January 2021

COST OF IMPLEMENTING MINIMUM SERVICE STANDARDS FOR HEALTH IN INDONESIA

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KEMENTERIAN KESEHATAN REPUBLIK INDONESIA

HP+
HEALTH POLICY PLUS

JANUARY 2021

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Suggested citation: Teplitskaya, L., P. Sucahya, D. Marbun, M. F. Rakhmadi, and Y. Leosari. 2021. *Cost of Implementing Minimum Service Standards for Health in Indonesia*. Washington, DC: Palladium, Health Policy Plus.

ISBN: 978-1-59560-272-5

Health Policy Plus (HP+) is a seven-year cooperative agreement funded by the U.S. Agency for International Development under Agreement No. AID-OAA-A-15-00051, beginning August 28, 2015. HP+ is implemented by Palladium, in collaboration with Avenir Health, Futures Group Global Outreach, Plan International USA, Population Reference Bureau, RTI International, ThinkWell, and the White Ribbon Alliance for Safe Motherhood.

This report was produced for review by the U.S. Agency for International Development. It was prepared by HP+. The information provided in this report is not official U.S. Government information and does not necessarily reflect the views or positions of the U.S. Agency for International Development or the U.S. Government.

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Acknowledgments

The authors would like to acknowledge support and contributions from Center for Health Financing and Insurance head Dr. Kalsum Komaryani, the Ministry of Health, and the team, including previous head of the health financing unit subdivision Yulianti, current head of the subdivision Herlinawati, and remaining team members Ackhmad Afflajir, Lemi Kurniawan, Amelia Widjaya, and Widyawati.

The authors thank the U.S. Agency for International Development technical support staff in Indonesia, including Edhie Rahmat and Anastasia Susanto. Lastly, we thank the Center for Health Research at the University of Indonesia for leading primary data collection for the minimum service standards costing data. Special thanks are extended to Center for Health Research at the University of Indonesia head Rita Damayanti and all researchers who led the data collection study, including Dadun, Nugroho Soeharno, Hendri Hartati, Fitra Yelda, Ferdinand P. Siagian, Agus Dwi Setiawan, Dini Dachlia, Amri Ismail, Heru Suparno, Luluk Ishardini, Monalisa, Gita Erysha, Ridwan Fauzi, and Anifatun Mu'asyarah.

Abbreviations

APBD	Anggaran Pendapatan dan Belanja Daerah (subnational expenditure)
ARV(s)	anti-retroviral(s)
BPS	Baden Pusat Statistik (Statistics Indonesia)
CD(s)	communicable disease(s)
DAK Fisik	Dana Alokasi Khusus Fisik
DAK Non-Fisik	Dana Alokasi Khusus Non-Fisik
DHO	district health office
DJSN	Dewan Jaminan Sosial Nasional
FGD	focus group discussion
FKTP	Fasilitas Kesehatan Tingkat Pertama (first-level health facilities)
FKRTL	Fasilitas Kesehatan Rujukan Tingkat Lanjut (advanced referral health facilities)
HIV	human immunodeficiency virus
HP+	Health Policy Plus
HR	human resource(s)
IDR	Indonesian rupiah
JKN	Jaminan Kesehatan Nasional
MCH	maternal and child health
MNCH	maternal, newborn, and child health
MOH	Ministry of Health
MOHA	Ministry of Home Affairs
NCD(s)	non-communicable disease(s)
OAT	obat anti tuberculosis (anti-tuberculosis drugs)
PPJK	Pusat Pembiayaan dan Jaminan Kesehatan (Center for Health Financing and Insurance)
Pusdatin	Pusat Data dan Informasi (Center for Data and Information)
RPJMD	Rencana Pembangunan Jangka Menengah Daerah (local development plans)

SIHA	Sistem Informasi HIV AIDS
SPM	standar pelayanan minimal (minimum service standard(s))
TB	tuberculosis
USAID	U.S. Agency for International Development

Executive Summary

The government of Indonesia has maintained its commitment to universal health coverage through the establishment of the largest single-payer social health insurance scheme (Jaminan Kesehatan Nasional, or JKN) and has increased health insurance coverage to 83 percent. In October 2020, health promotion and prevention totaled 0.2 percent of total JKN spending, and spending at first-level health facilities (Fasilitas Kesehatan Tingkat Pertama or FKTP) comprised 16 percent of total JKN payments (with the remainder spent at advanced referral health facilities (Fasilitas Kesehatan Rujukan Tingkat Lanjut or FKRTL) (DJSN, 2020). With the rising prevalence of non-communicable diseases (NCDs) and concerns regarding JKN's financial sustainability, Indonesia needs to shift its public health spending focus from curative to primary healthcare and to improve the efficiency of its public spending in the health sector. In response to health inequities which have persisted since decentralization, Indonesia has designed several iterations of its minimum service standards (standar pelayanan minimal, or SPM) for primary healthcare services, with the most recent regulations released in the Permenkes 4/2019. These services comprise mainly health promotion and prevention interventions, with treatment interventions for specific SPM as described below.

The latest SPM regulation describes the minimum quality of mandatory services at the district level to reach 12 target populations, along with detailed technical standards for equipment, supplies, and human resources to accomplish 100 percent of health service coverage within each fiscal year. The 12 SPM address:

1. Maternal and child health (MCH) services for pregnant women, delivery, newborns, children under five, and school-age children
2. Communicable disease services for tuberculosis (TB) and HIV
3. NCD services for productive-age adults, elderly, hypertension, diabetes, and mental disorders

The scope of services for each population group differs one from another, but broadly includes outreach, data collection, education, screening, service delivery, referral, documentation, and reporting. Although SPM activities for HIV and TB within Permenkes 4/2019 focus on health prevention and promotion and do not require districts to plan and budget for inclusion of costs of treatment drugs (procured by the central government[1]), some districts and municipalities receive insufficient quantities of anti-TB (obat anti tuberculosis, or OAT) drugs and antiretrovirals (ARVs) and may need to procure additional drugs. In these instances, districts and municipalities may need to plan and budget for a portion of their population receiving services for HIV and/or TB SPM that includes the cost of drugs, in order to reach 100 percent of SPM targets. For districts and municipalities in this situation, the Health Policy Plus (HP+) project calculated HIV and TB unit costs with the inclusion of drug costs (per person per year).

In March 2019, the Ministry of Health Center for Health Financing and Insurance (Pusat Pembiayaan dan Jaminan Kesehatan, or PPJK) developed the Siscobikes platform and associated tools to assist districts in planning and budgeting for the resources needed to meet 100 percent of SPM, and to fulfil the requirements in Permenkes 4/2019. Districts

[1] Permenkes No: 1190 / MENKES / SK / 2004 concerning the provision of free anti-TB (OAT) drugs and anti-retroviral (ARV) drugs for HIV/AIDS issued on October 19, 2004.

must ensure that SPM planning and budgeting is adequate and efficient for reaching 100 percent of targets, and that the various sources of financing do not overlap with each other. The Siscobikes platform aims to assist districts in accurate estimation of their SPM budget needs and to identify reasons behind any failure in meeting SPM targets, providing evidence for specific resources to meet SPM in the future.

Despite several modifications in 2019 and 2020 to improve Siscobikes functionality, an analysis of the data submitted by 67 of 514 districts indicated poor data quality and incompleteness (Sucahya and Teplitskaya, 2020). Districts rely on prior expenditure estimates to develop annual SPM budgets, which do not reflect actual costs to meet target population needs. A modification of the current version is required to incorporate evidence-based SPM cost inputs into the revised tools, which reflect the latest Permenkes 4/2019 and differences in cost drivers across regions.

Given the need to improve SPM budgeting and planning, the U.S. Agency for International Development-funded HP+ project conducted an activity-based costing study to assess costs required for the 12 district-level SPM to assist local governments in planning and budgeting to reach 100 percent of their SPM. The analysis required primary data collection from 24 districts and included data collection from district health offices (DHOs), puskesmas with and without inpatient beds, private clinics, pustu, and polindes. To complement the costing analysis, HP+ conducted focus group discussions (FGDs) in each of the 24 districts to better understand SPM implementation challenges and enabling factors. Through interviews with health facility staff and observation, HP+ also assessed the availability of services for health SPM in the sample based on the list of activities in Permenkes 4/2019 required to be undertaken by DHOs, and the list of sub-activities required to be implemented by puskesmas networks and private clinics. All primary data were collected by the Center for Health Research at the University of Indonesia.

HP+ employed the costing perspective of local government officials responsible for planning and budgeting for SPM per the Permenkes 4/2019. The costing perspective was normative, reflecting the costs that districts should incur at DHOs and health facilities if SPM implementation followed the Permenkes 4/2019 technical guidelines. HP+ conducted cost calculations separately for DHOs and service delivery providers. Service delivery providers, comprised of puskesmas, private clinics, pustu, and polindes, serve as the main implementers of SPM. District health office responsibilities for SPM include higher-level SPM planning, logistical support, coordination, monitoring and evaluation, and recording and reporting to the provincial health office and the Ministry of Health (MOH) as required. HP+ calculated direct costs and overhead costs separately for each SPM. Direct costs comprised medicines, vaccines, medical and non-medical consumables, medical equipment, and transportation directly related to provision of services for SPM. Overhead costs comprised remaining costs indirectly related to provision of services for SPM, including operating costs, fixed costs, and staff costs.

The results from this cost analysis are being used to improve the MOH SPM budgeting tools in Siscobikes for districts to accurately budget their resource requirements to meet SPM in following years. New features in the tools will include pre-filled regional SPM unit costs which districts can select to estimate SPM funding requirements each year, in addition to an alert system to inform the user of any total resource requirements that exceed a budget ceiling that is automatically calculated based on costs and targets inputted.

Study results indicate that Indonesia still needs to strengthen primary healthcare service delivery, which is consistent with other recent findings on maternal and newborn healthcare

services in Indonesia and broader primary healthcare findings in the World Bank's Public Expenditure Review (Van Doorn et al., 2020; Stein et al., 2020). Consistent with other viable costing methods used in other low- and middle-income countries, HP+ used a mixed approach for this study, calculating direct costs through bottom-up costing and overhead costs using top-down costing (Hendriks et al., 2014; Cunnama et al., 2016). Compared to top-down costing, bottom-up costing is considered to more accurately capture resources used to provide a health service. However, this approach may underestimate inefficiencies in service provision. Top-down costing is less accurate in estimating true costs, but captures existing inefficiencies in service delivery (Cunnama et al., 2016).

Applying this study's average SPM unit cost estimates by region to SPM targets, HP+ estimated that national resource requirements for direct SPM costs for 2019 total Indonesian rupiah (IDR) 6.7 trillion, approximately 4.6 percent of total subnational expenditure (Anggaran Pendapatan dan Belanja Daerah or APBD) for health (or an estimated IDR 25,177 per person per year). This direct cost SPM resource estimate includes direct inputs for SPM delivery (medicines, vaccines, medical and non-medical consumables, medical equipment, and transportation directly related to SPM provision) and excludes the cost of staff time. With inclusion of overhead costs and the cost of staff time, total national SPM resource requirements are an estimated IDR 21.6 trillion, approximately 8.1 percent of the total APBD expenditure for health (or an estimated IDR 81,523 per person per year).

Although personnel costs are fixed year to year, they serve as the main cost driver for SPM in sampled puskesmas networks (on average, 51 percent of total costs) and private clinics (on average, 58 percent of total costs) and contribute a significant portion of overhead costs to the total SPM resource estimate. Across regions, personnel costs in sampled puskesmas networks range from 34 percent of total SPM costs in Java to 60 percent of total SPM costs in Bali and Nusatenggara. Similarly, across regions, personnel costs in sampled private clinics range from 46 percent of total SPM costs in Java to 68 percent of total SPM costs in Maluku and Papua. Per the guidelines outlined in Permenkes 4/2019, health providers have flexibility in selecting appropriate health personnel to meet SPM, and can implement task shifting or task sharing of service delivery among doctors, specialists, midwives, and nurses to increase service delivery efficiency and reduce costs.

Indonesia remains behind in meeting TB and HIV targets, which may be explained by high unit costs for these services (Table ES1). At the DHO-level, on average, unit costs per person per year were highest for HIV services with ARVs (IDR 1,580,122) and TB services with OAT drugs (IDR 1,128,835). Similarly, SPM unit costs were highest in puskesmas networks for TB services with drugs (IDR 566,611). JKN capitation payments do not generally incentivize provision of more expensive services at primary healthcare facilities, and these study results indicate that health facility staff spend a small proportion of their total SPM time on HIV and TB services. This time allocation may need to increase to meet targets.

Indonesia also must improve SPM target achievement for NCDs and TB. On average, among districts sampled in all five regions, NCDs and TB were the lowest three targets met. TTB target achievement must be increased in Java, Maluku, Papua, Sumatra, and Kalimantan. Despite the wide availability of SPM services for hypertension, particularly among sampled private clinics, hypertension target achievement was low in all regions with the exception of Maluku and Papua. Target achievement of services for productive-age adults needs to be improved, particularly in sampled districts in Bali and Nusatenggara and Maluku and Papua (58 percent and 65 percent, respectively).

Table ES1. Average Direct and Total SPM Unit Costs at Sampled DHOs, Puskesmas Networks, and Private Clinics (IDR)

SPM	DHO		Puskesmas networks		Private clinics	
	Direct	Total	Direct	Total	Direct	Total
Pregnancy	52,324	71,896	41,529	161,454	12,638	77,083
Delivery	104,102	126,916	73,282	204,730	77,749	317,396
Newborn	81,614	103,442	61,911	279,409	52,042	391,606
Children under five	138,618	145,539	58,324	133,435	25,490	54,364
School-age children	14,004	24,872	18,405	169,276	3,434	8,186
Productive-age adults	50,908	53,199	15,150	51,921	6,461	42,414
Elderly	45,915	53,241	36,983	89,506	35,129	112,456
Hypertension	12,362	16,900	8,402	84,282	12,623	176,898
Diabetes	28,290	56,731	54,023	138,428	76,227	199,669
Mental disorders	70,395	238,421	88,264	235,381	30,619	178,030
TB *(without OAT drugs)*	89,164	165,663	79,266	274,536	9,293	255,087
TB *(with OAT drugs)*	1,052,335	1,128,835	371,341	566,611	216,222	462,016
HIV *(without ARVs)*	99,750	177,123	33,214	227,928	2,702	165,861
HIV *(with ARVs)*	1,502,749	1,580,122	59,158	253,872	13,476	176,635

To improve health SPM execution in Indonesia, HP+ recommends the following:

- **Analyze future SPM data collected through the new Siscobikes platform.** Using the results of this costing study, HP+ has (1) supported the government of Indonesia in improving its electronic platform for SPM data collection (Siscobikes), (2) improved associated Excel-based budgeting tools used by districts by pre-filling cost estimates for SPM activities that vary by region, and (3) developed an interoperability guideline for use by other ministries and government agencies to assess Siscobikes data. Future analysis of SPM data collected through the new Siscobikes platform is needed to assess improvements in district-level SPM performance and to better target central government transfers (such as through Dana Alokasi Khusus Fisik (DAK Fisik) and Dana Alokasi Khusus Non-Fisik (DAK Non-Fisik) to local governments based on each district's SPM needs and performance.
- **Strengthen service availability and implementation of SPM in the private sector**. To meet ambitious 100 percent SPM targets, DHOs will need to improve engagement of private clinics in delivery of SPM services. Study results indicate that compared to the public sector, the private sector is generally less equipped to deliver services addressing SPM, which is consistent with findings that private primary healthcare facilities lacked basic diagnostic capacity and essential medicines (Rajan et al., 2018). On average, sampled private clinics had the widest availability of diabetes and hypertension services addressing SPM (79 percent) and had 25 percent or lower availability for services for HIV, mental disorders, and school-age children. Puskesmas networks serve as the main service provider for these services, and some of the lower service availability at private clinics may be explained by lower disease

prevalence and service demand. The lower service availability at private clinics is also consistent with World Bank findings which indicate that private facilities focus less on preventive and public health interventions and more on treatment (Rajan et al., 2018). Among sampled private clinics, our results indicated that private clinics in Bali, Nusatenggara, and Java had lowest SPM service availability, and six services were not available in sampled facilities in Bali and Nusatenggara. HP+ recommends that the government of Indonesia explore incentives to engage the private sector in service delivery addressing SPM.

- **Improve cost efficiency of SPM for school-age and under-five children through task shifting and task sharing.** Overhead costs comprise 56 percent and 89 percent of SPM unit costs for under-five and school-age children, respectively. Per the guidelines in Permenkes 4/2019, health providers can implement task shifting and task sharing among doctors, midwives, and nurses as needed to suit each district's local context and reduce inefficiencies in the provision of routine health services for children. Compared to other SPM, services for school-age and under-five children focus on interventions that require less specialized health personnel, such as growth monitoring, immunization administration, and vitamin supplementation. Less specialized, trained health staff can be tasked to provide these routine services for children, and more specialized cadres such as doctors can focus on addressing health complications and other services addressing SPM that require a more specialized skillset.
- **Improve SPM reporting and monitoring and evaluation technical guidance.** This study's focus group discussion results indicated monitoring and evaluation for SPM is not prioritized at most DHOs sampled, and there is a lack of systems for puskesmas to receive constructive feedback on their monthly report submissions. To improve the supervisory role of DHOs and puskesmas in recording and reporting, the MOH must establish an integrated reporting system that accommodates reporting at SPM and program levels. As part of strengthening service delivery for SPM services in private clinics, Indonesia must strengthen the role of puskesmas to coordinate and monitor private sector involvement in SPM, which includes managing private sector SPM performance reporting.
- **The Ministry of Home Affairs must fulfil its role in enforcing local government's compliance to SPM regulations.** To ensure the fulfillment of equipment, supplies, and human resources needed to properly implement SPM, districts need to comply with existing regulations to prioritize funding for health by allocating 10 percent of their APBD funding for the health sector. In August 2020, the Ministry of Home Affairs (MOHA) indicated that average district APBD allocations for the health sector remain below the 10 percent required, at 9.24 percent (Nugraheny, 2020). MOHA has a critical role in disseminating SPM guidance to district leaders and clarifying their responsibilities in executing SPM and the consequences if they fail to achieve 100 percent of their targets. Per Law 23/2014, MOHA must impose sanctions on local leaders who are not able implement SPM effectively and meet their targets.

Introduction

The government of Indonesia has maintained its commitment to universal health coverage through the establishment of the largest single-payer social health insurance scheme (Jaminan Kesehatan Nasional, or JKN) and has increased health insurance coverage to 83 percent (Van Doorn et al., 2020). Currently, the government of Indonesia spends 1.4 percent of its gross domestic product (GDP) on health, which is approximately one-third of public health spending as a percentage of GDP in similar countries in east Asia and the Pacific. In October 2020, health promotion and prevention totaled 0.2 percent of total JKN spending, and spending at first-level health facilities (Fasilitas Kesehatan Tingkat Pertama or FKTP) comprised 16 percent of total JKN payments (with the remainder spent at advanced referral health facilities (Fasilitas Kesehatan Rujukan Tingkat Lanjut or FKRTL) (DJSN, 2020). With the rising prevalence of non-communicable diseases and concerns regarding JKN's financial sustainability, Indonesia needs to shift its public health spending focus from curative to primary healthcare and improve efficiency of its public spending in the health sector.

Despite improvements in several health outcomes, such as infant mortality, and in access to basic healthcare services (e.g., the percentage of institutional deliveries increased from 46 percent to 74 percent between 2007 and 2017), significant geographic inequities in healthcare access and health outcomes persist among regions (Statistics Indonesia and Macro International, 2008; BKKBN, et al., 2018). For example, the percentage of live birth deliveries in a health facility were as low as 29 percent in Maluku Province and as high as 100 percent in Java islands such as Yogyakarta. The under-five mortality rate was also significantly higher in eastern provinces compared to the national average (40 deaths compared to 60 deaths per 1,000 live births) (BKKBN, et al., 2018).In response to health inequities which have persisted since decentralization, Indonesia has designed several iterations of Standar Pelayanan Minimal (SPM), or minimum service standards, at the primary healthcare level, with the most recent regulations released in the Permenkes 4/2019. The remainder of this section focuses on an overview of SPM regulations, evidence of their implementation, challenges to date, and purpose of this study.

Regulations and Evidence on SPM for Health in Indonesia

Following the formalization of decentralization in Indonesia in 2001 per regulations UU 22/1999 and UU 25/1999, provincial and district governments inherited a range of political, administrative, and financial responsibilities (Maharani and Tampubolon, 2015; Pal and Wahhaj, 2017). For health, the responsibility of service delivery was transferred from the Ministry of Health (MOH) to local governments. Under decentralization, the MOH was responsible for providing technical guidance to provincial and district health offices in planning, financing, managing, and delivering health services (Suryanto et al., 2016).

To assist local governments and to address varying quality of service provision across Indonesia, the central government introduced regulations (UU 32/2004 and PP 65/2005) to set SPM in 15 decentralized sectors, including health. SPM defined the minimum types and quality of services that every regional government (provincial and district) must deliver to meet the needs of its population.

There were several reasons for the introduction of SPM, including:

- SPM was intended to address the varying quality of service provision across Indonesia to ensure the equitable coverage of basic essential services for all citizens.

Regional governments held the obligatory functions to provide and deliver such services regardless of their resources and capacity, which in the long run, may potentially narrow the gap of regional disparity (Roudo and Chalil, 2016).

- SPM was planned as a means to assess performance of regional governments on certain essential functions and hold them accountable to their constituents. It was considered that SPM performance could be used for arguments to increase local taxes when people were unsatisfied with the quality of public services (Ferrazzi, 2005).

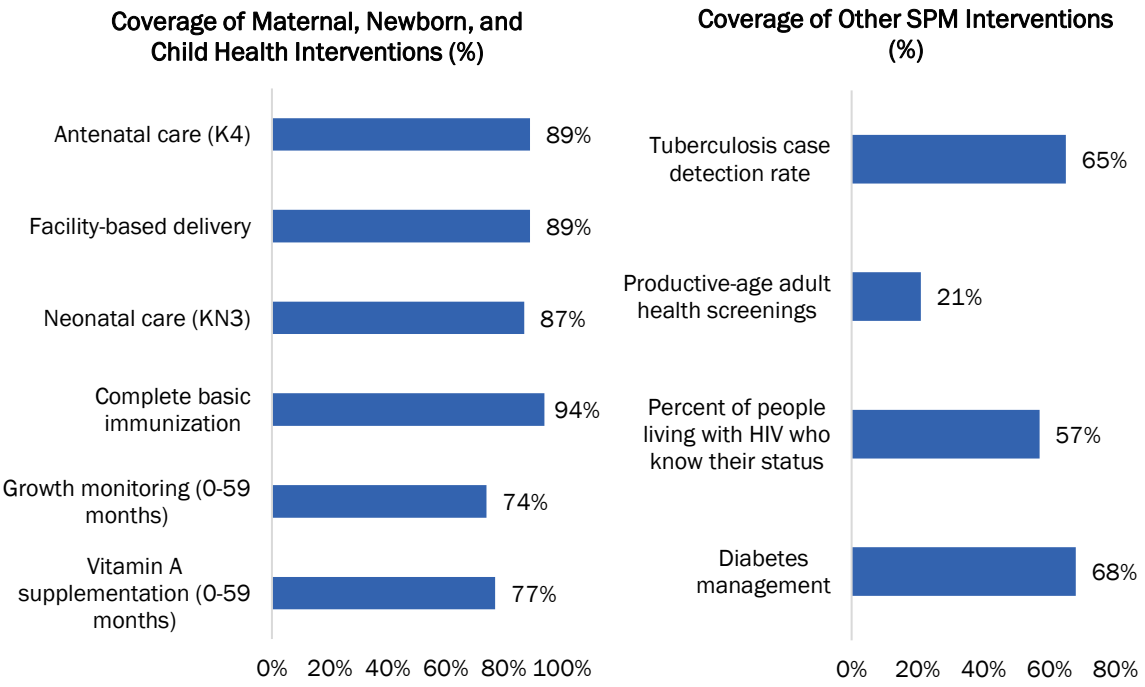
Several iterations of the SPM regulation followed thereafter. In 2008, the MOH issued Permenkes 741/2008, which contained 22 indicators with service targets for specific populations ranging from 70 percent to 100 percent, to be achieved between 2010–2015 at the district level. Limited evidence exists on how these minimum service standards were communicated to districts and minimal records exist regarding implementation, reporting, and monitoring and evaluation. One study analyzing reports from 115 districts submitted to the Ministry of Home Affairs (MOHA) in 2013 reported that 20 out of 22 indicators were still in progress to meet SPM targets. However, local authorities faced challenges in understanding SPM and indicated challenges in human resource (HR) shortages, financial constraints, and lack of alignment of SPM indicators with those in local development plans (Rencana Pembangunan Jangka Menengah Daerah or RPJMD) (Khairi, 2015). Another study analyzed data from 54 districts and concluded that the overall SPM target of 91.25 percent would not likely be achieved in 2015, as coverage had not significantly changed from 2010 to 2013 (74.6 percent and 76.0 percent, respectively) (Roudo and Chalil, 2016). The study by Roudo and Chalil highlighted high variation in SPM implementation among districts, attributable to the level of fiscal capacity. Local officials often did not have adequate understanding of the SPM technical guidelines, creating misinterpretation when calculating achievements. Other challenges included lack of reporting, either through missing data in reports, or missing report submissions, and ambiguity in the reporting line for SPM monitoring and evaluation (it was unclear whether district officials were to report to the MOHA or the MOH). Both the MOHA and the MOH also dealt perfunctorily with the reports submitted by districts, claiming that neither central government nor the local governments were ready to implement SPM conscientiously (Roudo and Chalil, 2016).

