is a key intervention to support improved prevention and promotion, which has three objectives: (i) improving family access to a comprehensive healthcare package covering prevention services, health promotion, basic curative care and rehabilitation; (ii) supporting local governments to achieve the minimum service standards by improving access to health care and health screening; and (iii) improving community

[42] Rokx, C., et al. 2010. "New insights into the provision of health services in Indonesia: a health workforce study." Washington DC: World Bank. See also World Bank (2008). See also World Bank (2008).

[43] Rokx (2009). See also Heywood, P & Harahap, NP 2009, 'Health facilities at the district level in Indonesia', Australia and New Zealand Health Policy, vol.6, no.13.

awareness to become a *JKN* member. Currently, PIS-PK has been implemented in around 30% (2,926) *puskesmas* in all 514 districts, and 34 provinces. The first step to implementing *PIS-PK* is a visit by *puskesmas* staff to each family to develop a database of 12 health indicators[44]. Analysis of the collected data, produces a Healthy Family Index *(Indeks Keluarga Sehat or IKS)* for village, sub-district, district, province and national level. The *puskesmas* will plan and conduct follow-up home visits to address identified risks through behavior change communication and by facilitating appropriate clinical care, as needed. *PIS-PK*, supported by mHealth interventions, will enable more accountable and efficient frontline service delivery.

B. The Government's Program

35. **Introduced in 2015, the GOI's flagship health program is the Healthy Indonesia program**, which aims to improve the health and nutritional status of the community through health and community empowerment efforts, backed by financial protection and the equitable distribution of health services. The Healthy Indonesia program is an *umbrella program* that encompasses the entire public health expenditure, through central and local governments, and was IDR 178 trillion (US$ 13.2 billion) in 2016.

Table 3: GOI Healthy Indonesia Flagship Program

Priority outcomes: ▪ Family health – including maternal and child health; ▪ Nutrition; and ▪ Disease control and environmental health, including: o Communicable diseases (HIV/AIDS, TB and malaria); and o Non-communicable diseases (Diabetes Mellitus, Hypertension, cervical and breast cancer, obesity and mental health).		
Pillar 1: Promoting a Healthy Paradigm	**Pillar 2: Strengthening Health Care Services**	**Pillar 3: The National Health Insurance Scheme**
Objective		
Strengthening preventive and promotive efforts "Healthy Indonesia" through the Family Approach Program (*PIS-PK*) and community campaign for Health Living (*GERMAS*)	Improve access to quality primary care, hospital care and referral through accreditation and HRH.	Improve beneficiary enrollment and expansion of benefits at the same time as achieving better quality and controlling costs
Sub-programs		
- Health prevention and promotion - community empowerment	- Quality primary care - Quality referral care - Pharmaceutical & Equipment - Food and Drug Regulation - HRH	- National Health Insurance (*JKN*)

[44] The 12 healthy family indicators are whether: (i) the family participates in family planning, (ii) if pregnant, the mother delivers in a health facility, (iii) an infant in the family receives complete basic immunization, (iv) an infant in the family is exclusively breast fed for six months, (v) growth monitoring of under-five children in the family, (vi) family members with tuberculosis receives treatment according to standard, (vii) family members with hypertension regularly take medicine, (vii) family members with mental disorder receives treatment and not neglected, (viii) no one in the family is smoking, (ix) the family has access to clean water supply, (x) the family has access to a healthy toilet, and (xii) the family is a member of JKN.

Cross-cutting
- Management, - Research and development; - Health information systems; and, - Health financing

36. **The Healthy Indonesia program is organized around three pillars: Pillar 1 - Promoting a healthy paradigm; Pillar 2 - Strengthening healthcare services; and Pillar 3 - The national health insurance scheme (*JKN*).** It has 12 sub-programs, the first three are related to priority outcomes: i) family health – including maternal and child health; ii) nutrition; and iii) disease control and environmental health: including both communicable diseases (HIV/AIDS, TB and malaria), and non-communicable diseases (Diabetes Mellitus, Hypertension, cervical and breast cancer, obesity and mental health). The remaining nine sub-programs which are designed to achieve the priority outcomes, are: iv) quality primary care; v) quality referral care; vi) pharmaceuticals and equipment; vii) food and drug regulation; viii) human resources for health [all under Pillar 2]; ix) health prevention and promotion and community empowerment [Pillar 1]; x) management, research and development and health information systems [cross-cutting]; xi) *JKN* [Pillar 3] and xii) health financing [cross-cutting]. The first pillar, the healthy paradigm, is implemented through strengthening of preventive and promotive efforts such as the Healthy Indonesia through the Family Approach Program or *Program Indonesia Sehat melalui Pendekatan Keluarga* (*PIS-PK*) and through a community campaign for healthy living (*Gerakan Masyarakat Hidup Sehat* or *GERMAS*). The second pillar, strengthening healthcare services, is to improve access to quality primary healthcare and hospital services, and to strengthen the referral system, including through accreditation and human resources. The third pillar, which is the national health insurance (*JKN*), is focused on beneficiary enrollment and expansion of benefits, as well as a focus on achieving quality and cost control. The cross-cutting strategies support all three pillars. *(please refer to Annex 2 for further details on the sub-programs)*

The following subprograms of Healthy Indonesia are included in the PforR Program:

37. **Healthy Indonesia Pillar 1:** The key sub-program of the implementing healthy paradigm pillar is PIS-PK. The program was rolled out in 2016, and has four objectives: (i) improving family access to a comprehensive healthcare package covering prevention services, health promotion, basic curative care and rehabilitation; (ii) supporting the local governments to achieve the Minimum Service Standards (MSS) by improving access to health care and health screening; and (iii) improving community awareness to become a *JKN* member. The first step to implementing *PIS-PK* is a visit by health center (*puskesmas)* staff to each family to develop a database of 12 health indicators[45] for all families in its catchment area. Analysis of the collected data produces a Healthy Family Index *(Indeks Keluarga Sehat* or *IKS)* for village, sub-district, district, province and national level. The *puskesmas* will plan and conduct follow up home visits to address identified risks through behavior change communication and by facilitating appropriate

[45] The 12 healthy family indicators are whether: (i) the family participates in family planning, (ii) if pregnant, the mother delivers in a health facility, (iii) an infant in the family receives complete basic immunization, (iv) an infant in the family is exclusively breast fed for six months, (v) growth monitoring of under-five children in the family, (vi) family members with tuberculosis receives treatment according to standard, (vii) family members with hypertension regularly take medicine, (vii) family members with mental disorder receives treatment and not neglected, (viii) no one in the family is smoking, (ix) the family has access to clean water supply, (x) the family has access to a healthy toilet, and (xii) the family is a member of *JKN*.

clinical care, as needed. Currently, *PIS-PK* has been implemented in around 30% (2,926) *puskesmas* in 514 districts, and 34 provinces.

38. **Healthy Indonesia Pillar 2:** The key sub-programs under pillar 2 are facility level accreditation, pharmaceuticals and equipment, and human resources. Accreditation will improve quality of services by ensuring that not only the necessary inputs (such as infrastructure, equipment and human resources) are in place but also certifies that both clinical and managerial processes are improved. This would ultimately benefit patients who can be assured of better quality of care by accessing accredited facilities. MoH policy is to make accreditation of hospitals and PHC facilities a prerequisite for empanelment by *BPJS-Health* as a *JKN* provider; by 2018 for hospitals and by 2021 for PHC facilities. The target for accreditation is at least one accredited *puskesmas* per sub-district (5,600) and at least one accredited government hospital per district by 2019.

39. **Besides accreditation, the government program also emphasizes equal access to quality primary and referral health services, including focusing efforts in disadvantaged and remote areas, such as Eastern Indonesia.** This includes supporting more investments (physical infrastructure, equipment and medicines) through *DAK – Fisik* for *puskesmas* and secondary level referral hospitals as well as supporting investments in national referral (vertical) hospitals through the national budget *(Anggaran Pendapatan dan Belanja Negara* or *APBN).* In addition, support for salaries and operational expenses predominantly comes from local government budgets, *DAK Non-Fisik* and *JKN.* Another focus is filling human resource gaps which are key, especially for remote areas and *DTPK*. The government program has two key initiatives to address the same, namely the Healthy Archipelago (*Nusantara Sehat)* program and the Compulsory Service of Specialist Doctor (*Wajib Kerja Sarjana Dokter Spesialis - WKDS*).

40. **The government program is working to address human resource constraints.** As a part of the policy to improve access to quality health care, Minister of Health regulation no. 75/2014 mandates a *puskesmas* to have at least nine health worker categories: doctor, dentist, nurse, midwife, medical laboratory technologist, staff working on public health, environmental health, nutrition and pharmacy. More specifically for *DTPK* and remote areas, in 2016, MoH temporarily discontinued the temporary staff (*Pegawai Tidak Tetap – PTT*) program and launched the Healthy Archipelago (*Nusantara Sehat)* program, to deploy health workers on special assignment to fill *puskesmas* workforce gaps in targeted locations. The *Nusantara Sehat Program* has two deployment strategies: (i) team based special assignment of at least five health worker categories, with varying combinations in response to local needs; and (ii) individual health worker special assignment. The decision to include the team based assignment option was based on positive results of a 2014 pilot in four provinces including Papua and Maluku. The length of the special assignment for both categories is two years. The amount of monthly financial incentive for *Nusantara Sehat Program* participants varies based on the health worker category and on remote/very remote posting, but is on average double the amount of regular civil servant salary for the category. The incentive for very remote posting is around 25 percent higher compared to that of remote posting. The monthly salary is approximately IDR 5 million for health staff with a D3 education (three years of tertiary education) deployed in a remote area up to about IDR 11 million for a doctor deployed in a very remote area.[46] By August 2017, 371 *Nusantara Sehat* teams have been deployed to around 440 *puskesmas*, and the total number of deployed health workers was around 2,750.

[46] D3/academy level education is high school plus three years. For health can be in the field of nursing, midwifery, public health, environmental health, nutrition, pharmacy.

41. **A presidential regulation (*Perpres* no. 4/2017) on Compulsory Service of Specialist Doctor (*Wajib Kerja Sarjana Dokter Spesialis - WKDS*), makes it compulsory for doctors completing specialist training in 2017 and beyond to do a minimum one-year service for the government.** For now, the policy only applies to five types of specialists: pediatrician, obstetrician, internal medicine, surgeon, and anesthetist. This MoH policy, endorsed by the relevant professional associations and professional colleges, aims at addressing shortages and ensuring equal distribution of specialists, particularly in remote district hospitals, regional referral hospitals, and provincial referral hospitals. Specialists on *WKDS* assignment can only practice in the hospital of placement. MoH pays for their salaries and local government can provide additional incentives through the local government budget (*APBD*). As of December 2017, a total of 870 specialists have been deployed, well short of the target of 2,000 *WKDS* participants.

42. **Healthy Indonesia Pillar 3:** The key sub-program under pillar 3 is to expand health insurance coverage to at least 95 percent of its population by 2019, as well as achieve quality and cost-containment. However, the national social health insurance *(JKN)* program has been facing several challenges: financial sustainability; implicit rationing due to limited capacity of the supply side to provide basic health services; and, delivery of integrated and quality health services. In addressing some of the above challenges, especially financial sustainability and quality of care, MoH jointly with the *JKN* administrator, *BPJS-Health* has implemented linking capitation payments to primary health facilities *(Kapitasi Berbasis Komitmen - KBK)* to an agreed set of performance indicators. *KBK* implementation is based on a 2016 MoH and *BPJS-Health* joint circular, with a supporting implementation guideline. The phased implementation of *KBK* started with a pilot for *puskesmas* in two provincial capital cities in 2014, which then was expanded to seven provincial capital cities the following year. By the end of 2016, *KBK* implementation had covered 9,282 or 94 percent of all *puskesmas* and 97 percent of total districts in all 34 provinces.[47] In addition to puskesmas, the expansion of *KBK* is also projected to cover these empaneled facilities: D-*pratama* class hospitals[48], public or private, and private primary care providers in 2017 as set out in the *KBK* roadmap. Health facilities situated in remote and isolated areas, as defined by government regulation[49], and those in areas with poor communication coverage are excluded from *KBK*. The three *KBK* indicators currently used are to monitor utilization of primary health services, cost containment measures, and quality of care for chronic conditions.[50] These indicators are: (i) contact rate of registered *JKN* members; (ii) ratio of avoidable specialist care; and, (iii) chronic disease management program (*Program Pengelolaan Penyakit Kronis - Prolanis*) at the *puskesmas* level. The capitation payment to all empaneled providers is determined first by the type of facility, the level of service availability, as well as the availability of laboratory and pharmacy services. For *KBK*, the capitation is paid in full (100%) if all three indicators are in the '*safe zone*', and is reduced incrementally from 95% to 90% depending on the number of indicators is in the *'safe zone*.'

Cross-cutting programs addressing key systemic constraints

43. **The MoH Secretary-General has prioritized the production of reliable data and the reduction of reporting burden for facility staff – who in his view should only have to enter data once.** *Pusdatin* plan

[47] Districts in East Java are yet to sign the joint cooperation agreement and *NTT* and Papua are awaiting a "remote health facility letter" for exemption from the *KBK*.

[48] D-*Pratama* type hospital provides basic hospital services with only Class-3 wards, can be either public or privately owned, regulated by MoH Decree 24/2014

[49] MOH Decree No. 90/2015 Health service delivery in remote and very remote areas

[50] During the conception of *KBK*, nine indicators were developed by *BPJS-K* team, but based on discussion and agreement with MOH four were selected, and out of four, there were implemented.

to roll out *SIKDA*-Generic to all *puskesmas*, and enable the linking of other systems. While the use of one application in all *puskesmas* and hospitals may be desirable, this is unlikely to be achieved in the short to medium term and MoH are working with facility data system vendors to ensure different systems adopt a common data dictionary. MoH has developed an ICT Masterplan, but it is focused on architecture rather than governance, staffing and other elements. For data aggregation, *KOMDAT* (*Komunikasi Data*) is currently operating in all districts, compiled from paper reports submitted by each facility. The District Health Information System 2 (DHIS2) has been piloted in 10 districts, and will be rolled out to 52 more over the next two years. DHIS2 acts a dashboard for local and national decision making, and can be electronically linked to other reporting systems. The most immediate needs are to: i) develop and implement data governance and interoperability standards; ii) increase the auto-filing of data between *BPJS-Health* and MoH systems (for which there is appetite from *BPJS-Health*); iii) increase the use of data verification protocols to improve quality; and iv) develop political and administrative leadership demand for data.

44. **The GOI has articulated a broad commitment to making fiscal transfers more results-oriented since the release of the Blueprint for Institutional Transformation of the Directorate-General of Fiscal Balance in 2014.** For the first time, the 2018 allocation of health *DAK Non-fisik* includes two "performance" elements. The allocation has been determined on the basis of both technical (80%) and performance (20%) indicators. The technical index is based largely on proxies of need, such as provincial and district location, fiscal capacity and service levels. The performance elements are limited to local-government level financial realization and reporting compliance. MoH claims that since the performance elements were socialized with local governments, reporting compliance has improved. MoH proposes to add more performance elements to the determination of district allocations for *DAK Non-Fisik.*

C. Rationale for World Bank Involvement

45. **The proposed operation supports the GOI's national development plan (*RPJMN*) and the Healthy Indonesia Program through improving access to quality health services.** The World Bank has been supporting the GOI to achieve UHC through analytical and advisory work on health financing, service delivery and governance. More recently, at the request of the Minister of Finance, the World Bank has also made specific recommendations to improve the quality of public spending in the health sector. Key recommendations that are being taken up in this operation are: (i) better use of budgetary resources and intergovernmental fiscal transfers to achieve results (preventive and promotive; facility accreditation); (ii) strengthening monitoring systems and use of health performance scorecards; (iii) fostering innovations to improve access in remote areas (mHealth and task shifting), and (iv) improving the strategic purchasing function of *JKN*. Given that external financing is less than 1% of total health expenditures, the value added of this operation would be to support a further shift to the use of budgetary resources towards achieving results rather than just financing of inputs, which has also been reflected in the recommendations to MoF on improving quality of spending. This operation would also complement ongoing engagements managed through the Governance Practice, such as a PASA (Programmatic Advisory Services and Analytics) on decentralized service delivery that is providing support to the Ministry of Finance (MoF) to implement a more results based approach to the fiscal transfers, as well as the multi-sectoral nutrition agenda. The World Bank will provide complementary technical assistance to support the operation, as well as share international experience on key issues such as performance based transfers, developing "integrated service delivery" models, introducing innovations such as mHealth, and strengthening implementation of social health insurance.

46. **I-SPHERE and the government program that it supports are consistent with the World Bank's Country Partnership Framework (CPF) FY2016-20, which reflects government priorities as specified in the latest Medium-Term National Development Plan (*RPJMN*).** The key results of the proposed operation are fully aligned with the CPF indicators and sector milestones. The CPF emphasizes six engagement areas across two supportive beams (leveraging the private sector; and shared prosperity, equality, and inclusion). The proposed operation falls under the fourth engagement area on delivery of local services and is consistent with both pillar 1 (strengthening the decentralization framework to support local service delivery engagement area) and pillar 2 (supporting the delivery of quality health services). The proposed operation is also consistent with several strategies under pillar 1, including strengthening the capacity of central government to support LGs, building capacity of LGs and possibly contribute to development of a performance-oriented fiscal transfer system.

47. **The proposed operation is consistent with the World Bank's Health, Nutrition and Population Global Practice's overarching objective of ending preventable deaths and disability through UHC.** The proposed operation is also consistent with the priorities outlined in the 2014 East Asia Pacific (EAP) HNP strategy which emphasizes a focus on UHC. EAP's HNP strategy underscores the need for countries in the region to improve HNP outcomes and make progress towards UHC, especially among the poor and vulnerable, as well as enhance the performance and resilience of health systems in financially affordable and sustainable ways. Finally, the operation will contribute to the convergence agenda in the area of chronic malnutrition through strengthening outreach for preventive and promotive health and nutrition services at the community level complementary with other Program support (such as through the Investing in Nutrition and Early Years/INEY operation under preparation).

48. **The Program leverages the efforts of development partners and the use of country systems.** The identified program continues to effectively harmonize support from all the development partners and discussions are underway on support for transitional financing for donor-funded programs such as HIV, TB and malaria, to complement the proposed operation.

49. **The Program is consistent with the World Bank Group Approach and Action Plan for Climate Change and Health which aims to improve climate resilience of health sector.** Climate change amplifies public health risks in Indonesia and presents additional challenges to the health care system and the climate-vulnerable populations it serves. Climate variability and change are already exacerbating many of the disaster risks that the country faces, including drought, flooding, landslides and sea level rise[51], which directly affect the health and well-being of millions of people and can cause critical damages to public health infrastructure. The dry zones in eastern Indonesia have a long history in coping with these risks, particularly floods and droughts.[52] The effects of climate change on natural and physical systems can also alter the number of people at risk of poor health. Heat stress will worsen as high temperatures become more common and water scarcity increases. Under a high emissions scenario, heat-related deaths in the elderly (65+ years) in Indonesia are projected to increase to about 53 deaths per 100,000 by 2080 compared to the estimated baseline of less than 1 death per 100,000 annually between 1961 and 1990.[53] Malnutrition, particularly in children, could become more prevalent in some parts where droughts are expected to become more frequent; and water- and vector-borne diseases are likely to expand in range

[51] Indonesia's first Nationally Determined Contributions (NDCs)

[52] World Bank 2011. "Climate Risk and Adaptation Country Profile – Indonesia" Global Facility for Disaster Reduction and Recovery (GFDRR) World Bank. Washington DC.