In 2016, the Ministry of Health released revised minimum service standards for health in Permenkes 43/2016, requiring districts to reach 100 percent coverage targets for 12 health services. The new regulation clarified roles and responsibilities in SPM implementation; the responsibility of providing services was assigned to district leaders (regents and mayors), rather than solely to district health offices (DHOs). Failure to comply would be subject to sanctions. Similarly, achievement of SPM targets was seen more as the role of district government as a whole rather than that of health sector alone. SPM planning was meant to be integrated into local development plans (RPJMD) as well as other regional strategic planning documents. All elements of government were expected to unite and work together toward achieving SPM targets. This included meeting the requirement of human resources in primary healthcare centers (puskesmas) as per Permenkes 75/2014. At the national level, the MOH also launched resources to assist districts in planning and reporting. In 2017, several districts' SPM targets were included in performance indicators for the Center for Data and Information (Pusat Data dan Informasi or Pusdatin) at the MOH, in an effort to hold Pusdatin accountable for ensuring sufficient local government SPM reporting. In response, Pusdatin provided training sessions to build the capacity of regional data managers and designed a team to conduct regular monitoring on SPM reporting. This team communicated frequently with data managers at provincial health offices and gave feedback on SPM reports. As a result, there were 438 and 425 districts that reported their SPM achievement to

Pusdatin in 2017 and 2018, respectively (Ministry of Health, 2019). However, the MOH has yet to publish or disclose any official data regarding the national SPM achievement.

Despite improvements to SPM over the past two decades, Indonesia still faces challenges in adequate coverage of basic health services. Coverage of maternal, newborn, and child health interventions remains below SPM targets (Figure 1), with stunting ranging from 17.6 percent to 42.7 percent across provinces (Ministry of Health, 2020). Indonesia also has a high tuberculosis (TB) burden and relatively low TB case detection, and remains behind schedule in reaching HIV treatment cascade targets (Figure 1).

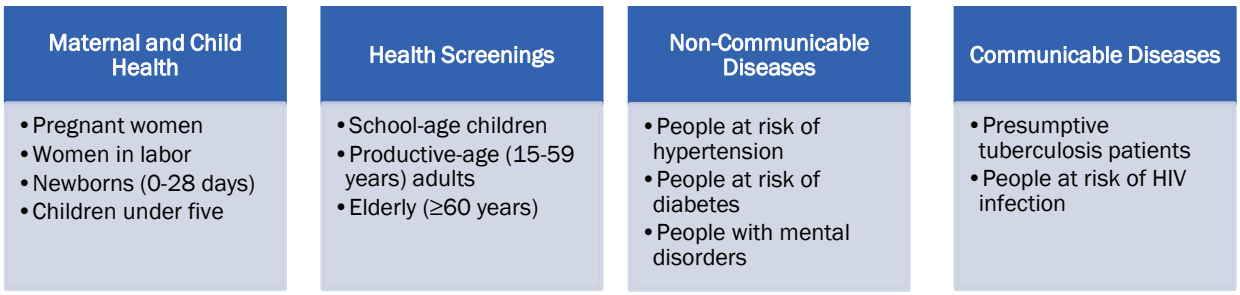
Figure 1. Coverage of Basic Health Interventions in Indonesia



Source: Ministry of Health, 2020

Most recently in January 2019, the MOH replaced Permenkes 43/2016 with Permenkes 4/2019 as the new basis for SPM implementation. It still describes the minimum quality of mandatory services at the district level to reach 12 target populations (Figure 2), along with detailed technical standards of equipment, supplies, and human resources to accomplish 100 percent of health service coverage within each fiscal year. While the SPM requirements for equipment and supplies do not vary by region, guidelines are flexible on the standard number and qualifications of health personnel to deliver services. For example, pregnancy services may be delivered by a doctor/obstetrician, a midwife, or a nurse. This flexibility allows districts to make task shifting and task sharing decisions based on local context, maximizing service delivery efficiency as needed. The scope of services for each population group differs from one district to another, but broadly includes outreach, data collection, education, screening, service delivery, referral, documentation, and reporting. The latest regulation also introduces two SPM at the provincial level, mandating the provincial governments to provide basic health services in times of disasters and disease outbreaks.

Figure 2. Target Populations to Receive Services for District-Level SPM for Health, per Permenkes 4/2019



Study Rationale and Objectives

In March 2019, the MOH Center for Health Financing and Insurance (Pusat Pembiayaan dan Jaminan Kesehatan or PPJK) developed the Siscobikes platform and associated tools to assist districts in planning and budgeting for the resources needed to meet 100 percent of SPM and meet the requirements of Permenkes 4/2019. Districts must ensure that SPM planning and budgeting is adequate and efficient for reaching 100 percent of targets, and that the various sources of financing do not overlap with each other. The Siscobikes platform aims to assist districts in accurate estimation of their SPM budget needs and to identify reasons behind any failure in meeting SPM targets, providing evidence for specific resources to meet SPM in the future.

Despite several modifications made in 2019 and 2020 to improve the functionality of Siscobikes, an analysis of the data submitted by 67 of 514 districts indicated poor data quality and incompleteness (Sucahya and Teplitskaya, 2020). A modification of the current version is required for several reasons:

- Data entry must be simplified, with greater use of automated calculations and functions, and accommodation of factors specific to each region.
- Collection of bottom-up inputs from puskesmas must be more efficiently integrated in the overall SPM planning and budgeting process, and the role of DHOs in SPM planning must be strengthened.
- Evidence-based SPM cost inputs must be incorporated into the revised tools, which reflect the latest Permenkes 4/2019 and differences in cost drivers across regions.

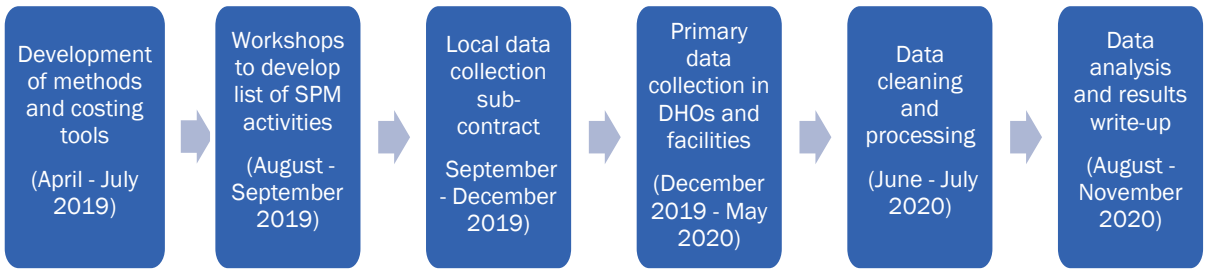
Given the need to improve SPM budgeting and planning, the U.S. Agency for International Development (USAID)-funded Health Policy Plus (HP+) project conducted facility-based primary data collection using the activity-based costing methodology to collect data on SPM costs. This report describes the methodology used to develop the SPM unit costs, summarizes SPM unit cost results nationally and by region, and outlines SPM enabling factors and challenges. The results from this cost analysis are being used to improve the MOH SPM budgeting tools in Siscobikes for districts to accurately budget their resource requirements to meet SPM in following years.

Methodology

HP+ conducted an activity-based costing study to assess costs required for the 12 district-level SPM to assist local governments in planning and budgeting to meet 100 percent of their SPM. The analysis required primary data collection from DHOs, puskesmas with and

without inpatient beds, private clinics, pustu, and polindes. All primary data were collected by the Center for Health Research at the University of Indonesia. Figure 3 describes the study timeline and process.

Figure 3. Study Timeline and Process



Identification of SPM Activities and Sub-Activities

To identify specific SPM interventions and detailed sub-activities for the costing exercise (Tables 1 and 2), HP+ used two approaches. HP+ first conducted a review of the recent Permenkes 4/2019 regulation, which outlines the technical standards for meeting and planning for 100 percent SPM coverage. Permenkes 4/2019 includes (1) guidance on calculating the standard quantity of goods and/or services, (2) guidelines on calculating the standard number of human resource personnel and their minimum qualifications, and (3) the procedure and associated sub-activities required to meet 100 percent of SPM. To reach agreement on the final list of SPM sub-activities, HP+ validated results of the Permenkes 4/2019 review at a workshop with key SPM program managers from the MOH, provincial health office and DHO officials, and puskesmas health workers involved in SPM. Through this review and discussion, HP+ reached agreement on the detailed list of sub-activities included in SPM (Annex A)

Table 1. Number of SPM Activities and Sub-Activities for Each SPM

SPM	Number of activities	Number of sub-activities
Pregnancy	5	23
Delivery	5	29
Newborn	5	25
Children under five	5	42
School-age children	6	15
Productive-age adults	7	26
Elderly	6	18
Hypertension	6	10
Diabetes	7	12
Mental health disorders	5	13
TB	6	12
HIV	10	17

Table 2. Example of Activities and Sub-Activities for Mental Disorder SPM

Activities	Sub-activities
Data collection	Preparation and socialization
	Home visits for data collection
	Determination of target numbers
Screening	Patient registration
	Preparation of materials and tools
	Mental health assessment
Health service provision	Home visits
	Medical examination and treatment
	Education on medication adherence
	Drug administration and delivery
	Counseling
Recording and Reporting	Recording and reporting
Referral	Referral to advanced referral health facilities or hospitals

Sample and Sampling Criteria

Limited published information is available on SPM costs or how they vary across Indonesia. Prior studies in Indonesia have found evidence of differences in healthcare costs regionally in Indonesia (Health Policy Plus and Sub-Directorate for HIV/AIDS and STI at the Ministry of Health, Indonesia, 2018; Sucahya and Mardiati, unpublished; Ensor et al., 2012). One study considered demographic indicators and availability of health facilities in its modeling of primary healthcare costs (Ensor et al., 2012). The same study's findings indicated that differences in primary healthcare costs may be driven by case volume. Given limited evidence available in Indonesia on SPM cost drivers, HP+ included data from several factors in the sampling criteria: (1) regional classification, (2) availability of promotive and preventive human resources at the puskesmas level for each district and city, (3) spending on health as a proportion of total local government spending, and (4) 2017 SPM performance.

Logistic regression analyses indicated that health spending and HR capacity at the puskesmas level both positively influence SPM performance and operate in the same direction. Accordingly, HP+ generated four possible categories from which to sample within each of the four regional classifications:

1. High health spending, high HR capacity, high SPM performance
2. High health spending, high HR capacity, low SPM performance
3. Low health spending, low HR capacity, high SPM performance
4. Low health spending, low HR capacity, low SPM performance

HP+ sampled cities *(*kota*)* and districts *(*kabupaten*)* separately. Four cities were sampled from west Indonesia and four cities were sampled from eastern Indonesia, totaling eight cities in the final sample. To sample districts in west Indonesia, the regions to sample from were further divided into (1) Sumatra and Kalimantan and (2) Java and Bali. In eastern Indonesia, the regions were further divided into (3) Sulawesi and (4) Papua, Maluku, and Nusa Tenggara. From each of the above four regions, four districts were selected, encompassing a total of 16 districts in the overall sample, distributed across 19 of 34 provinces in Indonesia.

From each of the 24 districts and cities sampled, we sampled:

- DHO
- Four primary healthcare centers or puskesmas (two with outpatient health centers only and two with inpatient beds)
- Two private clinics
- One pustu
- One polindes

Table 3 summarizes the sample distribution by region and facility type. The full sample is outlined in Annex B.

Table 3. Sample Distribution by Region and Facility Type

Facility	Bali and Nusatenggara	Java	Maluku and Papua	Sulawesi	Sumatera and Kalimantan	Total
DHO	3	4	2	7	8	24
Pukesmas without inpatient beds	7	7	7	13	14	48
Pukesmas with inpatient beds	6	9	3	16	14	48
Private clinics	3	8	5	10	6	32
Polindes	3	0	2	3	7	15
Pustu	2	4	5	6	7	24
Total	24	32	24	56	56	191

Costing Approach

HP+ employed the costing perspective of local government officials responsible for planning and budgeting for SPM per the Permenkes 4/2019. The costing perspective was normative, reflecting the costs that districts should incur at DHOs and health facilities if SPM implementation followed the Permenkes 4/2019 technical guidelines. However, in cases where SPM sub-activities were not offered at private clinics, it was not possible to cost these services, and no costs were imputed for services that were not offered at private clinics.

Health facilities, comprised of puskesmas, private clinics, pustu, and polindes, serve as the main implementers of SPM. DHO health office responsibilities for SPM include higher-level SPM planning, logistical support, coordination, monitoring and evaluation, and recording and reporting to the provincial health office and the MOH as required. HP+ conducted cost calculations separately for DHOs and service delivery providers. Direct costs comprised medicines, vaccines, medical supplies, medical equipment, and transportation directly related to service provision for SPM. Overhead costs comprised remaining costs indirectly related to service provision for SPM, including operating costs, fixed costs, and staff costs. Following HP+ consultations with PPJK, staff costs were included as part of overhead for several reasons: (1) staff salaries are a fixed cost in local governments' budget and do not vary based on SPM performance,and (2) staff, particularly at health facilities, have roles that require multitasking across SPM activities (e.g. prevention and health promotion) and non-SPM program activities (e.g. treatment), a situation which does not allow for accurate calculation of direct costs of staff time for each SPM activity.

Research indicates that a mixed costing methodology comprising bottom-up and top-down methods is a viable approach for use in low- and middle-income country settings where data limitations exist (Hendriks et al., 2014). In a comparison of these two approaches, bottom-up costing is considered to more accurately capture resources used to provide a health service. However, it may underestimate inefficiencies (Cunnama et al., 2016). To estimate direct costs, HP+ used an ingredients-based or bottom-up costing approach, calculating costs based on quantifies of inputs needed to meet each SPM. To estimate overhead costs (operating costs, fixed costs, and staff costs), HP+ used a top-down costing approach and developed an allocation factor based on the proportion of staff time spent (collected through staff interviews) on each SPM activity (at the DHO level) or sub-activity (at the health facility level).

At the DHO level, HP+ designated all costs for non-SPM divisions (planning, administration and finance, pharmacy, and recording/reporting departments) as overhead, with the allocation rate based on time spent by DHO staff conducting SPM activities (Figure 4). Costs for SPM divisions were composed of (1) maternal and child health (MCH) division with services for pregnant women, delivery services, newborn, child health, and school-age children, (2) communicable disease (CD) services for TB and HIV, and (3) non-communicable disease (NCD) services for productive-age adults, elderly, hypertension screening and services, diabetes screening and services, and mental disorder services. Within SPM divisions, HP+ calculated overhead costs (fixed, operating, and staff costs) and direct SPM costs (medicines, vaccines, medical consumables, medical equipment, non-medical consumables transportation for SPM) (Figure 4). Other than anti-TB treatment (obat anti tuberculosis or OAT) and antiretrovirals (ARVs), medicines required to meet SPM are procured at either DHO or facility-level, depending on local regulations. At the provider level (for puskesmas, private clinics, pustu, and polindes) HP+ considered overhead costs for non-SPM divisions (planning, finance, pharmacy, recording and reporting, and registration) and overhead and direct costs for SPM divisions (MCH, CD, NCD) (Figure 4). The cost calculations used the method outlined for DHOs, the only difference being that costs were calculated at the SPM sub-activity level as opposed to activity level (see Table 2 for differences between SPM activities and sub-activities).

Figure 4. Direct and Overhead Costs at DHO and Service Delivery Providers

District Health Office

Non-SPM Divisions	SPM Divisions	
Overhead Costs	**Overhead Costs**	**Direct Costs**
• Building • Non-medical equipment • Utilities • Non-SPM personnel • Office supplies • Maintenance • Non-SPM meetings • Other costs	• Building • Non-medical equipment • Utilities • Office supplies • Maintenance • Trainings • Personnel for SPM • Other costs	• Medicines • Vaccines • Medical consumables • Non-medical consumables • Medical equipment • Transportation for SPM

Service Delivery Provider

Non-SPM Divisions	SPM Divisions	
Overhead Costs	**Overhead Costs**	**Direct Costs**
• Building • Non-medical equipment • Utilities • Non-SPM Personnel • Office supplies • Maintenance • Non-SPM meetings • Other costs	• Building • Non-medical equipment • Utilities • Office supplies • Maintenance • Trainings • Personnel for SPM	• Medicines • Vaccines • Medical consumables • Non-medical consumables • Medical equipment • Transportation for SPM

Focus Group Discussions

To complement the costing analysis, HP+ conducted focus group discussions (FGDs) in each of the 24 districts to better understand SPM implementation challenges and enabling factors. HP+ and the Center for Health Research at the University of Indonesia developed a FGD guideline for each group of SPM (MCH, NCD, and CD) and led FGDs among approximately 20 DHO staff and health providers from puskesmas and private clinics in each district (see Annex C for FGD guidelines). Five key thematic areas were explored in the FGDs, including (1) SPM socialization, (2) SPM planning, (3) SPM implementation and strategies to achieve

targets, (4) SPM reporting, and (5) SPM monitoring and evaluation. Each theme included sub-themes on specific issues faced by health planners at the DHOs, puskesmas, and health clinics. For example, in the SPM planning theme, FGDs explored constraints in the planning process, the role of stakeholders in the planning process, and whether planned activities aligned with the existing regulations. HP+ developed a matrix based on these themes and conducted qualitative analysis of FGD findings by searching for specific key words using Microsoft Excel.

Estimated SPM Resource Requirements in Indonesia

HP+ estimated national resource requirements for SPM in Indonesia using unit costs from this analysis and recent district-level SPM targets from Pusdatin for all 12 indicators. SPM targets were available for years 2017 through 2019. A master list of target data was developed, with data for each target in each district compiled using the most recent year available. For any missing target data, HP+ applied the average SPM target at the provincial level to the specific district, ensuring all district targets remained at or below provincial target estimates. HP+ calculated SPM resource estimates for DHOs and puskesmas in each Indonesian region (Java, Bali and Nusatenggara, Maluku and Papua, Sulawesi, and Sumatra and Kalimantan) using this study's SPM unit costs. To best inform district-level SPM planning and budgeting, HP+ presented SPM resource requirement estimates for direct costs and total costs (inclusive of overhead) separately.

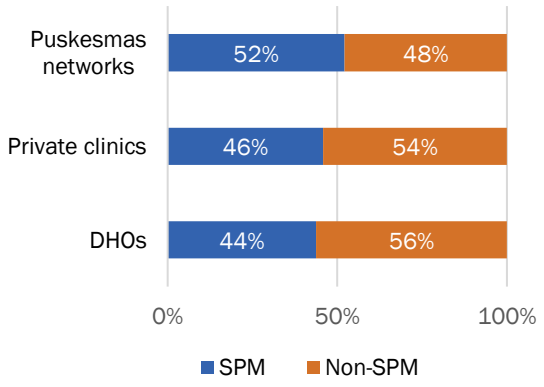
Results

National-Level SPM Results

Staff Time Spent on SPM

Per the guidelines outlined in Permenkes 4/2019, health providers have flexibility in selecting appropriate health personnel to provide SPM. Health providers can implement task shifting or task sharing of service delivery between doctors, specialists, midwives, or nurses depending on the specific service and the local context. On average, staff time spent on SPM activities ranged from 44 percent in DHOs to 52 percent in puskesmas networks (Figure 5). Of the time spent on SPM, on average, DHO staff spent the greatest proportion of time on TB (14 percent), HIV (13 percent) and mental disorder (10 percent) activities, and the least amount of time on services for elderly (6 percent) and productive-age adults (6 percent) (Table 4). Staff at puskesmas networks generally spend a significant proportion of their total SPM time on pregnancy, delivery, newborn, and child health interventions (45 percent in total), and the smallest proportion on HIV services (5 percent) and services for mental disorders (5 percent), largely because of lower patient volumes for these services. Staff at private clinics spent the greatest proportion of their total SPM time on

Figure 5. Average Proportion of Staff Time Spent on SPM and Non-SPM Activities



hypertension services (18 percent) and the smallest proportion of time on services for mental disorders (1 percent), HIV services (3 percent), and services for school-age children (3 percent), mainly because private clinics serve lower patient volumes for these services (Table 4).

Table 4. Average Proportion (Percent) of Staff Time Spent on SPM and Types of Health Personnel That May Provide Services

SPM	DHO	Private clinics	Puskesmas networks	Health personnel who may provide services
Pregnancy	7	12	12	Doctor, OB/GYN specialist, midwife, or nurse
Delivery	7	8	10	Doctor, OB/GYN specialist, midwife, or nurse
Newborn	7	7	10	Doctor, pediatrician, midwife, or nurse
Children under five	9	13	13	Doctor, midwife, or nurse; nutritionist
School-age children	7	3	10	Doctor, dentist, midwife, or nurse; nutritionist; public health specialist; trained teacher or peer counselor
Productive-age adults	6	10	7	Doctor, midwife, or nurse; nutritionist; public health specialist or trained non-health staff
Elderly	6	9	8	Doctor, midwife, or nurse; nutritionist; public health specialist or trained non-health staff
Hypertension	7	18	7	Doctor, midwife, or nurse; nutritionist; public health specialist
Diabetes	7	11	6	Doctor, midwife, or nurse; nutritionist; public health specialist
Mental disorders	10	1	5	Doctor, nurse, or other trained health worker
TB	14	5	6	Doctor, internal medicine specialist, pulmonologist, or nurse; laboratory technician; x-ray staff
HIV	13	3	5	Doctor, internal medicine specialist, or nurse; midwife; laboratory technician; trained mentors and outreach personnel

Availability of Services for SPM

Through observation and interviews with health facility staff, HP+ assessed the availability of services for SPM for health. Activities analyzed were those required to be undertaken by DHOs per Permenkes 4/2019, and sub-activities required to be implemented by puskesmas networks and private clinics. At DHOs, required activities included higher-level SPM responsibilities for planning, logistical support, coordination, monitoring and evaluation, and recording and reporting. At the health facility level, HP+ conducted a detailed assessment of required sub-activities for SPM; such activities included monitoring and evaluation, provision of health services, data collection, recording and reporting, and referrals (Table 2).

All sampled DHOs met all criteria (100 percent availability) for SPM activities, with the exception of HIV (95.8 percent availability, on average). The results indicate that a greater proportion of puskesmas networks sampled offer services for SPM compared to private clinics sampled. On average, puskesmas networks exceeded 90 percent service availability

for pregnancy, hypertension, and services for children under five (Figure 6). Service availability was lowest, on average, for mental disorders (71 percent) and HIV (66 percent). Some puskesmas networks were located in remote regions with very low HIV incidence and prevalence, and did not require 100 percent HIV service availability at all health facilities. Similarly, other regions reported low mental disorder targets and lacked sufficient HR resource staff in all sampled facilities to deliver screening and to conduct home visits. Private facilities experienced lower SPM service availability compared to puskesmas networks; on average, service availability was highest for hypertension (79 percent) and diabetes (79 percent) and lowest for mental disorders (15 percent), services for school-age children (16 percent), and HIV (25 percent) (Figure 6). By region, average service availability for private clinics ranged from 36 percent in Bali and Nusatenggara to 68 percent in Maluku and Papua (Figure 7). Among sampled puskesmas networks, average service availability ranged from 77 percent in Java to 87 percent in Bali and Nusatenggara, and Maluku and Papua (Figure 7).

Figure 6. Average Availability of Services for SPM at Sampled Puskesmas Networks and Private Clinics

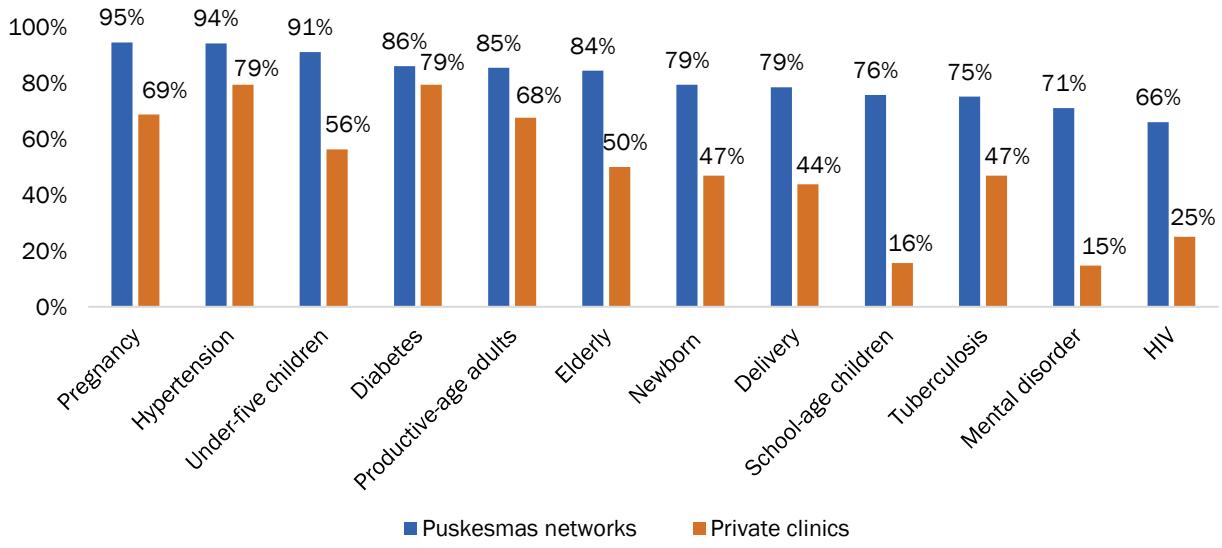
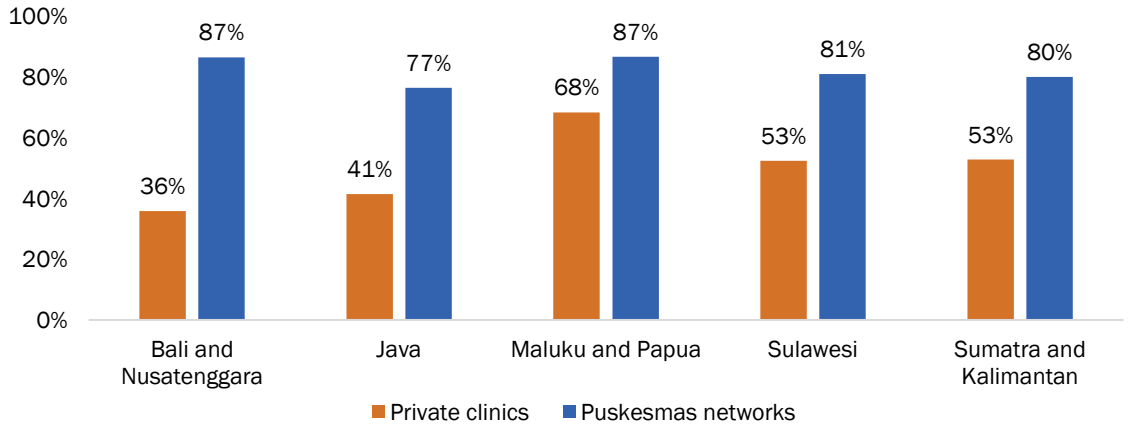


Figure 7. Service Availability at Sampled Puskesmas Networks and Private Clinics, by Region



Average SPM Unit Costs

HP+ calculated average direct, overhead, and total SPM unit costs at sampled DHOs, puskesmas networks, and private clinics for the twelve SPM, in addition to HIV and TB SPM with the inclusion of drug costs (Table 5). Medicine costs for SPM other than HIV and TB (with drugs) are included as part of direct SPM costs, procured at either the DHO or facility level, depending on specific local regulations. Within Permenkes 4/2019, SPM activities for HIV and TB focus on health prevention and promotion and do not require districts to plan and budget for the cost of treatment drugs, which are procured by the central government.[2] HIV and TB SPM requirements focus on mapping at-risk populations, screening, counseling and education, networking, recording and reporting, monitoring and evaluation, and referrals at the puskesmas level. However, some districts and municipalities receive insufficient quantities of OAT drugs and ARVs and may need to procure additional drugs. The central government has also faced delays previously in the bidding process for procurement of antiretrovirals, which has led to shortages of antiretrovirals. In these instances, districts and municipalities may need to plan and budget for a portion of their population receiving HIV and/or TB services under SPM that includes the cost of drugs, in order to reach 100 percent SPM targets. For districts and municipalities in this situation, HP+ calculated HIV and TB unit costs with the inclusion of OAT and ARV costs, per person per year.

Table 5. Average SPM Unit Costs at Sampled DHOs, Puskesmas Networks, and Private Clinics (IDR)

SPM	DHO			Puskesmas networks			Private clinics		
	Direct	Overhead	Total	Direct	Overhead	Total	Direct	Overhead	Total
Pregnancy	52,324	19,572	71,896	41,529	119,925	161,454	12,638	64,445	77,083
Delivery	104,102	22,813	126,916	73,282	131,448	204,730	77,749	239,647	317,396
Newborn	81,614	21,829	103,442	61,911	217,497	279,409	52,042	339,564	391,606
Children under five	138,618	6,921	145,539	58,324	75,111	133,435	25,490	28,873	54,364
School-age children	14,004	10,867	24,872	18,405	150,871	169,276	3,434	4,752	8,186
Productive-age adults	50,908	2,292	53,199	15,150	36,771	51,921	6,461	35,953	42,414
Elderly	45,915	7,326	53,241	36,983	52,523	89,506	35,129	77,328	112,456
Hypertension	12,362	4,539	16,900	8,402	75,880	84,282	12,623	164,276	176,898
Diabetes	28,290	28,441	56,731	54,023	84,404	138,428	76,227	123,442	199,669
Mental disorders	70,395	168,026	238,421	88,264	147,117	235,381	30,619	147,411	178,030
TB *(without OAT drugs)*	89,164	76,499	165,663	79,266	195,270	274,536	9,293	245,794	255,087
TB *(with OAT drugs)*	1,052,335	76,499	1,128,835	371,341	195,270	566,611	216,222	245,794	462,016
HIV *(without ARVs)*	99,750	77,373	177,123	33,214	194,714	227,928	2,702	163,159	165,861
HIV *(with ARVs)*	1,502,749	77,373	1,580,122	59,158	194,714	253,872	13,476	163,159	176,635

[2] Permenkes No: 1190 / MENKES / SK / 2004 concerning the provision of free anti-TB (OAT) drugs and anti-retroviral (ARV) drugs for HIV-AIDS issued on October 19, 2004.

On average at sampled DHOs, total SPM unit costs were lowest for hypertension (IDR 16,900) and highest for HIV with drug costs (IDR 1,580,122) and TB services with drug costs (IDR 1,128,835).

- Medicine costs for TB services and HIV services are incurred as direct costs at the DHO level and served as the drivers of high total SPM unit costs for TB and HIV.
- Direct SPM unit costs were lowest for hypertension services (IDR 12,362) and school-age children (IDR 14, 004). Hypertension services are composed of blood pressure measurement, monitoring, education, and pharmacological therapy, the costs of which are mainly incurred at the health facility level. Similarly, services for school-age children are composed of health screenings (nutritional status, vital signs, dental and oral health checks, and vision and hearing checks). Most costs are incurred at the health facility level.
- Overhead SPM unit costs were highest for mental disorders (IDR 168,026). The size of the unit cost is mainly driven by the smaller target population (individuals with severe mental illness) who receive mental disorder services.

At sampled puskesmas networks, total SPM unit costs ranged on average from IDR 51,921 for productive-age adults to IDR 566,611 for TB services with drug costs. At sampled private clinics, total SPM unit costs ranged on average from IDR 8,186 for services for school-age children to IDR 462,016 for TB services with drugs.

- For all services under SPM provided at sampled puskesmas networks and private clinics, overhead unit costs were higher than direct unit costs. This situation is driven mainly by higher costs for personnel time to deliver services as opposed to costs for direct inputs to deliver health promotion and prevention services.
- Across sampled puskesmas networks and private clinics, direct unit costs were similar for most SPM, with the exception of the following: school-age children (costs were four times higher at puskesmas networks), TB services without drugs (costs were seven times higher at puskesmas networks), and HIV services without ARVs (costs were more than 10 times higher at puskesmas networks).
- Overhead unit costs were highest for newborn services (IDR 217,497 at puskesmas networks and IDR 339,564 at private clinics), which require three health visits with skilled health providers at specific intervals: the first between 6–48 hours after birth, the second between 3–7 days after birth, and the third between 8–28 days after birth.
- At sampled private clinics, overhead costs were lowest for school-age children (IDR 8,186), which is driven by low average time spent by staff in delivering these services (3 percent of total time spent on SPM) compared to the time spent by puskesmas staff (10 percent). On average, availability of services for school-age children was 16 percent at private clinics (compared to 76 percent at puskesmas networks), indicating that this target population is not commonly served at private clinics.

Cost Drivers

At the DHO level, 41 percent of SPM costs on average were for medicines, with a smaller proportion allocated to personnel, medical consumables, and other costs (12 percent each) (Figure 8). On average, personnel costs comprised the largest cost category at puskesmas networks and private clinics sampled (51 and 58 percent, respectively). Non-medical consumables and medicines also comprised a significant proportion of total SPM costs in sampled puskesmas networks and private clinics (10 and 8 percent, respectively) (Figure 8).

Figure 8. Proportion of SPM Costs by Cost Category at DHOs, Private Clinics, and Puskesmas Networks

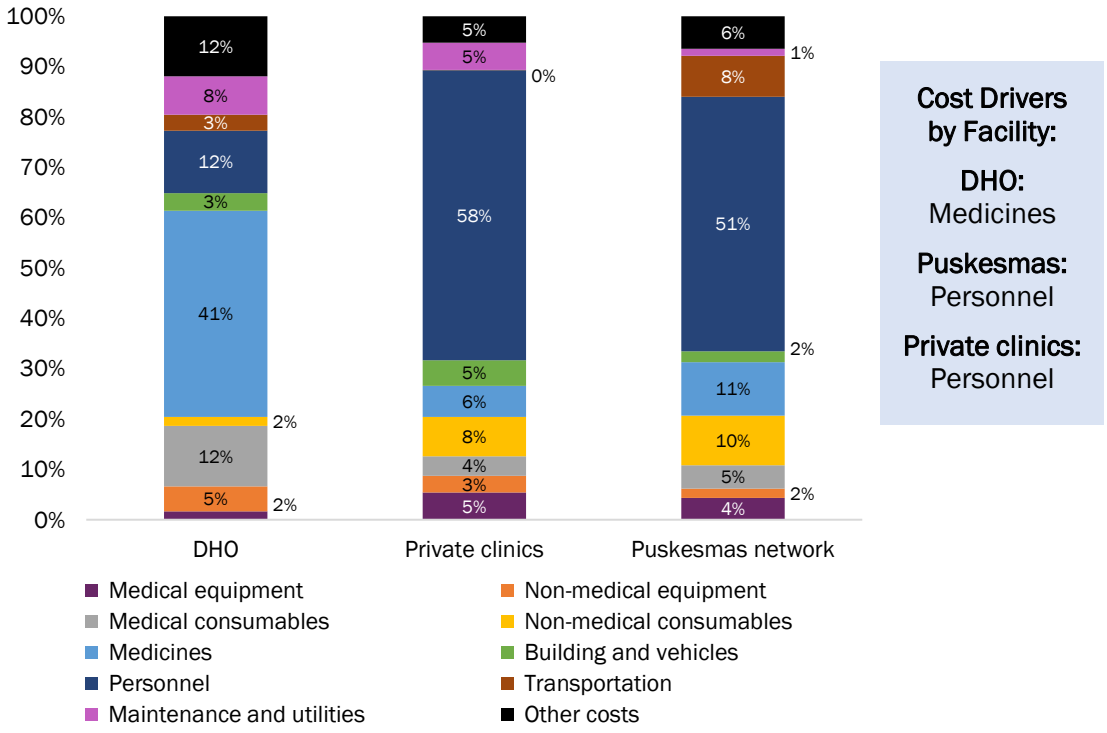


Figure 9 expands upon Figure 8, highlighting cost drivers by region. At the DHO level, medicines were a significant cost driver in Bali and Nusatenggara (50 percent of total SPM costs), and Java and Maluku and Papua (52 percent of total SPM costs). Medicines constituted a smaller proportion of total DHO SPM costs in Sulawesi (31 percent) and Sumatra and Kalimantan (24 percent) (Figure 9). Personnel costs were the largest cost driver at sampled puskesmas networks in Bali and Nusataggara (60 percent of total SPM costs) and the smallest in Java (34 percent of total SPM costs). Medicine costs in Java were a more significant proportion of total SPM costs (16 percent) compared to other regions. Across sampled private clinics, personnel costs ranged from 46 percent of total SPM costs in Java to 67 percent of total SPM costs in Bali and Nusatenggara (Figure 9).

Figure 9. Proportion of SPM Costs at DHOs, Puskesmas Networks, and Private Clinics by Cost Category Across Regions

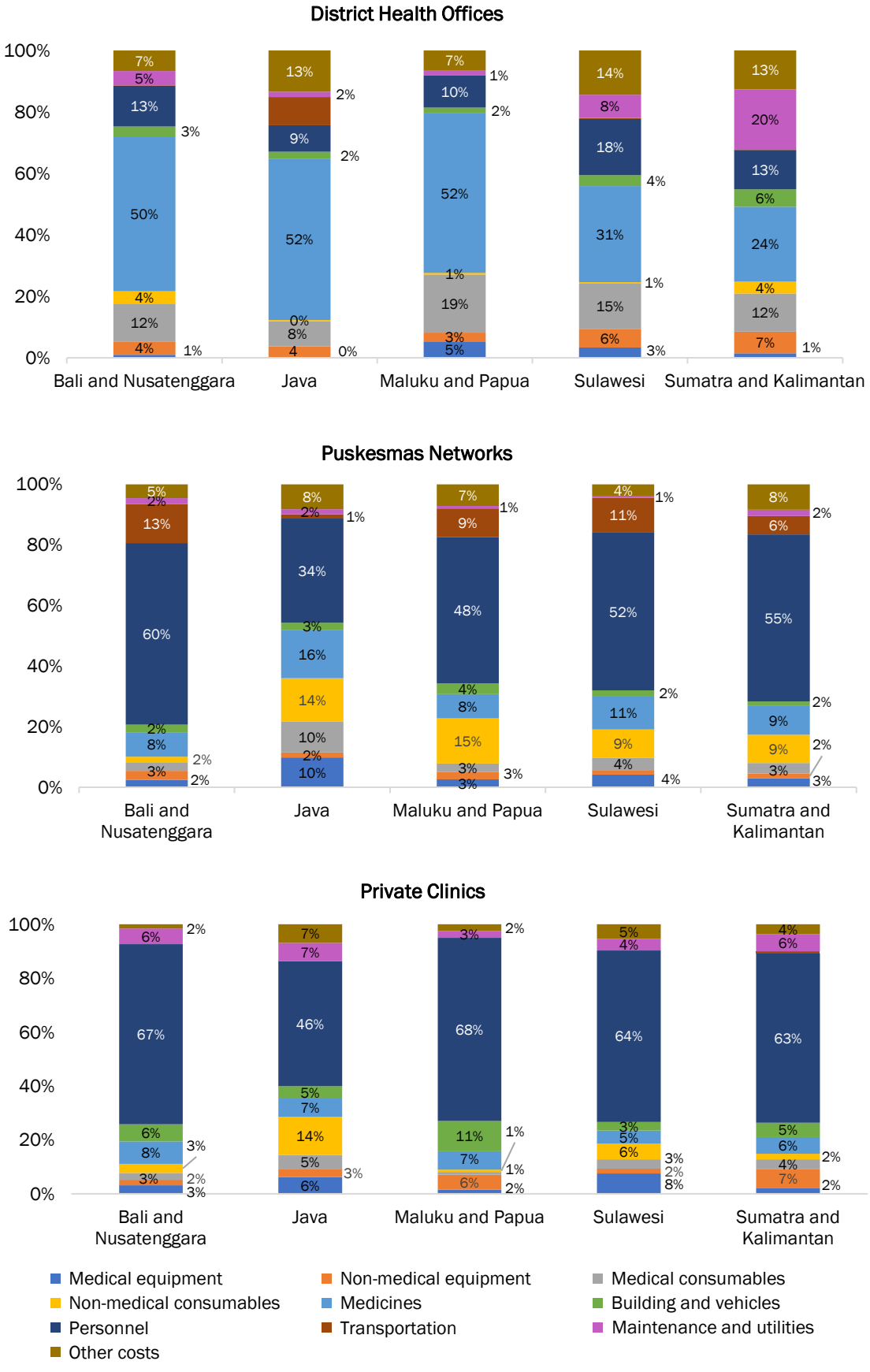


Table 6 summarizes the regions with lowest and highest total unit costs by SPM; detailed graphs mapping direct cost drivers by SPM by region may be found in Annex D. At the DHO level, Java and Bali and Nusatenggara each experienced lowest unit costs for five SPM, whereas Sulawesi had the highest unit costs for six SPM (Table 6). High unit costs at the DHO level are driven mainly by direct costs, as overhead costs comprised a small proportion of total SPM unit costs in DHOs. For four of the six SPM, the high unit costs in Sulawesi were mainly driven by medicines, which comprised 86 percent of direct costs for HIV services, 87 percent of direct costs for TB services, 58 percent of direct costs for mental disorders, and 50 percent of direct costs for children under five. In sampled puskesmas, Sumatra and Kalimantan and Bali and Nusatenggara experienced the lowest unit costs for five SPM, whereas highest SPM costs were found in Maluku and Papua and Java for five SPM. High newborn, HIV, and TB unit costs in Java were driven by high overhead costs which ranged from 44 percent to 91 percent of total unit costs for these SPM. Similarly, high overhead costs (particularly for personnel) drove high unit costs at sampled puskesmas networks for the following SPM in Maluku and Papua: services for pregnancy, children under five, productive-age adults, elderly, and mental disorders. Similarly, compared to other regions, the highest unit costs at sampled private clinics were seen in Maluku and Papua for eight SPM, mainly driven by high overhead costs. Generally, a larger range in costs were seen for each SPM at sampled private clinics compared to sampled puskesmas, generally driven by higher overhead costs. For example, at private clinics, the lowest average costs for newborn services were seen in Sumatra and Kalimantan (IDR 99,631) whereas the highest were seen in Maluku and Papua, where unit costs were nearly seven times higher (IDR 699,354), mainly due to higher overhead costs (comprising 95 percent of the total newborn unit cost).

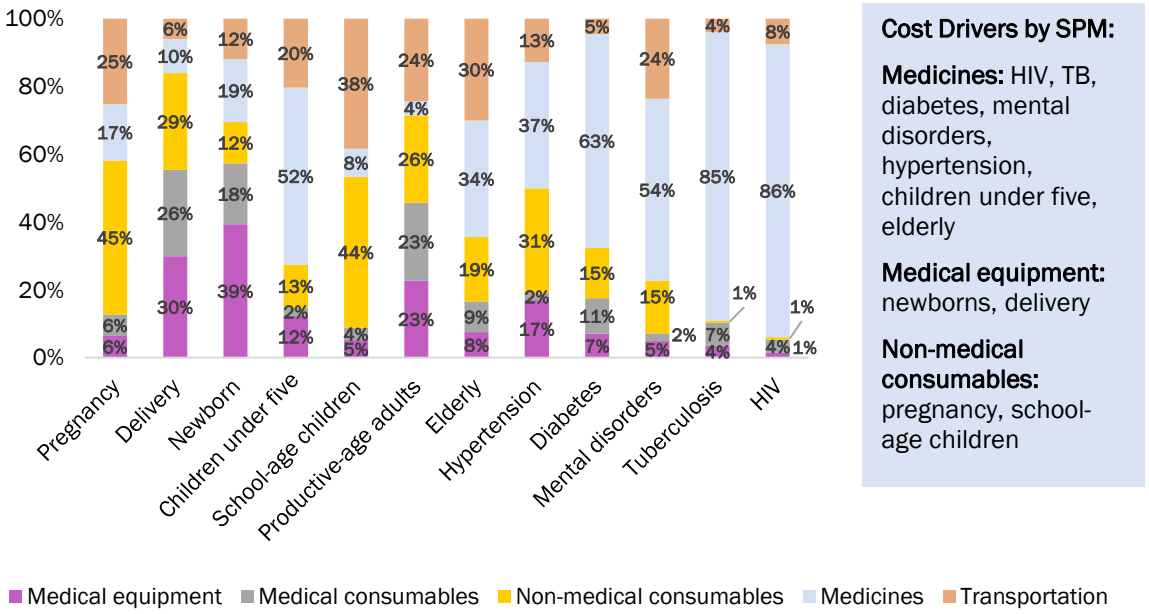
Table 6. Regions with Lowest and Highest Total SPM Unit Costs (IDR)

SPM	DHO		Puskesmas networks		Private clinics	
	Lowest	Highest	Lowest	Highest	Lowest	Highest
Pregnancy	61,388 [iv]	96,871 [ii]	89,615 [i]	232,601 [iii]	34,214 [i]	94,239 [ii]
Delivery	60,324 [v]	182,879 [iv]	142,302 [v]	281,191 [iv]	224,751 [ii]	575,687 [iii]
Newborn	84,996 [v]	137,056 [iii]	183,341	387,966	99,631 [v]	699,354 [iii]
Children under five	92,974 [i]	163,706 [iv]	83,454 [v]	208,473 [iii]	24,631 [i]	93,178 [v]
School-age children	6,399 [ii]	47,257 [v]	110,003 [i]	196,749 [v]	7,036 [iv]	9,910 [v]
Productive-age adults	17,270 [i]	106,895 [iv]	36,396 [i]	75,739 [iii]	4,150 [i]	303,637 [iii]
Elderly	11,518 [i]	198,144 [ii]	58,477 [ii]	111,376 [iii]	41,020 [i]	260,927 [iii]
Hypertension	8,299	23,960 [i]	59,711 [ii]	107,200 [v]	99,545 [ii]	290,169 [iii]
Diabetes	14,721 [i]	139,663 [iii]	83,891 [ii]	176,596 [iv]	61,221 [i]	272,075 [v]
Mental disorders	122,592 [i]	375,201 [iv]	146,362 [ii]	288,338 [iii]	91,076 [v]	395,746 [iii]
TB *(without OAT drugs)*	121,149 [ii]	194,663 [v]	207,757 [v]	505,261 [i]	146,028 [i]	342,012 [iii]
TB *(with OAT drugs)*	730,021 [v]	1,657,758 [iv]	446,185 [v]	732,437 [i]	150,528 [i]	1,153,630 [iii]
HIV *(without ARVs)*	115,408 [ii]	271,907 [iii]	133,827 [iii]	366,290 [i]	77,684 [i]	256,193 [v]
HIV *(with ARVs)*	1,090,200 [ii]	2,013,741 [iv]	175,791 [v]	404,951 [i]	77,684 [i]	256,193 [v]

Legend	[i] Java	[ii] Bali/NTT	[iii] Maluku/Papua	[iv] Sulawesi	[v] Sumatra/Kalimantan

In an examination of cost drivers by SPM for direct costs at health facilities, medicines comprised the largest proportion of total direct SPM costs for HIV (86 percent), TB (85 percent), diabetes (63 percent), mental disorders (54 percent), services for children under five (52 percent), hypertension (37 percent), and services for the elderly (34 percent) (Figure 10). Non-medical consumable costs comprised the largest proportion of total direct SPM costs for pregnancy services (45 percent) and services for school-age children (44 percent). Non-medical consumable costs for pregnant women and school-age children are mainly composed of medical record forms, maternal and child health record books, and educational brochures and other media for each target population. Medical equipment costs comprised the largest proportion of total direct SPM costs for newborn (39 percent) and delivery services (30 percent). For newborn services, medical equipment included kits for neonatal care and neonatal emergency. For delivery services, medical equipment costs included kits for delivery assistance, medical emergencies, neonatal resuscitation, and postpartum care.