[53] WHO. 2016. Climate and Health Country Profile – 2015 Indonesia. Geneva

as conditions favor mosquitoes, flies, and water-borne pathogens. These threats will be greatest in regions where the population is most dense, most vulnerable, and least equipped to adapt, pushing more people in poverty and reinforcing a cycle of environmental degradation, poor health and slow development.[54] The operation will contribute to the Indonesia's national health adaptation strategy which aims to build technical and institutional capacities of the health care system to improve response to increasing climate-related health risks.

50. **The Program-for-Results (PforR) financing instrument has been chosen as the Government has a coherent program and it provides an opportunity for relatively small external financing to leverage larger systemic changes**. The instrument is particularly suitable to support the operation as it is focused on systemic reforms, institutional changes, introducing and scaling up innovations as well as demonstrated improved quality of health spending. Some of the specific reasons are:

a. The PforR is appropriate as it helps to build on a dialogue between MoF and MoH, to achieve more and better spending in health;
b. The PforR instrument is well placed to support and expand national governance, service delivery and financing reforms;
c. Given that external financing is less than 1% of total PHE, the PforR instrument is well placed to support GOI's own programs to improve local service delivery by leveraging domestic financing at the central and local government levels;
d. By linking disbursements to achievement of results that are tangible, transparent, and verifiable, PforR can be an effective instrument to shift focus towards achievement of results by central and local government, rather than just financing of inputs in Investment Project Financing; and,
e. The PforR instrument allows scaling up successful interventions (for example, performance scorecards, innovations and fiscal transfer reforms) based on lessons learnt during the life of the operation.

51. **The MoH has expressed strong interest in the use of the PforR instrument, and has been supported by the Ministry of Planning (*Bappenas*) as well as MoF**. While the instrument is relatively new for Indonesia, there are already two PforRs under implementation, as well as other operations in the pipeline. The World Bank team has spent time orienting MoH, Bappenas and MoF with the PforR approach, including on the Disbursement Linked Indicators (DLIs), verification protocols, and with associated procurement, financial management, as well as social and environmental assessment issues.

III. Program Technical Soundness

A. World Bank Supported PforR Program

52. **The PforR Program will focus on supporting key aspects of the Healthy Indonesia Program to improve performance of primary health care service delivery across Indonesia, including the three lagging provinces of *Nusa Tenggara Timur*, Maluku and Papua.** The PforR Program will achieve transformational impact through a set of three coordinated and converging results areas outlined below, and illustrated in Figure 1.

[54] World Bank. 2017. "World Bank Group Approach and Action Plan for Climate Change and Health". Washington DC. World Bank.

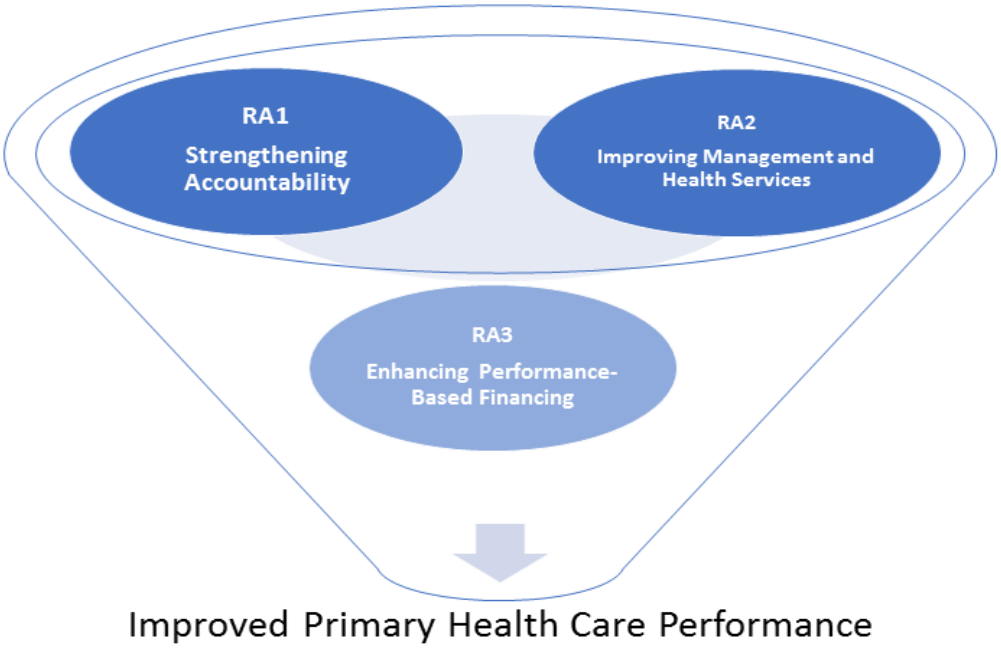
- **Results area 1:** Strengthening performance monitoring for increased local government and facility accountability
- **Results area 2:** Improving implementation of national standards for greater local government and facility performance
- **Results area 3:** Enhancing performance orientation of health financing for better local service delivery

53. **Results area 1 (strengthening performance monitoring for increased local government and facility accountability)** is to improve performance monitoring and benchmarking of health care delivery (both primary and referral care), including developing and publishing district level "performance dashboards." These performance dashboards would also be used to monitor progress made in *DAK* and *JKN* related performance indicators under results area 3. Quality of data would also be improved by enabling interoperability of key systems, introduction of verification protocols, and making electronic data systems more compliant with a standard data dictionary. It will also include introducing mHealth to enable more accountable and efficient frontline service delivery through the *PIS-PK*.

54. **Results area 2 (improving implementation of national standards for greater local government and facility performance)** will support the strengthened implementation of a quality assurance program and accreditation of *puskesmas.* This would involve supporting *puskesmas* to reach higher levels of accreditation, which are associated with more stringent clinical quality and managerial performance standards that are difficult to achieve. However, additional focus will also be given to Eastern Indonesia where *puskesmas* would be supported to achieve basic levels of accreditation, which would be difficult in itself. In addition, the proposed operation will support capacity building of the primary care accreditation commission and MoH by introducing better programs to drive clinical quality, community outreach, continuous quality improvement programs as well as begin to cover the private sector. The proposed operation will also support the accreditation commission to help it gain credibility by becoming independent, making its standards and results more transparent, and implementing the necessary improvements needed to get ISQua certification. This results area will also support strengthening capacity of selected lagging districts to do more data-driven planning and budgeting. These districts would be given intensive training in data driven integrated planning and budgeting to produce improved annual workplans and budgets for better primary and referral healthcare delivery, and have clear financing requests from various funding sources like the *DAK*. To address the issue of human resource scarcity in remote areas, this results area also supports the deployment of teams and individual doctors under the *Nusantara Sehat* initiative. At the same time, an integrated referral system software will be rolled out to improve primary and referral care coordination.

55. **Results area 3 (enhancing performance orientation of health financing for better local service delivery)** supports the introduction of incentives for improved primary healthcare readiness and availability of front line health services through supply side inter-governmental fiscal transfers (*DAK Non-Fisik*) as well as through improved demand side purchasing of primary care (the national health insurance scheme or the *Jaminan Kesehatan Nasional – JKN).* The probable financing indicators are described later in this section.

Figure 1: Coordinated interventions under the PforR Program to improve primary healthcare performance



56. *Table 4* below describes the financial and non-financial incentives under each results area. The Program supports coordinated incentives to induce better service delivery performance from both local governments and facilities. In addition to the incentives, institutional capacity building at different levels of government and at the facility level will enable personnel to respond better to these incentives. While no one results area is enough to improve performance by itself and achieve the desired health outcomes, a "package" of interventions and reforms provides a synergistic platform that will influence district and facility behaviors resulting in improved performance.

57.

Table 4: Incentives and capacity building to achieve improved performance

Results Area	Financial Incentive	Non-financial Incentive	Capacity
RA1: Strengthening performance monitoring for increased local government and facility accountability	**No**	**Yes** – for facilities (as it improves transparency of performance to the district health office and the public) and local governments (improves accountability of local administration and politicians to public through the benchmarking of districts)	**Yes** – for local governments (to understand and monitor health inputs, processes and outputs, including variations in performance among facilities); and provides necessary prerequisite for performance based financing (RA3)

Results Area	Financial Incentive	Non-financial Incentive	Capacity
RA2: Improving implementation of national standards for greater local government and facility performance	**Yes** – for facilities (from 2021 accreditation will be required for *JKN* empanelment).	**Yes** – for facilities (accreditation is a signal of quality to public)	**Yes** – for facilities (the accreditation process provides facilitators to support continuous quality improvement) and local governments (facility action plans highlight where local government oversight attention needs to be focused. Also, building capacity for improved planning and budgeting in lagging districts)
RA3: Enhancing performance orientation of health financing for better local service delivery	**Yes** – for facilities (*JKN*; *BOK*) and local governments (*BOK*)	**No**	**No**

58. The results areas are outlined in more detail below:

Results area 1: Strengthening performance monitoring for increased local government and facility accountability:

a. Developing and publishing performance dashboard to benchmark performance across districts and increasing the interoperability of key information systems. The key activity is the development of "performance dashboards" using the District Health Information System – 2 (DHIS2) or any other relevant system, that pulls together agreed performance indicators from various information systems already in place. This will help benchmark performance across districts, make the results public and therefore help improve the performance orientation of districts. The performance indicators will include key system related indicators across the results chain, from inputs to process to outputs and outcomes. These indicators can be adjusted as government priorities change. Another key activity will be to increase the interoperability of key information systems such as the auto-filing of data between *BPJS* and MoH systems. This will also support the increased use of data standards and verification protocols to improve quality. Improved performance monitoring systems also provide a necessary prerequisite for performance based financing under results area 3; and,
b. Developing and introducing the use of mHealth to improve the quality of reported data. The key activity is to support the MoH in the development and use of mHealth as an innovation to support key programs that are delivered by frontline workers. The identified program to be supported is the *PIS-PK* that has developed a healthy family index based on twelve indicators. mHealth will help to roll this out nationwide in a faster way and add beneficiary targeting and telemedicine, as feasible, to make this preventive and promotive program more effective;

Results area 2: Improving implementation of national standards for greater local government and facility performance:

a. Strengthening the credibility and capacity of the KAFKTP to becomean independent commission. This will support the Accreditation Commission for Primary Health Care Facilities *(Komisi Akreditasi Fasilitas Kesehatan Tingkat Primer – KAFKTP)* to increase its capacity, improve its processes to gain credibility, and become an independent commission, which is a key milestone to achieve ISQua accreditation. This will include developing a business and financing plan, building its capacity, ensuring necessary regulations are in place to be legally independent, begin covering the private sector and applying for ISQua accreditation. In addition, this will support the commission to gain credibility by improving its transparency by publicly disclosure of standards and results. Quality assurance systems such as sample validation of surveyor results as well as introducing better facilitator training and oversight will be introduced. This will also support MoH's target of 5,600 sub-districts with at least one accredited *puskesmas* by 2019;

b. Strengthening the clinical and managerial capacity of - and providing the human resources required for – the puskesmas to obtain accreditation, with an additional focus on Eastern Indonesia. At the national level, the focus will be on supporting *puskesmas* to achieve higher levels of accreditation (top two out of four levels), which are associated with a more stringent application of clinical quality, community outreach, and managerial performance standards, and will be more difficult to achieve. This will also ensure lagging regions such as Eastern Indonesia are not left behind while pursuing national level targets by ensuring that *puskesmas* in these areas achieve any level of accreditation, which will be difficult by itself. This will also support to implement necessary continuous quality improvement approaches at the puskesmas;

c. Strengthening the implementation of priority programs for maternal and child health (including immunization), nutrition, communicable (especially TB) and non-communicable diseases;

d. Providing support for the placement of primary healthcare teams in remote and difficult to reach areas (lagging regions, disaster-prone areas, border areas, small islands0 through the Nusantara Sehat program; addressing the key gender gap of maternal mortality through the improvement of quality of services provided to pregnant women;

e. Strengthening the primary care "gate-keeping" function, and the referral system, through expanding use of an integrated referral information system.

f. Addressing the key gender gap of maternal mortality through the improvement of quality of services provided to pregnant women. The above five areas, along with the financial incentives provided in Results area 3, will directly improve the quality of services (family planning, ante-natal, intra-natal, and post-natal services) provided to pregnant women, including in areas with higher MMR, such as Eastern Indonesia. Also, the mHealth application to be used with PIS-PK, will improve demand for these services, and encourage more women to opt for institutional deliveries. Providing quality institutional delivery, or care at child birth, is directly correlated with reduction in maternal mortality, both globally[55] and in Indonesia[56]. Thus, institutional delivery, along with improved and timely referral care (part of the larger Government program), will help address the key gender gap of maternal mortality; and,

[55] Ending Preventable Maternal and Newborn Mortality and Stillbirths; The British medical Journal, 2015

[56] Revealing the Missing Link: Private Sector Supply Side Readiness for Maternal Health in Indonesia, World Bank report, 2017

g. Developing and implementing a capacity building program for improving public sector management functions, including planning and budgeting, for lagging districts. The activities include conducting intensive workshops for data-driven planning and budgeting concentrated on the development of improved annual plans and budgets. These would result in more efficient resource budget allocations but also enable these lagging districts to make more evidence based requests for financing through the *DAK*.

Results area 3: Enhancing performance orientation of health financing for better local service delivery:

a. Introducing and implementing performance-based elements in DAK allocations. The Program will support the MoH and MoF to implement performance-based elements into DAK non-fisik allocations. While current elements of performance are limited to timely financial reporting and financial absorption, this will support the introduction of more health system and service delivery indicators, examples of which are outlined in table 2 below. The indicators could be adjusted as government priorities change. One important element would be to reward local governments that achieve results in prior years with additional allocations. The Program will also improve the transparency of these allocations to incentivize better performance by enabling local governments to understand how much of their allocations is based on performance. Further, it would enable local governments, and the public to benchmark their "performance based" allocation amounts with others. The program will also support the Government to undertake verification of data used to determine the performance-based allocations, as one means of limiting gaming.
b. Enhancing the performance-based capitation mechanism to strengthen JKN's role in driving provider performance. The Program will support the enhancement of the performance based capitation mechanism to strengthen JKN's role in promotive and preventive health interventions, health system and provider performance improvement, in addition to its current use as a cost containment instrument. The number of performance-based indicators and the quantum of the financial penalty to the providers will both be increased. The joint monitoring of performance financing implementation by MoH and *BPJS–Health* will also be improved. The table of proposed indicators, measurement systems, financing lever, and the levels of intervention are in Table 5 below.

Table 5: List of proposed indicators for performance based financing

Program	Indicator	Type of indicator	Level of activities	Data source	Financing
Program Indicators					
1. Immunisation	• Complete basic immunization for infants • % of Universal Child Immunization villages	• Benchmark indicator	• District	• Reports from district submitted to program	• *DAK non-fisik*
2. TB	• Notification rate • Success rate	• Facility: Improvement • District: Benchmark	• Facility (or district achieving targets)	• *Sistem Informasi Tuberkulosis Terpadu* (SITT) and/or P-Care	• Facility: *JKN* • District: *DAK non-fisik*

Program	Indicator	Type of indicator	Level of activities	Data source	Financing
3. NCDs	• Hypertension detection and treatment compliance • Diabetes detection and treatment compliance • Index of NCD care	• Improvement • Percentage compliance	• Facility	• P-Care	• *JKN*
4. Maternal Health	• Percentage of institutional deliveries • Quality of maternal health services index[57]	• Improvement	• Facility/ district	*Komdat*	• *DAK n on*-fisik
System Indicators					
5. Reporting	• Timely and complete reporting to *Komdat*	• Minimum condition or percentage compliance	• District	• *Komdat*	• *DAK non-fisik*
6. Accreditation	• Number of *puskesmas* accredited (preferably at higher levels)	• Percentage achievement	• District • Facility	• *Sistem Informasi Akreditasi Fasilitas Kesehatan Primer (SIAF)*	• *DAK non-fisik* (district) • *JKN* (facility)
7. *PIS-PK* Coverage	• Percentage of *puskesmas* meeting *PIS-PK* utilization standard	• Percentage achievement	• District	• *PIS-PK*	• *DAK non-fisik*
8. Human resources	• Percentage of *puskesmas* with complete personnel	• Improvement	• District	• *ASPAK* • Personnel	• *DAK non-fisik*

[57] Some potential indicators for constructing a quality of maternal care index are: Four ANC visits (1-1-2) (height measured; blood pressure measured; urine sample taken; blood sample taken; stomach examined; consultation); iron supplementation during pregnancy; tetanus immunization; pregnancy complication advice; discussed place of delivery; discussed transportation to place of delivery; discussed who would assist delivery; discussed payment for delivery; discussed possible blood donor; baby was weighed at birth; baby was breastfed within 1 hour of birth ; no pre-lacteal feed; maternal postnatal check; neonatal postnatal check; postpartum vitamin A within 2 months of delivery.

59. The results chain in Figure 2 (below) articulates the linkages between the activities, outputs, intermediate outcomes, and the final outcomes from the PforR Program. This also identifies the PDOs (in bold), DLIs (in italics) and scalable DLIs marked by an asterisk.

Figure 2. Results chain for I-SPHERE

Sub Results Area	Activities	Outputs	Intermediate Outcomes	Outcomes
Results Area 1: Strengthening performance monitoring for increased local government and facility accountability				
Information systems and data use	Introduce and publish a "performance dashboard" based on various monitoring systems within MoH, MoF, *BPJS*–Health and MoHA	Prototype of performance dashboard designed with indicators and sources of information clearly identified Performance dashboard piloted	***Increased percentage of districts covered in MoH's published performance dashboards****	Timely and good quality information available for more evidence-based decision making and improved accountability
	Increase the interoperability of key information systems that are compliant with MoH's data dictionary	Enhanced data dictionary published Number of *puskesmas* whose information systems comply with the data dictionary P-Care, e-*Klaim* and *SIKDA-Generic* made interoperable with automatic data sharing	Increased percentage of *puskesmas* whose complete and compliant data is stored in MoH's data warehouse	
Design Innovation (mHealth for *PIS-PK)*	Design and introduce mHealth innovation to enhance PIS-PK towards service delivery	Enhanced design of PIS-PK agreed mhealth application designed and developed	*Increased number of puskesmas using mHealth application to support enhanced PIS-PK**	Increased productivity of frontline workers leading to improved service delivery of priority programs

Results Area 2: Improving implementation of national standards for greater local government and facility performance				
Primary care accreditation capacity	Support the Accreditation Commission of primary health care (KAFKTP) to become an independent commission, a key milestone to achieve ISQua certification	Roadmap produced by MoH Costed business plan and by-laws prepared Decree issued establishing independent commission At least 75% of planned staff appointed*	*Primary care accreditation body (KAFKTP) functioning as an independent commission*	Increased credibility of accreditation results
Primary care provider capacity building	MOH, with local governments and Accreditation Commission, to implement existing accreditation roadmap	MoH's existing accreditation roadmap implemented Increased number of trained surveyors and facilitators deployed	***Increased number of puskesmas that have received higher levels (Utama/Paripurna) of accreditation****	Improved accreditation scores in primary care facilities
Reducing inequality in access to quality primary health care	Strengthening access to quality primary health care	Strengthened clinical and managerial capacities at *puskesmas* Facilities properly staffed Continuous quality programs implemented Priority programs (MCH, nutrition, immunization, communicable and non-communicable diseases implemented)	*Increased number of puskesmas that have been accredited in Eastern Indonesia**	Increased number of people receiving primary health care at accredited facilities in remote areas

Local Government capacity building	Strengthening national and local government (lagging districts) capacity for planning and budgeting.	Training for local governments with low absorption capacity on data-driven health planning and budgeting	*Increased number of lagging districts that have produced an improved annual plan and budget**	Improved efficiency and effectiveness of local government health spending
HRH for remote areas	*Nusantara Sehat*	Hire and train staff for Nusantara Sehat	*Increased number of Nusantara Sehat teams deployed in remote areas**	Increased population coverage of priority programs in remote areas
Referral systems	Develop an integrated referral system between primary and higher levels of care.	New software developed and rolled out, with training.	*Provinces that are using an integrated referral system (IRIS)**	More efficient and effective treatment of health care needs
Results area 3: Enhancing Performance Orientation of Health Financing for better Local Service Delivery				
Performance oriented *DAK*	Link *DAK* transfers to achievement of specific results	*DAK* performance index with enhanced indicators designed and introduced Improved verification and transparency of *DAK* allocations	***Increased percentage of districts showing an improvement on the performance indicators in the enhanced DAK non-fisik****	Increased number of accredited facilities Increased coverage of people receiving priority primary health care services, **for example institutional deliveries**
Performance oriented *JKN*	Implementation design of performance based capitation for *JKN* completed	Additional performance based capitation indicators introduced Increase percentage of financing contingent upon performance	***Increased percentage of primary care providers implementing performance based JKN capitation****	

60. **Linkages with Investing in Early Years and Nutrition Action Plan**: In 2017 the current government launched a Presidential National Action Plan to consolidate "top-to-bottom" political leadership, strengthen execution of existing multi-sectoral policy frameworks, and drive consolidation and convergence of national, regional and community programs ("the National Action Plan"). The National Action Plan, which was approved in a ministerial cabinet meeting chaired by the Vice President in August 2017, acknowledges that stunting is at crisis levels and recognizes the need for an ambitious multi-sectoral response. It emphasizes the need to use the inter-governmental planning and transfer system to better monitor and allocate financing across programs and levels of government, strengthen coordination across sectors as well levels of government, improve the quality of existing programs and activities, improve utilization of community-based programs and financing, and strengthen performance systems. The National Action Plan directs national ministries to focus their programs and activities in 2018 on 100 districts with high stunting prevalence and incidence. The National Action Plan will rely on improvements in health service delivery at the primary care level in the priority districts.