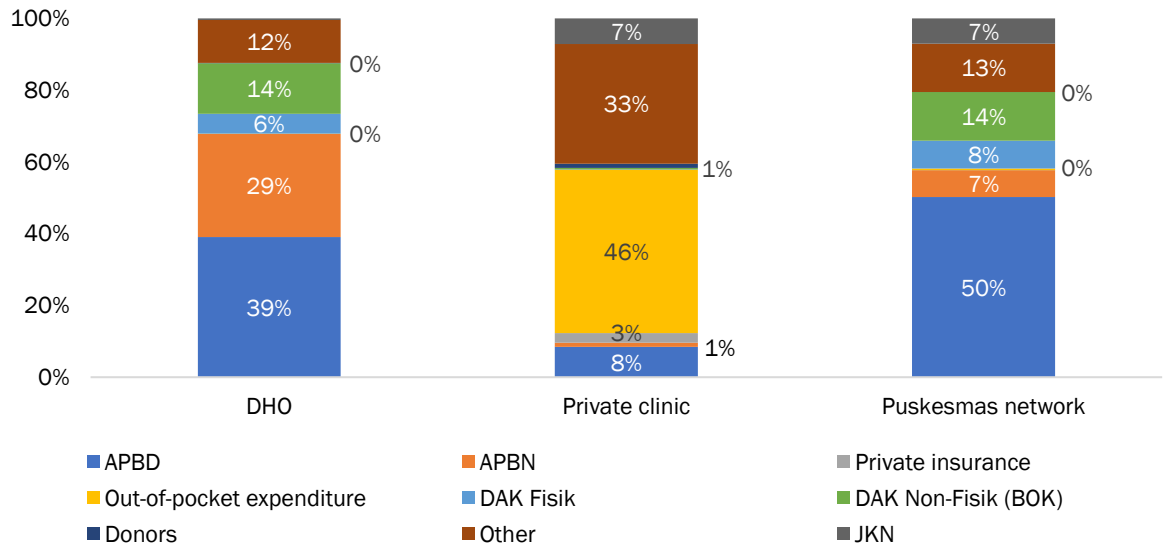
Figure 10. Direct Cost Drivers by SPM



SPM Funding Sources

SPM are funded through multiple funding sources, each with regulations with specific rules for their use (Box 1). Puskesmas networks relied on Anggaran Pendapatan dan Belanja Daerah (APBD) funding for a significant portion of their total SPM resource requirements; on average, 50 percent of SPM was funded through APBD (Figure 11). Dana Alokasi Khusus Non-Fisik (DAK Non-Fisik) (14 percent) and other funding (13 percent) were the next common sources of SPM funding at sampled puskesmas networks, on average. Private clinics reported significant use of out-of-pocket expenditure funding for SPM—46 percent on average—with other funding comprising 33 percent of SPM resource needs. At sampled DHOs, APBD funding on average provided 39 percent of total SPM resource requirements, followed by Anggaran Pendapatan dan Belanja Negara (APBN) (29 percent), and DAK Non-Fisik (14 percent) (Figure 11).

Figure 11. Total SPM Costs by Funding Source at Sampled DHOs, Private Clinics, and Puskesmas Networks



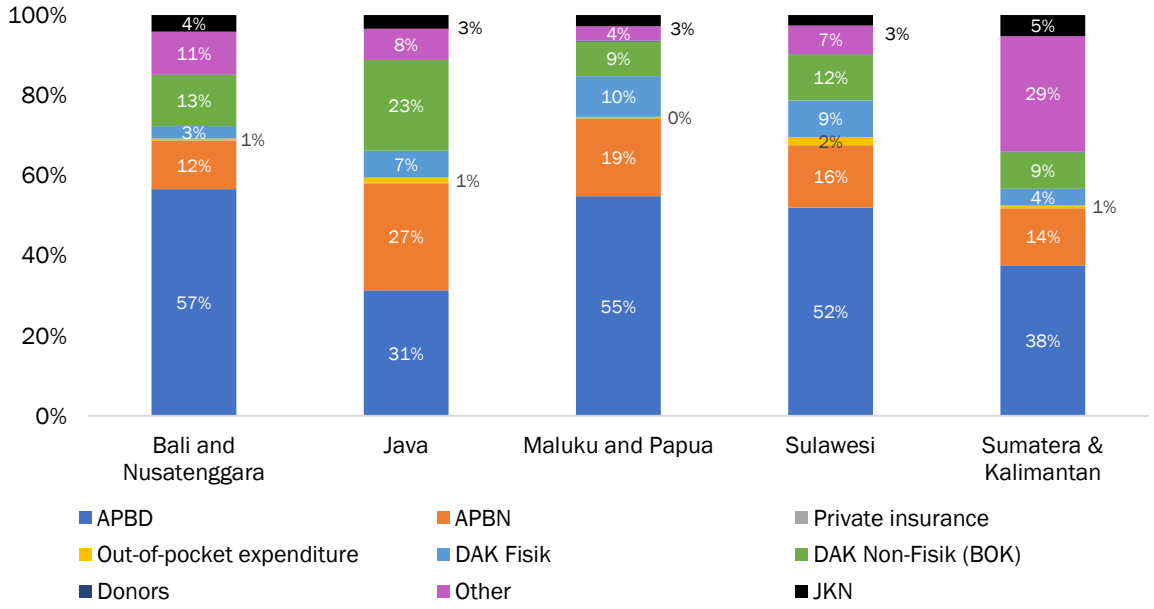
Box 1. SPM Funding Sources

1. **JKN:** Direct transfers from the national health insurance authority (BPJS-K) to primary healthcare facilities in the form of capitation and non-capitation payments. Sixty percent of capitation payments is mandated for health staff supplemental payments; 40 percent is allocated to operational expenses.
2. **APBD:** Local government financing, which includes local revenue (Pendapatan Asli Daerah, or PAD), profit-sharing funds (Dana Bagi Hasil, or DBH), general allocation funds (Dana Alokasi Umum, or DAU), and other legal funds and income.
3. **APBN**: Local governments receive these funds through national government expenditure. APBN was indicated as a funding option for some facilities and DHOs where the specific funding source was unknown but known to be from the central government.
4. **DAK-Fisik:** Special central government transfer to fund operational health expenditure.
5. **DAK Non-Fisik:** Special central government transfer to fund infrastructure, equipment, other health facility rehabilitation expenses.
6. **Private insurance:** Some facilities receive funds from private insurers.
7. **Out-of-pocket expenditure**: Some facilities receive funds from household out-of-pocket payments for services.
8. **Other:** Any funding sources not included above, such as retributions, payment from corporation, and community contributions.

Districts sampled in Bali and Nusatenggara and Maluku and Papua showed the greatest reliance on APBD funding for SPM (57 percent and 55 percent of total SPM budget, on average, respectively), whereas districts sampled in Java were the least reliant on APBD funds for SPM (31 percent of total SPM budget, on average) (Figure 12). On average, compared to districts sampled outside of Java, districts sampled in Java budgeted the largest proportion of total SPM budget using APBN funding (27 percent) and DAK Non-Fisik

funding (23 percent). A small proportion of the overall SPM budget in sampled districts in Maluku and Papua and Sumatra and Kalimantan was comprised of DAK Non-Fisik funding (9 percent of total SPM budget, on average) compared to districts in other regions (ranging from 12 percent to 23 percent). Compared to the rest of the sample, the Maluku and Papua sample budgeted the greatest proportion using Dana Alokasi Khusus Fisik (DAK Fisik) funds (10 percent of the total SPM budget). Generally, sampled districts budgeted a small proportion of their SPM budget using DAK Fisik funds. Districts in Sumatra and Kalimantan were most reliant on donor and other funding for their SPM budget compared to other districts (5 percent and 29 percent of total SPM budget, on average, respectively) (Figure 12).

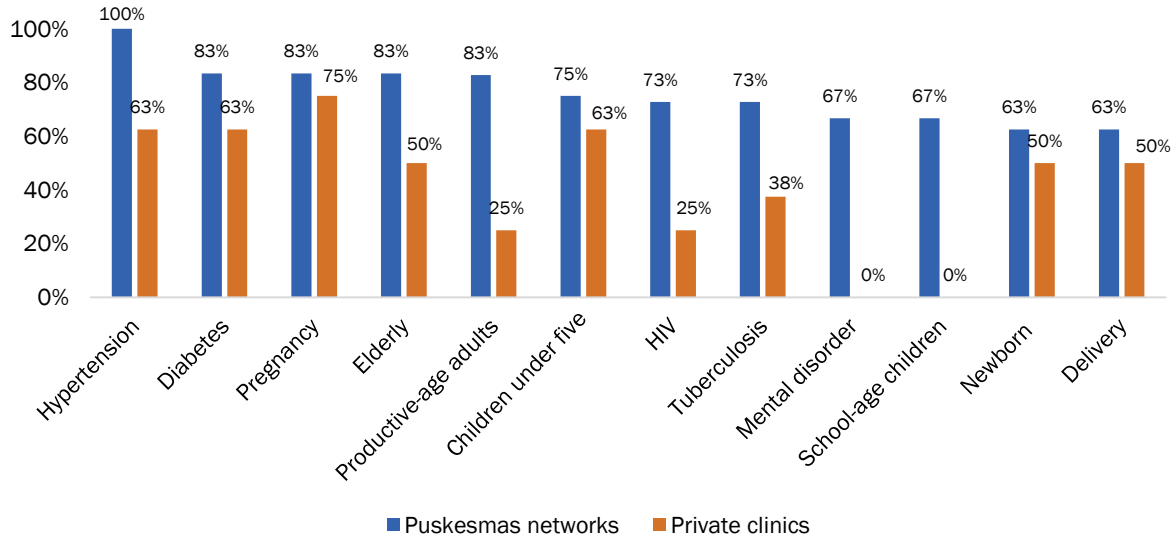
Figure 12. Total SPM Costs by Funding Source by Region



SPM Results in Java

As indicated in Figure 7, compared to other regions, service availability for SPM was lowest among sampled puskesmas and private clinics in Java. In private clinics, the highest service availability was seen for pregnancy services (75 percent), hypertension services (63 percent), and diabetes services (63 percent) (Figure 13). Private clinics in Java did not offer services for mental disorders or school-age children, and service availability was also low for productive-age adults and HIV (25 percent each). Private clinic staff in Java indicated that they did not spend time providing HIV and TB services (Figure 14). Similarly, in sampled puskesmas in Java, service availability was highest for hypertension services (100 percent) and relatively high for the following services: diabetes, pregnancy, elderly, and productive-age adults (83 percent each). Service availability was lowest for newborn services and delivery services (63 percent each) (Figure 13).

Figure 13. Average Availability of Services for SPM at Sampled Puskesmas Networks and Private Clinics in Java



Average service availability was not necessarily aligned with SPM target achievement in sampled districts in Java. For example, on average in Java, SPM target achievement was highest for newborn services (98 percent) and delivery (97 percent) despite low SPM availability at puskesmas networks sampled (63 percent each) and private clinics (50 percent each). It is possible that other (non-sampled) puskesmas have higher SPM availability for these services to offset any maternal, newborn, and child health (MNCH) availability gaps. By contrast, SPM target achievement was lowest for hypertension services (64 percent), despite the high SPM service availability for hypertension services at puskesmas (Figure 15). These results indicate districts may still face challenges in meeting SPM targets despite high SPM availability at puskesmas, perhaps because of poorer health-seeking behavior for some services, or preference for individuals to seek care at private clinics, where service availability is lower.

Figure 14. Proportion of Staff Time Spent on SPM in Java

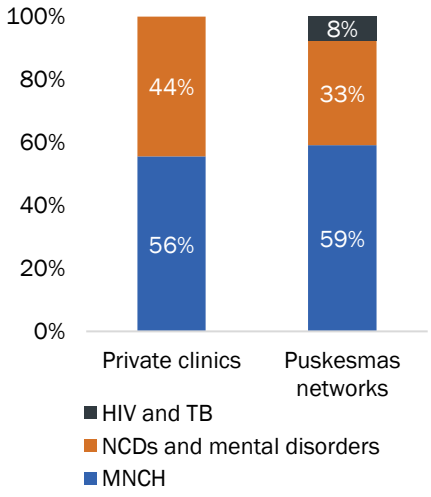
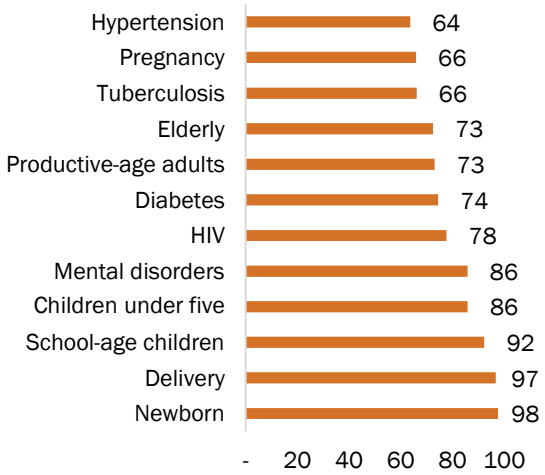


Figure 15. SPM Target Achievement (Percent) in Sampled Districts in Java



Total average SPM unit costs at sampled DHOs in Java were lowest for school-age children (IDR 8,052), and highest for HIV services (with ARVs) (IDR 1,737,119) and TB services with OAT drugs (IDR 1,269,137) (Table 7). In sampled puskesmas networks, average SPM unit costs ranged from IDR 36,396 for services for productive-age adults to IDR 732,437 for TB services with OAT drugs. At sampled private clinics in Java, average SPM unit costs ranged from 4,150 IDR for services for productive-age adults to 518,939 IDR for newborn services. Compared to puskesmas networks, SPM unit costs were significantly higher for delivery (398,000 IDR) and newborn SPM at private clinics. By contrast, TB and HIV unit costs were significantly lower at private clinics, likely because of the low SPM availability offered at private clinics (38 percent for TB and 25 percent for HIV, on average) (Table 7 and Figure 13). If sub-activities were not available in sampled private facilities, they were not included in SPM costs. Direct and overhead unit costs by SPM are outlined in Annex E.

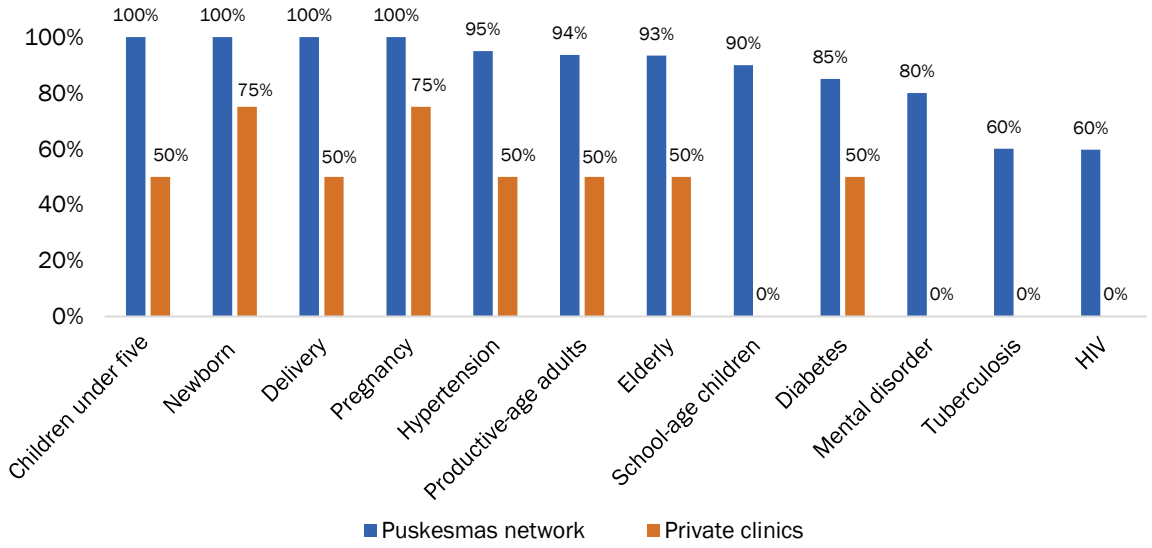
Table 7. Average Total SPM Unit Costs in Java

SPM	DHOs	Puskesmas networks	Private clinics
Pregnancy	69,711	89,615	34,214
Delivery	104,949	186,498	398,000
Newborn	114,798	387,996	518,939
Children under five	92,974	133,278	24,631
School-age children	8,052	110,003	-
Productive-age adults	17,270	36,396	4,150
Elderly	11,518	61,098	41,020
Hypertension	23,960	66,728	105,627
Diabetes	14,721	112,370	61,221
Mental disorders	122,592	181,681	-
TB *(without OAT drugs)*	183,760	505,261	146,028
TB *(with OAT drugs)*	1,269,137	732,437	150,528
HIV *(without ARVs)*	225,044	366,290	77,684
HIV *(with ARVs)*	1,737,119	404,951	77,684

SPM Results in Bali and Nusatenggara

Bali and Nusatenggara experienced the lowest service availability for SPM at private clinics (36 percent) compared to all regions and the highest service availability at puskesmas networks (87 percent) compared to all regions (Figure 7). Service availability at sampled puskesmas networks was 100 percent for maternal and child health services, including services for children under five, newborns, delivery, and pregnancy, and lowest for TB and HIV services (60 percent each) (Figure 16). Service availability at sampled private clinics was highest for pregnancy and newborn services (75 percent each). Not available were services for school-age children, mental disorders, TB, and HIV.

Figure 16. Average Availability of Services for SPM at Sampled Puskesmas Networks and Private Clinics in Bali and Nusatenggara



Although average SPM target achievement was below 100 percent for all indicators, SPM target achievement was highest for school-age children and maternal and newborn health services, which is consistent with the time prioritized by puskesmas and private clinic staff for MNCH SPM (Figures 17 and 18). SPM target achievement was lowest for diabetes services (68 percent), hypertension services (68 percent), and services for productive-age adults (58 percent). SPM target achievement was near median coverage values in Bali and Nusatenggara sampled districts for HIV (77 percent) and TB services (76 percent) despite the reported lowest availability for these services at puskesmas networks and no availability at private clinics (Figure 17).

Average SPM unit costs at sampled DHOs in Bali and Nusatenggara were lowest for school-age children (IDR 6,399), and highest for HIV services (with ARVs) (IDR 1,090,200) (Table 8). HIV unit costs with ARVs were more than eight times higher than HIV unit costs without ARVs (IDR 115,408). In sampled puskesmas networks, average SPM unit costs ranged from IDR 49,282 for services for productive-age adults to IDR 688,880 for TB services with OAT drugs. At private clinics, unit costs for SPM services ranged from 31,954 IDR for services for productive-age adults to 385,399 IDR for newborn services. SPM unit costs were not calculated for services not offered at sampled private clinics in Bali and Nusatenggara which included services for school-age children, mental disorders, HIV, and TB. Direct and overhead unit costs by SPM are outlined in Annex E.

Figure 17. SPM Target Achievement in Sampled Districts in Bali and Nusatenggara

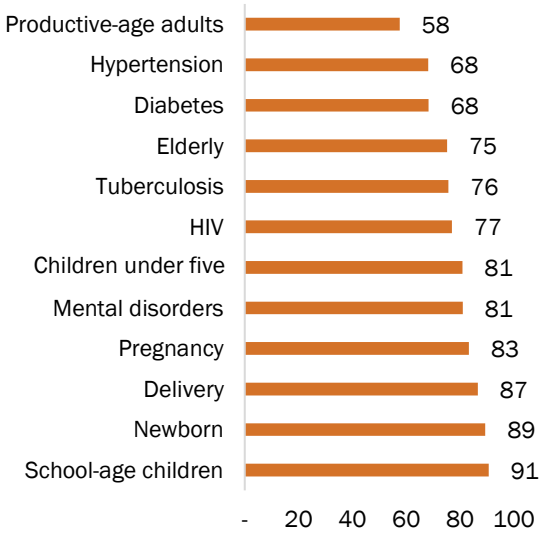


Figure 18. Proportion of Staff Time Spent on SPM in Bali and Nusatenggara

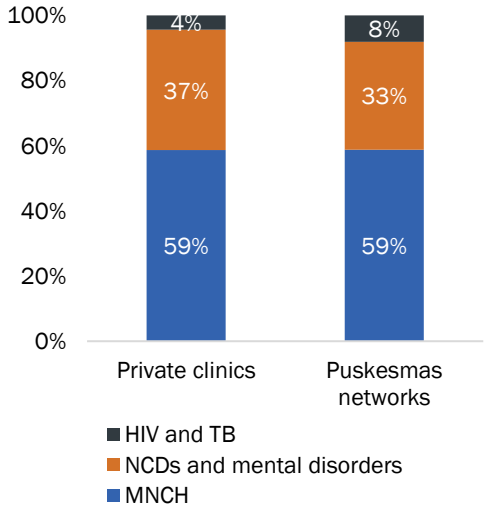


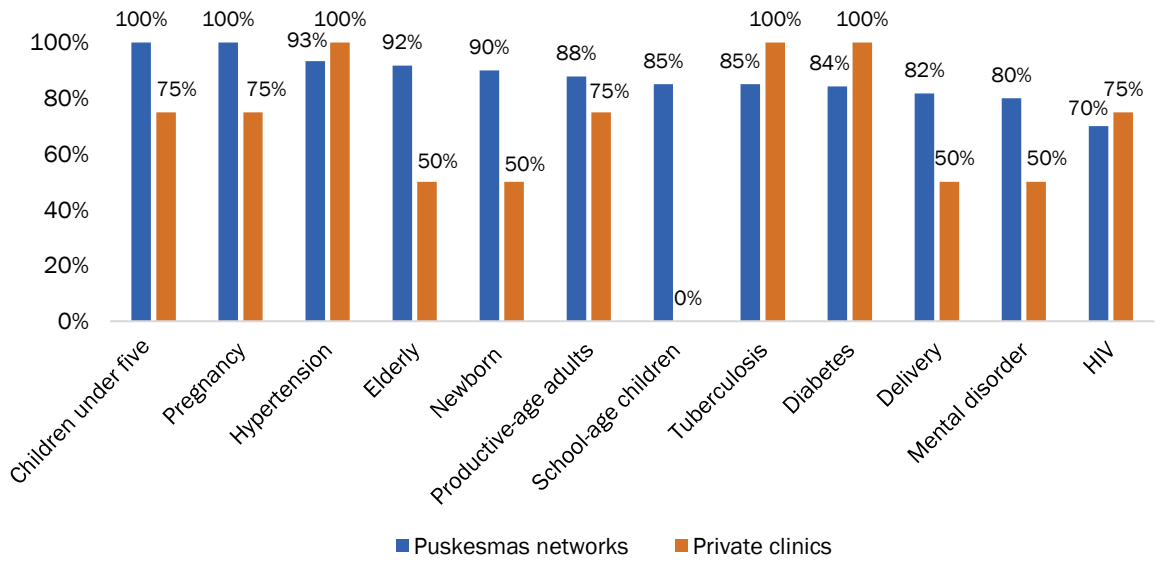
Table 8. Average Total SPM Unit Costs in Bali and Nusatenggara

SPM	DHOs	Puskesmas networks	Private clinics
Pregnancy	96,871	115,154	94,239
Delivery	134,303	152,524	224,751
Newborn	122,117	183,341	385,399
Children under five	156,487	134,057	79,214
School-age children	6,399	124,559	--
Productive-age adults	24,552	49,282	31,954
Elderly	198,144	58,477	72,407
Hypertension	8,299	59,711	99,545
Diabetes	46,742	83,891	76,827
Mental disorders	267,526	146,362	--
TB *(without OAT drugs)*	121,149	208,667	--
TB *(with OAT drugs)*	816,522	688,880	--
HIV *(without ARVs)*	115,408	201,314	--
HIV *(with ARVs)*	1,090,200	228,649	--

SPM Results in Maluku and Papua

Sampled districts in Maluku and Papua experienced highest service availability for SPM in both puskesmas networks (87 percent) and private clinics (68 percent) compared to all other regions (Figure 7). At sampled puskesmas networks, service availability was highest (100 percent) for children under five (100 percent), pregnancy (100 percent), and hypertension (93 percent) and lowest for HIV services (70 percent) (Figure 19). At sampled private clinics, service availability was highest for hypertension services (100 percent), TB services (100 percent), and diabetes services (100 percent), and lowest for services for school-age children (0 percent). On average, staff in private clinics spent the majority of their SPM time on NCDs and mental disorders (57 percent), whereas staff at puskesmas networks spent most of their time on MNCH SPM activities (54 percent), and a smaller proportion on NCDs and mental disorders (30 percent) (Figure 20).

Figure 19. Average Availability of Services for SPM at Sampled Puskesmas Networks and Private Clinics in Maluku and Papua



SPM target achievement in sampled Maluku and Papua districts was highest for services for school-age children (94 percent), diabetes (88 percent), and pregnancy (87 percent), and lowest for services for productive-age adults (65 percent) and mental disorders (74 percent) (Figure 21). Lower service availability for mental disorders may explain the lower coverage targets for mental disorders. Maluku and Papua districts had low TB target achievement (75 percent) which may be explained by this region having the highest average SPM unit costs for TB services with OAT drugs at puskesmas networks (IDR 2,415,893) and private clinics (IDR 2,311,068) compared to other regions (Table 9).