61. **A World Bank supported PforR operation *Investing in Nutrition and Early Years (INEY)* is under preparation and will support the GoI National Action Plan commitment to reducing stunting.** In order to achieve its results, the INEY PforR requires strong linkages and coordination with the I-SPHERE PforR. In return, the results proposed under the I-SPHERE PforR will benefit from strengthened frontline preventive and promotive health services (*posyandu* and *kaders*) which will be supported under INEY. Areas of linkage include: (i) enhanced health service delivery in the priority districts – the INEY and Health PforR have overlap in geographic areas; (ii) joint or complementary training interventions; (iii) data sharing and regular coordination meetings at sub-district and higher levels; and (iv) high-level commitment and leadership. The INEY PforR foresees incentivizing *kaders* who would be supported through the family health outreach program, which will be strengthened under the I-SPHERE PforR. The PforRs will coordinate incentives, indicators and verification for appropriate sub-areas of their programs, such as under the accreditation program for *puskesmas*, alignment of data and indicators linked to nutrition in *PIS-PK* and mHealth, and flexibility in use of resources for outreach under *DAK non-fisik*. The INEY PforR would make resources available to improve outreach through the kaders. Finally, as stunting reduction is part of the health agenda as well, the performance dashboard would include nutrition indicators.

B. Technical Soundness:

62. **Indonesia has made large strides towards achieving some of its health outcomes, as well as making a commitment towards achieving UHC.** With the largest single-payer Social Health Insurance scheme (SHI) in the world in terms of population (188m people enrolled), Indonesia now needs to focus on improving equitable access to quality health services to realize its commitment to UHC. Indonesia must increase its public expenditure on health but also derive more value for the money it spends. More recently, there has been strong interest shown by at highest levels in MoF in increasing the quality of spending in the health sector by improving both allocative and technical efficiency. The World Bank team has provided specific recommendations to improve public spending in the health sector, both through supply side- (*DAK*) and demand side- (*JKN*) financing reforms, strengthening governance and accountability in a decentralized context, as well as improving service delivery quality. Given the decentralized context, one of the key challenges that faces Indonesia is to improve service delivery access and quality by local governments, which could be achieved by a combination of governance and financing reforms. With rising NCDs, it is also imperative that costs are controlled through more efficient delivery of services, and by introducing "integrated care" with primary healthcare as a gatekeeper. The proposed Program supports the GOI in addressing some of these key issues by focusing on national initiatives to strengthen accountability, improve local government capacity, strengthen quality of care and related

institutional strengthening (accreditation commission), introduce innovations as well as make fiscal transfers to local governments more performance oriented. In addition, it supports improved strategic purchasing of primary care services through commitment based capitation (or *KBK*) by *JKN*. Finally, the Program also supports improved quality of primary care services in three of the worse off provinces in Eastern Indonesia. Hence, the Program is strategically relevant, responding to client demand for reform, and well aligned well with GOI's health sector goals and priorities.

63. **The proposed operation draws from extensive analytical work on health sector issues such as financing, service delivery, human resources, maternal health, nutrition, supply side readiness, as well as from other sectors, such as the inequality report and analysis of decentralization.** This also builds upon the experience of implementing projects in Indonesia, within and outside the sector. Findings from the health financing system assessment, the public expenditure review, the deep dive on human immunodeficiency virus (HIV), tuberculosis (TB), malaria, and immunization (ATMI), the supply side readiness assessment for maternal and child health, the nutrition report and the Quantitative Service Delivery Survey (QSDS)[58] squarely put the focus on the need to increase and improve the quality of government health spending. Government health expenditure is well below regional and lower middle-income averages, undermining service delivery – especially in remote, border, and island areas such as the Eastern provinces of Maluku, *NTT*, and Papua. The three pillars of the government (Healthy Indonesia) program, and its underlying sub-programs, are focused on prevention and promotion (pillar 1), expanding equal access to quality health services (pillar 2), and providing financial protection for all Indonesians through *JKN* (pillar 3). Some of the key constraints that need to be addressed is the need to strengthen quality of care, ensure availability of human resources, especially in remote areas and ensuring accountability and increasing capacity of local governments in a decentralized context. In addition, key intergovernmental fiscal transfers such as the *DAK* are not well performance oriented. At the same time, the rapidly expanding *JKN* provides a generous benefit package with insufficient funds that limit the depth of coverage. *JKN* design features include no caps or copayments on services received, open enrollment periods for accessing services, provider payment rates that do not cover the full cost of services[59], and open-ended payments to providers. These have all contributed to the growing deficit of *BPJS-Health*, the implicit rationing of services, high out of pocket payments, and forgone care when the supply side financing is ill equipped to meet growing demand.

64. **Addressing the ongoing under-investment in the health sector, improving quality of health spending and *JKN* sustainability will be key for expanding and ensuring UHC; and global experience supports the proposed design of the Program**. Many countries face similar challenges as they strive towards UHC with options typically involving: i) increasing revenues; ii) limiting coverage (e.g. small benefits packages, cost-sharing); and/or iii) improving efficiency in the use of funds through better strategic purchasing. Global experience has shown increasing revenue is limited by the fiscal capacity of the government – a relevant constraint in Indonesia. In Cambodia, Laos, and Myanmar benefit levels remain relatively shallow. In Indonesia, Vietnam, and the Philippines breadth of coverage is prioritized over depth of services. Each variation has resulted in limited access and poor financial protection.

65. **Global experience suggests that paying for performance (P4P) is an important element in improving health care quality.** WHO recommends strategic purchasing as one of the approaches to

[58] The QSDS is a health facility survey designed to measure different dimensions of performance.

[59] *BPJS* reimbursements in general do not cover the full cost of care and there is significant co-financing by supply-side government budgetary expenditures in the public sector.

enhance efficiency.[60] Successful implementation of P4P needs substantial structural and behavioral changes, at both the facility organization and health-system level. If P4P can be integrated with strategic purchasing payment mechanisms, and bring about positive changes in management and governance of programs, it can accelerate the pace of other quality improvement programs. Currently, primary care in Indonesia is paid primarily by capitation. Hospitals are reimbursed based on diagnosis-related groups[61] (DRGs) known as INA-CBGs. The challenges for P4P programs in LMICs are in developing valid quality indicators for contracting purposes. More and more countries using payment mechanisms such as fee for service, bundle payment or capitation, also offer incentives to promote quality improvement. Germany and UK have modified their DRG hospital payment systems whereby re-admissions within a certain period of time are refused payments. Rwanda has used a pay for performance (P4P) mechanisms as reimbursement over and above the capitation fee for outpatient care. P4P can also work with other quality insurance initiative such as accreditation.

66. **Globally, quality improvement initiatives are important for improving health processes.[62]** Quality improvement interventions can target both institutions, such as accrediting health service providers; public reporting of provider performance data; and total quality management; and individuals, such as regulating medical professionals; continuing medical education; and non-financial incentives to health workers. A wide range of quality improvement interventions are applied around the world. There is some evidence that these are associated with improved process measures of the quality of care. However, evidence on improving patients' health outcomes is less convincing.[63] Accreditation is as a form of external audit against pre-determined standards, using a mixture of self-assessment and external surveys, with the aim of improving clinical outcomes.[64] There can be a formal recognition of compliance with set standards (e.g. International Organization for Standardization, ISO) validated through external evaluation by an authorized auditor.[65] The Zeng review however finds that even though accreditation has been used for the past two decades, the body of evidence on accreditation program remains limited and of questionable quality. Studies included in systematic reviews are mostly observational and without control groups, raising questions about the causal attribution of accreditation effects. Most of the findings suggest that accreditation has a positive influence on organization and process of care. The evidence on the cost and value for money of accreditation is very thin and there seems to be structural difference in the implementation of such programs between LMICs and HICs. Experience from use of accreditation in LMICs is growing, and is a mixture of success with not so positive experiences. The Liberian accreditation program which was limited to evaluating health facilities for provision of a package of basic services, resulted in more service data being available and increased trust in the government for stewarding heath

[60] The World Health Report: Health System Financing: The Path to Universal Coverage; World Health Organization; Geneva, 2010

[61] Capitation is a population based payment where providers are paid a fixed rate to provide a defined set of services for everyone enrolled with them within a given period. Case based payments are a fixed rate per admission or per outpatient visit which can be adjusted for case severity.

[62] Zeng W, Gheorge A, Nair D: A Discussion Paper on Health System Level Approaches to Addressing Quality of Care in Low and middle Income Countries; World Bank; September 2016

[63] ibid

[64] International Society for Quality in Health Care; International Organization for Standardization (ISO)

[65] Accreditation is expected to lead to improved clinical outcomes and more efficient delivery by enabling the translation of quality and safety standards into clinical practice. It has three steps- 1) establish systems that determine and apply organizational and clinical standards; 2) assess the extent of provider compliance with these standards; and 3) encourage continuous improvement over time in parallel with gradually rising standards.

reform.[66] Zambia, Uganda, Kenya, Mali, Lebanon, Morocco, Iran and Zimbabwe are rolling out accreditation programs with mixed outcomes. The Zambian Hospital Accreditation program only was able to operate for a year due to obstacles in financing of the accreditation process, legal recognition of the authority, staff attrition and use of the results. This experience highlights the benefits of careful planning and piloting, electronic data collection and maintaining frequent communication across all stakeholders. All lessons to bear in mind when designing the PforR. Although the overall evidence on the impact of QI interventions is mixed and limited in LMICs, there is no doubt that improving quality of care requires more attention and given the paucity and low quality of the evidence, more research on the impact of QI strategies, particularly the impact on health outcomes, with rigorous research designs is recommended to generate evidence for policy making.

67. **The evidence on intergovernmental transfers[67] for health provides important learning for the operation**. Fiscal transfers from central/federal to subnational levels of government can play an important role in stimulating the desired inputs, process, outputs and health outcomes. If designed well these fiscal transfers can also "help to equalize the spending across states and adjust…allocations for the health risks of each state's population."[68] Transfers can increase accountability and create incentives for spending for effectiveness in service delivery. To get to better outcomes, a review by the Center for Global Development on international experience[69] suggests that existing transfers need to be reexamined and reformed along three dimensions. First, allocations to subnational governments should respond to local needs and take into account population size. Second, transfers can generate incentives to improve subnational governments' spending quality and performance on outcomes regardless of the health service delivery model used.[70] Third, there should be independent systems to monitor, evaluate, and provide feedback data on subnational performance, inducing greater accountability to legislatures as well as to citizens.

68. **In Argentina, Brazil and Pakistan, intergovernmental fiscal transfers are allocated according to formulas that incorporate both need (e.g. population, human resources and infrastructure) and performance (e.g. maternal and child health).** In many countries, funds are transferred based on the use of essential health services and achievement of an index of service- immunization coverage; growth monitoring/stunting and wasting; use of skilled birth attendance; antenatal and postnatal care. For example, Brazil and Mexico have used health services utilization indicators as conditions of conditional

[66] Zeng, Gheorge, Nair et al; A Discussion Paper of Health Systems Level Approaches to Addressing Quality of Care in Low- and Middle- income Countries; World Bank, Sept 2016.

[67] Amanda I Tan; Intergovernmental Fiscal Transfers: Health Financing; June 29, 2017

[68] Power to the States: Making Fiscal Transfers Work for Better Health; Center for Global Development & Accountability Initiative, Center for Policy Research, CGD, 2015

[69] ibid

[70] Indicators used by some countries: England: age, gender, mortality, unemployment, elderly living alone; Brazil: Infant mortality, ages 1–64 mortality, ages 65 and older mortality, mortality rate by infectious and parasitic diseases, mortality rate for neoplasia, mortality rate for cardiovascular conditions, adolescent mother percentage, illiteracy percentage, percentage of homes without sanitation, percentage of homes
without running water, percentage of homes without garbage collection; South Africa: Percentage of female; percentage children under 5; percentage living in rural area; percentage older than 25 without schooling; percentage unemployed; percentage living in traditional dwelling, shack, or tent; percentage without piped water in house or on site; percentage without access to refuse disposal; percentage without access to phone; percentage without access to electricity; percentage living in household headed by a woman. Source: Health Transfers Using Composite Indexes in England; Brazil and South Africa; Shah 2007

cash transfers (CCTS). In Argentina, under *Plan Nacer*, fiscal transfers are made from the federal government to the subnational governments based on a formula of 60% based on enrollment of the population in the program and 40% based on an index of 10-14 tracer indicators, of both health outcomes (e.g. low birth weight) and service utilization (e.g. immunization coverage).[71] In Pakistan, the provincial government of Punjab has adopted a hybrid formula-based fiscal transfer from the provincial government to districts using a performance-based equitable resource allocation model that is 70% needs-based and 30% performance-based. Another important aspect that needs to be addressed in performance-based financing is "who" is to be paid for the services - the subnational government; the health facility or worker; or the individual beneficiary utilizing the health service (such as in India, where the *JSY (Janani Suraksha Yojana)* program seeks to address maternal mortality by inducing mothers to take up more institutional deliveries). The review by CGD (Center for Global Development) on intergovernmental transfers finds that even there is good evidence the impacts on transfers to workers or individuals, and the evidence on transfers to subnational governments/states is emerging, though promising. CGD recommends, given the scale of large countries, that payments be made to states/subnational governments and they in turn encouraged to design programs which provide incentives to facilities/providers or even individual clients, to improve performance. Increasing efficiency in health care spending and targeted spending to areas of geographical inequality are often the most feasible entry points for increasing fiscal space for the sector. The PforR Program focuses on addressing many of the key systemic constraints to this in Indonesia. The PforR will be part of a package of engagements, including technical assistance within and outside the health sector, and the PforR enables the World Bank to support implementation of some of the key policy recommendations emerging from its analytical work.

C. Institutional Arrangements for Implementation

69. **Borrower Implementation Capacity**: The Ministry of Health has not had an operation with the World Bank since 2008, and hence there is a general need to exchange information between the two organizations, and to provide learning on World Bank processes. Furthermore, the PforR instrument is new to the Ministry of Health, and relatively new to Indonesia. Project preparation has benefited from knowledge sharing on the PforR instrument, and key Ministry and *BPJS-Health* staff attended a PforR training as well as a clinic focused on I-SPHERE, in November 2017. During implementation, implementing partners will benefit from additional capacity building around the particularities of the PforR instrument, and other needs for technical capacity building will form part of the operation. The primary care accreditation commission is a newly formed institution, with limited staff and institutional capacity. The commission will require significant support to expand its capacity, including to prepare a business plan to become an independent entity. There is a need to support MoH in terms of developing an appropriate mHealth design to take forward their *PIS-PK* initiative, and make it more service delivery oriented. *BPJS-Health* requires capacity building on strategic purchasing and the roll-out of enhanced performance-based indicators for *JKN*. The government (MoH, MoF, MoHA and local governments) will require support and advice in designing and implementing of a more performance-oriented health *DAK*. Finally, the substantial reliance on local governments (including health facilities) to achieve Program performance necessitates capacity building and institutional strengthening, including the need for developing training modules and advanced teaching methods for public sector management functions, such as integrated planning and budgeting. Significant technical support will also be needed in areas such as data governance and standards, data verification, and data analysis and use (including preparing the health performance dashboards). In the areas of environmental and social risk, capacity support will be required for improving complaints handling, assist personnel to manage environmental and social risks. Resources will be needed

[71] Gertler and Giovagnoli, 2014

to finance capacity building and technical assistance needs, including for mobilizing local and international expertise. Some of this will be raised by MoH by use of their own resources. The Program will also be supported by the World Bank health and governance Programmatic Advisory Services and Analytics (PASA), implemented in parallel with the Program. Both PASAs have technical assistance elements around stewardship and governance, financing, and service delivery in line with those needed by the Program.

70. **Institutional Arrangements:** A national Program Steering Committee (PSC) will comprise MoH, *BPJS-Health*, MoF, *Bappenas* and MoHA. The PSC will provide policy guidance, implementation oversight and ensure cross-ministry and subnational coordination. Program implementation will involve the following MoH implementing units: Bureau of Planning, Directorate of Primary Health Care, Directorate of Referral Health Care, Directorate of Health Facilities, Directorate of Health Care Quality and Accreditation, Directorate of Health Promotion, Directorate of Environmental Health, Center of Data and Information, Center of Health Financing and Insurance, Center of Health Workforce Planning and Empowerment, and various Directorates within the DG of Disease Control. In addition, the program will also require the participation of selected units within *BPJS-Health*, MoF and MoHA, and the Accreditation Commission. The Directors of these units will form a technical committee, providing overall technical guidance for the program. Internally, MoH will use existing managerial decision-making structures to direct implementation of the Program. Implementing units involved in the program will report to their respective Director Generals. The Head of the Bureau of Planning will be the Director of the Program Coordinating Unit (PCU), consisting of a Technical Working Group and a Management Group. The Technical Working Group will consist of technical staff specialized in areas relevant to the core needs of the program, who will be the focal points to drive implementation, identify and address bottlenecks and ensure reporting and communication between the implementing units and the PCU. The Management Group will organize, for example, program monitoring and evaluation, engagement with the Independent Verification Agent, and preparation of the program financial statements. Depending on the skills required, staff will be seconded from the Directorates/Centers or, where there is a lack of capacity, consultants will be hired. The provincial and district health offices will implement the program in the provinces and districts. For vertical coordination between the national and subnational government, existing government mechanisms will apply. For example, the Program will apply the same national-subnational processes for *DAK non-fisik* planning and monitoring, for requesting *Nusantara Sehat* team deployment, for requesting accreditation, and so forth. The PCU will arrange for additional support, as necessary. The existing reporting mechanism at the subnational level remains, in which the Head of the Provincial Health Office reports to the Head of the Provincial Government Office (Governor), and the Head of the District Health Office reports to the Head of the District Government Office (Bupati/Mayor).

IV. Program Expenditure Framework

71. **PforR Expenditure Boundaries:** The total Program cost over five years will be IDR 185.92 trillion (USD 13.507 billion), including support by a World Bank loan of USD150 million. The Program boundaries include only those expenditures needed to achieve the PDO and the results, and do no included expenditures in any other PforR[72]. The funding for the Program (including technical studies) is adequate, sustainable and aligned with the intended results under the Program. The expenditures included are from MoH's national budget (*APBN*) (select directorates from the Secretariat General, Inspectorate General, select directorates from the DG of Community Health, select directorates from the DG of Health Services,

[72] BOK puskesmas is required for the achievement of results under both the I-SPHERE and INEY PforRs. Based on an analysis of MoH data it has been determined that 89% of BOK puskesmas spending is more directly related to the objectives and results under I-SPHERE than to INEY. On this basis, the expenditure program has been adjusted.

select directorates from the DG of Disease prevention and Control and select directorates from the Human Resources for Health Institute), capitation and administrative expenditure of *BPJS-Health, and DAK non-fisik.* There are no high-value contracts to be excluded from the Program boundary.

Table 6: Program Funding

Source	Amount (US$m)	% of Total
Government	13,357.00	98.9%
IBRD/IDA	150.00	1.1%
Other Development Partners	-	-
Total Program Financing	13,507.00	100%

A. Program Budget Structure and Classification

72. **The Program is constituted by the following expenditures:**

Table 7: I-SPHERE PforR Program Expenditure Boundaries (2017 - budget)

	IDR	USD
Ministry of Health		
General Secretariat	270,768,860,000	19,977,044
Inspectorate General	114,153,583,000	8,422,132
Directorate General of Health Services	114,544,964,000	8,451,008
Directorate General of Disease Control	2,025,700,115,000	149,454,044
Directorate General of Community Health	813,233,257,000	59,999,503
National Institute for Health Workforce Development and Empowerment	3,680,289,636,000	271,527,935
Subtotal	**7,018,690,415,000**	**517,831,667**
BPJS		
Operational Costs	4,249,686,000,000	313,537,405.93
Capitation	13,551,384,000,000	999,806,994.25
Subtotal	**17,801,070,000,000**	**1,313,344,400.18**
DAK non-fisik[73]		
Subtotal	**6,383,835,515,670**	**470,992,733.93**
TOTAL	**31,203,595,930,670**	**2,302,168,801**

Source: *APBN*

73. **Financial sustainability is commonly assessed based on the medium-term expenditure framework (MTEF) for the program.** Since 2011, the Central Government budget has been following a MTEF. MTEF calculations are consolidated by each line ministry and cascaded down from the program level to the activity level by each spending unit. The existing program by the Ministry of Health is already

[73] The DAK non-fisik financing lines included are: puskesmas accreditation, childbirth assistance, family planning, BOK drug distribution, BOK district/municipality, BOK province and 89% of BOK puskesmas. *BOK puskemas* is required for the achievement of results under both the I-SPHERE and Investing in Nutrition and Early Years PforRs. Based on an analysis of MoH data it has been determined that 89% of *BOK puskesmas* spending is more directly related to the objectives and results under I-SPHERE than to INEY. On this basis, the expenditure program has been adjusted.

included in the detailed central government MTEF process. Local government transfers however are outside the scope of the MTEF and local governments do not implement MTEFs as part of their regular budget preparation. Given the large leverage of the Bank's funding there is almost no risk that the Government will reduce spending such that the Government program will be smaller than the PforR Program.

B. Adherence of Budgeted Program Expenditure and Execution to Government Priorities

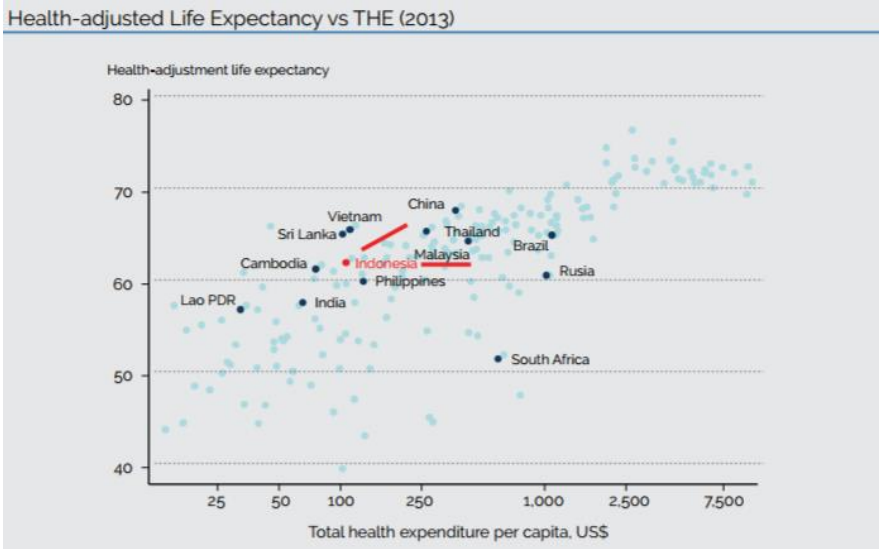
74. **The proposed PforR boundaries are in line with the government's reform agenda** with a particular focus on supporting national initiatives to strengthen governance capacity at all levels of government, supporting reform of financing to enable better local service delivery, and enabling equitable access to quality health care in three remote provinces in Eastern Indonesia. The boundaries are set within: the central government program that falls under the Ministry of Health, Secretary-General's Office, Inspectorate General, Directorate of Health Services, Directorate of Prevention and Disease Control, Directorate of Community Health, and Directorate of Human Resources for Health and Empowerment Agency; the national health social health insurance agency (*BPJS-Health*); and transfers to the regions in the form of *DAK non-fisik* in particular the health operational support grant (*Bantuan Operasional Kesehatan - BOK*) and accreditation facilitation grant (*DAK-Akreditasi*).

75. **Whether budget execution is "well-functioning" is assessed by comparing the expenditure outturns with those approved in the budget.** The execution rate of the program boundaries from MoH's budget was 99.3 percent for 2016. The execution rates for *BOK* (the majority of *DAK non-fisik*) was 97 percent in 2015 and 2016.[74]

C. Efficiency of Program Expenditures

76. **Efficiency of program expenditures are often assessed through an application of international unit costs of the included programs.** However, given the Program boundary covers a wide range of activities, efficiency here is assessed based on the relationship between health spending and outcomes. On this basis, Indonesia has some way to go to improve efficiency of its health system – when looking both at past performance and compared to peers. Between 2000 and 2013, Indonesia increased total health spending per capita, with little increase in healthy life expectancy at birth. Furthermore, during the same period technical efficiency reduced from 0.30 to 0.16 (using a Data Envelopment Analysis).[75] Indonesia's healthy life expectancy is lower than other countries in the region that spend similar amounts per capita (e.g. Vietnam) and similar to others that spend less (e.g. Cambodia) (see below). On utilization, Indonesia's overall bed density ratio is below WHO norms, occupancy rates are low and the average length of stay is trending upwards. The density of health centers to population (one *puskesmas* per 26,000 people) is aligned with other low and middle-income countries.

[74] Execution is not available for *DAK Akreditasi*.
[75] See Indonesia Health Financing System Assessment (2016) World Bank, p84.



77. **Indonesia has challenges with both technical and allocative efficiency.** Key inefficiencies arise from poor supply-side readiness, limited health worker skills and maldistribution of personnel, unnecessary readmissions and increased average lengths of stay, medical errors (including in the late referral of women giving birth), and a focus on curative rather than preventative care. The Program will address many technical inefficiencies, for example by improving supply-side readiness through accreditation and improving the use of *DAK*, and allocative inefficiencies, for example through increasing the availability of information on health spending and outcomes, and reducing the number of inappropriate referrals

V. Program Results Framework and M&E Capacity

A. Description and Assessment of Program Results Framework and M&E Capacity

(please refer to annex 3 for results framework and DLIs)

78. **The Program Development Objective is**: **Strengthening the performance of Indonesia's primary health care system.**

79. **The Program Development Objective (PDO) indicators are**:

1. Districts covered in MoH's published performance dashboard;
2. *Puskesmas* that have received higher levels of accreditation;
3. Pregnant women delivering at a health care facility;
4. Primary care providers that are implementing performance based *JKN* capitation; and,
5. Districts showing an improvement on at least half of the performance indicators in the enhanced *DAK non-fisik*.

B. Capacity Building for Monitoring and Evaluation

80. **The Government will benefit from capacity building on monitoring and evaluation through the Program itself and associated technical assistance.** As much as possible, existing systems will be used to monitor the Results Framework, but these will need to be complemented with additional collection and independent verification. Indonesia has many national data collection and reporting systems for the health sector, but they are fragmented, have incomplete coverage, and the data is rarely verified. Health facilities are required to enter data, as are districts. One of the core aspects of the PforR is to improve the coverage, quality and use of health information. The Program is keen to not contribute to the further

proliferation of data systems, by establishing an additional, separate system for Program monitoring. The Program will therefore seek to use existing systems as much as possible. *BPJS-Health* already has a widespread, well-functioning and credible data collection process. In other areas, the Program will adopt a gradual approach to the reliance on existing data systems, as they improve. At least for the first two years, the Program will need to engage an independent authority (which could be the same as the DLI verification agent) to assess progress in certain indicators. The Program will work closely with MoH's data center *(Pusdatin)* and relevant Directorates General to develop desk and field-based protocols to check and enhance data quality. These processes will model methods that the Government can adopt for routine data verification and validation across all health information systems. Overall, this situation will necessitate additional supervision attention from the Bank team.

VI. Program Economic Evaluation

A. Rationale for Public Provision/Financing

81. **Addressing the ongoing under-investment in the health sector and *JKN* sustainability will be key in expanding and ensuring UHC; and global experience supports the proposed design of the project.** Many countries face similar challenges as they strive towards UHC with options typically involving: i) increasing revenues; ii) limiting coverage (e.g. small benefits packages, cost-sharing); and/or iii) improving efficiency in the use of funds. But global experience has shown increasing revenue is limited by the fiscal capacity of the government – a relevant constraint in Indonesia. In Cambodia, Laos, and Myanmar the benefit levels remain relatively shallow. In Indonesia, Vietnam, and the Philippines breadth of coverage is prioritized over depth of services. In each situation, the result has been limited access and poor financial protection. Therefore, efficiency in health care spending and targeted spending to areas of geographical inequality are needed to make the most of existing limited fiscal space, and make the case for greater allocation from national and local budgets.

82. **Access to good quality primary healthcare increases overall system equity and efficiency by:** (i) improving allocative efficiency through investments in cost-effective interventions such as prevention and promotion versus much costlier curative care (immunization versus treatment of vaccine preventable diseases such as measles); (ii) decreasing the unit cost per episode of treatment (at more inexpensive primary care centers versus hospitals); and (iii) increasing early treatment and reducing expensive referrals by avoiding complications in Indonesia's increasingly common chronic diseases (controlling blood pressure of hypertensive patients via lifestyle modification and medication versus dealing with stroke and nephropathy). International evidence suggests that most countries with well-functioning and efficient health systems, rely on improvements in primary health care as a path to achieve UHC.

83. **The three results areas proposed under I-SPHERE offer a set of coordinated and converging results areas to improve the quality of health expenditure, with both financial and non-financial interventions**. They are part of a package of engagements, including technical assistance that aim to:

a) Strengthen national procedures, guidelines, and standards for improved clinical and managerial performance – helping reduce inappropriate or low-value care, prevent avoidable costly adverse effects, and decrease operational waste (Results Area 2);
b) Enable greater accountability by formalizing the collection, review, and use of data in decision making (Results Area 1); and

c) Use supply and demand side financial incentives to stimulate improvements in performance, slow down the growth of health expenditures all while mitigating any unintended consequences (Results Area 3).

B. Economic Impact

84. **Traditional economic evaluations for projects that focus on strengthening governance and financing are rare because they are often complex interventions that target multiple aspects of the health system making them difficult to quantify.** As a result, there is limited or weak empirical evidence to draw conclusions on their value for money.[76]

85. **First, studies evaluating accreditation and performance based financing (PBF) interventions are often partial evaluations presenting information on consequences or benefits, and less so on costs**. In the limited number of studies that presented costs and benefits, the information was presented separately with no attempt to quantify benefits and assess whether they outweighed costs.

86. **Second, the wide variety of outputs measured make results hard to generalize**. Early accreditation interventions were limited to compliance with minimum standards – a reflection of accreditation often being used as a tool for regulation and public accountability. These show limited impact in improving the quality of care. However, increasingly there is a move towards quality and patient safety indicators which can have significant economic impacts. The results of PBF are mixed -dependent on country context and implementation arrangements. For instance, other factors such as the lack of continuous provider education, limited managerial skills, poor monitoring and information systems – may hinder the impact of these interventions.

87. **However, the results areas proposed under I-Sphere collectively offer a package of health system strengthening activities that may have a disproportionate impact relative to their cost as they address the health care systems' most challenging impediments to reaching UHC.** Persistent regional inequalities in access to primary health care, poor quality of at the primary health care level, and a ballooning BPJS deficit (driven primarily by open-ended hospital payments) all find root in systemwide weaknesses in governance and accountability that handicap performance on the ground. The proposed activities develop some of the key operational systems needed to monitor and evaluate the sector (e.g. health information systems that benchmark performance; primary health care payment systems that incentivize and reward performance; and budgeting systems that link inputs to outcomes). They also strengthen the institutional capacity of local governments and facilities to carry out functions essential to the more efficient use of public resources tackling fundamental prerequisites needed for successful governance and financing interventions (e.g. planning and budgeting, resource management, stewardship, accreditation, performance monitoring and evaluation, etc.).

- **First, Results Area 2 strengthens national procedures, guidelines, and standards for improved clinical and managerial performance – helping reduce inappropriate or low-value care, prevent avoidable costly adverse effects, and decrease operational waste**. It is estimated that adverse

[76] Independent Evaluation Group (2010). Cost-Benefit Analysis in World Bank Projects. Washington, DC: World Bank. https://openknowledge.worldbank.org/bitstream/handle/10986/2561/624700PUB0Cost00Box0361484B0PUBLIC0.pdf?sequence=1&isAllowed=y

events[77] add between 13% and 16% of hospital costs – 28% to 72% of which are considered avoidable. Data on adverse events in primary care settings is much more limited but according to one study around 80% of errors are classified as potentially avoidable process errors. Inappropriate or low-value care (e.g. primary health care sensitive hospital admissions, unnecessary C-sections, over-prescription of antimicrobials, over-use of high cost inputs, discarding unused inputs) may also be both ineffective and costlier. The economic impact associated with current rates of anti-microbial resistance may reach 0.03% of the global GDP in 2020; and in the US the cost of generic drugs is on average 80-85% lower than brand name products[78, 79]. As a result, many facilities have begun explicitly monitoring these events and accreditation has moved towards clinical and managerial processes that ensure ongoing quality assurance. Adherence to guidelines and protocol-based care at the primary health care level is especially important given the rising burden of more complex, costly, chronic conditions as they are much more cost-effective to prevent and properly manage than treat in hospital settings.

- **Results Area 1 will enable greater accountability by formalizing and expanding the collection, review, and use of data in decision making**. Health performance dashboards will help strengthen the public sector management functions of central and local governments to plan and manage resources more efficiently. On the supply side, there are significant gaps in facility readiness at the primary health care level (especially in hard to reach areas). Health performance score cards offer the tools to better coordinate supply side planning and resource allocation to ensure even capacity to deliver *JKN* services. Combined with technical assistance to central and subnational governments on the use of information in planning and budgeting under results area 2, this will help improve the quality of service delivery, generate greater demand for services, and help improve outcomes overall. It will also help target limited resources to districts and facilities that need them most helping reduce regional inequalities in access to quality primary health care.

- **Finally, Results Area 3 uses supply and demand side financial incentives to stimulate improvements in performance and slow down the growth of health expenditures**. Health financing reforms incentivize the right quantity and quality of services allowing opportunity for increased efficiency and accountability in service delivery. The two sources of funding that offer the most scope for improving the quality of health spending are the *DAK* and *JKN* payments as they are earmarked for health, have the potential to be tied to outcomes, and make up a significant share of district health revenues – where over half of government health expenditures occur. Meant to provide facilities resources for preventive and promotive activities, accreditation, institutional deliveries, and operational expenses, supply side *DAK non-fisik* financing to date has mostly focused on financial realization and has not been linked with facilities' provision of quality care. On the demand side, current JKN payment arrangements encourage *puskesmas* to refer patients to hospitals*;* they also encourage hospitals to "up-code" to charge codes that have higher payment rates and discharge patients early for later re-admission. Refining performance based indicators to reflect clinical guidelines, protocol-based care, and appropriate referrals will help improve *puskesmas* performance and reduce hospital costs.

[77] Most common adverse events are related to health-care associated infections (e.g. post-operative sepsis), venous thromboembolism, pressure ulcers, medication error, and wrong or delayed diagnosis.

[78] Slawomirski, L. et al. (2017). *The economics of patient safety: strengthening a value-based approach to reducing patient harm at national level.* OECD Publishing: Paris.

[79] Couffinhal, A. and Karoline Socha-Dietrich (2017). *Ineffective spending and waste in health care systems: framework and findings*. Chapter 1 in Tackling Wasteful Spending in Health. OECD Publishing: Paris.

VII. Program Action Plan

Table 8. Program Action Plan

Action Description	DLI #	Responsibility	Recurrent	Frequency	Due Date	Completion Measurement
MOH and MOF to allocate sufficient budget to allow KAFKTP to increase capacity and quality of facilitation and surveying		MoH; MoF	Yes	Yearly		Budget documents show increase in budget
MoH's Center for Data and Information (Pusdatin) to develop and roll out verification protocols to improve data quality		MoH	Yes	Continuous		Verification protocols developed and rolled out
BPJS, MOF and MOH to issue joint circular for data sharing between BPJS, MoF and MoH		BPJS, MoH, MoF	No		28-Jun-2019	Joint circular for data sharing exists
BPKP should monitor internal audit implementation in the Program and ensure achievement of level 3 of IA-CM of MoH by 2019		MoH	No		31-Dec-2019	MoH level 3 IA-CM accreditation issued by BPKP
MOH to include financial management training and fund utilization monitoring system as part of the Puskesmas management training		MoH	Yes	Continuous		Puskesmas management training reports
MOH and LGs are to strengthen DHO's oversight and require primary care providers to report patient-care related complaints and feedback and publish them		MoH and LGs	Yes	Continuous		Data on complaints published
KAFKTP and MOH to strengthen facilitator		KAFKTP and	Yes	Continuous		Training and workshops

and surveyor capacity in areas such as safe-handling of medical waste, emergency response, management of complaints and grievances, and patient consent processes and rights		MOH				conducted Surveyor's performance evaluation
KAFKTP and MOH to develop necessary work instructions or standard operating protocols (SOP) to improve the existing guidelines for surveyors and for environmental sanitation officers on proper management of medical waste management.		KAFKTP and MOH	Yes	Continuous		Improved guidelines prepared, including specific SOPs or work Instructions.