Figure 20. Proportion of Staff Time Spent on SPM in Maluku and Papua

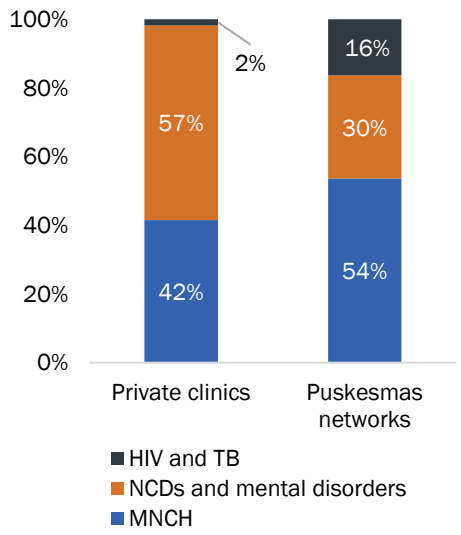
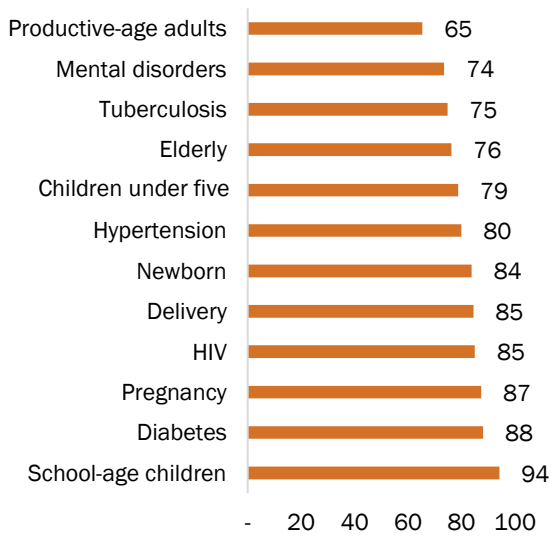


Figure 21. SPM Target Achievement in Sampled Districts in Maluku and Papua



Average SPM unit costs at sampled DHOs in Maluku and Papua were lowest for school-age children (IDR 14,657), and highest for HIV services (with ARVs) (IDR 1,632,201) (Table 9). HIV unit costs with ARVs were 500 percent higher than HIV unit costs without ARVs (IDR 271,907). In sampled puskesmas networks, average SPM unit costs ranged from IDR 75,739 for services for productive-age adults to IDR 553,368 for TB services with OAT drugs. At private clinics, SPM unit costs ranged from IDR 35,667 for services for children under five to IDR 1,153,630 for TB services with OAT drugs. Notably, several SPM unit costs were significantly higher at private clinics compared to the unit costs at puskesmas networks, including those for delivery, newborns, productive-age adults, hypertension, and TB with OAT drugs (Table 9). Unit costs for delivery and newborn services were highest at sampled private clinics in Maluku and Papua compared to all other regions in Indonesia, mainly due to higher overhead costs (for example, overhead costs comprised 95 percent of total newborn unit costs). Direct and overhead unit costs by SPM are outlined in Annex E.

Table 9. Average Total SPM Unit Costs in Maluku and Papua

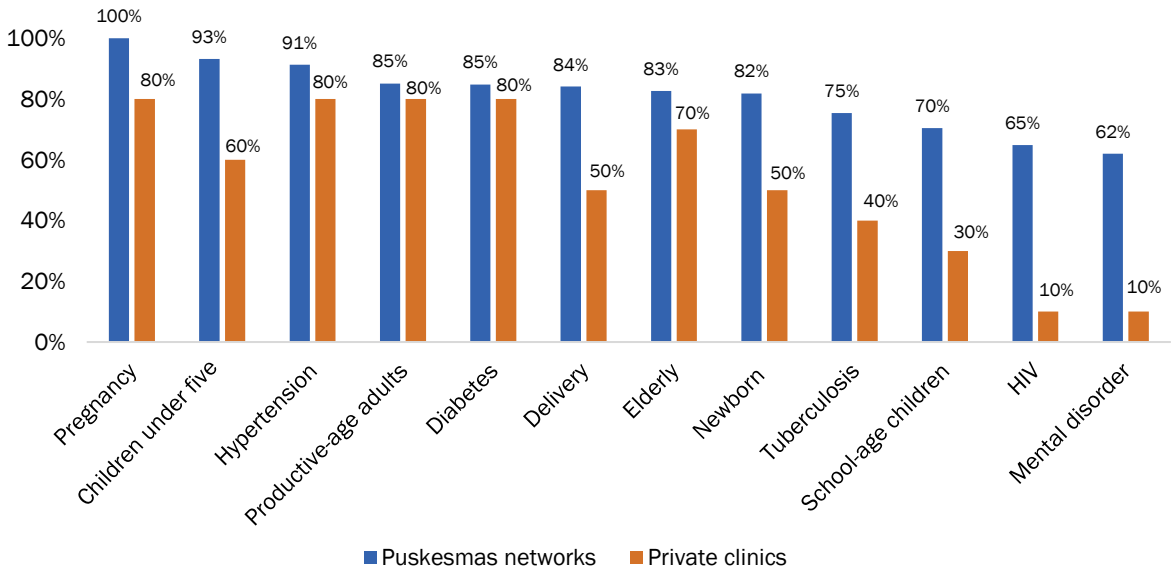
SPM	DHOs	Puskesmas networks	Private clinics
Pregnancy	85,763	232,601	228,082
Delivery	173,617	230,448	575,687
Newborn	137,056	326,036	699,354
Children under five	154,275	208,473	35,667
School-age children	14,657	184,011	-
Productive-age adults	75,222	75,739	303,637
Elderly	77,836	111,376	260,927
Hypertension	18,623	94,095	290,169
Diabetes	139,663	138,642	258,231
Mental disorders	214,643	288,338	395,746

SPM	DHOs	Puskesmas networks	Private clinics
TB *(without OAT drugs)*	143,615	283,052	342,012
TB *(with OAT drugs)*	950,488	553,368	1,153,630
HIV *(without ARVs)*	271,907	133,827	212,384
HIV *(with ARVs)*	1,632,201	214,659	232,569

SPM Results in Sulawesi

SPM service availability in Sulawesi averaged 81 percent in puskesmas networks and 51 percent in private clinics (Figure 7). In puskesmas networks, availability was highest for pregnancy (100 percent), services for children under five (93 percent), and hypertension services (91 percent), and lowest for HIV services (65 percent) and mental disorders (62 percent) (Figure 22). At private clinics, availability was highest for pregnancy services (80 percent), hypertension (80 percent), productive-age adults (80 percent), and diabetes (80 percent) and lowest for HIV services (10 percent) and mental disorder services (10 percent). On average, puskesmas staff spent a significantly larger proportion of their total SPM time on HIV and TB services compared to private clinic staff (16 percent and 2 percent, respectively) (Figure 23).

Figure 22. Average Availability of Services for SPM at Sampled Puskesmas Networks and Private Clinics in Sulawesi



SPM target achievement was highest for pregnancy (96 percent), newborn (93 percent), school-age children (91 percent) and delivery (90 percent) (Figure 24). Service availability particularly for newborn SPM (on average, 82 percent in sampled puskesmas networks and 50 percent in sampled private clinics) may need to improve to reach 100 percent SPM targets. Despite relatively high service availability at sampled puskesmas networks (91 percent) and private clinics (80 percent), SPM target achievement was low for hypertension services (78 percent) and elderly services (76 percent) (Figure 24).

Figure 23. Proportion of Staff Time Spent on SPM in Sulawesi

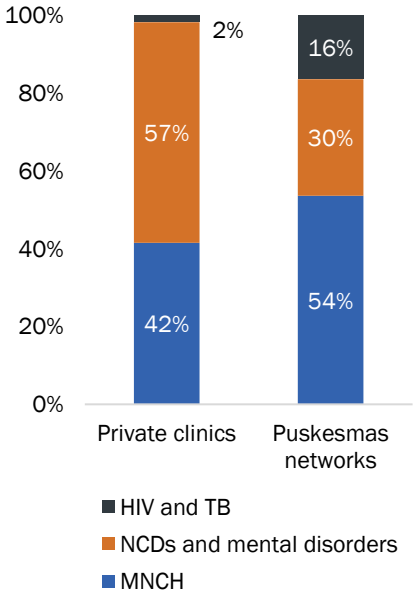
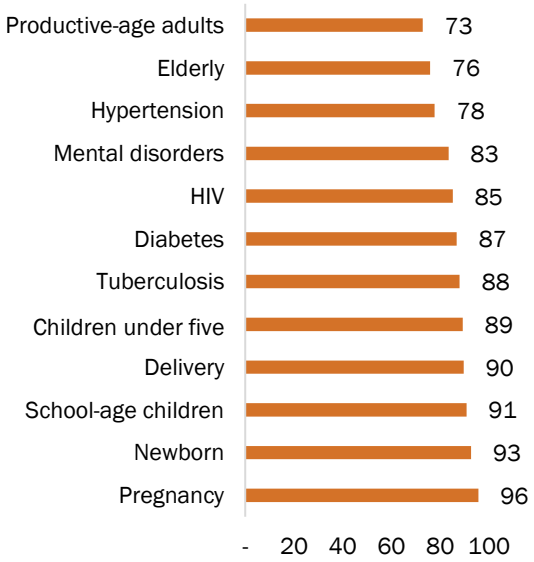


Figure 24. SPM Target Achievement (Percent) in Sampled Districts in Sulawesi



Similar to other regions (Bali and Nusatenggara, Maluku and Papua, and Java) average SPM unit costs at sampled DHOs in Sulawesi were lowest for school-age children (IDR 24,392). SPM unit costs at sampled Sulawesi DHOs were highest for HIV services with ARVs (IDR 2,013,741), the highest SPM unit cost seen for HIV services with ARVs across all sampled districts (Table 10). Direct costs for ARVs were also highest in Sulawesi compared to other regions (IDR 1,923,110) (Annex E). TB unit costs with drugs at the DHO level were also highest in Sulawesi (IDR 1,657,758) compared to TB unit costs on average in all districts. SPM unit costs at sampled puskesmas networks in Sulawesi ranged from IDR 46,929 for productive-age adult services to IDR 560,324 for TB services with drugs. SPM unit costs at sampled private clinics in Sulawesi ranged from IDR 7,036 for services for school-age children to IDR 290,310 for newborn services. Compared to unit costs at sampled puskesmas, unit costs at private clinics were significantly lower for pregnancy, services for children under five, school-age children, mental disorders, and TB services with drugs. Direct and overhead unit costs by SPM are outlined in Annex E.

Table 10. Average Total SPM Unit Costs in Sulawesi

SPM	DHOs	Puskesmas networks	Private clinics
Pregnancy	61,388	207,333	75,400
Delivery	182,879	281,191	250,389
Newborn	92,989	311,300	290,310
Children under five	163,706	149,841	55,913
School-age children	24,392	183,335	7,036
Productive-age adults	106,895	46,929	15,587
Elderly	36,334	106,546	125,500
Hypertension	17,032	75,436	133,522

SPM	DHOs	Puskesmas networks	Private clinics
Diabetes	62,982	176,596	225,933
Mental disorders	375,201	286,837	134,222
TB *(without OAT drugs)*	174,989	242,576	257,322
TB *(with OAT drugs)*	1,657,758	560,324	257,322
HIV *(without ARVs)*	208,598	262,299	158,840
HIV *(with ARVs)*	2,013,741	275,408	183,114

SPM Results in Sumatra and Kalimantan

Service availability in sampled districts in Sumatra and Kalimantan averaged 80 percent in puskesmas networks and 53 percent in private clinics (Figure 7). Sampled puskesmas networks did not have 100 percent availability for any services, though there was high availability for hypertension (94 percent) and diabetes services (91 percent) (Figure 25). Service availability at sampled puskesmas networks was lowest for delivery services (69 percent) and HIV services (65 percent) (Figure 25). Private clinics in Sumatra and Kalimantan were least equipped of all Indonesian districts sampled to provide maternal and child health services; specifically, service availability was low for newborn services (17 percent), delivery (17 percent), and pregnancy (33 percent). This is consistent with average private clinic staff time spent on MNCH SPM activities, which was lowest in Sumatra and Kalimantan (27 percent) (Figure 26) compared to all other districts sampled. Instead, private clinic staff spent a greater proportion of their SPM time on NCDs and mental disorders (65 percent) (Figure 26). SPM availability at private clinics was 100 percent for hypertension services, diabetes services, and services for productive-age adults (Figure 25). Despite very high service availability at both sampled puskesmas networks and private clinics in Sumatra and Kalimantan, SPM target achievement remains low for hypertension services (75 percent) and diabetes (77 percent) (Figure 27). Target achievement is also low for TB services (71 percent) and services for productive-age adults (64 percent) (Figure 27). Staff in sampled private clinics in Sumatra and Kalimantan spend the greatest proportion of their total SPM time on NCDs and mental disorders compared to other regions, however, they are still not meeting their SPM targets for these services. Although HP+ did not measure quality of service provision as part of this study, it is possible that improved quality of services and/or improved targeting of appropriate populations for NCD screening may still be needed in Sumatra and Kalimantan to meet 100 percent of SPM targets.

Figure 25. Average Availability of Services for SPM at Sampled Puskesmas Networks and Private Clinics in Sumatra and Kalimantan

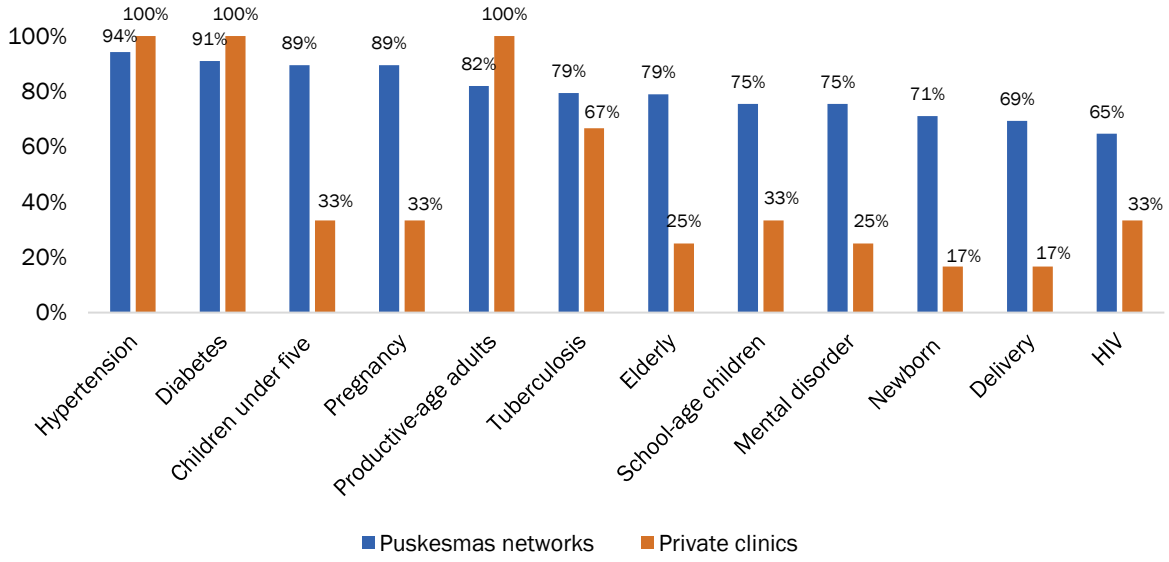


Figure 26. Proportion of Staff Time Spent on SPM in Sumatra and Kalimantan

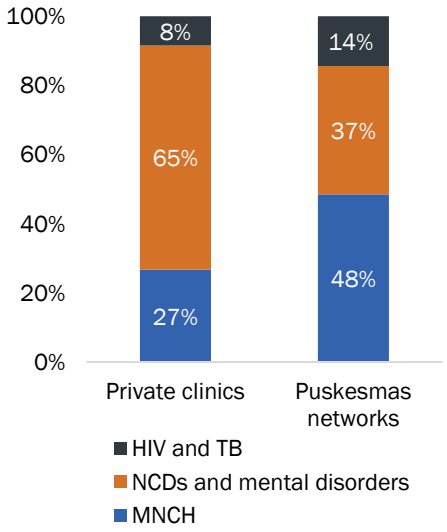
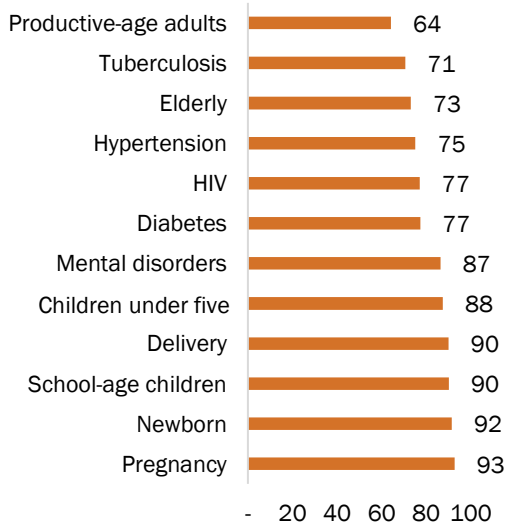


Figure 27. SPM Target Achievement (Percent) in Sampled Districts in Sumatra and Kalimantan



Average SPM unit costs at the DHO level ranged from IDR 15,683 for hypertension services to IDR 1,251,876 for HIV services with ARVs, and unit costs were notably high for TB services with OAT drugs (IDR 730,021) (Table 11). At sampled puskesmas networks, average SPM unit costs ranged from IDR 55,684 for services for productive-age adults to IDR 446,185 for TB services with drugs. At sampled private clinics, average SPM unit costs ranged from IDR 9,910 for school-age children to IDR 354,815 for TB services with drugs. Compared to unit costs at sampled puskesmas, average unit costs at private clinics were significantly lower for pregnancy, newborns, school-age children, productive-age adults, and mental disorders (Table 11). Direct and overhead unit costs by SPM are outlined in Annex E.

Table 11. Average Total SPM Unit Costs in Sumatra and Kalimantan

SPM	DHOs	Puskesmas networks	Private clinics
Pregnancy	67,005	137,255	35,693
Delivery	60,324	142,302	257,020
Newborn	84,996	215,935	99,631
Children under five	148,972	83,454	93,178
School-age children	47,257	196,749	9,910
Productive-age adults	22,873	55,684	10,956
Elderly	21,347	92,013	101,257
Hypertension	15,683	107,200	252,007
Diabetes	43,225	138,058	272,075
Mental disorders	165,544	231,453	91,076
TB *(without OAT drugs)*	194,663	207,757	274,242
TB *(with OAT drugs)*	730,021	446,185	354,815
HIV *(without ARVs)*	117,633	170,817	256,193
HIV *(with ARVs)*	1,251,876	175,791	256,193

Estimated SPM Resource Requirements for Indonesia

Nationwide, Indonesia is furthest from meeting its SPM targets for hypertension (39 percent), for productive-age adults (44 percent), for HIV services (56 percent), and for TB services (57 percent) (Figure 28). Indonesia is closest to meeting maternal and newborn health targets (with existing achievement ranging from 71 percent for pregnancy and delivery services to 75 percent for newborn services). However, Indonesia's progress on maternal and newborn health targets remains far below the new mandate to meet SPM targets of 100 percent per Permenkes 4/2019. Applying average SPM unit cost estimates by region to SPM targets using data from Pusdatin, estimated resource requirements for direct SPM costs for 2019 range from IDR 185.7 billion in Maluku and Papua to IDR 3.3 trillion in Java (Figure 29), totaling IDR 6.7 trillion nationwide. These costs are approximately 4.6 percent of the total APBD expenditure for health, or an estimated IDR 13.5 billion per district/municipality (IDR 25,177 per person per year). Estimated total SPM resource requirements range from IDR 649.6 billion in Maluku and Papua to IDR 10.9 trillion in Java (Figure 30). These estimates do not include HIV and TB drug costs in some districts and municipalities which may need to purchase additional medicines to meet HIV and TB SPM targets. Total SPM requirements are approximately 8.1 percent of the total APBD expenditure for health, or an estimated IDR 42.1 billion per district/municipality (IDR 81,523 per person per year).

Figure 28. SPM Target Achievement in Indonesia

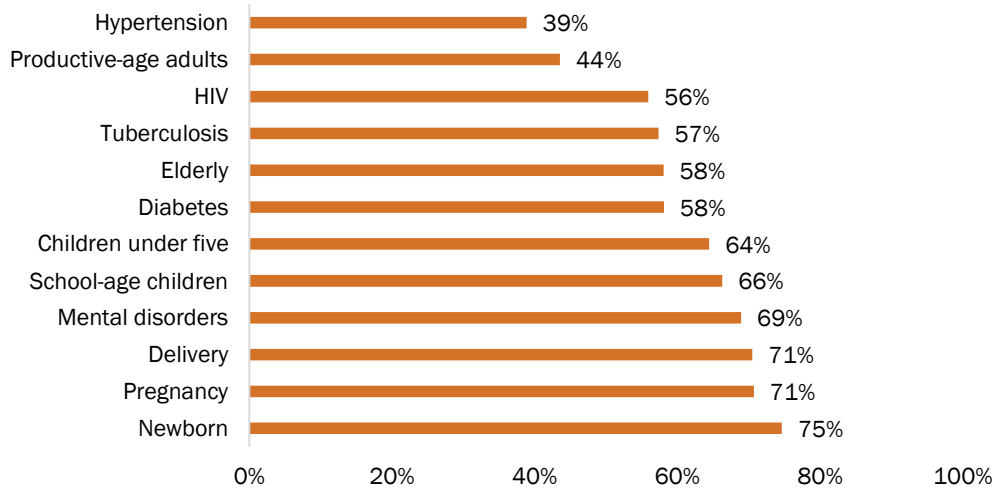


Figure 29. Estimated Direct Cost SPM Resource Requirements by Region (2019, IDR billions)

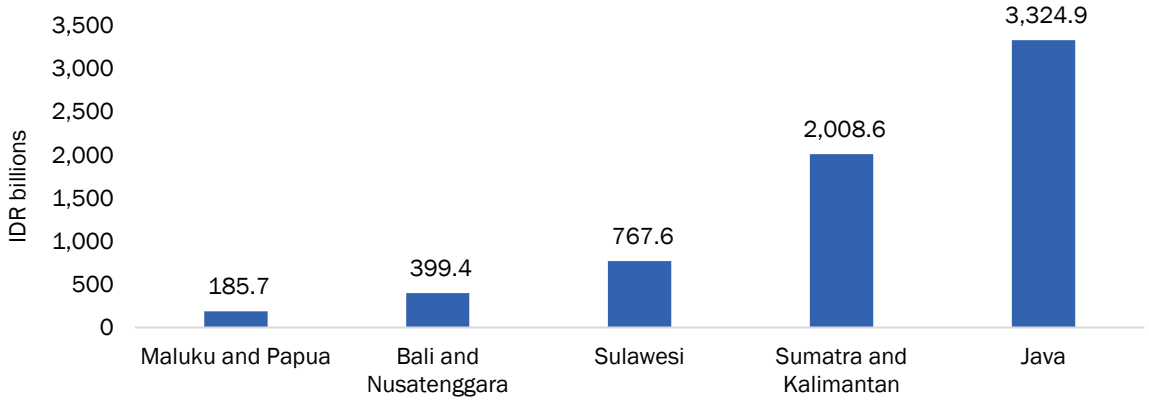
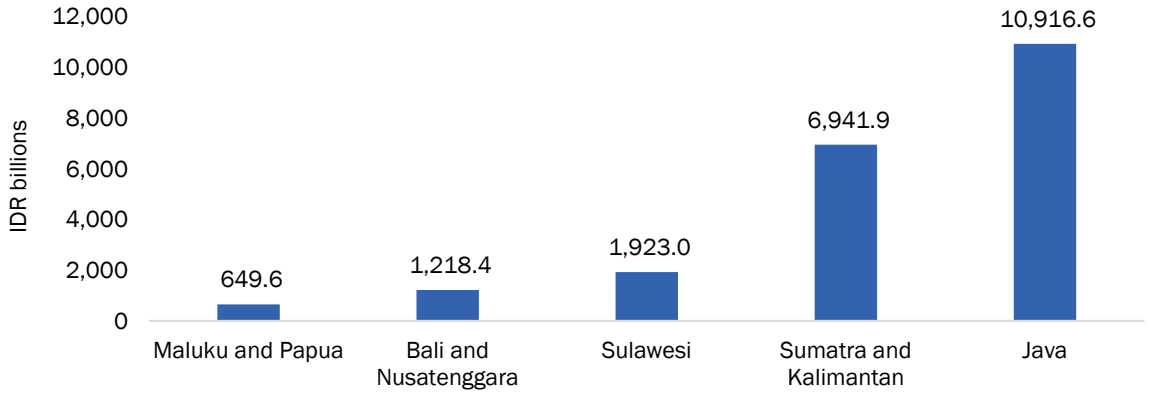


Figure 30. Estimated Total SPM Resource Requirements by Region (2019, IDR billions)



By SPM, Indonesia's total resource requirements are largest for services for productive-age adults (IDR 5.8 trillion) and hypertension (IDR 3.4 trillion) (Table 12). Since SPM unit costs for these services were relatively low compared to unit costs for other SPM, these large resource requirements may be explained by high target population counts for these services. For example, DHOs are responsible for reaching more than 143 million productive-age adults in Indonesia with relevant SPM services, which include a variety of screening services for obesity, vision, early detection of breast cancer and other cancers, and counseling on

various lifestyle risk factors and family planning. The government of Indonesia will need to improve its investment in SPM for NCDs to increase coverage of screenings at the primary healthcare level for non-communicable diseases to minimize chronic care costs at referral facilities longer-term and meet 100 percent of SPM targets.