VIII. Technical Risk Rating

88. Overall technical risk is considered **substantial**, as the risks in: political and governance, sector strategies and policies, technical design of the program, institutional capacity for implementation, fiduciary and stakeholders are substantial. The remaining two (macroeconomic and economic and social) are moderate.

a. **Political and Governance: Substantial.** Though there is strong national commitment to achieve UHC, decentralization of authority to the local governments, including for health, complicates securing local government commitment to achieve UHC. Although MoH is the leading ministry for achieving UHC goals, directing local governments' investment in health is beyond MoH's direct control as most local governments consider Ministry of Home Affairs as the authorizing entity for program planning, budgeting and execution, including for health programs. MoH also has difficulties in ensuring the adequacy of local government contributions to health, though this is mandated by the law. Also, there is variable capacity among local governments in terms of public sector management functions, which also contributes to the variable implementation of the Program. Some mitigation measures introduced by the Program includes strengthening of planning and budgeting capacity of lagging districts, using performance based dashboards to benchmark district performance, and making fiscal transfers to the districts *(DAK non-fisik)* more performance based, all of which are also DLIs under the Program
b. **Sector Strategies and Policies: Substantial.** MoH has an overall policy/strategy for the sector (the Health Indonesia Policy), but many details and implementation regulations/guidelines are still being put in place. There remains considerable room for effectively using financial and other mechanisms

to incentivize the improved use of resources, including levers to influence the allocation of resources at the local government and facility level. MoH's e-Performance application is part of the government accountability system (*E-SAKIP*) which aims at improving the accountability of work unit performance. There is an agreement under the PforR to include performance-based financing of fiscal transfers (*DAK non-fisik*) and capitation payments to primary health care facilities. The government will require technical assistance in generating awareness and commitment, and in designing, implementing, and monitoring the introduced systems.

c. **Technical Design of Project or Program: Substantial.** The program is seeking to work across ministries and agencies (MoH, MoF, *BPJS*, MoHA), at a national scale, and with decentralized local governments, including in three of the most difficult provinces (*NTT*, Maluku and Papua). This ambitious mix is needed to achieve transformational improvements in the sector, but comes with both coordination and execution challenges. The risk of delays in achieving the DLIs is substantial. Mitigation measures will include participation of high level government officials from MoH, *BPJS-Health*, MoH and MoHA in the Program Steering Committee to facilitate communication, collaboration and coordination among the implementing units. All but one of the DLIs are scalable, allowing payment for any level of achievement in accordance with the formula. Scalable DLIs provide some mitigation against the risk of no payment, which arises under "all or nothing" DLIs.

d. **Institutional Capacity for Implementation and Sustainability: Substantial.** There is no experience in MoH with implementing a PforR operation, and limited experience with World Bank lending in general (this is the first operation in over a decade). To promote institutional integration and sustainability, the program does not intend to establish stand-alone program management/implementation units at the national or sub-national levels. However, weak capacity may cause implementation delays. A Program Coordinating Unit (PCU) will be headed by the Director of Planning and Budgeting in the Secretary-General's Office. The PCU will lead a secretariat containing technical and management working groups. Other mitigation measures include participation of central level staff in PforR training and an I-SPHERE PforR clinic during Program preparation. Building capacity at the local government level will include staff training, and improving district monitoring and supervision by the province and MoH.

e. **Fiduciary: Substantial**. Fiduciary risk is substantial due inadequate internal control practices, weak DAK monitoring leading to poor quality/results, the absence of initiatives to prevent and eradicate corruption, lack of oversight and inadequate attention to complaints handling. DAK monitoring will be addressed under the Program. The Program Action Plan will include measures to mitigate some of the identified risks.

f. **Stakeholders: Substantial.** The multiple stakeholders across government both horizontally (across ministries), and vertically (across levels of government), makes implementation of the Program complex. This will require coordination across MOH, *BPJS-Health*, MOF, MOHA, and the Accreditation Commission. Similarly, within MOH, Program implementation will involve several MOH implementing units. In addition, the program will need to coordinate across all districts and an even larger number of *puskesmas.* There are several development partners supporting GOI, and active coordination would be required to avoid duplication of any sort. Implementation arrangements mitigate these risks to an extent through high level coordinating mechanisms like the steering committee, day to day coordination through the PCU as well as using regular system of reporting for Program implementation. The World Bank task team will also continue to actively coordinate with the development partners through various fora.

IX. Program Implementation Support Plan

89. **The ambitious nature of the reforms supported by the Program will require carefully tailored and intensive implementation support.** The challenges are not just addressing capacity deficits, but managing across levels of government, and coordinating among central government agencies. This will require working within the political economy of possible reforms. The Bank has calibrated implementation support to address the capacity issues identified in the technical, fiduciary, and environmental and social assessments.

90. **The World Bank team will provide continuous Program support and conduct official implementation support missions at least twice a year to ensure that appropriate technical support is provided for the achievement of Program results**. The task team will be led by the co-task team leaders and will consist of experts/specialists on relevant technical areas, fiduciary management, social and environmental aspects, and general operations management. The World Bank team will emphasize that MoH (in conjunction with *BPJS-Health* and MoF) prepares progress reports and work plans as a basis for Program implementation review. Technical missions will be organized between the regular implementation support missions, as needed. In addition to missions, document review, and routine communications, the task team will maintain regular communication with MoH's PCU via staff and consultants based in the country office.

91. **The PforR will also have complementary technical assistance from the World Bank though the responsibility of implementation will lie with the Government of Indonesia.** Table 9 below clarifies the different roles of the World Bank and the implementing agencies of the Government of Indonesia.

Table 9: Complementarities between Government Responsibilities and World Bank TA

(Sub)-results area	GOI	World Bank
Performance dashboards	Finalize indicators Dashboard design and rollout Develop feedback mechanisms	Bring relevant international experience on different models of performance monitoring systems and choice of indicators
m-Health for *PIS-PK*	Develop m-health application, field test and roll out	Bring relevant international and local experience on m-Health application and its uses for primary care
Strengthen KAFKTP	Expand capacity, complete processes to become fully independent and improve quality assurance processes	Bring relevant international and local experience to help inform processess
Local government capacity for health sector planning and budgeting	Develop training modules and continuous hand-holding methods and roll out to lagging districts	Bring relevant international experience to help inform development of methodology
JKN performance based capitation and DAK performance based financing	Finalize indicators Roll out to facilities and districts Build monitoring systems	Bring relevant international experience on different models of performance based financing systems and choice of indicators

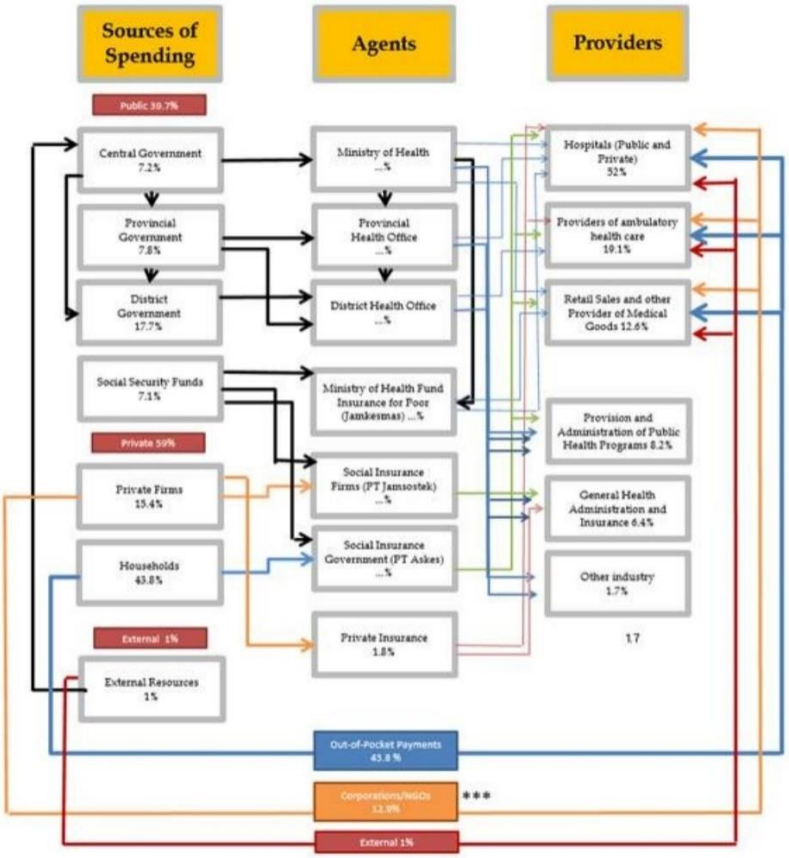
Annex 1: Overall financing system, funds flow at district level and service delivery organization

Funds Flow under Decentralization

Under decentralization, the District Health Office (DHO) is responsible for service delivery and the financing comes from various sources:

- **District government budget (District *APBD*):** By regulation, the district government has to allocate at least 15% of its budget for health, but in reality, very few districts do so. From resources allocated to health, the largest percentage goes to civil servant salaries including those working at the *puskesmas*. Other expenditures for the *puskesmas* includes drugs and supplies, equipment and infrastructure (new and refurbishing). The DHO usually also allocates resources for *puskesmas* operational cost including for financing outreach services, but poorer districts usually limit the allocation only to pay for utilities. The remaining DHO resources, usually only a small amount, are allocated to support program implementation such as for staff training/workshop, IEC activities, printing program guidelines.
- **Provincial government budget (Province *APBD*):** The Provincial Health Office (PHO) receives funding from the provincial government and they can use the money to support the implementation of national priority programs including maternal health by the districts. PHO support is usually in kind, for example drug buffer stock, equipment and sometimes construction. For example, West Java PHO allocated resources in 2012 to refurbish and equip selected *puskesmas* to become BEONC (*puskesmas* with capacity to provide basic emergency obstetric and neonatal services).

Figure 1: Financing flows in Indonesia Health system



- *BPJS* capitation: pays primary health providers including *puskesmas* and PHC private providers in its network through capitation. Capitation to the *puskesmas* includes payment for maternal health services. Payment for maternal health services by private providers in the network (including private practicing midwives) is done through claims. The claim for ANC and for PNC has to be for the complete package of service. The requirement for ANC claim is four times ANC, and has to be once each during the first and second trimester, and twice during the third trimester; while the claim for PNC is for three times PNC i.e. during the first, third and second week after birth. Because of this requirement, many midwives prefer not to claim payment for ANC/PNC but ask clients to pay fee for service per visit. Sixty percent of *puskesmas* capitation is to pay for service fees and 40% for operational cost.

Several modalities of intergovernmental fiscal transfers exist in Indonesia and are described below. Prominent among these are "fiscal balance" transfers comprising three primary components: general allocation funds (*Dana Alokasi Umum*, *DAU*), revenue sharing (*Dana Bagi Hasil*, *DBH*), and special allocation funds (*Dana Alokasi Khusus*, DAK).

- ***DAU* represented the largest share (61%) of total resources transferred to sub-national governments in 2013.**[80] *DAU* is the unconditional equalizing grant from the center to provinces and districts in the form of a "basic allocation" (based on the total salary of sub-national public civil servants) and a "fiscal gap" (based on the difference between fiscal requirements and fiscal capacity). Fiscal requirements are determined based on population, land/sea area, a "construction expensiveness index", the human development index (HDI), and gross regional domestic product; fiscal capacity is based on PAD and *DBH* revenues.[81] Districts receive 90% of *DAU*, with the remaining 10% going to provinces. Districts have complete discretion over how DAU resources are allocated.

- ***DBH* – 17% of intergovernmental fiscal transfers in 2013 -- represents unconditional revenue-sharing transfers** from the center to provinces and districts of taxes on income, property, and natural resources with pre-defined shares being returned to originating jurisdictions.[82] About 2% of *DBH* grants represent tobacco revenue-sharing. Sub-national distributions are by provincial point of origin; producing districts within provinces receive larger portions than non-producing districts. Sub-nationals have total discretion over the use of allocated funds.

- ***DAK* allocations -- about 6% of central government transfers in 2013 -- are conditional earmarked capital grants for prioritizing some sectors** (including health, which received 10% of all *DAK* financing in 2013) and are designed to provide additional resources to districts that are under-developed, vulnerable, and have low financial capacity; *DAK* allocations generally also require a 10% co-financing requirement from districts (although there is some discussion that this requirement is to be eliminated). *DAK* for health can be used to procure infrastructure and equipment at *puskesmas* and public hospitals, including equipment, immunization equipment, laboratory equipment, health promotion equipment, mobile health center, and power sources (generators), among others. Provisional estimates for 2015 indicate *DAK*'s share of all intergovernmental fiscal transfers will increase to 9%, up from 6% in 2013 and 2014 (Table 1). *DAK* for health has almost doubled from 2014 to 2015 (and is expected to more than double again in 2016). There are plans to convert *DAK* from a formula-based to proposal-based allocation and also to allow for financing of non-capital expenditures. In general, *DAK* is a meaningful funding source for the districts and its importance will increase in light of reforms. The possibility for financing infrastructure from *DAK*, for example, is quite significant: construction of new *puskesmas* and housing for *puskesmas* staff, upgrading *pustu* into *puskesmas* and *puskesmas* into *puskesmas* with beds (in remote areas),

[80] Provisional numbers for 2014 and 2015 indicate *DAU* being 57% and 55% of all intergovernmental fiscal transfers.

[81] More specifically, a district's fiscal capacity is determined by the sum of revenues from PAD, *DBH*, and *DAU* minus personnel expenditures divided by the number of poor people in the district.

[82] Provisional numbers for 2014 and 2015 indicate a slight increase in *DBH* share of all intergovernmental fiscal transfers to 20%.

upgrading regular *puskesmas* to BEONC *puskesmas* and *puskesmas* with rehabilitation. The same for referral hospitals.

Table 1: DAK and DAK for health as share of all intergovernmental transfers in Indonesia, 2011-2015

***DAK* (IDR trillion)**	**2011**	**2012**	**2013**	**2014***	**2015****
All intergovernmental fiscal transfers	411	481	513	574	644
DAK total	25	26	31	32	59
Share of *DAK* in all intergovernmental fiscal transfers	6%	5%	6%	6%	9%
DAK for health	3	3	3	3	6
Share of health in DAK	12%	12%	10%	10%	11%

- **Other intergovernmental transfers include resources provided to special autonomous and transfers to villages.** Law 06/2014, or the "Village Law," ratified in early 2014, mandates an annual transfer of approximately US$140,000 from central and sub-national government budgets to every village in the country (amounting to about 1% of all intergovernmental fiscal transfers in 2015). The government is drafting the implementing regulations and ministerial decrees needed to implement the Village Law. Village Law implementation provides a major opportunity for village governments to substantially increase investments in local development priorities. However, there is a concern that Village Law financing needs will crowd out already low levels of local government expenditures for health worker outreach, preventative, or promotive care, which village governments have no obligation to replace, or lack the capacity to procure and maintain.

- ***DAU* is the largest source for districts and own-sources are the largest source of revenues for provinces.** Over half of district financing comes from *DAU* allocations (Table 2). In aggregate across all districts, *DAK*'s share of district revenues is only 14.5% (although this is likely higher in districts with low fiscal capacity). In 2017, 100% of all districts received *DAK* transfers earmarked specifically for health. Unlike for districts, wherein own-source revenues accounted for only 14% total district revenues, own-source revenues accounted for almost half of all provincial revenues.

Table 2: Sub-national government revenues, 2017 (planned budget)

	District (N=508)		**Province (N=34)**	
	IDR Trillion	*Share (%)*	*IDR Trillion*	*Share (%)*
Own Sources	101.39	14.0%	141.09	44.2%
Balancing Fund	505.98	69.8%	153.33	48.1%
DBH	50.77	7.0%	34.05	10.7%
DAU	349.82	48.2%	55.55	17.4%
DAK	105.40	14.5%	63.73	20.0%
Others	117.98	16.3%	24.54	7.7%
Total	725.35	100.0%	318.96	100.0%

Source: estimated from MoF data on *APBD* 2017 (*LGF Anggaran (Ringkas) 2017, April 2017*)

- **In addition to the above intergovernmental transfers, there are additional transfers that are sector specific and typically occur via line ministry transfers and are not recorded under *APBD*.** For example, deconcentration funds (*DEKON*) are allocated in line ministries under *APBN* (e.g., to MoH) but are administered by provincial governments (so deconcentration funds for health are administered by the PHO) and are used to finance non-physical activities for example for technical assistance, training, supervision, research, and promotion. Co-Administered Tasks (*TP/Tugas Pembantuan*) are allocated in line ministries for in-kind grants to districts for example for vaccines, drugs, and supplies. MoH also pays for the salary of contract physicians and contract midwives (*PTT*). *PTT* physicians work in the *puskesmas*, while *PTT* midwives are usually based at the villages (some districts recruit additional physicians/midwives under *PTT* using their own resources).

- **MoH also channels operational costs for health to the *puskesmas* (*BOK*) using the TP mechanism** (although this was considered a violation to the use of TP channel and there are discussions to integrate this with DAK). *BOK* is supposed to be used for accelerating the achievement of national targets such as the MDGs for health by improving the performance of *puskesmas*, *poskesdes/polindes*, and *posyandu*. DHOs determines the allocation of *BOK* per *puskesmas* following MoH guidelines. *BOK* money can be used among others for outreach services to increase the coverage of promotion and prevention services of priority programs including maternal health, refresher training of community health workers (*kaders*), and planning and coordination meetings at the *puskesmas* and below. *BOK* cannot be used for supporting curative care, paying salaries, building/vehicle maintenance, paying utilities, or for referring patients.

- **Indonesia does not have an explicit result-based orientation in its system of intergovernmental fiscal transfers**. The central government does not have mechanisms to incentivize generation of outputs/outcomes from use of resources, nor does it have clear policy levers to influence the allocation of resources at the sub-national level. Although some of the allocations of resources are based on district characteristics, the capacity of districts to plan for, absorb, and realize outputs/outcomes is not a key determining factor; the focus has been more on ensuring compliance with rules/norms rather than on building the capacity of districts to effectively utilize resources in order to improve service delivery.

Health System Service Delivery/Organization

Indonesia has mixed public-private provision and financing of health services. The public sector generally takes a dominant role in rural areas and for secondary levels of care but this is not necessarily the case across all health services. Private provision has been increasing rapidly in recent years, including for primary care. The country has 34 provinces, 511 districts/cities, and some about 72,000 villages and public provision is decentralized to the district/city level. As a country with over 6,000 inhabited islands, geography poses a significant obstacle to service delivery.

Household data indicate that outpatient and inpatient utilization rates have risen steadily, especially among the bottom 40% of the population and increasingly at private facilities. About 14% of the population reported utilization outpatient services in the previous 30 days. And almost 3% reported utilizing inpatient services in the previous year. These numbers have increased in recent years with the expansion of social health insurance and following a period of decline during and after the financial crisis. Nationally, almost two-thirds of all outpatient utilization now occurs at private facilities. Inpatient utilization rates in Indonesia have almost doubled over the period 2004-2012 to 1.9%.[83] Nevertheless, the annual inpatient admission rate remains one of the lowest in Southeast Asia and, despite the relative scarcity of beds, occupancy rates in both public and private facilities are low at 55%-60%, approximately 25%

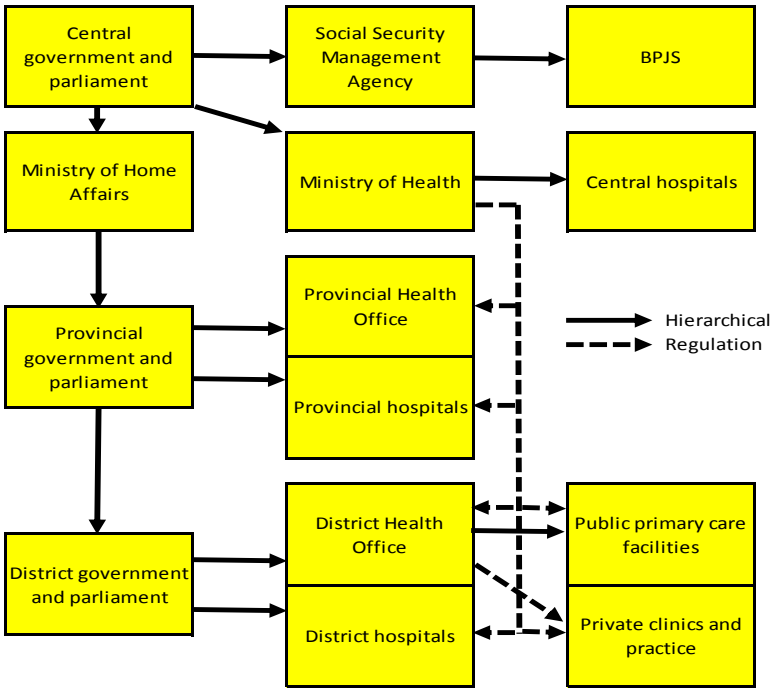
[83] Inpatient utilization rates refer to the proportion of the population that utilized inpatient care in the past 12 months.

lower than occupancy rates in other Southeast Asian countries.[84] There are wide variations in utilization rates across the country with provinces in the Java-Bali region generally having much higher utilization rates vis-à-vis other provinces; North Maluku, Papua, and Maluku have some of the lowest utilization rates in the country. Nationally, more than 40% of all inpatient utilization occurs at private facilities. The share of outpatient visits at hospitals has remained fairly stable at 10% over the years. IDHS data indicates that the number of caesarean sections – another indicator capturing improved access to high-end maternal health services – has tripled: from 4 per 100 deliveries in 1997/2002 to 12 per 100 deliveries in 2012.[85] Bed occupancy rates are still relatively low in Indonesia: averaging about 65% in 2012. The average length of stay has been trending upwards and is about 6 days.

Table 3: Inpatient and outpatient utilization rates by economic status and at public/private facilities, 2012-2014

		2012	2013	2014
Outpatient utilization (all)	*National*	12.9%	13.5%	15.4%
	Bottom 40%	12.9%	12.2%	13.9%
Outpatient utilization (private)	*National*	8.1%	8.7%	10.4%
	Bottom 40%	7.8%	7.1%	8.5%
Inpatient utilization (all)	*National*	1.9%	2.3%	2.5%
	Bottom 40%	1.3%	1.6%	1.8%
Inpatient utilization (private)	*National*	0.8%	1.0%	1.1%
	Bottom 40%	0.4%	0.5%	0.6%

Figure 2: Organization of Indonesia's health system



[84] Awofeso N, Rammohan A, Asmaripa A (2012) Exploring Indonesia's "low hospital bed utilization-low bed occupancy-high disease burden" paradox. J Hosp Adm 2: 49–58. Available: http://www.sciedu.ca/journal/index.php/jha/article/view/1829.

[85] WHO recommends caesarean sections be between 10-15% of all deliveries: below 10% generally shows underuse, and above 15% generally shows overuse; Gibbons, L, Belizán, J, Lauer, J, Betrán, A, Merialdi, M and Althabe, F 2010, 'The global numbers and costs of additionally needed and unnecessary caesarean sections performed per year: overuse as a barrier to universal coverage', World Health Report 2010 background paper no. 30.

The central Ministry of Health (MoH) operates some tertiary and specialist hospitals but otherwise plays more of a stewardship role in terms of regulation and supervision. Other ministries and public entities involved in the health sector include the Ministry of Home Affairs, the Ministry of National Development Planning, the Social Security Management Agency (which manages the social insurance administrator, *BPJS*), the Food and Drug Control Agency, the National Board of Population and Family Planning, and the Ministry of Villages. Provincial Health Offices (PHO) run provincial hospitals and coordinate cross-district issues. All other public facilities are managed by District Health Offices (DHOs), under the overall purview of district governments. Figure 2 summarizes the organization of Indonesia's health system reflecting the relationships among the major actors.[86]

***Puskesmas* are the backbone of Indonesia's health system, each serving catchment areas of 25,000-30,000 individuals, and providing primary care services.** There were 9,654 *puskesmas* in 2013, with almost a third having inpatient beds. As mentioned above, private clinics increasingly provide primary care but there is no systematic information available at the central level on their numbers and distribution. The public primary care system also includes 23,000 auxiliary *puskesmas* (*pustu*) for outreach activities in remote regions, village-level delivery posts (*polindes*, often the home of the village midwife), and village health posts (*poskesdes*). In addition, community-level participation is active in maternal and child health promotion activities at around 270,000 integrated health services posts (*posyandu*).

Indonesia has a mix of public and private hospitals for secondary and tertiary care.[87] Indonesia's Ministerial Regulation 340/2010 classifies hospitals as types A, B, C, and D according to services provided.[88] In 2013, MoH recorded 56 Type A, 255 Type B, 630 Type C, and 415 Type D hospitals. There are at least 17 types of specialty hospitals, of which the largest numbers were mother and child hospitals, followed by maternity and mental hospitals. The number of hospitals has almost doubled over the past decade to an estimated 2,228 in 2013, with more than half of all hospitals now being private. The number of beds per capita in Indonesia stands at 1.3 per 1,000 population.[89] The median distance to a health facility in Indonesia is about 5 km.[90] Despite a rise in the bed density ratio, this number remains far below WHO's norm/recommendation of 2.5 per 1,000 and Indonesia's numbers remains far below that of comparator countries in the region including Thailand, Malaysia, Sri Lanka, China, and Vietnam. Key issues are the lack of systematic information on the number of hospital beds in private clinics and the maldistribution of beds across the country. There is a four-fold difference in the bed density ratio across the country: from a high of 3.2 beds per 10,000 in DI Yogyakarta to a low of 0.8 per 1,000 in West Java. Two additional provinces – North Sulawesi and West Papua – exceed the WHO norm of 2.5. Thirteen provinces had a bed density ratio below the Indonesian average. Higher bed density scores were evident in both moderate to large size provinces.

[86] HiTs reference.

[87] MoH (2013); additional details on this are provided later in the document.

[88] Type A provides, at a minimum, four basic specialist services (internal medicine, pediatrics, surgery, obstetrics-gynecology), five medical support specialist services (four medical diagnostics and anesthesia), twelve other specialist services, and thirteen subspecialist services; Type B provides, at a minimum, four basic specialist services, four medical support specialist services, eight other specialist services, and two subspecialist services; Type C provides, at a minimum, four basic specialist services, and four medical support specialist services; Type D provides, at a minimum, two basic specialist services.

[89] This number does not include beds in private clinics.

[90] WHO recommends that time to nearest facility be no more than 1 hour, based on the most common mode of transportation used.

Annex 2: Further details on Government sub-programs

A. PIS-PK

The flagship program of the implementing healthy paradigm pillar is *Program Indonesia Sehat melalui Pendekatan Keluarga/PIS-PK* (Healthy Indonesia through the Family Approach Program). The program was rolled out in 2016, and has four objectives: (i) Improving family access to a comprehensive healthcare covering prevention services, health promotion, basic curative care and rehabilitation, (ii) Supporting the achievement of the local government Minimum Service Standards by improving access to health care and health screening, and (iii) Supporting the implementation of *JKN* by improving community awareness to become a *JKN* member. *PIS-PK* is based on MoH's 2015-2019 strategic plan that health services will adopt the principles of integrated care and continuum of care touching the life cycle of a human being from pregnancy to old age. The selected indicators are consistent with the four priority areas. They also reflected MoH's emphasis on prevention and promotion through early identification of risks.

The first step in implementing *PIS-PK* on the ground is a visit by the puskesmas staff to each family to develop a database recording the health status of all families in its catchment area referring to 12 healthy family indicators in line with the four priority areas[91]. Analysis of the collected data will produce a Healthy Family Index (*Indeks Keluarga Sehat/IKS*) for village, subdistrict, district, province, or national level. The database is supposed to be updated annually. The *puskesmas* will plan and conduct follow up home visits to the families to address identified risks through behavior change communication, encouraging visit to community led activities such as *posyandu* and *posbindu*, seeking health professional help if needed, ensuring compliance to treatment, etc. Health cadres are expected to support the *puskesmas* in implementing *PIS-PK*.

MoH's policy to implement the family approach is based on MoH's 2015-2019 that health services will adopt the principles of integrated care and continuum of care touching the life cycle of a human being from pregnancy to old age. The selected indicators are consistent with the four priority areas. They also reflected MoH's emphasis on prevention and promotion through early identification of risks. Successful implementation can potentially reduce the cost of care. Collaboration with cadres is key for successful implementation as it will be impossible for *puskesmas* staff to follow up on all identified risks. This should be made more explicit in the *PIS-PK* technical guidelines. Aside for monitoring program performance, the IKS might also be included as a part of the dashboard to benchmark district performance. It means MoH should have a system in place to ensure data quality and timely reporting. MoH might want to consider using m-health technology to record family risks, and update family status after each visit. The application can also be designed to include messages to assist cadres in doing the behavior change communication.

B. FACILITY ACCREDITATION

One of the strategies under the "Strengthening Health Services" pillar is improving access to quality healthcare and optimizing the referral care. MoH has adopted accreditation as a regulatory mechanism for improving facility performance and ensuring continuous quality improvement of health facilities. Hospital accreditation has been in place since 1995, although when introduced it only covered partial services, until *KARS* (*Komisi Akreditasi Rumah Sakit*/Hospital Accreditation Commission) revised the standards to comprehensively covered all hospital services in 2012. Accreditation of primary health care facilities began in 2015 with the enactment of Minister of Health regulation No. 46/2015. The regulation also includes accreditation standards for public and private facilities.

[91] The 12 healthy family indicators are: (i) the family participates in family planning, (ii) if pregnant, the mother delivers in a health facility, (iii) an infant in the family receives complete basic immunization, (iv) an infant in the family is exclusively breast fed for six months, (v) growth monitoring of underfive children in the family, (vi) family members with tuberculosis receives treatment according to standard, (vii) family members with hypertension regularly take medicine, (vii) family members with mental disorder receives treatment and not neglected, (viii) no one in the family is smoking, (ix) the family has access to clean water supply, (x) the family has access to a healthy toilet, (xii) the family is a member of *JKN*.

MoH established an Accreditation Commission for Primary Health Care Facilities (*KAFKTP*) under a Minister of Health decree (No. HK.02.02/MENKES/432/2016) in 2016. The decree states that the chairperson of the Steering Committee is the Director General of Health Services of MoH, and MoH's Secretary General is the chairperson of the Supervisory Body. The body also has an executive chairperson and an executive secretary, and consists of 4 divisions: (i) accreditation division, (ii) training and development division, (iii) legal and ethics division, and (iv) administration of information and interagency cooperation. The current chairperson of the Commission is a MoH retiree. Most of the other people involved in the commission are active civil servants either working for MoH, particularly within the DG of Health Services. Commission members do not get salary/fee, but *APBN* pays for the Commission's activities and operating cost. Although the Commission is dependent on MoH for funding (*APBN*), they have full authority in implementing the accreditation process, and in deciding and announcing facility accreditation status. Based on ministerial regulation No.46/2015, an independent accreditation body for primary health care facilities should be established four years after the enactment of the regulation (i.e., before June 29, 2019). The legal requirement to function as an independent body is a Decree (*Surat Keputusan/SK*) from the Ministry of Justice and Human Rights (*Kementerian Hukum dan Hak Azasi Manusia*).

Puskesmas accreditation standards is divided into three groups, with three chapters for each group:

A. Management of administration:
    - Chapter 1: *Puskesmas* services (*PPP*)
    - Chapter 2: *Puskesmas* leadership and management (*KMP*)
    - Chapter 3: *Puskesmas* quality improvement (*PMP*)
B. Community health group:
    - Chapter 4: Target oriented community health (*UKMBS*)
    - Chapter 5: Community health leadership and management (*KMUKM*)
    - Chapter 6: Community health performance targets
C. Individual health group:
    - Chapter 7 Patient oriented clinical services (*LKBP*)
    - Chapter 8 Clinical diagnostic support management (*MPLK*)
    - Chapter 9 Clinical quality improvement and patient safety (*PMKP*)

Each chapter consists of several standards; each standard has several criteria, and each criteria has rationale and scoring elements. Scoring elements cover input, process, and some outputs.

The standards for private clinics consist of four chapters:
- Chapter 1: Clinic leadership and management (*KMK*)
- Chapter 2: Patient oriented clinical service (*LKBP*)
- Chapter 3: Clinical diagnostic support management (*MPLK*)
- Chapter 4: Clinical quality improvement and patient safety (*PMKP*)

The standards for individual private practice consist of only two chapters
- Chapter 1: Individual clinic management and leadership (*KMPM*)
- Chapter 2: Clinical quality improvement and patient safety (*LKPM*)

There are four possible accreditation status:
- Basic
- *Madya*

- *Utama*
- *Paripurna*

For *puskesmas* accreditation the criteria for each status are as follows:

Status	Chapters								
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
Not Accr	< 75%	< 75%	< 20%	< 60%	< 60%	< 20%	< 60%	< 20%	< 20%
Dasar	≥ 75%	≥ 75%	≥ 20%	≥ 60%	≥ 60%	≥ 20%	≥ 60%	≥ 20%	≥ 20%
Madya	≥ 75%	≥ 75%	≥ 40%	≥ 75%	≥ 75%	≥ 40%	≥ 60%	≥ 60%	≥ 40%
Utama	≥ 80%	≥ 80%	≥ 60%	≥ 80%	≥ 80%	≥ 60%	≥ 80%	≥ 80%	≥ 60%
Paripurna	≥ 80%	≥ 80%	≥ 80%	≥ 80%	≥ 80%	≥ 80%	≥ 80%	≥ 80%	≥ 80%

MoH has produced the following guidelines to support PHC facility accreditation:
- Ministerial regulation 44/2016 on Guidelines for *Puskesmas* Management
- Book on standards and instrument for PHC facility accreditation
- Guidelines for developing required documents for PHC facilities (including SOPs)
- Guidelines for facilitators of PHC facility accreditation
- Curriculum for facilitator training
- Guidelines for accreditation survey
- Curriculum for PHC facility accreditation surveyor training
- Guidelines for improvement of PHC quality
- Guidelines for patient safety in PHC facility
- Guidelines for conducting internal management and audit meetings
- Guidelines for technical assistance and evaluation of PHC facility accreditation
- Guidelines for web-based accreditation information system

The information system for the implementation of primary health care facility accreditation is called SIAF (https://siaf.kemkes.go.id) which still need further development. Although currently *KAFKTP*'s records on the accreditation process and status are computerized, the data is entered manually by *KAFKTP* administration staff.

MoH strategic plan 2015-2019 targeted 5,600 subdistricts have at least one accredited *puskesmas* by 2019. Accreditation is renewed every three years. Although *puskesmas* accreditation has covered 320 districts/cities and 34 provinces, the number of accredited *puskesmas* is much lower in eastern provinces such as Papua, Maluku and North Maluku. Currently, resources to support *puskesmas* accreditation include financing from *DAK Fisik* to meet infrastructure standards per Minister of Health regulation No. 75/2014 on *puskesmas*. Funding for implementing *puskesmas* accreditation itself comes from *DAK non-fisik* (*DAK Akreditasi*) *APBN*, and *APBD*. The local government manages *DAK Akreditasi* and spends the money for facilitator training, workshops, *puskesmas* facilitation, pre-accreditation assessment, and accreditation survey. The unit cost is Rp. 140 million per *puskesmas*. Resources for surveyor capacity building is very limited. *APBN* is paying for a one-off twelve days accreditation surveyor training. The commission sometimes organized workshops, but the surveyors have to self-pay the travel cost to attend the workshop. Per regulation 46/2015, private facilities are required to cover all accreditation cost including the facilitator cost, preaccreditation assessment, accreditation survey and support post accreditation for continuous improvement. Each province has at least one team of trainers of district accreditation facilitators, and at least one accreditation surveyor team. Currently, *KAFKTP* has 190 surveyor teams (three surveyors per team, one each for management and administration, community health and individual health). Demand for accreditation is expected to increase as in 2021 only accredited facilities can be empaneled by *BPJS* to be a *JKN* service provider

Roles and responsibility of PHC facility accreditation stakeholders:

MoH	*Dinkes Propinsi*	*Dinkes Kabupaten*	Health Facility	Accreditation Commission
- Provide support to the Accreditation Commission until it becomes independent: (i) Finance commission meetings, (ii) Finance TA for the Commission, (iii) provide secretariat support, (iv) Develop a web-based information system (*SIAF*), (v) Enact MoH Decree for the Commission, (vi) Endorse the Commission to become independent. - Develop accreditation quality standards: (i) Develop guidelines (e.g guidelines for improving PHC quality, and guidelines for TA to improve PHC quality, guidelines for internal audit, guidelines for patient safety and risk management - Develop national accreditation roadmap (# of targeted accredited facility by yr and yearly update)	- Conduct HR technical improvement: (i) conduct district facilitator training, (ii) recommend surveyor candidate (civil servant), (iii) conduct workshop on quality improvement and patient safety. - Develop provincial accreditation roadmap. - Provide technical assistance to prepare *puskesmas* and conduct supervision. - Conduct Monev post-accreditation.	- Facilitate *puskesmas* pre-accreditation: (i) workshop to confirm commitment, (ii) workshop to introduce standards and instruments, (iii) self-assessment, (iv) facilitate *puskesmas* in document development, (v) pre-survey assessment - HR technical improvement: (i) forming accreditation facilitator team, (ii) workshop to improve facilitator and *puskesmas* staff capacity on quality improvement and patient safety. - Propose accreditation survey: (i) Develop district accreditation roadmap, (ii) Monitor facilitation process in each *puskesmas* - Propose accreditation survey to the Commission with province recommendation - Budget resources for accreditation through *APBD* and *DAK Non-Fisik*:	- Facility accreditation: (i) Commitment of facility leader and staff, (ii) Understanding standards and instruments (iii) Initial self-assessment, (iv) Form facility quality assurance team, (v) Prepare required documents, (vi) Implement documents, (vii) Conduct audit internal and management assessment, (viii) Pre-survey assessment, (ix) Submit proposal for survey - Budgeting and financing: proposal for staffing and infrastructure to *Dinkes* or if autonomous facility (*BLUD*) follow applied procedure. - HR technical improvement: (i) Understand the concept of quality of health facility, (ii) Understand accreditation standards	- Implement accreditation survey and decide on accreditation status: (i) Receive survey proposal based on the national roadmap, (ii) Prepare accreditation survey schedule, (iii) Assign surveyors based on their competence, (iv) Receive surveyor report and check completeness and quality, (v) Routine meeting to decide on status, (vi) Announce results, (vii) Receive complaints from community/facility, (viii) Handle complaints around ethics violation, in collaboration with MoH, (ix) Receive input from MoH for improving survey implementation and decision making on accreditation status. - Conduct monev on accreditation survey: survey money using monitoring instrument on a sample of facilities. - Provide input to MoH to improve accreditation

- Budget for the accreditation process (*APBN*, *DAK*) - Sosialisasi and advocacy - Improve technical capacity of HR for accreditation: (i) supply of surveyors (minimum 1 surveyor team/province), (ii) supply trainers for surveyor training, (iii) supply trainers for accreditation facilitator training at the province, (iv) supply trainers for internal audit, management assessment, and patient safety - Monev post-accreditation survey		(i) propose resources for *puskesmas* accreditation through *APBD* and *DAK Non-Fisik*, (ii) Monitor fund transfers, (iii) fulfillment of *SPATU* (?) - Provide technical assistance and supervision to *puskesmas* - Monev post accreditation: six monthly monitoring post- accreditation, periodic reporting to province using instrument developed by MoH		system: provide yearly report to MoH.