Table 12. Estimated SPM Resource Requirements (2019, IDR billions) and Target Population

SPM	Target Population	Direct Cost	Total Cost
Pregnancy	5,057,508	178.3	563.3
Delivery	4,792,440	390.9	779.6
Newborn	4,708,705	461.5	1,268.0
Children under five	20,299,702	1,373.8	2,415.2
School-age children	19,913,149	301.4	2,450.8
Productive-age adults	143,315,584	2,197.4	5,862.2
Elderly	24,630,898	578.9	1,564.4
Hypertension	49,762,377	347.3	3,402.4
Diabetes	7,714,930	261.1	850.3
Mental disorders	572,612	35.1	114.4
TB (*without OAT drugs*)	2,465,620	273.5	793.3
HIV (*without ARVs*)	6,528,211	287.0	1,585.6

Enabling Factors and Challenges in SPM Implementation at the District Level

The process of SPM planning requires several steps as per the MOHA Regulation 100/2018; the key objectives include developing targets for each indicator and estimating resources required to deliver SPM services. DHOs must first establish SPM teams headed by the planning officer or the head of the DHO. DHOs then conduct resource mapping which covers HR, medicines, equipment, infrastructure, and supplies that are available to meet SPM. DHOs then set the SPM targets using Statistics Indonesia (Baden Pusat Statistik or BPS) or MOH survey data such as Riskesdas. Targets are then approved by the head of the district, and DHOs then identify funding sources for meeting SPM and any funding gaps. Lastly in the SPM planning process, DHOs develop their activity plans, coordinate with puskesmas and private clinics to collect relevant SPM data, and then upload them into the Siscobikes website.

Despite the guidance provided for SPM planning, implementation, and monitoring and evaluation in the regulation, FGD findings revealed several challenges that remain at the district level. This section summarizes those challenges and discusses enabling factors.

Operational SPM Planning Challenges

Operational SPM planning remains a major challenge in nearly all districts, as most DHO and health facility staff lack the understanding of the SPM as outlined in the Permenkes 4/2019. DHO and health facility staff reference some inconsistency in operational definitions and targets to be achieved between SPM and programs, causing confusion in estimating the

number of target populations, which affects target achievement. For example, in one FGD, participants from Sumbawa mentioned that they did not fully understand the Permenkes 4/2019. Specifically, they questioned the definition of "screening" for SPM indicator #6 referring to the productive-age population. Although the technical guidance states that screening should be conducted on all individuals between the ages of 15 and 59 in the respective districts, the participants argued that not all individuals in that age bracket should be treated with screening since as screening should only be carried out to find new cases. However, puskesmas staff have different views about this; they thought that screening should be conducted for all individual regardless of their health status prior to the screening.

It is difficult to compare performance across programs because of the varying data sources used to set targets (BPS, Pusdatin, provincial statistics). Furthermore, in many districts, the target projections made using these data sources are inaccurate and too high, and districts are unable to meet 100 percent target achievement.

Private clinic participation in the SPM planning process remains limited. In FGDs in 15 districts, private clinic staff indicated that they were unfamiliar with SPM and had not engaged in any of the SPM-related activities alongside puskesmas and DHOs and had little knowledge of their role in SPM implementation. Most clinics had not conducted joint planning SPM activities with DHOs. However, private clinic respondents from six districts who were also employees of DHOs or puskesmas had more exposure to SPM and contributed more to SPM achievement in their districts. For example, in Halmahera Utara District, private clinic respondents confirmed that they were included in the SPM planning process to discuss targets. Such inclusion was expected, as this clinic offered many SPM interventions, including those for HIV, TB, hypertension, diabetes, and delivery. Results from the FGDs indicated that private clinic staff understand that coordination with puskesmas on service delivery is important for SPM achievement. For example, in the district of Bitung, one clinic conducted extensive coordination with puskesmas to meet referral service needs for pregnant women and patients with diabetes.

SPM Funding Challenges

Out of the 24 total districts sampled, 20 districts still heavily rely on central government transfers (BOK, DAK) for their SPM budgets, with little contribution from subnational expenditure through APBD. The approved budget is usually less than what is proposed, indicating a lack of prioritization of local government funds for SPM. In one district, approved funding was 90 percent lower than the budget proposed, with funds instead used to support the local election campaign. The MOHA has a critical role in disseminating SPM guidance to district leaders and clarifying their responsibilities in executing SPM and the consequences if they fail to achieve 100 percent of their targets. Per Law 23/2014, the MOHA must impose sanctions on local leaders who are not able implement SPM effectively and meet their targets.

FGD findings indicate that SPM budget limitations have contributed to inequities. For example, in Sumbawa and Lhokseumawe, the frequency of outreach services was reduced due to an insufficient transportation budget. The reduction became problematic for several target populations who face limited access to health facility-based services, including the elderly, people with mental disorders, patients with TB, and people living with HIV. Outreach services are crucial to reach these populations, who tend to be disproportionately vulnerable and who tend face accessibility issues. As a result of these budget limitations and pressure to meet SPM targets, puskesmas often prioritize service quantity, and perhaps may provide unnecessary services to people to meet SPM targets,

leading to inequities in service provision and not necessarily reaching the most vulnerable populations with SPM services.

SPM Target Achievement

Nearly all DHO and puskesmas participants indicated that reaching 100 percent of SPM targets was not realistic based on current SPM resources, and there were concerns regarding the ability of puskesmas to meet the higher standard of services required under Permenkes 4/2019. As the main implementer of SPM, puskesmas participants indicated that SPM implementation challenges include HR shortages, both in quality and quantity. Staff also lack sufficient understanding of technical guidance under Permenkes 4/2019 and require more training to fill in SPM budgeting and planning tools.

FGD findings also indicated a lack of monitoring and evaluation protocols for SPM per MOH regulations. Instead, puskesmas and DHOs continue to use their individual, existing program-based recording and reporting systems. Each month, the program point of contact at each puskesmas would prepare and submit their achievement reports to DHOs (which include private clinic report submissions to puskesmas) who would then validate and compile them into district-level reports. For TB and HIV programs, the program points of contact send their reports directly through a web-based reporting system. Late reporting from puskesmas is a common issue in almost all districts as a result of high workload and other constraints.

Coordination between puskesmas and private clinics on reporting, monitoring, and evaluation remains inconsistent. Private clinic respondents in FGDs indicated that in addition to lack of engagement in the SPM planning process, they were not well informed of their role in achieving SPM targets. Some respondents from several districts such as Wakatobi, Bitung, Takalar, Klungkung, and Kota Batu highlighted their requirements to submit service coverage reports on a monthly basis. One private clinic from Bitung mentioned some engagement and follow-up from puskesmas asking for reports on maternal and newborn health service coverage. More data are needed on the completeness and quality of SPM reporting at private clinics.

FGD findings indicate that due to limited human resources, monitoring and evaluation for SPM is not a priority at most DHOs sampled, and there is no system currently in place for puskesmas to receive constructive feedback on their monthly report submissions. District health offices conduct SPM monitoring and evaluation either by directly visiting puskesmas and private clinics, or by convening meetings. Since each program plans for its own monitoring and evaluation activities based on budget availability, the frequency and methods vary across programs, and DHOs generally lack capable human resources to conduct regular monitoring and evaluation. In puskesmas, SPM progress is monitored by the planning unit based on reports submitted by each program and the result is presented to all staff during meetings. Low-achieving indicators are put under a spotlight and discussions focus on finding strategies to improve performance in the following months. Likewise, in DHOs, SPM reports are also compiled by the planning unit and submitted to the MOH, but there is no clear evidence how progress is being monitored. One district clearly stated that they have yet to submit an SPM report to the MOH.

Enabling Factors

FGD findings highlighted several good practices that support effective SPM planning and implementation:

- Nearly all puskesmas invite multiple stakeholders (heads of sub-districts, villages, puskesmas, and other health clinics) during the SPM planning process. This effort has resulted in strong village government participation in funding priority activities and purchasing medical supplies that contribute to meeting SPM targets.
- Some districts have issued additional subnational regulations to strengthen local execution of service delivery for SPM. For example, following the passing of Permenkes 4/2019, the district of Gunung Kidul issued a regulation (Perbup 100/2019) to strengthen the local execution of SPM, and similar regulations have been proposed in Bengkulu and Sumbawa. These regulations indicate increased local government prioritization of SPM, though it is still too early to tell whether these regulations will actually improve SPM performance
- Districts continue to improve performance through use of local solutions beyond conventional practices (Box 2). In Lhokseumawe and Ngada, DHO staff were divided into teams charged with the responsibility to oversee a few puskesmas, in addition to their main duties. DHO staff members must familiarize themselves with all ongoing programs in Puskesmas, instead of simply focusing on their main duties. This strategy aims to avoid siloed program-oriented mentalities but instead to promote collaboration among program staff.

Box 2. Use of Local Solutions to Improve SPM Implementation

Despite the challenges, DHOs and puskesmas continue to improve performance through the use of local solutions beyond conventional practices. Each district has its own way of reaching SPM target populations through innovations that suit the local context. In Padang Pariaman District, where most of the population is Muslim, puskesmas Padang Alai engages religious leaders in delivering health education messages during the Friday prayer and conducts health screening in mosques. In rural settings, health workers rely on community health volunteers to disseminate health information. The health workers train volunteers to conduct basic screenings (height, weight, blood pressure, glucose, cholesterol) among productive-age adults through an initiative called Jumsepase (Jumat Sehat Padang Alai Semangat, or "Healthy Friday"). Puskesmas Padang Alai also conducts health screenings at the market and on every holiday, when most people are at home. Indonesia remains behind in reaching its SPM targets for productive-age adults; community-level interventions like this may provide one solution. Voluntarism and community action in public health is also known to be effective in high-income countries in both closing budget gaps and effectively reaching communities at the local level.

Conclusions

Results of this study indicate that Indonesia still needs to strengthen primary healthcare service delivery, consistent with other recent findings on maternal and newborn healthcare services in Indonesia and broader primary healthcare findings in the World Bank's Public Expenditure Review (Van Doorn et al., 2020; Stein et al., 2020). Consistent with other viable costing methods used in other low- and middle-income countries, HP+ used a mixed

approach for this study, calculating direct costs through bottom-up costing and overhead costs using top-down costing (Hendriks et al., 2014; Cunnama et al., 2016). Bottom-up costing is considered to more accurately capture resources used to provide a health service, however, may underestimate inefficiencies in service provision, whereas top-down costing is less accurate in estimating true costs, yet captures existing inefficiencies in service delivery (Cunnama et al., 2016).

Applying this study's average SPM unit cost estimates by region to SPM targets, it is possible to estimate that national resource requirements for direct SPM costs for 2019 total IDR 6.7 trillion, approximately 4.6 percent of total subnational expenditure (APBD) for health (or an estimated IDR 25,177 per person per year). This direct cost SPM resource estimate includes direct inputs (medicines, vaccines, medical and non-medical consumables, medical equipment, and transportation directly related to service delivery for SPM) and excludes the cost of staff time. With inclusion of overhead costs and the cost of staff time, total national SPM resource requirements are an estimated IDR 21.6 trillion, approximately 8.1 percent of the total APBD expenditure for health (or an estimated IDR 81,523 per person per year).

Although personnel costs are fixed year to year, they serve as the main cost driver for SPM in sampled puskesmas networks (on average, 51 percent of total costs) and private clinics (on average 58 percent of total costs) and contribute a significant portion of overhead costs to the total SPM resource estimate. Across regions, personnel costs in sampled puskesmas networks range from 34 percent of total SPM costs in Java to 60 percent of total SPM costs in Bali and Nusatenggara. Similarly, across regions, personnel costs in sampled private clinics range from 46 percent of total SPM costs in Java to 68 percent of total SPM costs in Maluku and Papua. Per the guidelines outlined in Permenkes 4/2019, health providers have flexibility in selecting appropriate health personnel to provide services for SPM, and can implement task shifting or task sharing of service delivery among doctors, specialists, midwives, and nurses to increase service delivery efficiency and reduce costs.

Indonesia remains behind in meeting TB and HIV targets, which may be explained by high unit costs for these services. At the DHO level, on average, unit costs per person per year were highest for HIV services with ARVs (IDR 1,580,122) and TB services with OAT drugs (IDR 1,128,835). Similarly, SPM unit costs were highest in puskesmas networks for TB services with drugs (IDR 566,611). JKN capitation payments do not generally incentivize provision of more expensive services at primary healthcare facilities, and study results indicate that health facility staff spend a small proportion of their total SPM time on HIV and TB services; this time allocation may need to increase to meet targets.

Indonesia also must improve SPM target achievement for NCDs and TB. On average, among districts sampled in all five regions, NCDs and TB represented the lowest three targets met. TB target achievement must be increased in Java, Maluku, Papua, Sumatra, and Kalimantan. Despite the wide availability of hypertension services, particularly among sampled private clinics, hypertension target achievement was low in all regions with the exception of Maluku and Papua. SPM target achievement for productive-age adults needs to be improved, particularly in sampled districts in Bali and Nusatenggara, and Maluku and Papua, where target achievement remains very low (58 and 65 percent, respectively).

To improve health SPM execution in Indonesia, we recommend the following:

- **Analyze future SPM data collected through the new Siscobikes platform.** Using the results of this costing study, HP+ has (1) supported the government of Indonesia in improving its electronic platform for SPM data collection (Siscobikes), (2) improved associated Microsoft Excel-based budgeting tools used by districts, by

pre-filling cost estimates for SPM activities that vary by region, and (3) developed an interoperability guideline for use by other ministries and government agencies to assess Siscobikes data. Future analysis of SPM data collected through the new Siscobikes platform is needed to assess improvements in district-level SPM performance and to better target central government transfers (such as through DAK Fisik and DAK Non-Fisik) to local governments based on each district's SPM needs and performance.

- **Strengthen SPM availability and implementation in the private sector**. To meet ambitious 100 percent SPM targets, DHOs will need to improve engagement of private clinics in service delivery for SPM. Our results indicate that the private sector is generally less equipped to deliver services for SPM, which is consistent with other findings that private primary healthcare facilities lacked basic diagnostic capacity and essential medicines (Rajan et al., 2018). On average, sampled private clinics had greatest availability for diabetes and hypertension services (79 percent) and had 25 percent or lower availability for the following services: HIV, mental disorders, and school-age children. Puskesmas networks serve as the main service provider for these services, and some of the lower service availability at private clinics may be explained by lower disease prevalence and service demand. The lower service availability at private clinics is also consistent with World Bank findings which indicate that private facilities focus less on preventative and public health interventions and more on provision of treatment (Rajan et al., 2018). Among sampled private clinics, results indicated that private clinics in Bali and Nusatenggara, and Java had the lowest service availability, and services for six SPM were not available in sampled facilities in Bali and Nusatenggara. It is recommended that the government of Indonesia explore incentives to engage the private sector in service delivery addressing SPM.
- **Improve cost efficiency of SPM for school-age and under-five children through task shifting and task sharing.** Overhead costs comprise 56 and 89 percent of SPM unit costs for under-five and school-age children, respectively. Per the guidelines in Permenkes 4/2019, health providers can implement task shifting and task sharing among doctors, midwives, and nurses as needed to suit each district's local context and reduce inefficiencies in provision of routine health services for children. Compared to other SPM, services for school-age and under-five children focus on interventions that require less specialized health personnel, such as growth monitoring, immunization administration, and vitamin supplementation. Less specialized trained health staff can be tasked to provide these routine services for children, and more specialized cadres such as doctors can focus on addressing health complications and other SPM that require a more specialized skillset.
- **Improve SPM reporting and monitoring and evaluation technical guidance.** This study's FGD results indicated monitoring and evaluation for SPM is not prioritized at most DHOs sampled, and there is a lack of systems in place for puskesmas to receive constructive feedback on their monthly report submissions. To improve the supervisory role of DHOs and puskesmas in recording and reporting, the MOH must establish an integrated reporting system that accommodates reporting at SPM and program levels. As part of strengthening service delivery addressing SPM in private clinics, Indonesia must strengthen the role of puskesmas to coordinate and monitor private sector involvement in SPM, which includes managing private sector SPM performance reporting.
- **The MOHA must fulfil its role in enforcing local government's compliance to SPM regulations.** To ensure the equipment, supplies, and human

resources needed to properly implement SPM, districts need to comply with existing regulations to prioritize funding for health by allocating 10 percent of their APBD funding to the health sector. In August 2020, the MOHA indicated that average district APBD allocations for the health sector remain below the 10 percent required, at 9.24 percent (Nugraheny, 2020). The MOHA has a critical role in disseminating SPM guidance to district leaders and clarifying their responsibilities in executing SPM and the consequences if they fail to achieve 100 percent of their targets. Per Law 23/2014, the MOHA must impose sanctions on local leaders who are not able implement SPM effectively and meet their targets.

References

Cunnama, L., E. Sinanovic, L. Ramma, N. Foster, and L. Berrie, et al. 2016. "Using Top-Down and Bottom-up Costing Approaches in LMICs: The Case for Using Both to Assess the Incremental Costs of New Technologies at Scale." *Health Economics* 25 Suppl 1(Suppl Suppl 1), 53–66. Available at: https://pubmed.ncbi.nlm.nih.gov/26763594/.

Dewan Jaminan Sosial Nasional (DJSN). 2020. "Sistem Monitoring Terpadu." Available at: http://sismonitoring and evaluation.djsn.go.id/pembayaran/

Ensor, T., H. Firdaus, D. Dunlop, A. Manu, and A. G. Mukti, et al. 2012. "Budgeting Based on Need: A Model to Determine Sub-National Allocation of Resources for Health Services in Indonesia." *Cost Effectiveness and Resource Allocation* 10(1): 11.

Ferrazzi, G. 2005. "Obligatory Functions and Minimum Service Standards for Indonesian Regional Government: Searching for a Model." *Public Administration and Development* 25(3): 205-215. Available at: https://onlinelibrary.wiley.com/doi/epdf/10.1002/pad.363.

Health Policy Plus and Sub-Directorate for HIV/AIDS and STI at the Ministry of Health, Indonesia. 2018. *Updated Resource Requirements for Sustainable Financing of the HIV Response in Indonesia*. Washington, DC: Palladium, Health Policy Plus.

Hendriks, M. E., P. Kundu, A. C. Boers, O. A. Bolarinwa, and M. J. te Pas, et al. 2014. "Step-by-Step Guideline for Disease-Specific Costing Studies in Low- and Middle-Income Countries: A Mixed Methodology." *Global Health Action* 7(1): Available at: https://doi.org/10.3402/gha.v7.23573

Khairi, H. 2015. "The Policy Implementation of Minimum Service Standard in Indonesia: Problems and Challenges." *International Journal of Social Sciences* 34(1): 1-17. Available at: https://www.tijoss.com/TIJOSS percent2034 percent20Volume.html

Maharani, A., and G. Tampubolon. 2015. "Has Decentralization Affected Child Immunization Status in Indonesia?" *Global Health Action* 8(s3): 24913. Available at: https://doi.org/10.3402/gha.v7.24913

Ministry of Health. 2019. *Laporan Kinerja Pusat Data Dan Informasi Tahun Anggaran 2018*. Jakarta, Indonesia: Government of Indonesia. Available at: https://pusdatin.kemkes.go.id/folder/view/01/structure-laporan-kinerja-pusdatin.html

Ministry of Health. 2020. *Profil Kesehatan Indonesia Tahun 2019*. Jakarta, Indonesia: Government of Indonesia. Available at: https://www.kemkes.go.id/folder/view/01/structure-publikasi-pusdatin-profil-kesehatan.html

National Population and Family Planning Board (BKKBN), Statistics Indonesia (Badan Pusat Statistik—BPS), Ministry of Health (Kemenkes), and ICF. 2018. *Indonesia Demographic and Health Survey 2017*. Jakarta, Indonesia: BKKBN, BPS, Kemenkes, and ICF.

Nugraheny, D. E. "Mendagri: Masih Banyak Daerah yang Alokasi Anggaran Kesehatannya Kurang dari 10 Persen APBD," *Kompas.com,* August 18, 2020, https://nasional.kompas.com/read/2020/08/18/06214491/mendagri-masih-banyak-daerah-yang-alokasi-anggaran-kesehatannya-kurang-dari

Pal, S. and Z. Wahhaj. 2017. "Fiscal Decentralisation, Local Institutions and Public Good Provision: Evidence from Indonesia." *Journal of Comparative Economics* 45(2): 383-409. Available at: https://www.sciencedirect.com/science/article/pii/S0147596716300361.

Rajan, V. S., A. Patil, E. S. Pambudi, and B. Junedi. 2018. *Is Indonesia Ready to Serve?: An Analysis of Indonesia's Primary Health Care Supply-Side Readiness (English)*. Washington, DC: World Bank Group. Available at: https://documents.worldbank.org/en/publication/documents-reports/documentdetail/484351538653658243/is-indonesia-ready-to-serve-an-analysis-of-indonesia-s-primary-health-care-supply-side-readiness

Roudo, M. and T. M. Chalil. 2016. "Depolarization in Delivering Public Services? Impacts of Minimum Service Standards (MSS) on the Quality of Health Services in Indonesia." *Journal of Regional and City Planning* 27(1): 1-15. Available at: http://journals.itb.ac.id/index.php/jpwk/article/view/1738

Sucahya P. K. and L. Teplitskaya. 2020. *Analysis of Local Government Budgets to Meet Minimum Service Standards for Health in Indonesia*. Washington, DC: Palladium, Health Policy Plus.

Sucahya, P. K., and N. Mardiati. Unpublished. "Costing Study: Unit Cost of HIV and AIDS Program in Indonesia."

Statistics Indonesia (Badan Pusat Statistik—BPS) and Macro International. 2008. *Indonesia Demographic and Health Survey 2007*. Calverton, Maryland, US: BPS and Macro International.

Stein, D., M. F. Rakhmadi , J. Ugaz, and A. Dutta. 2020. *Does Better Financing Enable Higher Quality Maternal and Neonatal Health Services? Evidence from Healthcare Providers and Local Governments in Indonesia*. Washington, DC: Palladium, Health Policy Plus. Available at: http://www.healthpolicyplus.com/ns/pubs/18476-18858_MNHFRReportFinancingwAnnex.pdf

Suryanto, S., V. Plummer, and M. Boyle 2016. "Financing Healthcare in Indonesia." *Asia-Pacific Journal of Health Managemen*t 11(2):33-38. Available at: http://achsm.org.au/Public/Public/Resources/Journal/Archives/Volume_11_Issue_2_2016.aspx.