C. *NUSANTARA SEHAT* (HEALTHY *NUSANTARA*)

In 2016, MoH launched the Health Indonesia (*Nusantara Sehat) Program*, to deploy health workers on special assignment to fill health workforce gap in *puskesmas* in targeted locations, characteristically in remote, lagging, border areas and islands (*DTPK*), and locations facing priority health challenges of the Healthy Indonesia Program.

The policy focus of the Ministry of Health (*Kemenkes*) for the period 2015 - 2019 is the strengthening of primary health care. This priority is based on urgent health problems such as high maternal and infant mortality rates, malnutrition rates, and life expectancy that is largely determined by the quality of primary health care. The strengthening of primary health care covers three areas: 1) Physical (infrastructure improvements), 2) Facilities (facility improvements), and 3) Human Resources (strengthening health workers).

The *Nusantara Sehat Program* has two deployment strategies: (i) team based special assignment of at least five health worker categories, albeit with varying combination in response to local needs to meet *puskesmas* staffing standards depicted in Minister of Health regulation 75/2014 (table 1); and (ii) individual health worker special assignment. The decision to include the team based assignment option was based on positive results of a 2014 pilot in four provinces including Papua and Maluku. The length of the special assignment for both categories is two years. Individual special assignment program participants can re-apply for another round of individual special assignment. Members of the team based special assignment can also apply for an individual special assignment upon completion of their two-year team based assignment. The amount of monthly financial incentive for *Nusantara Sehat Program* participants varies based on the health worker category and on remote/very remote posting, but is on average double the amount of regular civil servant salary for the category. The incentive for very remote posting is around 25 percent higher compared to that of remote posting. The monthly salary is approximately IDR 5 million for health staff with a D3 education deployed in a remote area up to about IDR 11 million for a doctor deployed in a very remote area.[92]

Table 1: *Puskesmas* Staffing Standards (MoH Regulation/*Permenkes* No: 75/2014)

Health Worker Type	Urban *Puskesmas*		Rural *Puskesmas*		Remote *Puskesmas*	
	w/o beds	w/beds	w/o beds	w/beds	w/o beds	w/beds
Physician/PHC Physician	1	2	1	2	1	2
Dentist	1	1	1	1	1	1
Nurse	5	8	5	8	5	8
Midwife	4	7	4	7	4	7
Public health staff	2	2	1	1	1	1
Environmental health staff	1	1	1	1	1	1
Medical laboratory technologist	1	1	1	1	1	1
Nutrition staff	1	2	1	2	1	2
Pharmacy staff	1	2	1	1	1	1
Administration staff	3	3	2	2	2	2

[92] D3/academy level education is high school plus three years. For health can be in the field of nursing, midwifery, public health, environmental health, nutrition, pharmacy.

The table below based on an MoH report from June 2016 show that many *puskesmas* have gaps in the required staff.

Table 2: *Puskesmas* Health Workforce Gaps (Compared with *Permenkes* No: 75/2014)

Health workforce type	*Puskesmas* without required workforce	
	Number	Percent[93]
Doctor	1,898	20
Dentist	4,831	50
Nurse	919	10
Midwife	1,374	14
Pharmacy staff	787	8
Public health staff	4,016	42
Environmental health staff	542	6
Nutrition staff	4,064	42
Medical laboratory technologist	6,169	65

Specialist Doctors Compulsory Service (WKDS)

Another key health workforce challenge is the shortage of specialist doctors. Currently, specialist training in Indonesia is only provided in public universities and can only fulfill 14% of the country's specialist need. Table 3 shows the shortage of four basic specialists and anesthesiologist in public hospitals by January 2017, based on regulation 56/2014 (SIRS online):

Table 3: Shortages of Specialist Doctors in Public Hospitals

Hospital Characteristics	Number of Hospitals	Shortage					
		Sp.A	Sp.OG	SP.PD	SP.B	SP.An	Total
Remote, Lagging and Border Areas	78	51	54	50	55	17	227
Regional referral	110	69	55	57	91	57	329
Provincial referral	20	36	33	33	59	12	173
National referral	14	1	0	4	8	1	14
Other LG hospitals	510	222	146	177	236	65	846
Other central hospitals	255	103	81	87	122	21	414
Total	976	482	369	408	571	173	2,003
Total doctors available		6,571	7,527	6,172	4,808	4,434	20,512

Note: SP. A pediatrician, SP.OG obstetrics and gynecology specialist, SP.PD internal medicine specialist, SP. B surgeon Sp.An Anesthesiology specialist

In addition, Law No 29/2004 on medical practice allows doctors to practice in maximum three locations. It means for

[93] Percent is using 9,600 *puskesmas* as the denominator.

example a doctor working in a public hospital can also work in a private hospital and open an individual private practice. This might mean a higher shortage of specialist in public hospitals than reported on paper, as it is common for private hospitals, particularly at the sub-national level, to rely on specialists working in public hospitals to provide care in their hospital. The enactment of a presidential regulation (*Perpres* no. 4/2017) on Compulsory Service of Specialist Doctor (*Wajib Kerja Sarjana Dokter Spesialis - WKDS*), made it compulsory for doctors completing specialist training in 2017 and beyond to do a minimum one-year service for the government. For now, the policy only applies to five types of specialists: pediatrician, obstetrician, internal medicine, surgeon, and anesthetist. This MoH policy, endorsed by the relevant professional associations and professional colleges, aims at addressing shortages and ensuring equal distribution of specialists, particularly in remote district hospitals, regional referral hospitals, and provincial referral hospitals. Specialists on WKDS assignment can only practice in the hospital of placement. MoH pays for their salaries and local government can provide additional incentives through the local government budget (APBD).

D. Commitment Based Capitation (*KBK*) under *JKN*

Program Description – *KBK* Mechanism

The Government of Indonesia has committed to achieve Universal Health Coverage goals including providing health insurance coverage to at least 95 percent of its population by 2019. In achieving the national social health insurance (*Jaminan Kesehatan Nasional* or *JKN*) program's ambitious goal, however, the program has been facing several challenges; The program's financial sustainability; Implicit rationing due to limited capacity of the supply side to provide basic health services; and at the same time delivery of integrated and quality health services.

In addressing some of the above challenges, especially financial sustainability and quality of care, MoH jointly with the *JKN* administrator, *BPJS - Health* (*Badan Pelaksana Jaminan Sosial Kesehatan* or *BPJS-K*) implemented *Kapitasi Berbasis Komitmen* (*KBK*), capitation payment to primary health facilities that is linked with an agreed set of performance indicators. *KBK* was supported by a MoH and *BPJS-K* joint circular for its implementation in 2016, and followed by another letter on the implementation guideline. The phased implementation of *KBK* started with a pilot for public primary care facilities (*Puskesmas*) in two province's capital cities in 2014, which then was expanded in capital of seven provinces the following year. By the end of 2016 *KBK* implementation has covered 97 percent of total districts in 34 provinces. In addition to *puskesmas*, the expansion of *KBK* is also projected to cover these empaneled facilities: D-*pratama* class hospitals[94], public or private, and private primary care providers in 2017 as in the *KBK* roadmap. Health facilities situated in remote and isolated areas, as defined by government regulation[95], and those in areas with poor communication coverage are excluded from *KBK*.

The three *KBK* indicators currently used in principle monitor access to primary health services, and cost containment measures such as gatekeeping functions, and to a certain extent quality of care especially for chronic conditions. These indicators are (i) Contact rate of registered members measures *JKN* program coverage; (ii) Ratio of avoidable specialist care and hospital admission obtained from the number of referred primary care cases to total referral. This has been used as a key cost containment measure by controlling the number of patients referred to a higher level of care. The number of diseases that a primary health care level should be able to manage varies across the country as it is agreed between each district health authority and *BPJS-K*. (iii) Chronic disease management program (*Prolanis – Program Pengelolaan Penyakit Kronis*) monitors the rate of regular visits of *JKN* members registered in the program. During the conception of *KBK*, nine indicators were developed by *BPJS-K* team, but based on discussion and

[94] D-Pratama type hospital provides basic hospital services with only Class-3 wards, can be either public or privately owned, regulated by MoH Decree 24/2014

[95] MoH Decree No. 90/2015 Health service delivery in remote and very remote areas

agreement with MoH four were selected, and out of four, there were implemented. The fourth indicator is the *puskesmas*-conducted home visits in its catchment area.

The capitation payment to empaneled providers will be determined first by the type of facility, higher per capita for private clinics and individual physician practice, compare puskesmas, and the level of service availability such as the number of doctors, dentists, and midwives, and availability of laboratory and pharmacy services. For facilities implementing KBK, their performance will be measured against what they have committed to achieve for the three indicators mentioned above. For instance, different districts may agree on the number of diseases to be treated at the primary care facilities (non-specialists cases). The capitation will be paid in full (100%) if all three indicators are in the '*safe zone*', and will be reduced incrementally from 95% to 90% depending on the number of indicators are within the *'Safe Zone'*.

***KBK* Implementation**

KBK implementation may have yielded positive results during the pilot phase, but the rapid expansion reveals areas for further improvement. Based on the evaluation of *KBK* pilots conducted by *BPJS*, there were observable improvements in primary care facilities' compliance to document and report visits and types of services used of *JKN* members. Reduction of primary care referral to hospitals, and improved facility awareness to conduct promotive and preventive activities were found following *KBK*. Meanwhile, some challenges can be identified from these pilots, such as limited communication infrastructure, lack of interoperability of existing information systems, as well as lack HIS operator's skills that prevent effective reporting. Supply side gaps persist as a result of low level service availability and facility readiness, and wide variation in the capacity of medical personnel to diagnose[96]. The expansion of *KBK* pilot from covering only *puskesmas* in seven provincial capitals to cover 9,829 *puskesmas* (94% of total *puskesmas*) in 498 districts (out of 514) only in one year, from 2015 to 2016 resulted in significant decrease of the three indicators' achievements. Although more in depth assessments are needed to understand the root causes of the issues, such as whether unavailability of doctors or laboratory services are the major drivers for the high number of referral, or whether other factors for the facility to retain chronic condition patients. Overall, this *BPJS-K* monitoring results indicated that there are issues in both supply side readiness and demand side.

KBK mechanism has potential to strengthen *JKN*'s program roles in promotive and preventive health interventions, beyond its use as a cost containment instrument. At present, the implementation of *KBK* payment aims to improve quality by narrowing disparity in supply side readiness, and to control use of unnecessary more expensive secondary, or higher, level services, which in the end controlling overall *JKN* program's expenditure. The existing three indicators correspond more to *BPJS-K* needs as the program administrator, but less relevant for MoH who have the overall responsibility to ensure the achievement of universal health coverage goals beyond health insurance membership coverage.

The plan to expand *KBK* indicators need to involve MoH as well as other relevant stakeholders. As *BPJS-K* is moving from passive towards more active (strategic) purchasing, the provider monitoring functions such as linking payment to performance, setting performance indicators and its monitoring mechanism should be developed and implemented as a collaborative effort, including the process to develop additional *KBK* performance indicators. The remaining five out of nine *KBK* indicators that *BPJS-K* have developed are more suitable as health insurance management indicators, rather than health system performance indicators.

[96] Fachurrazi, Payment System for Health Services at Puskesmas (Community Health Center) For *JKN-KIS* members, *BPJS-K* presentation at *Bappenas* Meeting of *Puskesmas* Financing, September, 2017

The effectiveness of *KBK* as a payment lever to influence providers' behavior will depend on various factors including the significance of its financial impact to the providers. In the first year of *KBK* pilot, the reduction to capitation payment could reach up to 25%. However, the current *KBK* payment reduction as agreed with MoH is much less, ranging from 2.5 to 10% depending on the facility's ability to meet the commitment. The relatively small percentage reduction raises questions on the ability of *KBK* to incentivize primary care providers to perform better and to effectively play its gatekeeping functions. Solely using payment mechanisms may not be sufficient to influence providers' behavior, a robust pay for performance design, and a consistent utilization review and monitoring mechanism should also be in place to improve its effectiveness.

The monitoring of *KBK* implementation is a key feature to continuously improve the program. At the moment, *BPJS-K* regularly conduct monitoring and evaluation of *KBK* on their own. *BPJS-K* team analyze data from the P-Care (Primary Care Information System)[97] that currently covers 95 % of empaneled primary care providers. MoH is relying on information produced and made public by *BPJS-K* as they do not have access to *BPJS-K* managed *JKN* program information databases. The idea to develop an information dashboard with *JKN* performance indicators including *KBK* performance indicators to bridge this access issues is currently being discussed. It is clear that a more structured and rigorous monitoring and evaluation of the performance based payment *KBK* that involves key stakeholders is essential for the program, therefore should be developed and implemented.

E. NATIONAL AND LOCAL GOVERNMENT CAPACITY FOR PLANNING, BUDGETING AND MANAGEMENT

National planning for health is guided by Indonesia's 5-year medium term development plan (*RPJMN* 2015-2019), translated into Ministry of Health 5-year plan (*Renstra* 2015-19). The MoH *Renstra* has recently been revised to reflect the Healthy Indonesia Program. The national annual development plan (*RKP*) forms the basis of the national annual budget (*APBN*) which determines allocations to the Ministry of Health, *BPJS* and subnational transfers.

District health planning is based on the overall priorities of the (District 5-year development plan) and the *Dinas Kesehatan* (*Dinkes*) *Renstra*. The *Dinkes Renstra* attempts to align both the national MoH *Renstra* with the *RPJMD*. The annual district health plan is combined with other sector plans and form the basis of the annual district budget. There is reason to believe that district health offices lack the ability to make strong evidence-based arguments for greater allocations to health (as compared to other sectors). Contributions from local governments are often small and frequently below the 10% (not including salaries) required by the Health Law (UU 36/2009). The primary support provided by local governments for health is staff salaries, both in facilities and in the *Dinas*. A large majority of operational (including equipment and medicines) and capital budgets comes from the central government (thought *DAK*, *BOK* and *JKN*). Evidence suggests that the introduction of the *JKN* has negatively affected the operation of *Dinkes* in two ways: i) the approximately 10% insurance allocation under *ASKES* (the pre-cursor to *JKN*) has ceased, removing an important source of operational funding; and ii) increased the amount of funding to facilities (including the salary of the facility staff) thus reducing the relative influence of the *Dinkes* and its staff. This may be reducing the power of *Dinkes* to properly coordinate the delivery of health services in a district.

Health facilities (*puskesmas* and hospitals) are funded from multiple sources, each which its own planning, budgeting, disbursement, and reporting requirements. This can complicate the management of facilities, especially those with limited human resource capacity in finance and administration. Each funding sources has different eligible spending categories, which themselves vary based on the type of facility (BLUD or not[98]):

[97] The discussion on P-Care can be found in the Technical Assessment for "Performance Dashboard"

[98] BLUD refers to a level of increased financial autonomy, in particular where facilities are able to retain and use fees generated at the facility.

Table of Eligible Expenditures[99]

Spending Item	District budget			JKN		Service user fees	Village fund
	Non-DAK	Physical DAK	BOK (TP/ DAK)	Capitation	Non-capitation		
Personnel expenses							
Civil servants	✔			✔	✔	✔	
Honorary staff	✔			✔	✔	✔	
Training/ capacity building	✔				✚	✔	
General operations (electricity, water, etc)	✔			✚	✔	✔	
Facility							
Development	✔	✔		✚	✔	✔	
Maintenance	✔			✚	✔	✔	
Pharmacy	✔	✔		✔	✔	✔	✔
Medical equipment	✔			✔	✔	✔	
Public health programs (UKM)	✔		✔	✚	✔	✔	✔
Individual health programs (UKP)	✔			✔	✔	✔	

Note: "✚" indicates eligibility in BLUD Puskesmas ONLY

Note: Medical equipment is also available under Physical *DAK*

This makes planning difficult. Further, *DAK* and *BOK* funds, if they are not included in the *APBD* (which is usually passed in November or December of the prior year) many districts determine that the money cannot be used until the *APBD* revision process (which often is in July, at the earliest). This reduce to less than half a year the time to implement important programs on infrastructure, medicines and public health. The issue of delays in implementation of *DAK* is spelt out in more detail below.

F. HEALTH INFORMATION SYSTEM AND DATA MANAGEMENT

Health information management in Indonesia is currently characterized by many fragmented systems, poor compliance, little data verification and underutilization of data. There are currently more than 20 information systems reaching up to the national level and likely manly more that exist solely at the subnational level.[100] Most of these are not interoperable nor integrated, and many collect the same information. This situation is partly the product of a lack of integrated direction from within and between central government agencies (e.g. the Ministry of Health and *BPJS*), but also the result of local initiatives (e.g. districts developing their own information software and hardware filling gaps left by the center). This fragmentation makes it difficult to properly assess the performance of facilities and local governments, nor understand the kinds of capacity, resourcing and incentives needed to improve service delivery and health outcomes. Entering the same information into different sub-systems at the facility increases the reporting burden (taking away from service delivery), reduces compliance, and heightens the chances for error and confusion (i.e. what is in fact the same information showing up in the system as different data).

Based on Law 36/2009 (Law on Health), the government has a responsibility to ensure the availability of and access to information about health. Under Ministry of Health Decree 97/2015 (Roadmap of health information system), the vision for a HIS in Indonesia is to achieve a reliable, integrated system, capable of providing adequate support for health development management. There are five missions to achieve the vision: 1) Strengthening health information

[99] Source: Adrianus Hendrawan, "Policy Brief: Funds Interplay in Public Health Centers" (forthcoming)
[100] See Annex for more detail

system resources including policies, regulations, standards, coordination, planning, financing, human resources, infrastructure and institutions; 2) Developing health indicators that can describe efforts and achievements of community health development; 3) Strengthening data sources and building networks with all stakeholders; 4) Improving quality of health data management covering data collection, processing, and analysis, as well information dissemination; and 5) Improving utilization and dissemination of information to improve evidence-based management and services.

An effective system of health information management in Indonesia requires capturing information at multiple levels of government and across different service providers. The main levels of government are village (e.g. *posyandu* services), subdistrict (e.g. *kecamatan*), district (e.g. district hospitals), provincial (e.g provincial hospitals) and national (e.g. vertical hospitals). Services are provided by government and the private sector and contain financing on both the demand-side (*APBN*, *APBD*, *DAK*, *BOK*) and supply-side (e.g *JKN*, fees for service). The system needs to cover inputs (infrastructure, staffing, equipment), financing, outputs (e.g. services (including patient records), as well as outcomes (e.g. health status of the community).

***Puskemas* collect information about patient characteristics, morbidity and mortality, health effort and health resources.** The primary system for doing this is called the *Sistem Pencatatan dan Pelaporan Terpadu Puskesmas* (*SP2TP*). This system is used in both public and private facilities and covers all patients (*JKN* and non-*JKN* funded). *SP2TP* is implemented in both manual and electronic formats, depending on the facility. Approximately 1000 *puskesmas* (or 10%) are using an application called *SIKDA*-Generic, which contains the fields of *SP2TP* as well as other data. Approximately 20-30% of *puskesmas* are using other locally-developed electronic systems with the remaining collecting and transmitting data manually.

Hospitals also collect their own data through a sub-system call *SIRS-Online* (*Sistem Informasi Rumah Sakit-Online*). This collects information on patient characteristics, morbidity, finance and health resources. BPJS-Health collects information, through p-care (at the primary care level) and e-*klaim* (at the hospital level). About 97% of facilities who are empaneled under the *JKN* program use p-care system to record patient transactions. The information collected by p-care/e-*klaim* is also collected in *SIKDA*-Generic and the latter has been designed to allow this information to feed into the *BPJS* systems (though not the other way around), even if this isn't happening currently. While p-care and e-*klaim* have much better coverage that any other system, the information only covers *JKN* patients, and is not readily shared with MoH.

Data on infrastructure, equipment, staffing and medicines is also entered into multiple systems. This data is critical for resource planning, including through *DAK*.

Two systems of data aggregation currently exist – *Komdat* (*Komunikasi Data*)[101] and the District Health Information System 2 (DHIS2). According to the Center of Data and Information (*Pusdatin*) all districts implement *KOMDAT*, whereas DHIS2 is currently piloted in 10 districts (in five provinces), with a further 52 to be included in the next two years. *Komdat* relies on the manual reporting for priority health information (approximately 130 indicators) from facilities to the *Dinkes*, where it is entered. DHIS2 is structured to designed to pull from all existing systems, and currently the dashboard focuses on SIHA (HIV), SITT (TB) and SISMAL (Malaria) systems. It is important that the Program's support for a dashboard builds on and adapts (rather than seeks to replace) the existing dashboard (such as DHIS2 or *Komdat*). The dashboard should be produced in various configurations [102] depending on the primary audience (central government, provincial, district and public). In further developing the dashboards, more focus could

[101] Under Ministry of Health Regulation 92/2014

[102] There remains a question about whether it should be fully customizable.

be placed on the demand for data from political and administrative leaders. Data that those leaders can use for decision making. Strengthening health information for *Bupatis* and mayors could increase the priority they place on health in budget decisions, and also increase their oversight of the *Dinkes*. Criteria for indicator inclusion could be: within the control of the central/province/district to influence (depending on the "level of the dashboard"); the indicator is likely to change over the period of a year (or less); and reliable data is available (or is likely to be shortly available). It is also advisable that the dashboard covers indicators in different areas of the health production function:

Sample: Provincial Health Dashboard		
Health production function	**Indicator examples**	**Source of data**
Inputs		
• *Financial*	• *% of districts allocating 10% of APBD to health*	*SIKD* (MoF)
• *Human resource*	• *% of puskesmas with a doctor*	*ASKAK* (MoH)
• *Equipment/medicines*	• *% of puskesmas with drug stock-outs*	*ASPAK* (MoH)
• *Infrastructure*	•	*ASPAK* (MoH)
Processes	• *% of puskesmas that submit complete monthly data* • *Referral rate for non-specialist needs*	
Outputs	•	
Outcomes*	• *Vaccination rates* • *% of puskesmas/hospitals received accreditation*	

** Provided these are likely to change over a relatively short space of time (e.g. 1-2 years)*

Common challenges with the multiple data systems are:

- **Lack of data verification:** beyond *BPJS*, there appear to be few processes of routinely checking the quality of (including missing) data. WHO has introduced a self-assessment tool (*PMKDR*: *Pemantauan Mandiri Kualitas Data Rutin*/ Self- assessment on the quality of routine data)
- **Underutilization:** A lot of data is collected, but much of it seems to go unused (possibly due to questions about quality). Some *Dinkes* organize meetings among facilities to compare performance on certain programs and against the minimum service standards. Otherwise, facility management often don't know whether they are doing better or worse than their peers, or which areas they need to focus on to improve. It's not clear that local political or bureaucratic leaders have clear information at hand to guide their decision making.
- **Poor transparency:** The lack of readily available data for the public about the quality of health care – either among different facilities in their district, or compared to neighboring districts – undermines user and voter pressure to reform.
- **Unclear data ownership and protection:** Some of the systems that have been developed at the district level (e.g. e-*puskesmas*, financed by e-*telkom*) vest the ownership of the data in the provider and tie the facility to ongoing provider fees. It's not clear that robust security measures are in place to protect patient data.

Vision/Way forward

The MoH Secretary General has placed his leadership behind improving health information. He has stated his vision that facility workers should only have to enter data once. *Pusdatin*'s vision is that this single entry would be into the same application in every *puskesmas*, though this may not be realistic (or desirable) in the short to medium term, given the disruption this would cause to data collection given the many legacy systems and interests that support

them. As a result, the most appropriate way forward may be to focus on interoperability standards, and iteratively streamline existing systems, while developing better verification protocols and clearer demand for data through use by leadership at the national and subnational levels.

The key steps[103] to increased availability and use of quality data are:

- Develop common, national data standards for the definition, collection, verification entry, transmission, storage (including privacy and security), analysis and dissemination of data. Ideally, this would include:
  - Follow international standards where possible;
  - A universal common facility list, as well as unique patient identifiers and standard input, process, output and outcome codes;
  - Include a rationalization of the number of indicators collected, especially in areas of existing overlap/duplication, but also asking the question, "If this data is not used, then it shouldn't be collected".
  - Develop a method of data verification that contains elements of desk review; a cascading system of annual sample verification; publicizing data reporting and quality to stimulate improved reporting and other incentives for better data.
- Address the organizational development needs of *Pusdatin*, including:
  - Increasing synergies across sub-directorates and offering project management training.
- Ensure that *SIKDA*-Generic and p-care/e-*klaim* have fully operational two-way data sharing.
- Develop a roadmap for increasing the coverage of a standard information data entry-point for facilities (most likely *SIKDA*-Generic).
- Roll out SIKDA-generic
  - This should take advantage of links to p-care/e-*klaim* which currently have much higher usage rates.
- Link *SIDKA*-Generic to program data systems (might take 2-3 years).
- Put improved data quality/verification system in place
- Expand the number of local governments with (DHIS2) dashboards and develop a dashboard for the Minister and Secretary General, as well as Directors General and *BPJS* management.

G. *DANA ALOKASI KHUSUS* (*DAK*)

DAK-fisik

There are three types of *DAK-fisik*:

1. ***DAK* Regular:** which in 2018 finances basic health services at the *Kabupaten*/*Kota* level (*puskesmas* infrastructure, medical devices, equipment and information systems); referral health services (primarily *Kabupaten*/*Kota* and provincial hospital infrastructure and equipment); pharmacy and health supplies (infrastructure, medicines and medical expendables) and family planning (infrastructure and equipment).[104]
2. ***DAK Penugasan* ("Assignment"):** which in 2018 funds XX *Kabupaten*/*Kota* and XX Provinces **for r**eferral, training and laboratory services in XX districts
3. ***DAK Afirmasi*:** which in 2018 fund *puskesmas* health service infrastructure in XX border, island, lagging and transmigration districts.

[103] Some/all of these steps could constitute project indicators and/or actions.
[104] See Annex for more details.

In 2018, the national health *DAK-fisik* allocation will be Rp. 17,979,700trn, up from Rp. 17,104,880trn in 2017, representing 29% of all *DAK-fisik* (stable with 2017) (see table below for details). The majority of *DAK-fisik* is for *DAK* regular, with the largest allocations to district-level basic health care and district pharmacy. *DAK* does not require co-financing by local governments.

DAK ALLOCATION 2016 -2018 (in IDR Million)

Note: 2018 from Nota Keuangan

NO.	TYPE	SUBSECTOR	RECIPIENT	2016	2017	NK 2018
I	REGULAR					
		Total	**Total**	**15,269,061**	**10,021,819**	**10,511,800**
		Basic health services	Kab/Kota	6,460,281	3,205,121	
		Referral services	Kab/Kota	3,997,774	2,880,609	
			Province	565,709	1,321,192	
		Pharmacy and health supplies	Kab/Kota	3,510,433	2,099,879	
			Province	131,563	13,932	
		Family Planning	Kab/Kota	603,300	501,093	
		Total DAK regular health		**15,269,060**	**10,021,826**	**10,511,800**
		TOTAL DAK REGULAR		**29,559,183**	**20,396,248**	**31,351,000**
II	PENUGASAN					
		Referral services	Kab/Kota		3,692,325	
			Province		1,138,937	
		Total DAK Penugasan health		-	**4,831,262**	**4,241,700**
		TOTAL DAK PENUGASAN			**34,466,763**	**24,463,700**
III	AFIRMASI					
		Basic health services			**2,251,799**	**3,226,200**
		Total DAK Afirmasi health			**2,251,799**	**3,226,200**
		TOTAL DAK AFIRMASI		**1,247,770**	**3,479,199**	**6,621,700**
IV	IPD					
		Health infrastructure		**1,104,147**		
		TOTAL DAK IPD		**25,535,076**		
		TOTAL DAK HEALTH		**16,373,207**	**17,104,887**	**17,979,700**
		TOTAL DAK ALLOCATION		**56,342,029**	**58,342,210**	**62,436,400**
		% DAK for health		**29%**	**29%**	**29%**

Since the 2016 *DAK*, uses a "bottom-up" proposal process from districts (and in some districts from facilities). DAK is applied for using PBE (electronic based planning; but not linked to e-*renggar*) and *APSAK* (though these are not integrated). The Ministry of Health requires that *Sipermon* (aggregator of five information systems – RS online, e-monev, *ASPAK*, e-*renstra* and e-planning) be completed before districts can apply for *DAK*. MoH reports 90% compliance. The *DAK* subsectors and menu items are set by the Secretary General (based on inputs from the DGs) and the Ministry of Finance has asked that these more general, to provide discretion to LGs. Ministry of Finance sets the ceilings for each of the three health *DAK*s (based on inputs from MoH). The Secretary General then then determines the how much is allocated to each subsector/menu. District ceilings are set using a formula. In 2018, the formula will contain two elements, technical and performance indices, the latter being introduced for the first time. The formula consists of:

"Technical Index" [80%]

1. The state of the infrastructure stock (from the *ASPAK* database)
2. The level of human resources (using the *BPPSDN* database)
3. The remoteness of the district.

"Performance Index" [20%]

1. Compliance with the previous year's allocation (i.e. if they received *DAK* to upgrade 5 *puskesmas* did they complete 5?) [This is based on filling out of the MoH's e-monev system…thus an incentive now to do so]
2. Absorption (i.e. different scores for different levels of budget execution).

These changes could represent a useful way to improve *DAK* performance. Further details of the "new" formula (including the implementation manual) are required. Particular questions include:

- What year will be used as the base year for calculating absorption (T-2?)?
- How will the formula be socialized with local governments, to maximize the impact of the incentive?
- What kind of verification will be done to minimize gaming?
- Discussions with MoH about how to measure the impact of the changes in *DAK*

Local government proposals are assessed by MoH based on the ceilings provided and local governments are asked to cut activities that are above the ceiling. The final allocation is considered by Parliament, which according to MoH changes about 20-30% of *DAK* Regular *locations* (but usually doesn't change the *Penugasan* or *Afirmasi* allocations). Reporting on *DAK* is done through both MoH's e-monev and MoF's OM-SPAN, as well as to MoHA.

Some possible reform areas include:

- A better use of data in prioritizing DAK subsectors and menu items each year.
- Linking MoH's e-budgeting and planning systems (which include e-monev) with MoF's OM-SPAN.
- More for Satkers to complete applications and reporting – and integrating *ASPAK* with the *DAK* application.
- Poor *DAK* absorption (they quoted 50-60%...but we are checking this).
- Getting districts to begin work earlier.

DAK Non-fisik [Total 2017 Rp. 6.91trn]

There are five types of *DAK non-fisik*: health operational assistance (*BOK*); childbirth services guarantee (*Jampersal*); *puskesmas* accreditation; hospital accreditation, and family planning. In 2017, the total *DAK non-fisik* allocation was 6.91trn.

***BOK*:** In 2017, the *BOK* was allocation was Rp. 4.86trn. *BOK* focused on preventative and promotive care and was introduced by the national government in recognition of the cost efficiencies and medical effectiveness of preventive and promotive care. It was also introduced in recognition that local governments generally underinvest in these areas – as their political payoff is less direct that curative and rehabilitative infrastructure. The Ministry of Health claims that since the introduction of *BOK*, districts have in fact reduced their allocations to preventive and promotive health. There are very minimal changes to the *BOK* activities that are funded each year. Functioning well, *BOK* should complement *JKN* – which funds people once they get to a health center (though can also be used for outreach). *BOK* is allocated on a per-facility according to formula based on workload (working area, residents, community-based health initiatives and implementer, schools, and *JKN* capitation). In 2018, for the first time, 20% of the allocation will take into account prior year *BOK* absorption (10%) and reporting compliance (10%).[105] Each *puskesmas* allocation will be limited to a maximum of 30% increase or decrease of the prior year's allocation.

[105] A *Permenkes* is currently under preparation.

Even though *BOK* is a transfer from the central government, the use and reporting of *BOK* is closely controlled by the District *Dinkes*. Facilities submit a monthly plan which is verified by the Dinkes. *BOK* reporting is done to *PEMDA* and then to MoHA. Financial absorption is measured by MoF.

***DAK-Akreditasi*:** In 2017, the total allocation for *DAK-Akreditasi* (*Puskesmas*) is Rp. 478bn and for *DAK-Akreditasi* (Hospitals) is Rp. 48.5bn.[106] The accreditation process appears to be a widely influential standard among facility and *Dinkes* staff. *DAK-Akreditasi* funds activities such workshops, honoraria and travel for the self-assessment, pre-accreditation evaluation, the survey itself and post-accreditation guidance. *DAK-Akreditasi* doesn't fund any of the inputs (such as works, equipment or medicines) that might be required to lift the *puskesmas* or hospital up to the appropriate level to get accredited. These inputs must be funded from other sources. Given the central nature of accreditation to the way in which improvements to facility quality is understood, there is an opportunity to more closely tie *DAK-fisik* with *DAK-akreditasi*.

Areas of reform

- How to increase the amount/% of local health budget going to preventative or promotive.
    - Could do as min condition, matching grant, and/or part of the formula. Data to support could be difficult to come by.
- Better link the *DAK-fisik* allocation with *BOK-akreditasi* to ensure that those facilities that are undertaking accreditation receive preference in *DAK-fisik* allocation.
- Simplify reporting and reduce the reporting burden. MoHA has a template for reporting. Linking reporting to OM-SPAN could make it easier.
- As with *DAK-fisik*, address delays in commencement of use and thus increase absorption

[106] The remaining two *BOK* categories are *Jampersal* (Rp. 1.26trn) and Family Planning (Rp. 292.8bn)

Table: Health *DAK-fisik* Menu 2018

	***DAK* Regular**	***DAK Penugasan***	***DAK Afirmasi***
Basic health services	Basic health service – *Kab*/*Kota* 1. Construction and rehabilitation of *Puskesmas* and its supporting facility (excl. *Puskesmas* eligible for *DAK Afirmasi*) 2. Provision *Puskesmas* infrastructure 3. Provision of medical devices & equipment and *Puskesmas* Information System.		Basic health service – *Kab*/*Kota* 1. Improvement/ construction of *Puskesmas* facilities, infrastructure, and medical equipment in border areas 2. Improvement/ construction of *Puskesmas* facilities, infrastructure, and medical equipment in lagging/island regions 3. Improvement/ construction of *Puskesmas* facilities, infrastructure, and medical equipment in transmigration areas.
Referral services	Referral service – *Kab*/*Kota* 1. Construction and rehabilitation of *Kab*/*Kota* Hospital (excl. Hospitals eligible for *DAK Penugasan*) 2. Provision medical equipment for Hospital 3. Provision of Hospital infrastructure. Referral service – Province 1. Construction and rehabilitation of Provincial Hospital (excl. Hospitals eligible for *DAK Penugasan*) 2. Provision medical equipment for Hospital 3. Provision of Hospital infrastructure.	Referral service – *Kab*/*Kota* 1. Provision of building, infrastructure, and medical equipment for Regional Referral Hospital 2. Expansion of building, infrastructure and medical equipment for hospital in Tourism Priority Regions 3. Provision of building, infrastructure and equipment for Blood Transfusion Unit (*UTD*) 4. Expansion of Regional Health Training Center (*Balai Pelatihan Kesehatan Daerah*) and provision of equipment to support training 5. Construction of Primary Hospital (*RS* Pratama) 6. Rehabilitation of Schistosomiasis laboratory. Referral service – Province 1. Provision of building, infrastructure, and medical equipment for National Referral Hospital 2. Provision of building, infrastructure, and medical equipment for Province Referral Hospital 3. Provision of building, infrastructure, and medical	

		equipment for Regional Referral Hospital 4. Expansion of building, infrastructure and medical equipment for hospital in Tourism Priority Regions 5. Expansion of Regional Health Training Center (*Balai Pelatihan Kesehatan Daerah*) and provision of equipment to support training 6. Rehabilitation of Schistosomiasis laboratory.	
Pharmacy and health supplies	Pharmacy and health supplies – *Kab*/*Kota* 1. Provision of medicines and medical expendables at *Kab*/*Kota* 2. Construction or rehabilitation of K*a*b/*Kota* Pharmacy Installation. Pharmacy and health supplies – Province 1. Construction or rehabilitation of Province Pharmacy Installation.		
Family planning	Family Planning – *Kab*/*Kota* 1. Provision of equipment and infrastructure of Family Planning service (clinic, construction/ reassignment of function for storage, tools and contraceptive medicines, vehicles) 2. Provision of equipment and infrastructure of Family Planning counseling (*penyuluhan*).		

Annex 3. Results Framework Matrix

PDO Indicators by Objectives / Outcomes	DLI	CRI	Unit of Measure	Baseline	Intermediate Targets (IT)				End Target
					Y1	Y2	Y3	Y4	
Strengthening performance monitoring for increased local government and facility accountability									
Districts covered in MoH's published performance dashboard	DLI 1		Text	0.00	Performance dashboard designed and guidelines issued	5 %	30 %	60 %	90 %
Improving implementation of national standards for greater local government and facility performance									
Puskesmas that have received higher levels of accreditation	DLI 3		Number	496.00	600.00	900.00	1,200.00	1,500.00	1,996.00
Pregnant women delivering at a health care facility			Percentage	78.00	80.00	82.00	84.00	87.00	90.00
Enhancing performance orientation of health financing for better local service delivery									
Primary care providers that are implementing performance based JKN capitation	DLI 8		Text	0.00			Joint MoH-BPJS agreement (on JKN performance based	40 %	60 %

PDO Indicators by Objectives / Outcomes	DLI	CRI	Unit of Measure	Baseline	Intermediate Targets (IT)				End Target
					Y1	Y2	Y3	Y4	
							capitation) signed		
Districts showing an improvement on at least half of the performance indicators in the enhanced DAK non-fisik	DLI 9		Text	0.00	Enhanced performance based DAK non-fisik designed	Enhanced DAK non-fisik baseline data collected	DAK non-fisik allocated based on performance	25 %	60 %

Intermediate Results Indicators by Results Areas	DLI	CRI	Unit of Measure	Baseline	Intermediate Targets (IT)				End Target
					Y1	Y2	Y3	Y4	
Strengthening performance monitoring for increased local government and facility accountability									
Puskesmas using electronic data reporting systems with complete and compliant data in accordance with MOH's data dictionary			Text	0.00	Enhanced data dictionary published	20 %	40 %	60 %	80 %
Puskesmas using mHealth application to support enhanced PIS-PK	DLI 2		Text	0.00	mHealth plan for PIS-PK completed	mHealth for PIS-PK designed and field tested	25.00	250.00	1,500.00

Improving implementation of national standards for greater local government and facility performance									
Puskesmas that have been accredited (for basic levels in Eastern Indonesia)	DLI 4		Number	66	100	175	250	350	466
Primary care accreditation body (KAFKTP) functioning as an independent commission	DLI 5		Text	No	Roadmap for independent commission produced	Costed business plan and by-laws submitted	Decree issued establishing independent commission	75 % of commission staff appointed	Accreditation commission operating in accordance with its by-laws
Lagging districts that have produced an improved annual plan and budget	DLI 6		Text	0.00	Upgraded training modules designed	10.00	25.00	50.00	120.00
Special health worker teams deployed	DLI 7		Number	439.00	539.00	639.00	739.00	839.00	1,039.00
Provinces that are using an integrated referral information system (IRIS)	DLI 10		Text	0.00	Integrated information system (IRIS) designed	Software application for IRIS completed	1.00	3.00	5.00