Van Doorn, R., A. Ihsan, C. D. R. D. Agustina, and P. S. Yoong. 2020. *Indonesia—Public Expenditure Review: Spending for Better Results* (Main Report/English). Washington, DC: World Bank Group. Available at: http://documents.worldbank.org/curated/en/611541588612447572/Main-Report

Annex A. SPM Activities and Sub-Activities

SPM	Activity	Sub-activity
Children under five	Health services (age 0-11 months)	Preparation of basic immunizations
Children under five	Health services (age 0-11 months)	Administration of basic immunizations
Children under five	Health services (age 0-11 months)	Preparation of vitamin A
Children under five	Health services (age 0-11 months)	Administration of vitamin A to babies age 6-11 months once a year
Children under five	Health services (age 0-11 months)	Preparation of equipment for body length and weight measurement
Children under five	Health services (age 0-11 months)	Measurement of body length/height at least twice a year
Children under five	Health services (age 0-11 months)	Body weight measurement at least eight times a year
Children under five	Health services (age 0-11 months)	Monitoring of a child's development at least twice a year
Children under five	Health services (age 0-11 months)	Preparation of MCH books, Early Detection of Child Grown and Development forms; Child Development Pre-Screening Questionnaire forms, and other applicable standard instruments
Children under five	Health services (age 12-23 months)	Preparation of booster immunizations
Children under five	Health services (age 12-23 months)	Administration of booster immunizations
Children under five	Health services (age 12-23 months)	Administration of vitamin A twice a year
Children under five	Health services (age 12-23 months)	Monitoring of a child's development at least twice a year
Children under five	Health services (age 12-23 months)	Preparation of equipment for body length and weight measurement
Children under five	Health services (age 12-23 months)	Body length/height measurement at least twice a year
Children under five	Health services (age 12-23 months)	Body weight measurement at least eight times a year (at a minimum 4 times in 6 months
Children under five	Health services (age 12-23 months)	Preparation of MCH books, Early Detection of Child Grown and Development forms; Child Development Pre-Screening Questionnaire forms, and other applicable standard instruments
Children under five	Health services (age 12-23 months)	Preparation of vitamin A
Children under five	Health services (age 24-59 months)	Administration of vitamin A
Children under five	Health services (age 24-59 months)	Monitoring of a child's development at least twice a year

SPM	Activity	Sub-activity
Children under five	Health services (age 24–59 months)	Treatment in case of anaphylactic shock
Children under five	Health services (age 24–59 months)	Body length/height measurement at least twice a year
Children under five	Health services (age 24–59 months)	Body weight measurement at least 8 times a year (at a minimum 4 times in 6 months
Children under five	Health services (age 24–59 months)	Preparation of vitamin A
Children under five	Health services (age 24–59 months)	Preparation of equipment for body length and weight measurement
Children under five	Health services (age 24–59 months)	Preparation of MCH books, Early Detection of Child Grown and Development forms; Child Development Pre-Screening Questionnaire forms, and other applicable standard instruments
Children under five	Health services	Inform the results of the examination
Children under five	Health services	Recording to the MCH Handbook
Children under five	Recording and reporting	Use of the infant and toddler cohort register
Children under five	Recording and reporting	Filling out the report according to the reporting flow
Children under five	Data collection	Home visits for data collection
Children under five	Data collection	Data entry and analysis
Children under five	Data collection	Determination of target numbers
Children under five	Data collection	Preparation and socialization
Children under five	Referrals	Preparing for an emergency set
Children under five	Referrals	Dispatch of patients to advanced referral health facilities (Fasilitas Kesehatan Rujukan Tingkat Lanjut or FKRTL)
Children under five	Referrals	Referral planning
Children under five	Referrals	Pre-referral stabilization and/or treatment
Newborn	Health services (0–6 hours)	Umbilical cord cutting and care
Newborn	Health services (age 0–6 hours)	Rinse all the equipment using chlorine 0.5 percent solution
Newborn	Health services (age 0–6 hours)	Early initiation of breastfeeding
Newborn	Health services (age 0–6 hours)	Check the newborn's history for any preexisting conditions
Newborn	Health services (age 0–6 hours)	Bodyweight measurement

SPM	Activity	Sub-activity
Newborn	Health services (age 0–6 hours)	Body temperature measurement
Newborn	Health services (age 0–6 hours)	Prophylactic antibiotic ointment/eye drops
Newborn	Health services (age 0–6 hours)	Vitamin K1 injection
Newborn	Health services (age 0–6 hours)	Hepatitis B immunization
Newborn	Health services (age 0–6 hours)	Record time of birth and cover baby
Newborn	Health services (age 6 hours–28 days)	Counseling about newborn care and exclusive breastfeeding
Newborn	Health services (age 6 hours–28 days)	Health assessment using Integrated Management of Young Infants (IMYI) form
Newborn	Health services (age 6 hours–28 days)	Vitamin K1 injection for infants who were not born at a health facility or have not received vitamin K1 injections
Newborn	Health services (age 6 hours–28 days)	Hepatitis B immunization for infants less than 24 hours whose birth was not assisted by a health personnel
Newborn	Health services (age 6 hours–28 days)	Management and referral of neonatal complications
Newborn	Health services	Preparation of recording forms
Newborn	Health services	Clean the placenta
Newborn	Health services	Refer (if complications occur)
Newborn	Health services	Congenital hypothyroid screening
Newborn	Health services	Filling and utilizing the MCH handbook
Newborn	Recording and reporting	Reporting data to the health office
Newborn	Recording and reporting	Recording with the infant cohort register
Newborn	Data collection	Home visit for data collection
Newborn	Data collection	Data entry and analysis
Newborn	Data collection	Determination of target numbers
Newborn	Data collection	Preparation and socialization
Newborn	Referrals	Prepare the Neonatal Emergency Sets
Newborn	Referrals	Delivery of patients to FKRTL
Newborn	Referrals	Referral planning

SPM	Activity	Sub-activity
Diabetes	Health services	Preparation of materials and tools
Diabetes	Health services	Blood sugar measurement
Diabetes	Health services	Education for lifestyle changes (balanced diet, adequate rest, physical activity and stress management
Diabetes	Health services	Pharmacological therapy and education for treatment adherence to pharmacological therapy
Diabetes	Monitoring and evaluation	Monitoring and evaluation of diabetes patient data
Diabetes	Recording and reporting	Recording and reporting of diabetes patients
Diabetes	Recording and reporting	Diabetes patient identification at FKRTL
Diabetes	Data collection	Home visits for data collection on diabetes patients
Diabetes	Data collection	Determination of target numbers
Diabetes	Data collection	Preparation and socialization
Diabetes	Referrals	Referral to FKRTL for management of complications
Hypertension	Health services	Blood pressure measurement at least once a month at a health facility
Hypertension	Health services	Education for lifestyle changes and/or treatment adherence
Hypertension	Health services	Referral as needed
Hypertension	Health services	Preparation of materials and tools
Hypertension	Health services	Utilization of Program Indonesia Sehat dengan Pendekatan Keluarga or PIS-PK data
Hypertension	Monitoring and evaluation	Monitoring and evaluation of hypertension patients via record sheet
Hypertension	Recording and reporting	Recording and reporting of hypertension patients
Hypertension	Data collection	Determination of targets
Hypertension	Referrals	Referral to FKRTL
HIV	Health services	Health promotion and outreach (information, education, and communication materials for HIV patients and people at risk of HIV)
HIV	Health services	Networking and partnership
HIV	Health services	HIV screening inside the health facility

SPM	Activity	Sub-activity
HIV	Health services	HIV screening outside the health facility
HIV	Health services	Preparation of materials and tools inside the building
HIV	Health services	Preparation of materials and tools outside the building
HIV	Referrals	HIV referral
HIV	Socialization	Socialization on HIV prevention
HIV	Monitoring and evaluation	HIV program monitoring and evaluation
HIV	Monitoring and evaluation	Assessment of the performance of the SPM-HIV Program
HIV	Recording and reporting	HIV program reporting
HIV	Recording and reporting	Recording medical records and filling out Sistem Informasi HIV AIDS (SIHA)
HIV	Data collection	Home visit for data collection
HIV	Data collection	Collecting data on people at risk of HIV
HIV	Data collection	Preparation and socialization
HIV	Data collection	Mapping HIV targets
Delivery	Health services	Orphanage after childbirth
Delivery	Health services	Give support and care for the baby and family
Delivery	Health services	Give vitamin K1 injection and antibiotic ointment/eye test, and hepatitis B immunization
Delivery	Health services	Provide resuscitation (if needed)
Delivery	Health services	Client identification and MCH handbook filling
Delivery	Health services	Assist in childbirth
Delivery	Health services	Installation of IUD post-placenta
Delivery	Health services	Newborn physical check
Delivery	Health services	Preparation of tools, materials, and rooms
Delivery	Health services	Tactile stimulation (massage) of the uterus and assessment of bleeding
Delivery	Health services	Referral (if there are signs of complications)
Delivery	Health services	Filling and utilizing the MCH handbook

SPM	Activity	Sub-activity
Delivery	Health services	Fill out mother cards and mother cohort data
Delivery	Data collection	Home visit for data collection
Delivery	Data collection	Data entry and analysis
Delivery	Data collection	Determination of target numbers
Delivery	Data collection	Preparation and socialization
Delivery	Referrals	Prepare the Neonatal Emergency Sets
Delivery	Referrals	Referral to FKRTL
Delivery	Referrals	Referral planning
Delivery	Referrals	Stabilize the patient
Pregnancy	Health services	Assessment and history-taking
Pregnancy	Health services	Provide information, education, communication materials for pregnancy
Pregnancy	Health services	Provide iron supplement and tetanus toxoid vaccine as needed
Pregnancy	Health services	Counseling and explanation of the results of the examination
Pregnancy	Health services	Request a laboratory examination
Pregnancy	Health services	Explain the results of lab tests
Pregnancy	Health services	Examination around the leg
Pregnancy	Health services	Examination around the head (face, eyes, nose, ears, mouth, throat)
Pregnancy	Health services	Examination around the abdomen and chest (chest, uterus, fetus)
Pregnancy	Health services	Hand area and other vital sign measurements (temperature, blood pressure, pulse)
Pregnancy	Health services	Physical measurement (height and weight)
Pregnancy	Health services	Preparation of tools, materials, and rooms
Pregnancy	Health services	Filling and utilizing the MCH Handbook
Pregnancy	Health services	Fill out mother and cohort cards
Pregnancy	Recording and reporting	Report the results of the report to the health office
Pregnancy	Recording and reporting	Recap the results of antenatal services

SPM	Activity	Sub-activity
Pregnancy	Data collection	Home visit for data collection
Pregnancy	Data collection	Data entry and analysis
Pregnancy	Data collection	Determination of target numbers
Pregnancy	Data collection	Preparation and socialization
Pregnancy	Referral	Referral to FKRTL
Pregnancy	Referral	Stabilize patient as needed
Mental disorders	Health services	Education on adherence to medication
Mental disorders	Health services	Carrying out home visits
Mental disorders	Health services	Drug administration and delivery
Mental disorders	Health services	Supportive medical action
Mental disorders	Screening services	Patient registration
Mental disorders	Screening services	Preparation of materials and tools
Mental disorders	Screening services	Mental health assessment
Mental disorders	Recording and reporting	Recording and reporting
Mental disorders	Data collection	Home visit for data collection
Mental disorders	Data collection	Determination of target numbers
Mental disorders	Data collection	Preparation and socialization
Mental disorders	Referrals	Referral to FKRTL
School-age children	Health services	Assessment of nutritional status (anthropometry)
School-age children	Health services	Assessment of vital signs (temperature, blood pressure, pulse, respiration, heart)
School-age children	Health services	Assessment of dental and oral health (oral cavity, teeth, and mouth)
School-age children	Health services	Assessment of sight (eye examination, vision testing, color blindness)
School-age children	Health services	Assessment of hearing (physical ear and auditory senses)
School-age children	Health services	Physical fitness examination
School-age children	Health services	Filling the questionnaire by participants or the parent/guardian

SPM	Activity	Sub-activity
School-age children	Health services	Follow-up assessment of health services in schools, including changes in health behavior and obese children
School-age children	Health services	Feedback on the results of screening and health counseling
School-age children	Recording and reporting	Recording and reporting patients' health examination results
School-age children	Data collection	Orientation services for health screenings
School-age children	Data collection	Health service preparation
School-age children	Referrals	Referral (if needed)
TB	Health services	Comprehensive TB education on risk behavior and infection prevention
TB	Health services	Clinical examination outside the building
TB	Health services	In-building clinical examination
TB	Health services	Preparation of materials, tools, and places in the building
TB	Health services	Preparation of materials, tools, and a location outside the building
TB	Health services	Supporting test via sputum test and/or bacteriological test and/or radiology examination
TB	Recording and reporting	TB logging and reporting
TB	Data collection	Home visit for data collection
TB	Data collection	Determination of target numbers
TB	Data collection	Preparation and socialization
TB	Referrals	Referral for TB patients
Elderly	Health services	Education on clean and healthy lifestyle
Elderly	Health services	Screening of communicable and non-communicable disease risk factors
Elderly	Health services	Measurement of height, weight and waist circumference
Elderly	Health services	Blood pressure measurement
Elderly	Health services	Testing for blood sugar level
Elderly	Health services	Mental health assessment
Elderly	Health services	Cognitive function testing

SPM	Activity	Sub-activity
Elderly	Health services	Assessment of level of independence during old age
Elderly	Health services	Anamnesis of risk behavior
Elderly	Health services	Follow-up on results of the individual health screenings
Elderly	Health services	Health education and counseling
Elderly	Health services	Preparation of tools and materials
Elderly	Monitoring and evaluation	Monitoring and evaluation of patient data
Elderly	Recording and reporting	Recording and reporting in the elderly health book
Elderly	Data collection	Home visits for data collection
Elderly	Data collection	Determination of target numbers
Elderly	Data collection	Preparation and socialization
Productive-age adults	Health services	Education and counseling on NCD risk factors, including family planning
Productive-age adults	Health services	Measurement of height, weight, and waist circumference
Productive-age adults	Health services	Blood pressure measurement
Productive-age adults	Health services	Blood glucose testing
Productive-age adults	Health services	Patient report of risk behavior
Productive-age adults	Health services	Follow-up on health screening results, including health education
Productive-age adults	Health services	Referral (as needed)
Productive-age adults	Health services	Clinical breast examination and visual inspection with acetic acid (for women ages 30 to 50 years)
Productive-age adults	Health services	Preparation of materials, tools, and point-of-service screening
Productive-age adults	Health services	Training for teachers to serve as counselors in schools
Productive-age adults	Health services	Detection of mental emotional and behavioral disorders
Productive-age adults	Monitoring and evaluation	Monitoring and evaluation of patient data
Productive-age adults	Recording and reporting	Recording and reporting of NCD risk factors
Productive-age adults	Data collection	Home visits for data collection

SPM	Activity	Sub-activity
Productive-age adults	Data collection	Determination of target numbers
Productive-age adults	Data collection	Preparation and socialization

Annex B. District and Municipality Sample List

Province	District/Municipality
Aceh	Kota Ihokseumawe
Sumatera Utara	Kota Tebing Tinggi
Sumatera Barat	Padang Pariaman
Jambi	Sarolangun
Bengkulu	Kepahiang
Bengkulu	Kota Bengkulu
Jawa Barat	Garut
Jawa Tengah	Jepara
Yogyakarta	Gunung Kidul
Jawa Timur	Kota Batu
Bali	Klungkung
Nusa Tenggara Barat	Sumbawa
Nusa Tenggara Timur	Ngada
Kalimantan Selatan	Banjar
Sulawesi Utara	Bolaang Mongondow Utara
	Kota Bitung
Sulawesi Selatan	Takalar
Sulawesi Tenggara	Wakatobi
	Buton Selatan
	Kota Kendari
Gorontalo	Gorontalo
Maluku Utara	Halmahera Utara
	Kota Tidore Kepulauan
Papua Barat	Kota Sorong

Annex C. Focus Group Discussion Guidelines

Focus Group Discussion Guidelines for District Health Offices

Theme	Sub Theme	Discussion Guidelines
A. Socialization The SPM understanding of program implementers	• Socialization of MOH regulation No. 4/2019 • Understanding of MOH regulation No. 4/2019 • Difference between MOH regulation No. 43/2016 and No. 4/2019 • Response (attitude) to MOH regulation No. 4/2019 • Constraints and solutions of socializing MOH regulation No. 4/2019	1. Please tell us your experience in implementing MOH regulation No.43/2016, which outlines technical guidelines to meet basic health service quality for health sector SPM. 2. Please describe the socialization of MOH regulation No. 4/2019 that you received. Was the socialization sufficient? Did you have remaining questions on the regulation following the socialization? 3. What is your understanding of differences between the MOH regulation No. 43/2016 and No. 4/2019? 3.1. What is your response to the changes in SPM regulation? 4. What constraints did you encounter during the socialization of MOH regulation No. 4/2019? 5. What solutions did you take to overcome these constraints? 6. Do you have any suggestions on how to improve SPM socialization in 2020?

Theme	Sub Theme	Discussion Guidelines
B. Planning Planned programs/ activities related to MOH regulations No.43/2016 OR No.4/2019	• Activities that have been planned • Stages of planning preparation process • Parties involved in the planning preparation (bureaucracy) • Differences (new things) between MOH regulation No. 43/2016 and No. 4/2019 planning • Readiness to fulfill planning needs (HR, infrastructure, costs, time, etc.) description • Constraints and solutions in planning	1. What activities that have been planned to meet SPM in 2019? 1.1. Do the activities that you have planned in 2019 include all 12 district-level SPM indicators? If not, which activities have not yet been planned? Why? 1.2. Is the plan from 2019 in accordance with the stages specified in MOH regulation No. 43/2016 or No. 4/2019? If not, what are the difficulties/impossible steps? Why? 2. Who are the parties involved in the preparation of SPM planning? 2.1. Local government, cross-program, cross-sector, community (mention parties involved.) 2.2. What are the roles of each party in the preparation of SPM planning? 2.3. If involved cross-sector, which sector involved in funding/financing to meet SPM? Please explain on a specific funding for any program? 3. What is your opinion on SPM 2016 and 2019? Why? 4. Please describe your readiness to fulfill current SPM planning needs for 2020? (This includes HR, organizational structure, infrastructure, costs, time, etc. Refer to the context of each program in MOH No. 4/2019. 5. What constraints did you encounter during SPM planning in 2019? 6. What solutions did you take to overcome those constraints? What constraints remain for 2020? 7. What strategies or solutions do you think should be implemented in 2020 (or the future) to meet SPM planning targets? Please specify if strategies differ among specific SPM indicators.

Theme	Sub Theme	Discussion Guidelines
C. Implementation, strategy and accomplishment of 12 health SPM indicators • Strategies • Accomplishment • Target • Barriers	• Planning implementation strategies that have been carried out • Innovative programs to achieve SPM • Activity achievement • Optimism to meet 100 percent SPM target • Constraints and solutions to meet 100 percent SPM target	1. What strategies/efforts have you made so that the health SPM workplan can be executed as expected? 1.1. Is there a strategy in the form of an innovative program carried out to meet SPM target *(Probe: Please discuss for each program.)*? 2. Please tell us how the planned activities have been realized so far (MOH regulations No. 43/2016 OR No. 4/2019). 2.1. What activities/programs have been met and not met the SPM *(look at SPM regulation aids for all activity related to KIA/PTM/P2M).* • Compliance with the number of standards and quality of goods and services? • Compliance with the number of standards and quality of personnel/HR? • Fulfillment of SPM (achievement of quantity and quality of service) 2.2. If not met, why? *2.3.* What strategies are done for achieving the target? *(Probe: Is there a revision of the calculation of targets, revisions of denominator calculations, advocacy for the addition of budget/funding?)* 3. Are you optimistic that you will meet 100 percent SPM targets this coming year, in 2020 (based on the quantity and quality standards set forth in MOH regulation No. 4/2019)? 3.1. For which indicators do you believe you will not meet SPM targets? What is the reason? 3.2. What is the percentage of the target that can realistically be achieved? What standards are difficult to meet and why is that? 4. What constraints did you encounter during SPM implementation in 2019? *4.1. Probe: SPM understanding, commitment, HR (quantity, quality/competency), facilities/ infrastructure, bureaucracy (organizational structure, staff rotation, authority, etc), supporting factors such as drug/equipment procurement, external factors (public knowledge, culture, socio-economic community, procedures, costs, time, or other).* 5. What solutions did you take to overcome those constraints? 6. What constraints do you believe you will encounter for SPM implementation in 2020? 7. What strategies or solutions do you think should be implemented (for the future) to meet SPM implementation targets? Please specify if strategies differ among specific SPM indicators. 8. Is there any penalty for not implementing SPM or not meeting SPM targets? If so, what is the penalty?

Theme	Sub Theme	Discussion Guidelines
D. Reporting	• Form and mechanism of reporting • Recording and reporting compliance • Differences (new things) from recording report of MOH regulation No. 43/2016 and No. 4/2019 • Constraints and solutions in reporting activities	1. What was the form and mechanism for program reporting in 2019? *1.1. Probe: Describe the reporting process? What is to be reported, who prepares the report, and to whom is the information reported?* *1.2. Probe: What is the facility's compliance with regard to recording and reporting?* 2. What constraints did you encounter during the reporting of the SPM program in 2019? *2.1. Probe: HR, data accuracy, achievement calculation, others? Please tell us.* *2.2.* Are there certain SPM indicators for which you faced greater challenges/constraints? 3. What steps did you take to overcome those constraints? 4. What constraints do you think will remain for SPM reporting in 2020? 5. What strategies or solutions do you think should be implemented in 2020 (or the future) to meet SPM reporting targets? Please specify if strategies differ among specific SPM indicators.

Theme	Sub Theme	Discussion Guidelines
E. Monitoring and Evaluation	• Form and mechanism of monitoring and evaluation • SPM information system/SPM costing technical guidance • Feedback from reporting and monitoring evaluation • Constraints and solutions in monitoring and evaluation	1. How is the monitoring of each program/activity carried out in puskesmas? 1.1. Probe: Method, instrument, length of time, implementation. 2. Was there any feedback on the results of monitoring and evaluation for SPM activities from provinces and the national level? 3. What activities have been carried out in the technical guidance? What problems were found in the technical guidance provided? 4. Does the local government monitor/supervise/evaluate SPM activities or the technical guidance that the health facility has implemented? How do you monitor/supervise/evaluate activities/programs or technical guidance that the health facility has carried out? 4.1. Using what instrument, when to do it, who is responsible? 4.2. Is there any feedback from the results of monitoring and evaluation for SPM activities from the local government? 5. Does the province or from the ministry of health or both conduct dissemination? What part of the Province/ministry of health delivers the SPM to the regency? 6. To what extent/how are regional leaders involved in the current SPM targets? 7. What constraints did you encounter during the monitoring and evaluating SPM program in 2020? 7.1. Probing: resources (HR and facilities), region, late reporting, instruments, bureaucracy, coordination/communication, other: … 8. What solutions did you take to overcome those constraints? 9. What constraints do you think will remain for SPM monitoring and evaluation in 2020? 10. What is your suggestion to improve the quality of monitoring and evaluation?
Clarification (if any)	–	Clarification of quantitative team findings on SPM

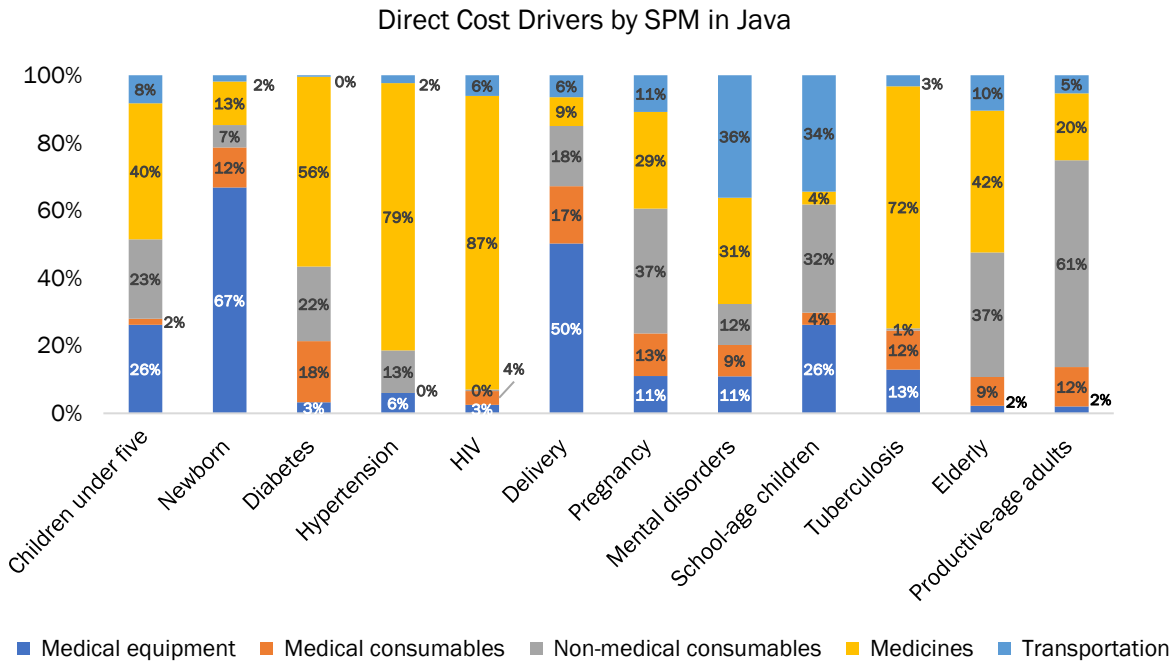
FGD Guidelines for Health Facilities (Puskesmas and Private Clinics)

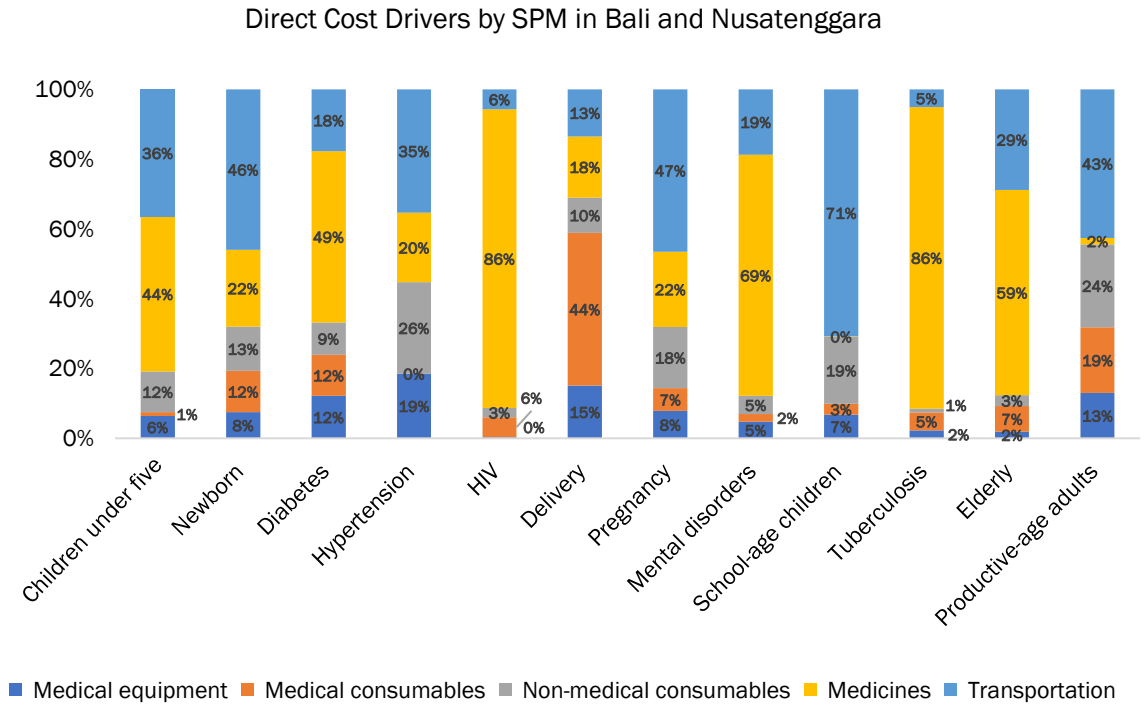
Theme	Sub Theme	Discussion Guidelines
A. Socialization The SPM understanding of program implementers	• Socialization of MOH regulation No.4/2019 • Understanding of MOH regulation No.4/2019 • Constraints and solutions of socializing MOH regulation No.4/2019	1. Please describe the socialization of MOH regulation no.4/2019 that you received. Was the socialization sufficient? Did you have remaining questions on the regulation following the socialization? 1.1. Probing: if you haven't received the socialization, why? 2. What constraints did you encounter during the socialization of MOH regulation no.4/2019? 3. What solutions did you take to overcome these constraints? Note: If you have not yet been socialized about SPM, then continue with questions related to 12 SPM indicators (Explain first about 12 SPM indicators). Are there services that are included in the 12 SPM indicators, if there are services that are done, ask if there is socialization from the Puskesmas / DHO / Agencies on it or others, related to the implementation of the activities carried out? Continue with the question what are the problems in the socialization and suggestions?
B. Planning Planned programs/ activities related to MOH regulations No.43/2016 OR No.4/2019	• Activities that have been planned • Parties involved in the planning preparation (bureaucracy) • Readiness to fulfill planning needs (HR, infrastructure, costs, time, etc) description • Constraints and solutions in planning	1. Please describe the process of making plan of action (PoA) to meet target that have been set by DHO? 1.1. What constraints did you encounter in making PoA? 1.2. What solutions did you take to overcome these constraints? 1.3. How is the financing plan for each PoA, what constraints did you encounter, please describe? 2. Who are the parties involved in PoA preparation? 2.1. Local government, cross-program, cross-sector and community: describe… 2.2. What are the roles of each party in PoA preparation? 2.3. If it involves cross-sector, which cross-sectors are involved in funding / financing in fulfilling the health midwife SPM? Specifically explain the funding for what program? 3. Please describe your readiness to fulfill current SPM planning needs for 2020? (This includes HR, organizational structure, infrastructure, costs, time, etc. refer to the context of each program in MOH no.4/2019)

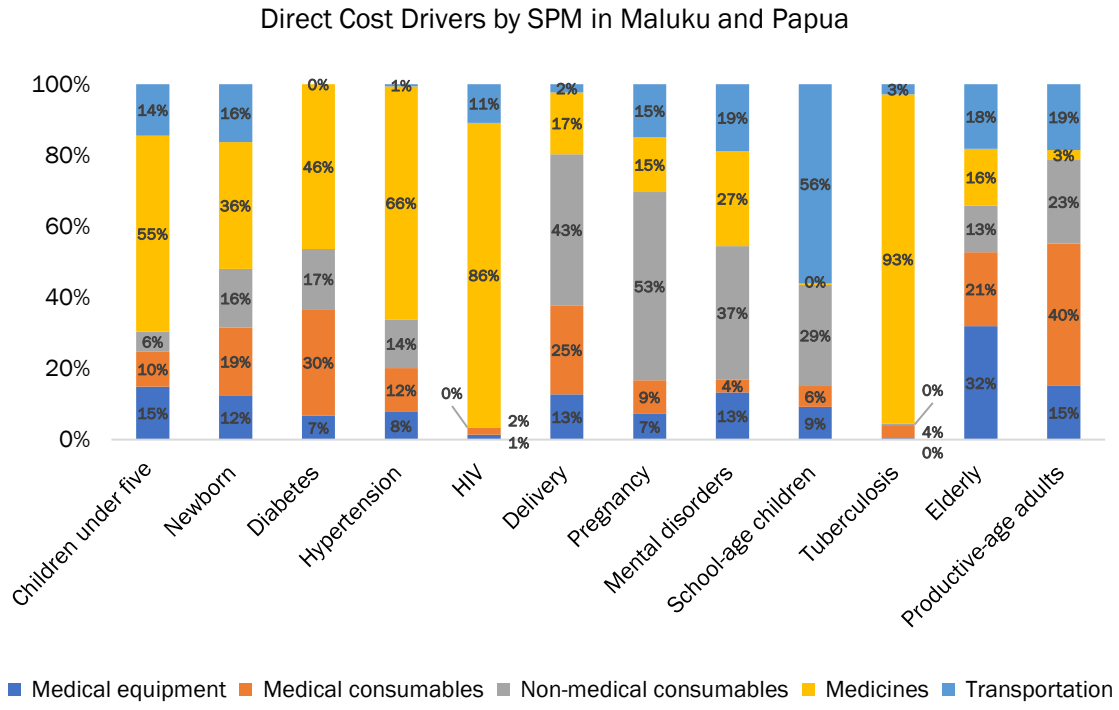
Theme	Sub Theme	Discussion Guidelines
C. Implementation, strategy and accomplishment of 12 Health SPM indicators • Strategies • Accomplishment • Target • Barriers	• Planning implementation strategies that have been carried out • Innovative programs to achieve SPM • Activity achievement realization that have been carried out (including those that didn't meet the target) • Optimism to meet 100 percent SPM target • Constraints and solutions to meet 100 percent SPM target	1. Please tell us how the PoA have been realized so far? 1.1. What strategies/efforts have you made so PoA can run as expected? 1.2. Is there any innovative program carried out to implement PoA *(probe: please discuss for each program*)? 1.3. What activities have been applied and not applied according to PoA *(look at SPM regulation aids for all activity related to KIA/PTM/P2M)* • Compliance with the number of standards and quality of goods and services? • Compliance with the number of standards and quality of personnel/HR? • Fulfillment of SPM (achievement of quantity and quality of service) 1.4. Why there are activities/target that have not been applied (if any)? 1.5. What about the readiness of HR, facilities and infrastructure to support SPM? 2. Are you optimistic that you will meet targets that have been set by DHO in 2020? 2.1. For which indicators do you believe you will not meet the targets? What is the reason? 2.2. What target that can realistically be achieved? What standards are difficult to meet and why is that? 3. What constraints did you encounter during SPM implementation in 2019? *3.1. Probe: SPM understanding, commitment, HR (quantity, quality/competency), facilities/ infrastructure, bureaucracy (organizational structure, staff rotation, authority, etc), supporting factors such as drug/equipment procurement, external factors (public knowledge, culture, socio-economic community, procedures, costs, time, or other…)* 4. What solutions did you take to overcome those constraints? 5. What strategies or solutions do you think should be implemented in the future to meet SPM implementation targets? Please specify if strategies differ between specific SPM indicators. 6. Is there any penalty if not implement SPM or not meet SPM target? If any, what is the penalty?

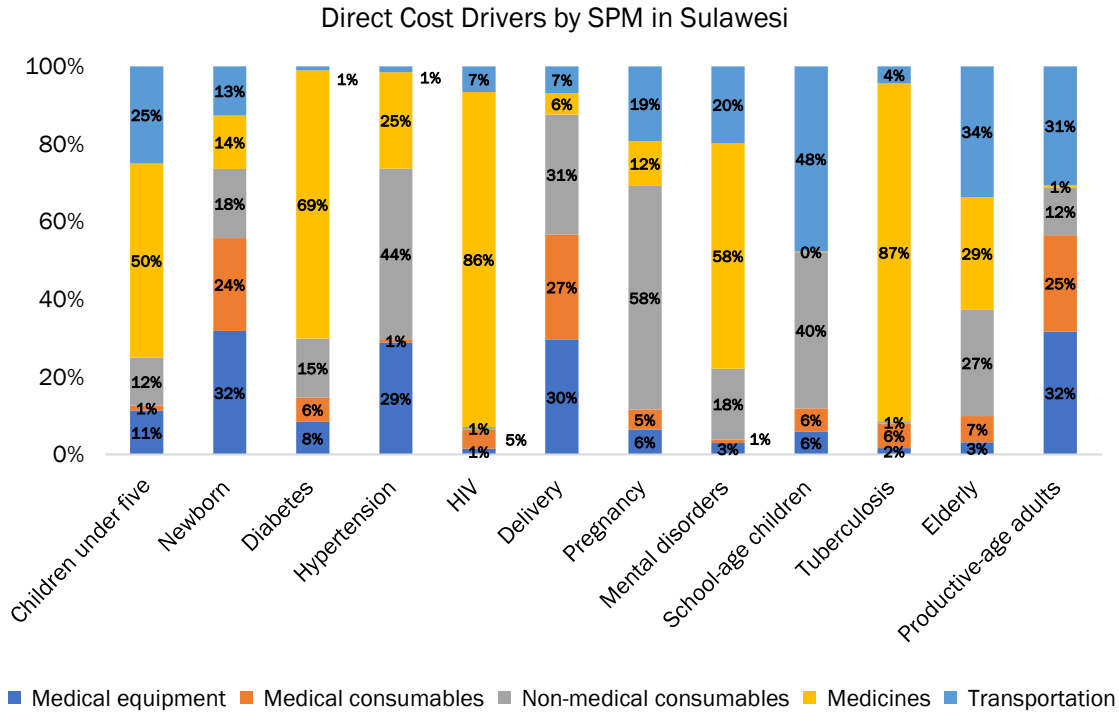
Theme	Sub Theme	Discussion Guidelines
D. Reporting	• Form and mechanism of reporting • Recording and reporting compliance • Constraints and solutions in reporting activities	1. What was the form and mechanism for program reporting in 2019? *1.1. Probing: how is the reporting process? What are to be reported, who prepare the report and to whom is reported?* 2. What constraints did you encounter during the reporting of the SPM program? *2.1. Probing: HR, data accuracy, achievement calculation, on time, others? Please tell us* *2.2.* What solutions did you take to overcome those constraints? 3. What constraints/problems do you believe will be encountered when reporting SPM in 2020? What do you think is the solution for this problem?
E. Monitoring and Evaluation	• Form and mechanism of monitoring and evaluation • SPM information system/SPM costing technical guidance • Feedback from reporting and monitoring evaluation	1. Please describe how to know the progress of PoA and the achievements? 1.1. Probing: with what instrument, when to do, who is the responsible person 2. Is DHO monitor/supervise/evaluate the activities/programs that have been carried out by puskesmas? 2.1. Probing: with what instrument, when to do, who is the responsible person 2.2. Was there any feedback on the results of monitoring and evaluation for SPM activities from DHO level? 2.3. Is there a reporting mechanism between the Puskesmas and the health service facility network below? If so, please explain how is the mechanism works? 3. What is done in technical guidance (bimtek)? What problems are found in Bimtek? 4. Do the local government monitor / supervise / evaluate activities / programs or do the Technical Guidance that the puskesmas has implemented? How do you monitor / supervise / evaluate activities / programs or Technical Guidance that the puskesmas has carried out? 4.1. Probing: using what instruments, when to do it, who is responsible 4.2. Is there feedback from the results of monitoring and evaluation for SPM activities from the Regional Government? 5. What is your suggestion to improve the quality of monitoring and evaluation or technical guidance?
Clarification	Based on information from quantitative team	Classification is done if it has not yet appeared on previous themes.

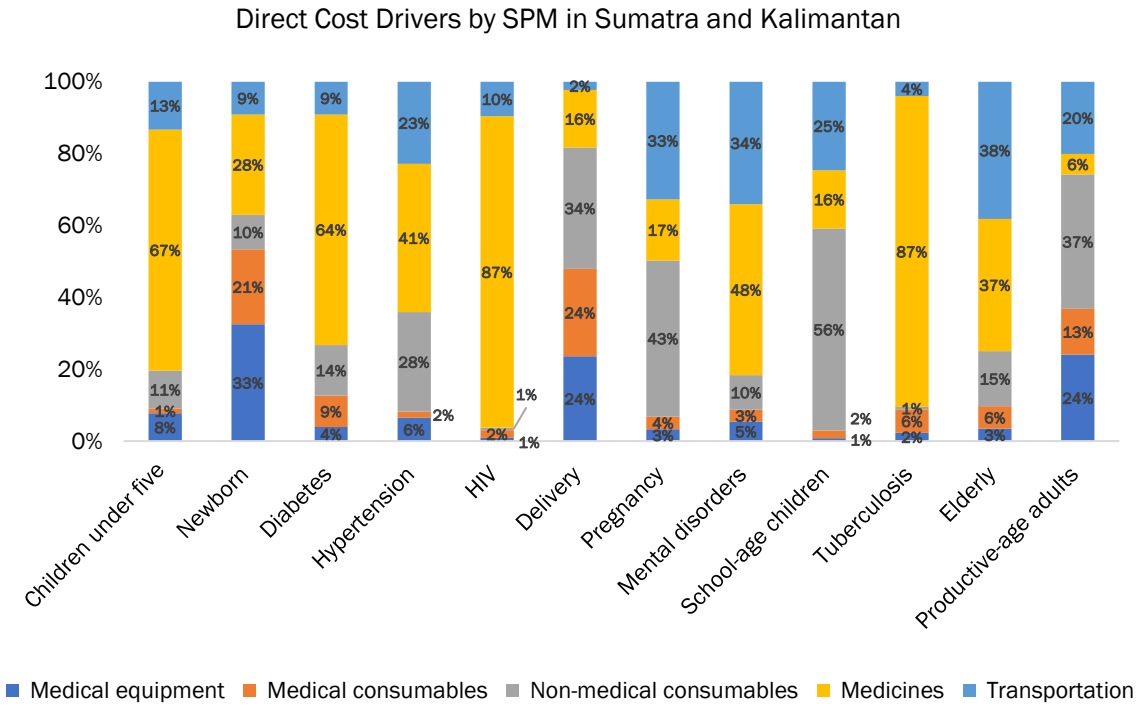
Annex D. Direct Cost Drivers by SPM by Region






Direct Cost Drivers by SPM in Maluku and Papua
100%
80%
60%
40%
20%
0%
Children under five
Newborn
Diabetes
Hypertension
HIV
Delivery
Pregnancy
Mental disorders
School-age children
Tuberculosis
Elderly
Productive-age adults
Medical equipment
Medical consumables
Non-medical consumables
Medicines
Transportation


Direct Cost Drivers by SPM in Sulawesi
100%
80%
60%
40%
20%
0%
Children under five
Newborn
Diabetes
Hypertension
HIV
Delivery
Pregnancy
Mental disorders
School-age children
Tuberculosis
Elderly
Productive-age adults
Medical equipment
Medical consumables
Non-medical consumables
Medicines
Transportation


Direct Cost Drivers by SPM in Sumatra and Kalimantan
100%
80%
60%
40%
20%
0%
Children under five
Newborn
Diabetes
Hypertension
HIV
Delivery
Pregnancy
Mental disorders
School-age children
Tuberculosis
Elderly
Productive-age adults
Medical equipment
Medical consumables
Non-medical consumables
Medicines
Transportation

Annex E. Direct, Overhead, and Total SPM Unit Costs by Region

Bali and Nusatenggara

SPM	DHOs			Puskesmas networks			Private clinics		
	Direct	Overhead	Total	Direct	Overhead	Total	Direct	Overhead	Total
Pregnancy	81,672	15,199	96,871	44,556	70,598	115,154	7,881	86,358	94,239
Delivery	121,630	12,673	134,303	24,440	128,083	152,524	20,445	204,306	224,751
Newborn	105,659	16,459	122,117	30,656	152,685	183,341	13,500	371,899	385,399
Children under five	150,898	5,588	156,487	71,169	62,888	134,057	9,288	69,926	79,214
School-age children	381	6,018	6,399	12,561	111,997	124,559	-	-	-
Productive-age adults	17,542	7,010	24,552	10,073	39,209	49,282	5,579	26,375	31,954
Elderly	186,898	11,246	198,144	23,726	34,751	58,477	8,517	63,891	72,407
Hypertension	5,207	3,092	8,299	12,116	47,594	59,711	24,545	75,000	99,545
Diabetes	20,007	26,735	46,742	46,028	37,864	83,891	13,446	63,382	76,827
Mental disorders	109,016	158,511	267,526	75,249	71,113	146,362	-	-	-
TB *(without OAT drugs)*	58,732	62,416	121,149	88,467	120,199	208,667	-	-	-
TB *(with OAT drugs)*	754,106	62,416	816,522	568,681	120,199	688,880	-	-	-
HIV *(without ARVs)*	56,574	58,834	115,408	31,640	169,674	201,314	-	-	-
HIV *(with ARVs)*	1,031,366	58,834	1,090,200	58,974	169,674	228,649	-	-	-

Java

SPM	DHOs			Puskesmas networks			Private clinics		
	Direct	Overhead	Total	Direct	Overhead	Total	Direct	Overhead	Total
Pregnancy	44,884	24,827	69,711	25,683	63,932	89,615	6,240	27,973	34,214
Delivery	87,107	17,842	104,949	105,205	81,293	186,498	106,658	291,342	398,000
Newborn	78,429	36,369	114,798	165,312	222,684	387,996	70,786	448,153	518,939
Children under five	86,374	6,600	92,974	69,892	63,386	133,278	21,057	3,574	24,631
School-age children	1,493	6,559	8,052	9,063	100,940	110,003	-	-	-
Productive-age adults	15,835	1,435	17,270	11,672	24,724	36,396	1,051	3,100	4,150
Elderly	3,067	8,451	11,518	17,037	44,060	61,098	22,349	18,670	41,020
Hypertension	21,649	2,311	23,960	2,074	64,654	66,728	1,237	104,389	105,627
Diabetes	9,024	5,696	14,721	20,256	92,114	112,370	10,013	51,209	61,221
Mental disorders	54,835	67,757	122,592	34,214	147,466	181,681			-
TB *(without OAT drugs)*	44,471	139,288	183,760	185,587	319,674	505,261	7,350	138,678	146,028
TB *(with OAT drugs)*	1,129,849	139,288	1,269,137	412,763	319,674	732,437	11,850	138,678	150,528
HIV *(without ARVs)*	123,323	101,721	225,044	32,456	333,835	366,290	1,238	76,446	77,684
HIV *(with ARVs)*	1,635,398	101,721	1,737,119	71,117	333,835	404,951	1,238	76,446	77,684

Maluku and Papua

SPM	DHOs			Puskesmas networks			Private clinics		
	Direct	Overhead	Total	Direct	Overhead	Total	Direct	Overhead	Total
Pregnancy	51,048	34,715	85,763	40,889	191,712	232,601	42,325	185,756	228,082
Delivery	116,507	57,110	173,617	58,284	172,164	230,448	63,981	511,707	575,687
Newborn	119,413	17,643	137,056	25,041	300,995	326,036	33,584	665,770	699,354
Children under five	146,384	7,892	154,275	49,375	159,098	208,473	-	35,667	35,667
School-age children	7,683	6,974	14,657	16,957	167,054	184,011	-	-	-
Productive-age adults	74,097	1,125	75,222	20,237	55,502	75,739	14,963	288,674	303,637
Elderly	72,458	5,377	77,836	43,608	67,768	111,376	8,974	251,953	260,927
Hypertension	15,353	3,269	18,623	4,656	89,439	94,095	21,481	268,688	290,169
Diabetes	90,279	49,384	139,663	31,305	107,337	138,642	67,655	190,576	258,231
Mental disorders	32,191	182,452	214,643	59,124	229,214	288,338	83,750	311,996	395,746
TB *(without OAT drugs)*		29,820	29,820	24,523	258,529	283,052	6,555	335,457	342,012
TB *(with OAT drugs)*	920,668	29,820	950,488	294,838	258,529	553,368	818,173	335,457	1,153,630
HIV *(without ARVs)*	129,412	142,495	271,907	28,137	105,690	133,827	3,911	208,473	212,384
HIV *(with ARVs)*	1,489,706	142,495	1,632,201	108,969	105,690	214,659	24,096	208,473	232,569

Sulawesi

SPM	DHOs			Puskesmas networks			Private clinics		
	Direct	Overhead	Total	Direct	Overhead	Total	Direct	Overhead	Total
Pregnancy	44,716	16,672	61,388	55,074	152,259	207,333	12,121	63,279	75,400
Delivery	160,697	22,182	182,879	108,663	172,529	281,191	61,327	189,061	250,389
Newborn	71,901	21,088	92,989	71,336	239,964	311,300	62,604	227,707	290,310
Children under five	155,746	7,961	163,706	73,916	75,925	149,841	35,280	20,633	55,913
School-age children	5,251	19,141	24,392	18,218	165,117	183,335	2,861	4,175	7,036
Productive-age adults	104,920	1,975	106,895	15,198	31,731	46,929	4,106	11,481	15,587
Elderly	29,864	6,471	36,334	48,281	58,265	106,546	63,746	61,754	125,500
Hypertension	13,622	3,411	17,032	10,593	64,843	75,436	20,937	112,585	133,522
Diabetes	30,365	32,617	62,982	101,535	75,061	176,596	91,240	134,694	225,933
Mental disorders	137,366	237,835	375,201	151,430	135,406	286,837	1,940	132,282	134,222
TB *(without OAT drugs)*	114,123	60,866	174,989	74,443	168,133	242,576	14,900	242,422	257,322
TB *(with OAT drugs)*	1,596,892	60,866	1,657,758	392,191	168,133	560,324	14,900	242,422	257,322
HIV *(without ARVs)*	117,967	90,631	208,598	45,421	216,877	262,299	4,848	153,992	158,840
HIV *(with ARVs)*	1,923,110	90,631	2,013,741	58,531	216,877	275,408	29,122	153,992	183,114

Sumatra and Kalimantan

SPM	DHOs			Puskesmas networks			Private clinics		
	Direct	Overhead	Total	Direct	Overhead	Total	Direct	Overhead	Total
Pregnancy	52,152	14,853	67,005	34,622	102,633	137,255	11,350	24,343	35,693
Delivery	44,392	15,932	60,324	52,169	90,133	142,302	172,595	84,424	257,020
Newborn	66,641	18,355	84,996	37,638	178,296	215,935	58,346	41,284	99,631
Children under five	142,753	6,219	148,972	37,420	46,034	83,454	28,301	64,878	93,178
School-age children	38,454	8,803	47,257	26,001	170,748	196,749	4,293	5,617	9,910
Productive-age adults	21,298	1,576	22,873	17,130	38,554	55,684	7,119	3,838	10,956
Elderly	14,655	6,692	21,347	39,488	52,524	92,013	13,294	87,964	101,257
Hypertension	7,579	8,104	15,683	9,515	97,685	107,200	5,122	246,886	252,007
Diabetes	14,206	29,019	43,225	40,230	97,827	138,058	121,509	150,566	272,075
Mental disorders	12,135	153,409	165,544	79,641	151,812	231,453	18,394	72,682	91,076
TB *(without OAT drugs)*	112,368	82,295	194,663	51,985	155,772	207,757	6,499	267,744	274,242
TB *(with OAT drugs)*	647,725	82,295	730,021	290,413	155,772	446,185	87,071	267,744	354,815
HIV *(without ARVs)*	78,093	39,540	117,633	45,421	216,877	262,299	1,066	255,127	256,193
HIV *(with ARVs)*	1,212,336	39,540	1,251,876	58,531	216,877	275,408	1,066	255,127	256,193

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